Member IMC Group

Tungaloy

INDUSTRY 4.0

GENERAL CATALOG - VOL. 1

TURNING
GROOVING

we improve, we evolve, we **ADD**



2023/2024



Member IMC Group

Tungaloy

INDUSTRY 4.0

Tungaloy's Insights – Smart Manufacturing

Tungaloy, as one of the leaders in the metal removal industry, offers the latest innovations in grades and geometries for superb performance and tool life.

Tungaloy's latest innovations in cutting tools contribute to carbon neutrality

TUNGALOY ADDFORCE ACCELERATED LINES

THINK GREEN

VOL. 1

TURNING GROOVING

A Grade A001 -

B Insert B001 -

C External Toolholder C001 -

D Internal Toolholder D001 -

E Threading Tool E001 -

F Parting, Grooving F001 -

G Miniature Machining G001 -

H Milling Cutter H001 -

I Endmill I001 -

J Drilling Tool J001 -

K Tooling System K001 -

L User's Guide L001 -

M Alphanumeric Index M001 -

About Tungaloy Cutting Tool Catalog

Note in using this catalog:

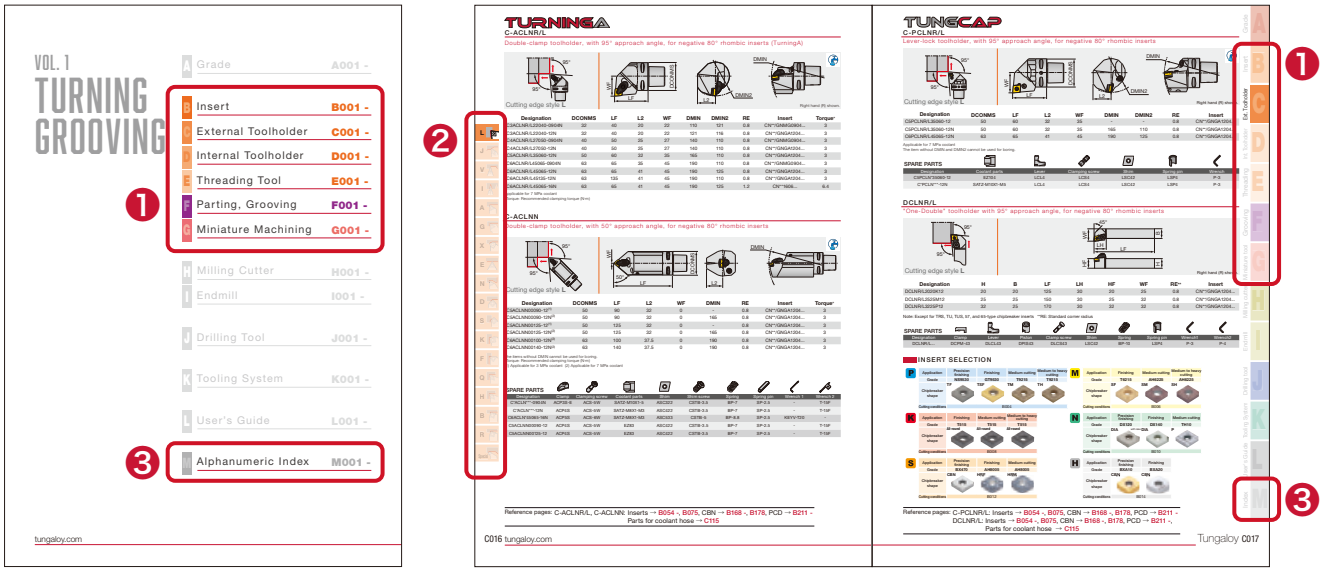
★ This catalog provides the information of Tungaloy's cutting tools as of September 2022.

★ The specifications are subject to change without prior notice for product improvements. Also, the products may be discontinued in the future due to the development of new products.

★ The dimensions of all products are shown in millimeters (mm).

★ For indexable tools, such as toolholders, cutters, drill bodies, applicable inserts or heads need to be ordered separately.

How to use this catalog:



❶ Select the tool category at the product group index.

❷ Select the tool type at the application index on the left pages.

❸ The index is in the alphanumerical order. Use it for your product search.

How to read the list for the standard items:

★ Designations for indexable tools – toolholders, adapters, etc.

· Orders are to be received for the tools with the designations in the catalog.

· For the tool with right- and left-hand options, the designation includes **R/L** as shown below.

Ex. 1: Designation: A16Q-STFP**R/L**13-D180

You can order both right- and left-hand tools. A16Q-STFP**R**13-D180 (a right-hand tool) and A16Q-STFP**L**13-D180 (a left-hand tool) will be available.

Ex. 2: Designation: A20R-STFP**R**13-D220

You can order only right-hand tools. Please contact us when you need left-hand tools.

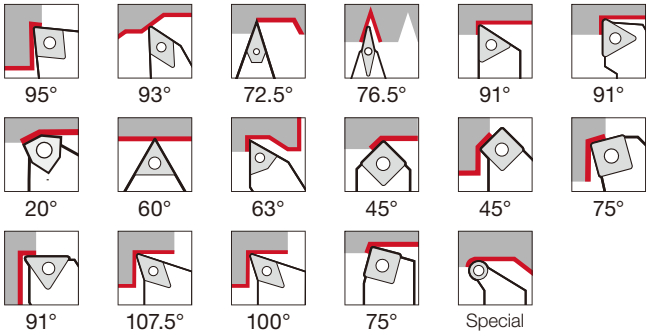
★ Lineup for inserts and solid tools

Blank : Please contact us regarding the product.

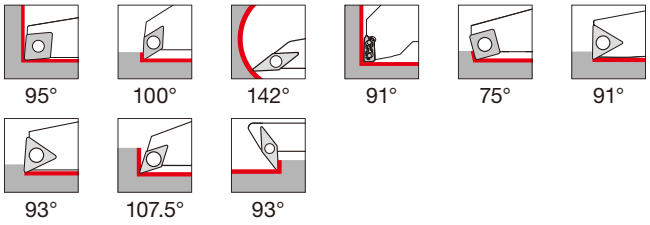
About Tungaloy Cutting Tool Catalog

Icons at the left side of each page

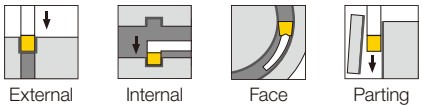
External toolholder (cutting edge shape / angle)



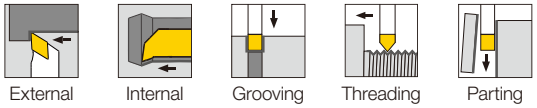
Internal toolholder (cutting edge shape / angle)



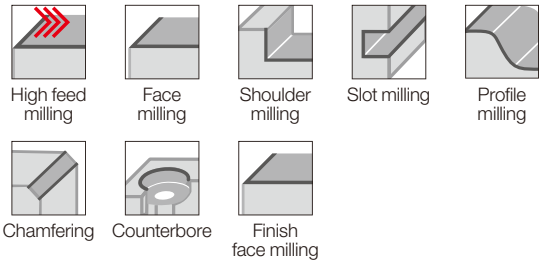
Parting, Grooving



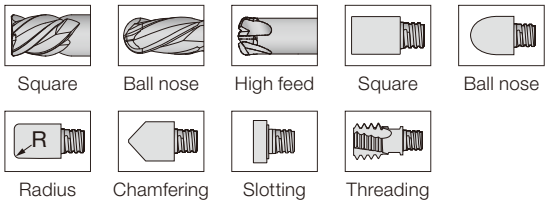
Miniature machining



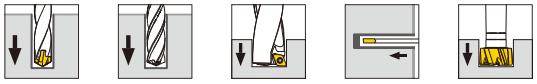
Mill



Endmill

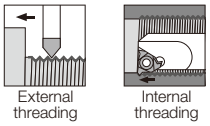


Drill

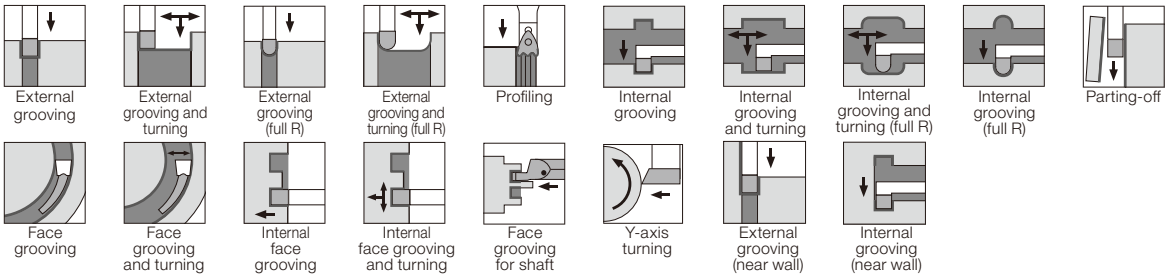


Icons for applications of each product

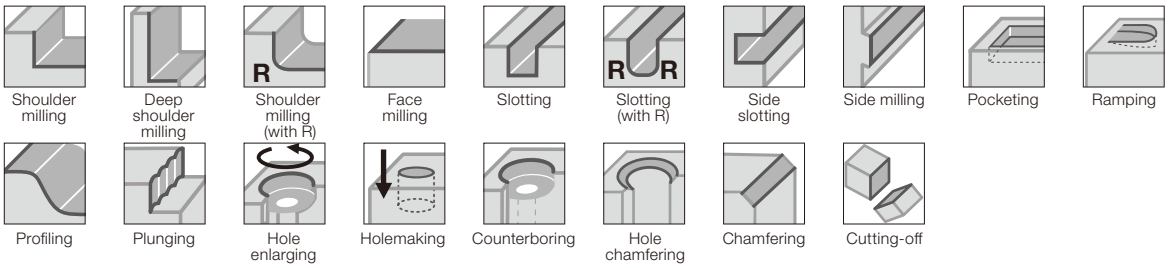
Threading



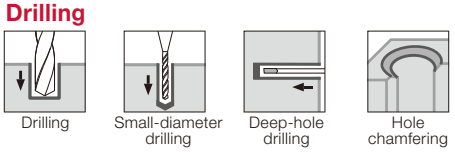
Grooving



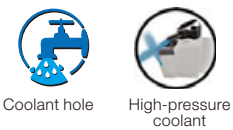
Milling



Drilling







About the dimension symbols conforming to ISO13399

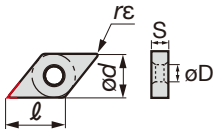
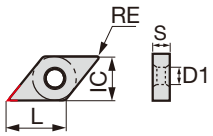
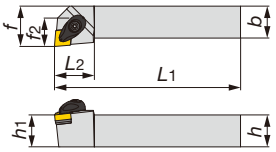
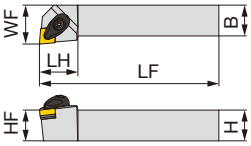
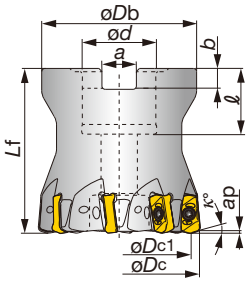
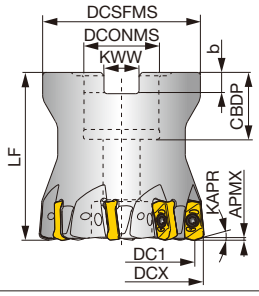
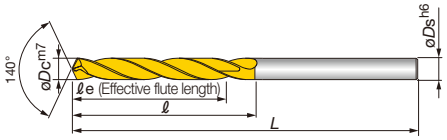
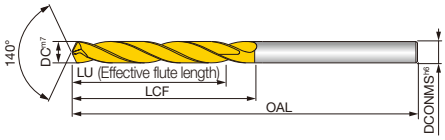
What is ISO13399?

ISO13399 is an international standard for the purpose of standardizing the electronic data of tools in the world.

Switching to the dimension symbols conforming to ISO13399

In this catalog, we use the dimension symbols (properties) conforming to ISO13399 international standard.
Below are the examples of the change.

Examples of the change:

	Before	After
Insert		
Turning		
Milling		
Drilling		

ISO13399 standardizes not only the format of 2D and 3D CAD data but also the tool dimension symbols (properties) and reference position information. This allows the tool information to be read and combined into NC programs and CAM software, regardless of any tool maker's data. In addition to General Catalog (paper catalog), we are also updating the symbols in e-catalog (electronic catalog on our website) to the properties conforming to ISO13399. The e-catalog also provides 2D and 3D CAD data in accordance with ISO13399 standard.

Insert

New symbol	Old symbol	Description
AN	-	Main cutting edge relief angle
APMX	Max. *ap*	Maximum depth of cut
AS	A	Side cutting edge relief angle
BW	B	Body width
BS	bs	Side cutting edge (wiper) length
CDX	T max	Maximum groove depth
CW	*W*	Grooving edge width
D1	*ød*1	Mounting hole diameter
DCONMS	*øDs*	Mounting part diameter on the machine
DMIN	*øDm*	Minimum machining diameter
EPSR	-	Nose angle
GAN	-	Rake angle (insert)
IC	*ød*	Inscribed circle diameter
INSD	A	Insert diameter (round type)
INSL	B	Insert length
KAPR	κ	Approach angle
LBB	-	Chipbreaker width
LE	A	Effective cutting edge length
LF	*L*1	Standard length
M	m	Distance from inscribed circle to cutting edge (m dimension)
PDX	t	Thread position (X direction)
PDY	*ℓ*3	Thread position (Y direction)
PNA	*θ*	Cutting edge angle
PSIRL	*θ*	Left-hand front cutting edge angle
PSIRR	*θ*	Right-hand front cutting edge angle
RE	*r*	Corner radius
S	T	Thickness
W1	-	Insert width

Turning, Grooving

New symbol	Old symbol	Description
B	*b*	Shank width
BD	*øD*1, *øD*2, *øD*3	Body external diameter
CDX	*ar*	Maximum groove depth
CND	-	Oil hole diameter
CNT	-	Oil hole plug size
CUTDIA	*øD*max	Maximum parting diameter
CW	W	Grooving edge width
CWN	-	Minimum grooving edge width
CWX	-	Maximum grooving edge width
DAXN	*øD*m	Minimum diameter in face grooving
DAXX	*øD*max	Maximum diameter in face grooving
DCONMS	*øDs*	Mounting part diameter on the machine
DCONWS	*øD*, *ød*2	Mounting part diameter on the workpiece
DMIN	*øDm*	Minimum machining diameter
GAMF	α	Radial rake angle
GAMP	*θ*	Axial rake angle
H	*h*	Shank length
HBH	*h*2	Height of offset on the bottom of head
HBKL	*f*2	Length of uneven level on the back of head
HBKW	*L*2	Width of uneven level on the back of head
HBL	*L*2	Length of offset on the bottom of head
HF	h1	Standard height
KAPR	κ	Approach angle
LB	*L*	Body length
LF	*L*1	Standard length
LH	*L*2	Head length
OAH	*h*4	Overall height
OAL	*L*1	Overall length
OAW	*L*3	Overall width
PSIR	*β*	Lead angle
WB	-	Body width
WF	*f*	Standard width
WFS	*f*2	Standard width (the second corner)

About the dimension symbols conforming to ISO13399

Tooling system

New symbol	Old symbol	Description
APMX	Max. *ap*	Maximum depth of cut
BD	*øD1*, *øD2*, *øD3*	Body external diameter
BHTA	α	Neck taper angle (half of nose angle)
BTED	*ød1*	Taper tip diameter
CRKS	S	Mounting screw size
DBC	*ød3*	Bolt hole pitch diameter
DCONMS	*øDs*	Mounting part diameter on the machine
DCONWS	*øD*, *ød2*	Mounting part diameter on the workpiece
DMIN	*øDm*	Minimum machining diameter
GAMF	α, R.R.	Radial rake angle
GAMP	*θ*, A.R.	Axial rake angle
KAPR	κ	Cutting edge angle
LB	*L2*, *L3*	Body length
LF	*L*	Standard length
LPR	*L1*	Parting length
LS	*ℓs*	Shank length
LSC	*Lmin*	Clamp length
LSCX	*Lmax*	Maximum clamp length
OAH	H4	Overall height
OAL	*L*	Overall length
OAW	*W*	Overall width
THID	-	Mounting screw size
WB	*W*	Body width
WF	*f*	Standard width

Drilling

New symbol	Old symbol	Description
BD	*øD1*, *øD2*, *øD3*	Body external diameter
CND	-	Oil hole diameter
CNT	-	Oil hole plug size
CRKS	*S*	Mounting screw size
DC	*øDc*	Machining diameter
DCONMS	*øDs*	Mounting part diameter on the machine
DCONWS	*øD*, *ød2*	Mounting part diameter on the workpiece
DCSFMS	*øD*	Connecting part diameter
KAPR	κ	Cutting edge angle
LCF	*ℓ*	Flute length
LF	*Lf*	Standard length (from the drill shoulder)
LPR	-	Parting length (from flange to tip)
LS	*ℓs*	Shank length
LU	*ℓ*	Machinable depth
NOF	z	Number of flutes
OAL	*L*	Overall length (from tip)
PL	PL	Distance from drill tip to shoulder
ZEFP	Z eff	Number of effective cutting edges on periphery

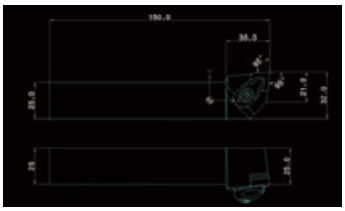
Milling

New symbol	Old symbol	Description
APMX	Max. *ap*	Maximum depth of cut
BD	*øD1*, *øD2*, *øD3*	Body external diameter
BHTA	α	Neck taper angle (half of nose angle)
CBDP	*ℓ*	Mounting hole depth
CDX	Max. *ae*	Maximum slot width
CHW	k	Chamfer width on the corner
CICT	z	Number of inserts
CRKS	S	Mounting screw size
CW	W	Slotting edge width
CWN	-	Minimum slotting edge width
CWX	-	Maximum slotting edge width
DBC	*ød3*	Bolt hole pitch diameter
DC	*øDc*	Machining diameter
DCONMS	*ød*	Mounting part diameter on the machine
DCONWS	*øD*, *ød2*	Mounting part diameter on the workpiece
DCSFMS	*øDb*	Mounting surface diameter on the machine
DCX	*øDc1*	Maximum machining diameter
GAMF	R.R.	Radial rake angle
GAMP	A.R.	Axial rake angle
H	T	Width across flat
KAPR	κ	Cutting edge angle
KWW	*a*	Drive key width
LF	*Lf*	Standard length
LH	*Lf*	Neck length
LS	*ℓs*	Shank length
NOF	z	Number of flutes
OAL	*L*, *L6*	Overall length
PDX	*t*	Thread position (X direction)
PNA	*θ*	Cutting edge angle
PSIR	*β*	Lead angle
RMPX	*θ*	Maximum ramping angle
THUB	T	Hub height (slot mill)
WT	Kg	Weight
ZEFP	Z eff	Number of effective cutting edges on the periphery

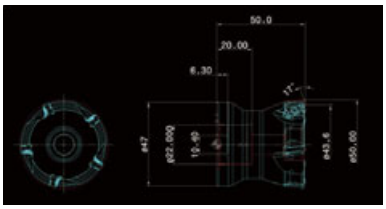
Note:
- Symbols unspecified in ISO13399 standard and Tungaloy's original symbols are not included.
- The symbols still under discussion are included. Please note any change or addition may occur.

CAD data provided in e-catalog

● 2D data (DXF format file)



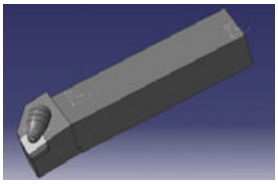
Turning:
Shows the insert with standard corner radius.



Milling:
Includes actual cutting edge curve (CUT layer) and body cross section (NOCUT layer).

● 3D data Light type (STP format file): Can be used to check tool path and interference.

Turning: Equipped with an insert with a standard corner radius.

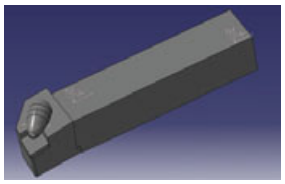


Milling: A rotating body model of an actual cutting edge curve and a body cross section.



● 3D data Detail type (STP format file): Can be used to create a new tool layout chart. (Can be combined with any insert model on a CAD software.)

Turning



Milling



Insert



Insert - Content structure

- Inserts are grouped in Positive type, Negative type, and CBN/PCD.
- The list is in alphabetical order.
- The order of the list: C (80°) → D (55°) → R (360°) → S (90°) → T (60°) → V (35°) → W (80°) → Y (25°) → Other shapes
- The order of inserts:
  - Negative type (each shape with hole → without hole)
  - Positive type (each shape with hole → without hole)
- The order of chipbreakers:
  From precision finishing to heavy cutting, in the order of the values of cutting depth and feed rate.
- Insert without chipbreaker is on the last page of each shape.
- Introduces the proposed inserts according to the workpiece materials and the shape of workpiece materials.
- The standard cutting conditions for typical chipbreakers are at the bottom of the pages.
- ● in the catalog describes our standard items, and ▲ means the item to be discontinued in the future.

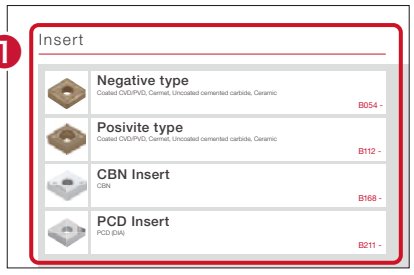
How to use the page

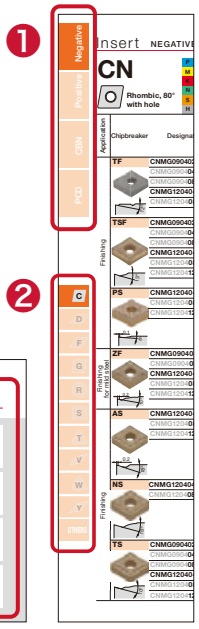
Method ①

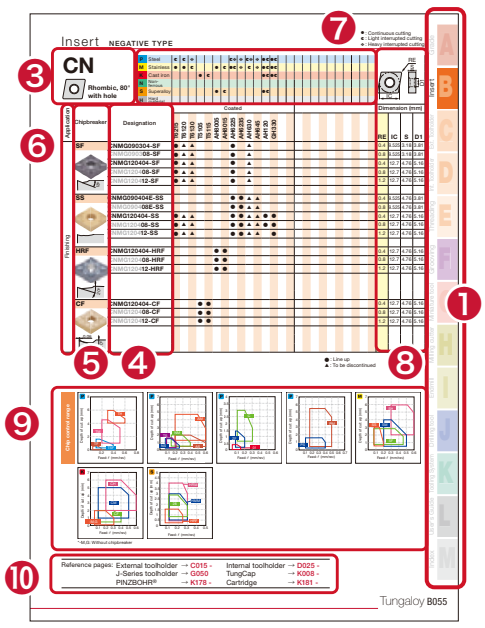
Select an insert at the right end, and choose the information page by the insert type (❶) and the outer shape of the insert (❷) at the left end.

Method ②

Check the page of each insert type from the index on B003 (❶), and choose the page of the setting information according to the outer shape of the insert (❷).

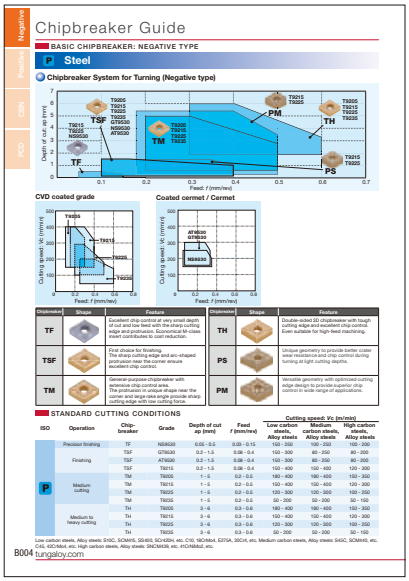


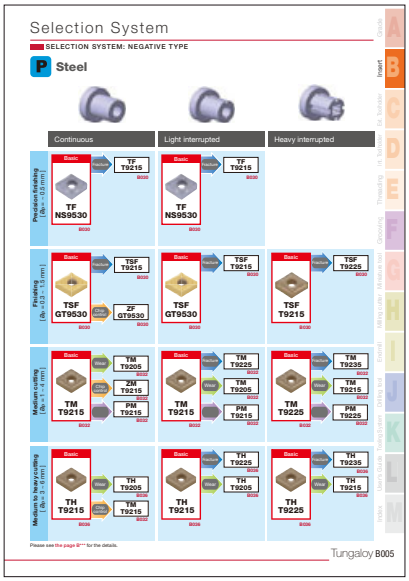




Method ③

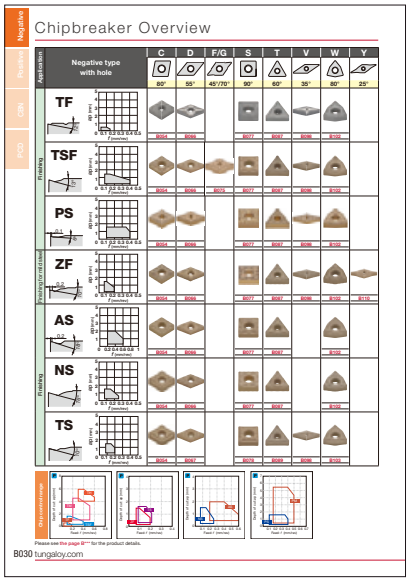
Select an insert at the chipbreaker introduction and the selection guide on B004 - B029 and check the details on the product page.





Method ④

Select an insert from the list of chipbreaker shapes on B030-B053 and check the details on each page.



When ordering

- Please specify the designation, grade, and quantity.
  e.g. **CNMG120408-TM T9215 ... 10 pieces** (10 inserts per package)
  *You will find a note if the number per package is not 10.

Insert



Negative type

Coated CVD/PVD, Cermet, Uncoated cemented carbide, Ceramic

B054 -



Posivite type

Coated CVD/PVD, Cermet, Uncoated cemented carbide, Ceramic

B112 -



CBN Insert

CBN

B168 -



PCD Insert

PCD (DIA)

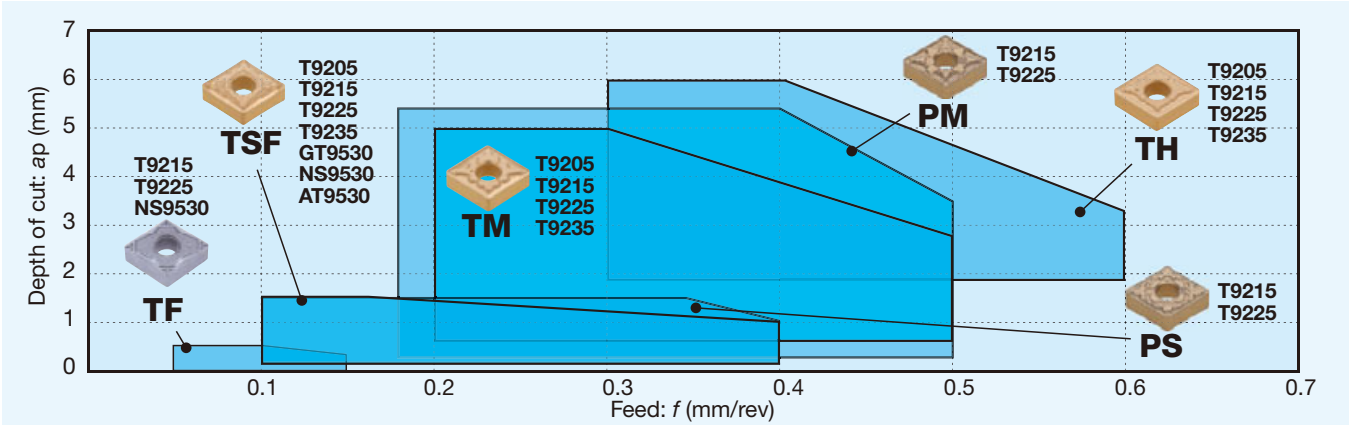
B211 -

Chipbreaker Guide

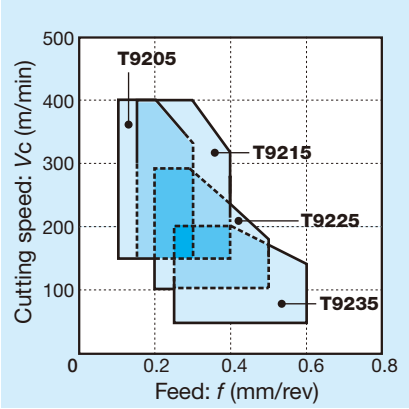
BASIC CHIPBREAKER: NEGATIVE TYPE

P Steel

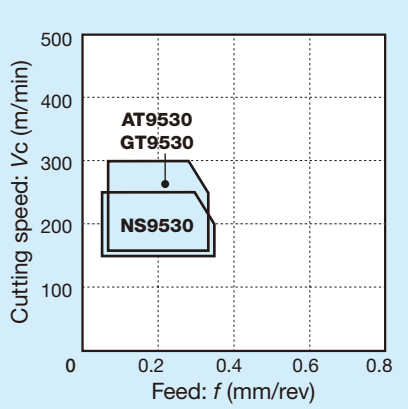
Chipbreaker System for Turning (Negative type)

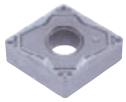


CVD coated grade



Coated cermet / Cermet



Chipbreaker	Shape	Feature
TF		Excellent chip control at very small depth of cut and low feed with the sharp cutting edge and protrusion. Economical M-class insert contributes to cost reduction.
TSF		First choice for finishing. The sharp cutting edge and arc-shaped protrusion near the corner ensure excellent chip control.
TM		General-purpose chipbreaker with extensive chip control area. The protrusion in unique shape near the corner and large rake angle provide sharp cutting edge with low cutting force.

Chipbreaker	Shape	Feature
TH		Double-sided 3D chipbreaker with tough cutting edge and excellent chip control. Even suitable for high-feed machining.
PS		Unique geometry to provide better crater wear resistance and chip control during turning at light cutting depths.
PM		Versatile geometry with optimized cutting edge design to provide superior chip control in wide range of applications.

STANDARD CUTTING CONDITIONS

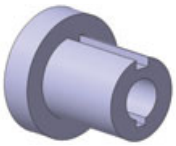
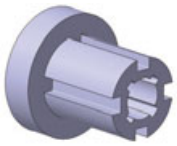
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min) Low carbon steels, Alloy steels	Medium carbon steels, Alloy steels	High carbon steels, Alloy steels
P	Precision finishing	TF	NS9530	0.05 - 0.5	0.03 - 0.15	150 - 250	100 - 250	100 - 200
	Finishing	TSF	GT9530	0.2 - 1.5	0.08 - 0.4	150 - 300	80 - 250	80 - 200
		TSF	AT9530	0.2 - 1.5	0.08 - 0.4	150 - 300	80 - 250	80 - 200
		TSF	T9215	0.2 - 1.5	0.08 - 0.4	150 - 400	150 - 400	120 - 300
	Medium cutting	TM	T9205	1 - 5	0.2 - 0.5	180 - 400	180 - 400	150 - 350
		TM	T9215	1 - 5	0.2 - 0.5	150 - 400	150 - 400	120 - 300
		TM	T9225	1 - 5	0.2 - 0.5	120 - 300	120 - 300	100 - 250
		TM	T9235	1 - 5	0.2 - 0.5	50 - 200	50 - 200	50 - 150
	Medium to heavy cutting	TH	T9205	3 - 6	0.3 - 0.6	180 - 400	180 - 400	150 - 350
		TH	T9215	3 - 6	0.3 - 0.6	150 - 400	150 - 400	120 - 300
		TH	T9225	3 - 6	0.3 - 0.6	120 - 300	120 - 300	100 - 250
		TH	T9235	3 - 6	0.3 - 0.6	50 - 200	50 - 200	50 - 150

Low carbon steels, Alloy steels: S10C、SCM415, SS400, SCr420H, etc. C10, 18CrMo4, E275A, 20Cr4, etc. Medium carbon steels, Alloy steels: S45C, SCM440, etc. C45, 42CrMo4, etc. High carbon steels, Alloy steels: SNCM439, etc. 41CrNiMo2, etc.

Selection System

SELECTION SYSTEM: NEGATIVE TYPE

P Steel

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic **TF NS9530** B030 → Fracture → **TF T9215** B030	Basic **TF NS9530** B030 → Fracture → **TF T9215** B030	
Finishing [a_p = 0.3 ~ 1.5 mm]	Basic **TSF GT9530** B030 → Fracture → **TSF T9215** B030; Chip control → **ZF GT9530** B030	Basic **TSF GT9530** B030 → Fracture → **TSF T9215** B030	Basic **TSF T9215** B030 → Fracture → **TSF T9225** B030
Medium cutting [a_p = 1 ~ 4 mm]	Basic **TM T9215** B032 → Wear → **TM T9205** B032; Chip control → **ZM T9215** B032; Crater wear → **PM T9215** B032	Basic **TM T9215** B032 → Fracture → **TM T9225** B032; Wear → **TM T9205** B032; Crater wear → **PM T9215** B032	Basic **TM T9225** B032 → Fracture → **TM T9235** B032; Wear → **TM T9215** B032; Crater wear → **PM T9225** B032
Medium to heavy cutting [a_p = 3 ~ 6 mm]	Basic **TH T9215** B036 → Wear → **TH T9205** B036; Chip control → **TM T9215** B032	Basic **TH T9215** B036 → Fracture → **TH T9225** B036; Wear → **TH T9205** B036	Basic **TH T9225** B036 → Fracture → **TH T9235** B036; Wear → **TH T9215** B036

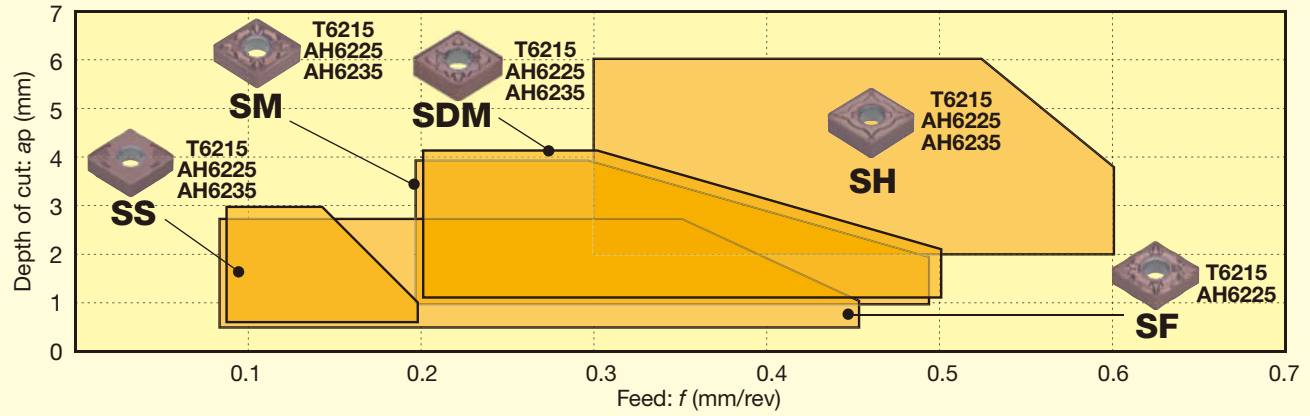
Please see the page B*** for the details.

Chipbreaker Guide

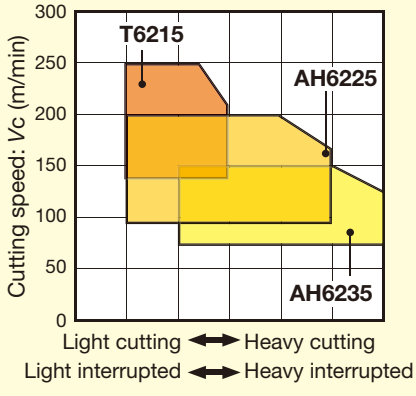
BASIC CHIPBREAKER: NEGATIVE TYPE

M Stainless Steel

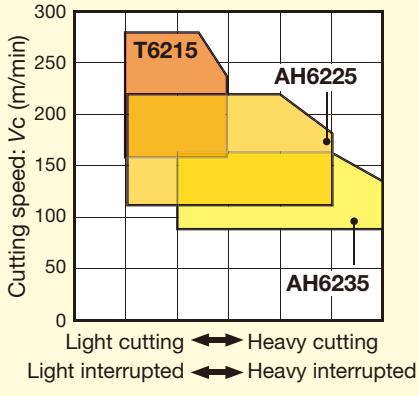
Chipbreaker System for Turning (Negative type)



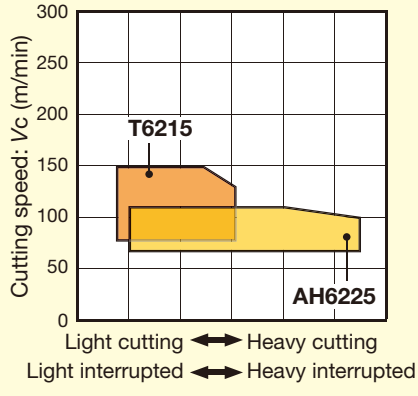
Austenitic stainless steel

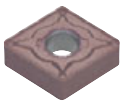


Ferritic / martensite stainless steel



Precipitation hardened stainless steel



Chipbreaker	Shape	Feature
SF		Excellent chip control with small depth of cut at high feed. Suitable for finishing stainless steel.
SH		Suitable for medium to heavy cutting. High fracture resistance with specially reinforced cutting edge. Ideal for machining that requires cutting edge strength. such as roughing and interrupted cutting.

Chipbreaker	Shape	Feature
SM		General-purpose chipbreaker with sharpness and good chip control. First choice for stainless steel.
SDM		Light cutting geometry for notch wear and crater wear resistance.

STANDARD CUTTING CONDITIONS

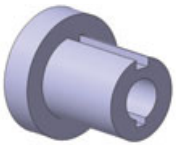
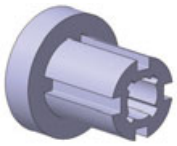
ISO	Operation	Chipbreaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)		
						Austenitic stainless steel	Ferritic / martensite stainless steel	Precipitation hardened stainless steel
M	Finishing	SF	T6215	0.5 - 2.5	0.08 - 0.45	140 - 240	160 - 280	80 - 150
			AH6225	0.5 - 2.5	0.08 - 0.45	90 - 200	110 - 240	60 - 110
			AH6235	0.5 - 2.5	0.08 - 0.45	50 - 150	70 - 170	-
	Medium cutting	SM	T6215	1 - 4	0.2 - 0.5	140 - 240	160 - 280	80 - 150
			AH6225	1 - 4	0.2 - 0.5	90 - 200	110 - 240	60 - 110
			AH6235	1 - 4	0.2 - 0.5	50 - 150	70 - 170	-
		SDM	T6215	1 - 4	0.2 - 0.5	140 - 240	160 - 280	80 - 150
			AH6225	1 - 4	0.2 - 0.5	90 - 200	110 - 240	60 - 110
			AH6235	1 - 4	0.2 - 0.5	50 - 150	70 - 170	-
	Heavy cutting	SH	T6215	2 - 6	0.3 - 0.6	140 - 240	160 - 280	80 - 150
			AH6225	2 - 6	0.3 - 0.6	90 - 200	110 - 240	60 - 110
			AH6235	2 - 6	0.3 - 0.6	50 - 150	70 - 170	-

Stainless steels: SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.

Selection System

SELECTION SYSTEM: NEGATIVE TYPE

M Stainless Steel

	Continuous	Light interrupted	Heavy interrupted
Finishing [a_p = 0.5 ~ 1.5 mm]	Basic **SF T6215** B031 Fracture → **SF AH6225** B031 Chip control → **SS AH6215** B031 Crater wear → **SDM T6215** B033	Basic **SF AH6225** B031 Fracture → **SF AH6235** B031 Wear → **SF T6215** B031 Chip control → **SS AH6225** B031 Crater wear → **SDM AH6225** B033	Basic **SF AH6225** B031 Fracture → **SM AH6225** B031 Wear → **SF T6215** B031
Medium cutting [a_p = 1 ~ 4 mm]	Basic **SM AH6225** B033 Wear → **SM T6215** B033 Chip control → **SS AH6225** B031 Crater wear → **SDM AH6225** B033	Basic **SM AH6225** B033 Fracture → **SM AH6235** B033 Wear → **SM T6215** B033 Chip control → **SS AH6225** B031 Crater wear → **SDM AH6225** B033	Basic **SM AH6235** B033 Fracture → **SH AH6235** B036 Wear → **SM AH6225** B033
Medium to heavy cutting [a_p = 2 ~ 6 mm]	Basic **SH AH6225** B036 Fracture → **SH AH6235** B036 Wear → **SH T6215** B036 Chip control → **SM AH6225** B033	Basic **SH AH6225** B036 Fracture → **SH AH6235** B036 Wear → **SH T6215** B036	Basic **SH AH6235** B036 Wear → **SH AH6225** B036

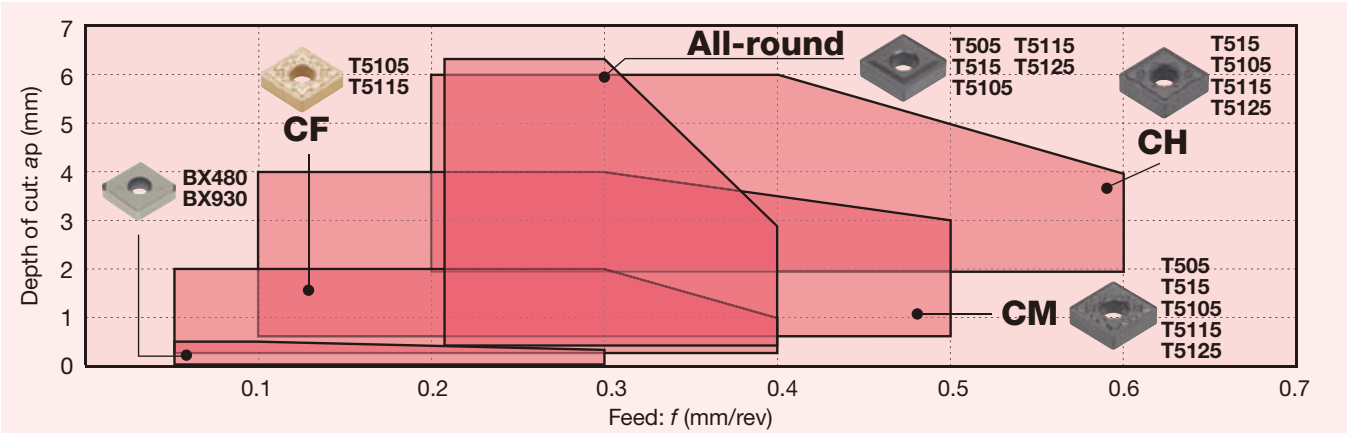
Please see the page B*** for the details.

Chipbreaker Guide

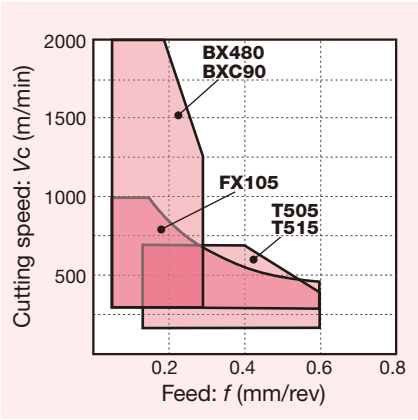
BASIC CHIPBREAKER: NEGATIVE TYPE

K Cast Iron

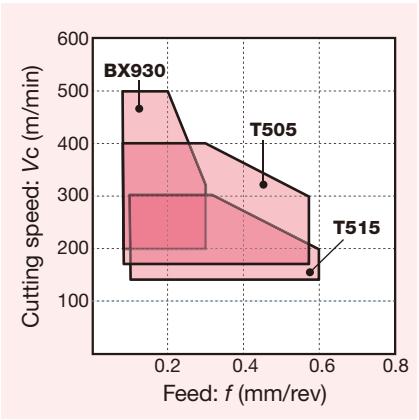
Chipbreaker System for Turning (Negative type)

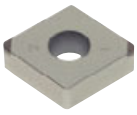


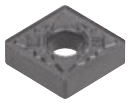
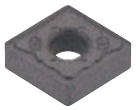
Grey cast iron



Ductile cast iron



Chipbreaker	Shape	Feature
-		Excellent performance in high-speed finishing of cast iron with CBN sintered body on the cutting edge.
CF		Low cutting force chipbreaker for cast iron. Combined with an arc-shaped high rake angle (substantially 20°) drastically reduces cutting force and prevents the deformation and burr of thin-walled components.
All-round		Excellent performance in interrupted cutting. Highly reliable chipbreaker with great stability.

Chip-breaker	Shape	Feature
CM		First choice for cast iron. Versatile chipbreaker for a wide range of applications from continuous to interrupted cutting thanks to the positive land and wide chip pocket.
CH		Chipbreaker with reinforced cutting edge. The negative land and the land support provide stable insert seating and increase cutting edge strength, resulting in no fracture even in heavy cutting.

STANDARD CUTTING CONDITIONS

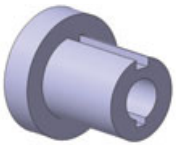
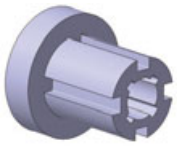
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)	
						Grey cast iron	Ductile cast iron
K	High speed cutting	-	BX930	0.05 - 0.5	0.05 - 0.2	300 - 1200	200 - 500
		-	BX480	0.05 - 0.5	0.05 - 0.3	300 - 2000	200 - 300
		-	BXC90	0.08 - 3	0.05 - 0.4	300 - 2000	200 - 300
	Finishing	All-round	T505	1 - 5	0.1 - 0.5	180 - 700	180 - 400
		All-round	T515	1 - 5	0.1 - 0.5	150 - 700	150 - 300
	Medium cutting	All-round	T505	1 - 5	0.1 - 0.5	180 - 700	180 - 400
		All-round	T515	1 - 5	0.1 - 0.5	150 - 700	150 - 300
		CH	T515	3 - 6	0.2 - 0.6	150 - 700	150 - 300
	Medium to heavy cutting	All-round	T515	1 - 5	0.1 - 0.5	150 - 700	150 - 300
		CH	T515	3 - 6	0.2 - 0.6	150 - 700	150 - 300

Grey cast iron: FC250, etc. 250, etc. Ductile cast iron: FCD450, etc. 450-10S, etc.

Selection System

SELECTION SYSTEM: NEGATIVE TYPE

K Cast Iron

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic: BX480 — B168 - B188	Basic: BX480 — B168 - B188; Fracture: All-round T515 — B033	Basic: BXC90 — B168 - B188
Finishing [a_p = 0.5 ~ 2 mm]	Basic: All-round T505 — B033; Fracture: All-round T515 — B033; Burr occurrence: CF T5105 — B031	Basic: All-round T515 — B033; Wear: All-round T505 — B033; Fracture: CH T515 — B036; Burr occurrence: CF T5115 — B031	Basic: CH T515 — B036; Wear: All-round T505 — B033; Burr occurrence: All-round T515 — B033
Medium cutting [a_p = 1 ~ 5 mm]	Basic: All-round T505 — B033; Fracture: All-round T515 — B033; Burr occurrence: CF T5105 — B031	Basic: All-round T515 — B033; Wear: All-round T505 — B033; Fracture: CH T515 — B036; Burr occurrence: CF T5115 — B031	Basic: CH T515 — B036; Wear: All-round T505 — B033; Fracture: CH T5125 — B036; Burr occurrence: All-round T515 — B033
Medium to heavy cutting [a_p = 3 ~ 6 mm]	Basic: All-round T515 — B033; Wear: All-round T505 — B033; Burr occurrence: CF T5105 — B031	Basic: All-round T515 — B033; Wear: All-round T505 — B033; Fracture: CH T515 — B036; Burr occurrence: CF T5115 — B031	Basic: CH T515 — B036; Wear: All-round T505 — B033; Fracture: CH T5125 — B036; Burr occurrence: All-round T515 — B033

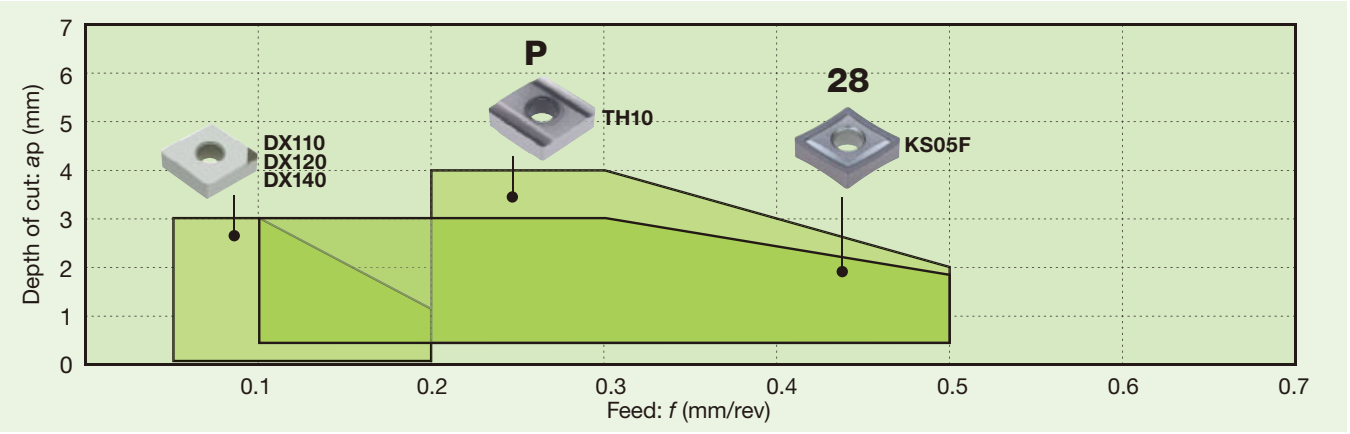
Please see the page B*** for the details.

Chipbreaker Guide

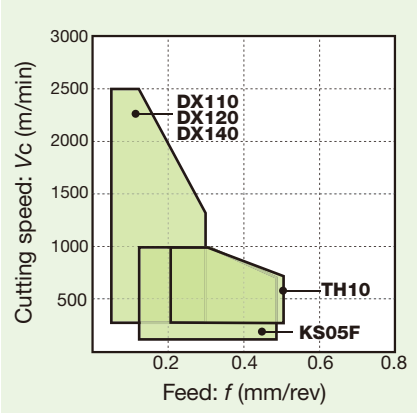
BASIC CHIPBREAKER: NEGATIVE TYPE

N Non-ferrous Metal

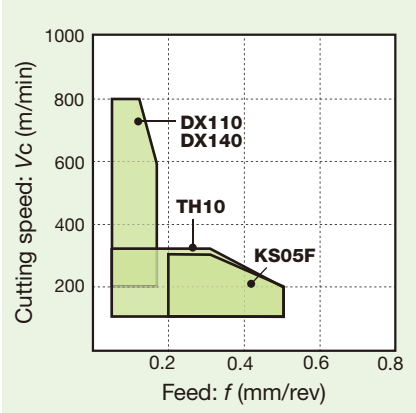
Chipbreaker System for Turning (Negative type)



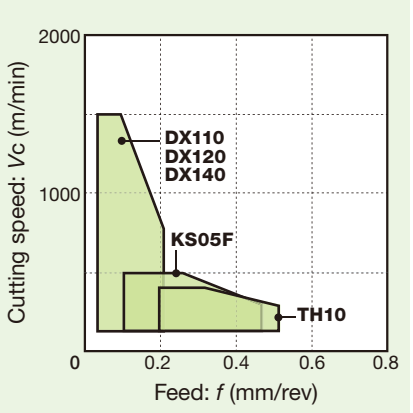
Aluminium alloy (Si < 12%)

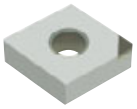
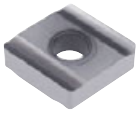


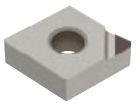
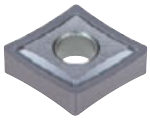
Aluminium alloy (Si ≥ 12%)



Copper alloy



Chipbreaker	Shape	Feature
-		Excellent performance in high-speed finishing of non-ferrous metal, such as aluminium and copper alloy, with diamond sintered body on the cutting edge.
P		Excellent sharpness for non-ferrous metal, such as aluminium and copper alloy.

Chipbreaker	Shape	Feature
With chip-breaker		Wide chipbreaker for excellent chip control.
28		Low cutting geometry with large inclination for finishing to medium cutting range.

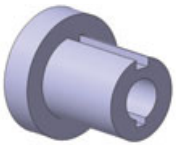
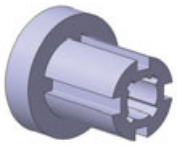
STANDARD CUTTING CONDITIONS

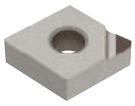
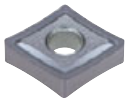
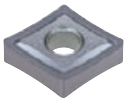
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min) Aluminium alloy (Si < 12%)	Aluminium alloy (Si ≥ 12%)	Copper alloy
N	Precision finishing	With	DX110	0.05 - 0.5	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
		-	DX140	0.05 - 0.5	0.05 - 0.20	300 - 2500	400 - 800	500 - 1500
	Finishing	With	DX110	0.05 - 2	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
		-	DX140	0.05 - 2	0.05 - 0.15	300 - 1800	400 - 600	400 - 1200
		P	TH10	0.5 - 4	0.2 - 0.5	100 - 1000	100 - 300	100 - 300
	Medium cutting	P	KS05F	0.5 - 3	0.1 - 0.5	100 - 1200	100 - 300	100 - 300
		P	KS05F	0.5 - 3	0.1 - 0.5	100 - 1200	100 - 300	100 - 300
		P	TH10	0.5 - 4	0.2 - 0.5	100 - 1000	100 - 300	100 - 300

Selection System

SELECTION SYSTEM: NEGATIVE TYPE

N Non-ferrous Metal

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic  With chipbreaker **DX110** B211 - B212 → Wear → **DX140** B211 - B212	Basic  **DX140** B211 - B212 → Surface quality → With chipbreaker **DX110** B211 - B212 / Wear → **DX160** B211 - B212	
Finishing [a_p = 0.5 ~2 mm]	Basic  **DX140** B211 - B212 → Surface quality → With chipbreaker **DX110** B211 - B212 / Wear → **DX160** B211 - B212	Basic  **DX140** B211 - B212 → Fracture → **P TH10** B035 / Wear → **DX160** B211 - B212	Basic  **P TH10** B035
Medium cutting [a_p = 1 ~ 4 mm]	Basic  **28 KS05F** B035 → Wear → **DX140** B211 - B212	Basic  **28 KS05F** B035 → Wear → **DX140** B211 - B212	Basic  **P TH10** B035

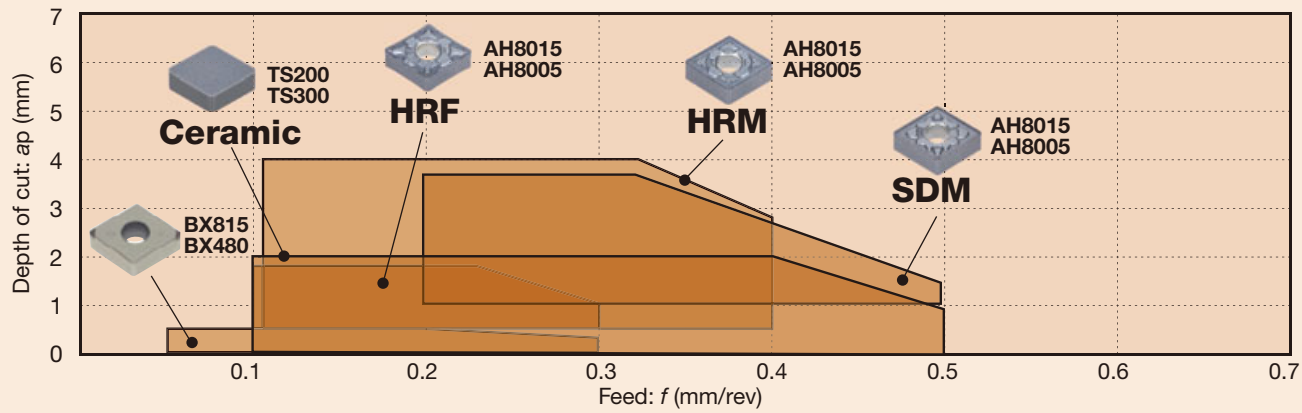
Please see the page B*** for the details.

Chipbreaker Guide

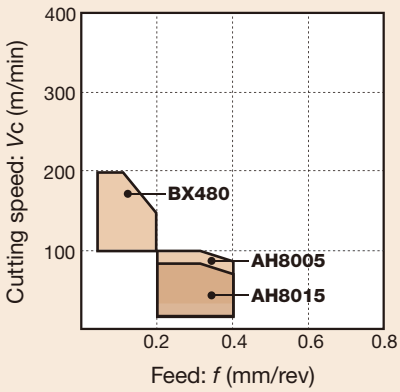
BASIC CHIPBREAKER: NEGATIVE TYPE

S Heat resistant superalloys

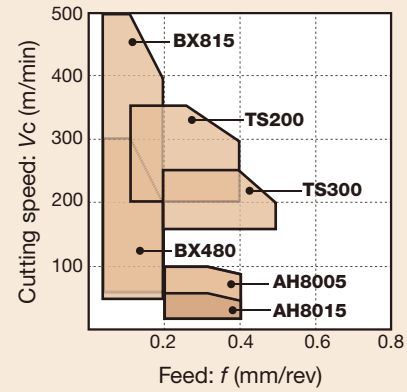
Chipbreaker System for Turning (Negative type)



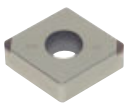
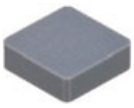
Titanium alloy



Ni-base alloy



Chipbreaker	Shape	Feature
HRF		Suitable for finishing superalloy. Unique protrusion improves chip control in cutting low depth.
HRM		First choice for heat-resistant alloy. The geometry optimized for a wide range of depths of cut.
SDM		Light cutting geometry for notch wear and crater wear resistance.

Chipbreaker	Shape	Feature
-		Excellent performance in finishing of heat-resistant alloy and titanium alloy with CBN sintered body on the cutting edge.
Ceramic		Suitable for roughing operation of heat-resistant alloy, due to the SiAlON ceramic with high-temperature strength.

STANDARD CUTTING CONDITIONS

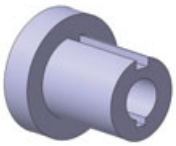
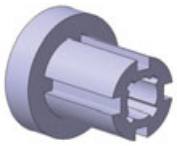
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)	
						Titanium alloy	Ni-base alloy
S	Precision finishing	-	BX480	0.1 - 0.5	0.05 - 0.2	100 - 200	70 - 300
		-	BX815	0.1 - 0.5	0.05 - 0.2	-	70 - 500
	Finishing to medium cutting	-	TS200	0.1 - 2	0.1 - 0.4	-	200 - 350
		-	TS300	0.1 - 2	0.2 - 0.5	-	150 - 250
		HRF	AH8005	0.5 - 1.5	0.05 - 0.25	20 - 100	20 - 100
		HRF	AH8015	0.5 - 1.5	0.05 - 0.25	20 - 80	20 - 50
		HRF	AH8015	0.5 - 1.5	0.05 - 0.25	10 - 60	10 - 40
	Medium cutting	HRM	AH8005	0.5 - 4	0.1 - 0.4	20 - 100	20 - 100
		HRM	AH8015	0.5 - 4	0.1 - 0.4	20 - 80	20 - 50
		HRM	AH8015	0.5 - 4	0.1 - 0.4	10 - 60	10 - 40

Ni-base alloy: INCONEL718, etc. Titanium alloy: Ti-6Al-4V, etc.

Selection System

SELECTION SYSTEM: NEGATIVE TYPE

S Heat resistant superalloys

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic **BX815** B168 - B188 → Fracture → **HRF AH8005** B038	Basic **BX480** B168 - B188 → Fracture → **HRF AH8005** B038	
Finishing [a_p = 0.5 ~ 1.5 mm]	Basic **HRF AH8005** B031 → Fracture → **HRF AH8015** B031; Chip control → **28 AH8005** B035; High-speed wear → **TS300** B038, B039; Crater wear → **SDM AH8005** B033	Basic **HRF AH8015** B031 → Fracture → **HRM AH8015** B035; Wear → **HRF AH8005** B031; Chip control → **28 AH8015** B035; Crater wear → **SDM AH8015** B033	Basic **HRF AH8015** B031 → Fracture → **HRM AH8015** B034; Wear → **HRF AH8005** B031; Crater wear → **SDM AH8015** B033
Medium cutting [a_p = 0.5 ~ 4 mm]	Basic **HRM AH8005** B034 → Fracture → **HRM AH8015** B034; Burr occurrence → **HRF AH8015** B031; Chip control → **28 AH8005** B035; Crater wear → **SDM AH8005** B033	Basic **HRM AH8015** B035 → Fracture → **SM AH630** B033; Wear → **HRM AH8005** B034; Chip control → **28 AH8015** B035; Crater wear → **SDM AH8015** B033	Basic **HRM AH8015** B034 → Wear → **HRF AH8005** B031; Crater wear → **SDM AH8015** B033

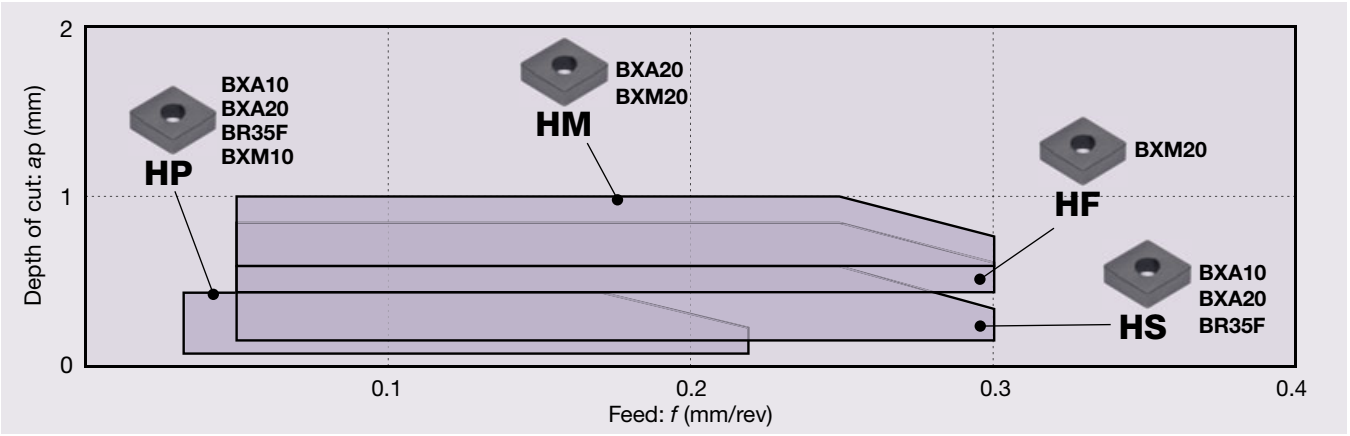
Please see the page B*** for the details.

Chipbreaker Guide

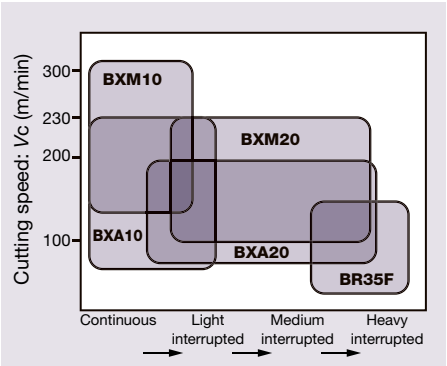
BASIC CHIPBREAKER: NEGATIVE TYPE

H Hard Materials

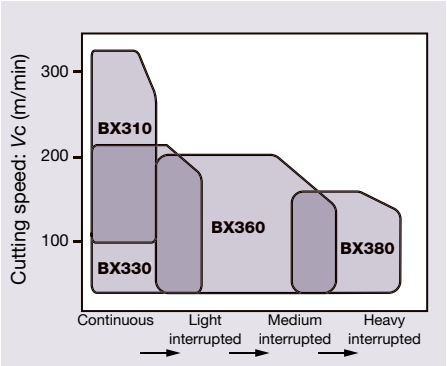
Chipbreaker System for Turning (Negative type)



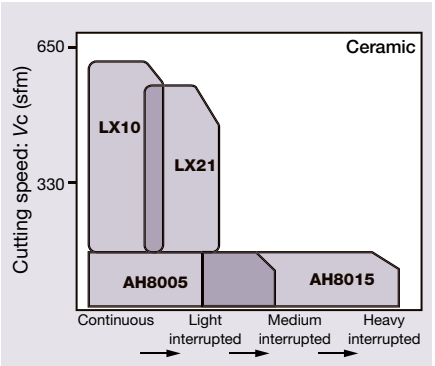
Coated CBN

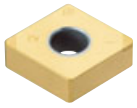
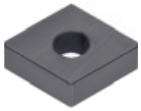


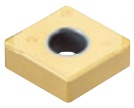
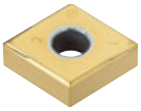
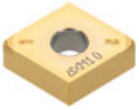
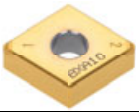
T-CBN



Ceramic, PVD coating



Chipbreaker	Shape	Feature
-		Excellent performance in finishing of hard material with CBN sintered body on the cutting edge.
- (Ceramic)		Realizes economical hardened steel medium speed finishing.
HRF		Excellent chip control in Hardent steel medium finishing.

Chipbreaker	Shape	Feature
HF		Excellent chip control in removing carburized layer at small depth of cut.
HM		Excellent chip control in removing carburized layer at large depth of cut.
HP		Excellent chip control in precision finishing.
HS		Provides the excellent chip-control at a high-feed condition in the precise finishing operation.

STANDARD CUTTING CONDITIONS

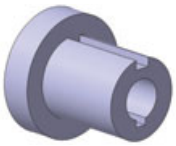
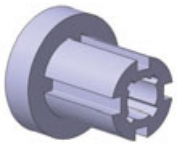
ISO	Operation	Chipbreaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed *Vc* (m/min)
H	Precision finishing	HP	BXA10 BXA20 BR35F	0.03 - 0.25	0.03 - 0.22	70 - 350
		HS	BXA10 BXA20 BR35F	0.1 - 0.35	0.05 - 0.3	70 - 350
	Finishing	-	BXM10 BXM20 BXA20	0.05 - 0.5	0.05 - 0.25	70 - 350
		-	LX10 LX21	0.05 - 0.5	0.05 - 0.25	60 - 180
	Removing of carburized layer	HF	BXM20	0.3 - 0.75	0.05 - 0.3	70 - 200
		HM	BXA20 BXM20	0.5 - 1	0.05 - 0.3	70 - 200
	Medium cutting	HRF	AH8005 AH8015	0.05 - 2	0.05 - 0.25	10 - 50

Hardened steels, Pre-hardened steels: SKD11, SKD61, etc. X153CrMoV12, X40CrMoV5-1, etc.

Selection System

SELECTION SYSTEM: NEGATIVE TYPE

H Hard Materials

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.35 mm]	Basic **HP BXA10** B168 - B188 → High feed → **HS BXA10** B168 - B188	Basic **BXA20** B168 - B188 → Fracture → **-H BXA20** B168 - B188; → High-speed wear → **BXA10** B168 - B188	
Finishing [a_p = ~ 0.5 mm]	Basic **BXA10** B168 - B188 → High-speed → **LX10** B038, B039	Basic **BXA20** B168 - B188 → Fracture → **-H BXA20** B168 - B188; → High-speed → **LX21** B038, B039; → High-speed wear → **BXA10** B168 - B188	Basic **BR35F** B168 - B188 → Fracture → **-HC BR35F** B168 - B188
Removing of carburized layer [a_p = ~ 1 mm]	Basic **HF BXM20** B168 - B188	Basic **HM BXA20** B168 - B188	
Medium cutting [a_p = ~ 2 mm]	Basic **HRF AH8005** B031 → Fracture → **HRF AH8015** B034	Basic **HRF AH8015** B031 → Fracture → **HRM AH8015** B034	Basic **HRF AH8015** B031 → Fracture → **HRM AH8015** B034

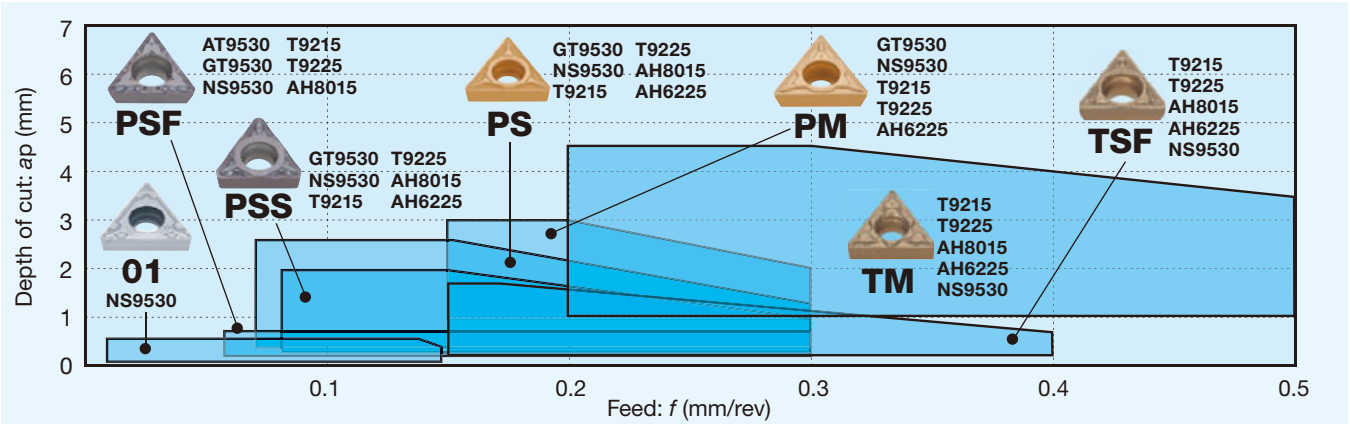
Please see the page B*** for the details.

Chipbreaker Guide

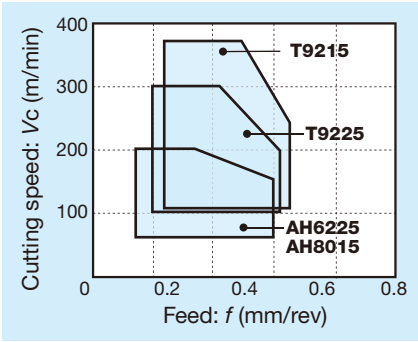
BASIC CHIPBREAKER: POSITIVE TYPE

P Steel

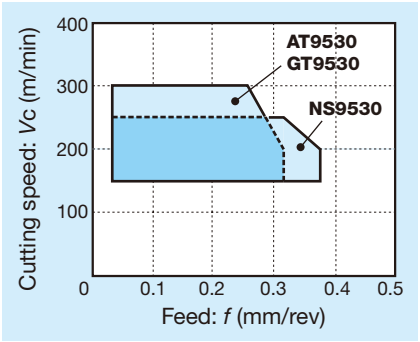
Chipbreaker System for Turning (Positive Type)

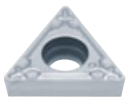
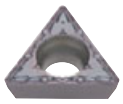
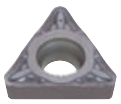


CVD / PVD coated grade



Coated cermet / Cermet



Chipbreaker	Shape	Feature
01		Excellent chip control in machining very small depth of cut thanks to the sharp cutting edge and protrusion.
PSF		Low cutting force and high wear resistance. First choice for finishing. Excellent chip control in finishing prevents chip entanglement in internal machining.
PSS		3D chipbreaker for finishing to medium cutting with excellent chip control and low cutting force.
PS		3D chipbreaker for finishing to medium cutting with excellent chip control and sharpness. M-class insert delivers cost reduction and highly efficient boring in a wide range of applications.

Chipbreaker	Shape	Feature
PM		First choice for medium cutting with excellent sharpness and good chip control. Delivers stable machining of stainless steel.
TSF		Optimal chipbreaker width and geometry enable smooth chip control in high-feed machining.
TM		Optimal cutting edge design and chipbreaker shape achieve excellent chip control in large depth of cut machining.

STANDARD CUTTING CONDITIONS

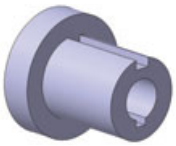
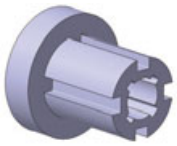
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min) Low carbon steels, Alloy steels	Medium carbon steels, Alloy steels	High carbon steels, Alloy steels
P	Precision finishing	01	NS9530	0.05 - 0.5	0.03 - 0.15	150 - 250	80 - 220	80 - 180
		01	NS9530	0.05 - 0.5	0.03 - 0.15	150 - 250	80 - 220	80 - 180
	Finishing	PSS	NS9530	0.1 - 0.5	0.05 - 0.3	150 - 250	80 - 220	80 - 180
		PSS	NS9530	0.1 - 0.5	0.05 - 0.3	150 - 250	80 - 220	80 - 180
		PSS	NS9530	0.1 - 0.5	0.05 - 0.3	150 - 250	80 - 220	80 - 180
	Finishing to light cutting	PS	T9215	0.3 - 2	0.08 - 0.3	120 - 350	100 - 350	80 - 250
		PS	T9215	0.3 - 2	0.08 - 0.3	120 - 350	100 - 350	80 - 250
		PS	T9215	0.3 - 2	0.08 - 0.3	120 - 350	100 - 350	80 - 250
	Finishing to Medium cutting	PS	T9215	0.5 - 2.5	0.08 - 0.3	120 - 350	100 - 350	80 - 250
		PS	T9225	0.5 - 2.5	0.08 - 0.3	100 - 300	80 - 300	80 - 250
	Medium cutting	PM	T9215	1 - 3	0.15 - 0.3	150	100 - 200	80 - 180
		PM	T9225	1 - 3	0.15 - 0.3	120	80 - 180	80 - 120

Low carbon steels, Alloy steels: S10C, SCM415, SS400, SCr420H, etc. C10, 18CrMo4, E275A, 20Cr4, etc. Medium carbon steels, Alloy steels: S45C, SCM440, etc. C45, 42CrMo4, etc. Hi carbon steels, Alloy steels: SNCM439, etc. 41CrNiMo2, etc.

Selection System

SELECTION SYSTEM: POSITIVE TYPE

P Steel

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic: **01 NS9530** — B040, B045	Basic: **01 NS9530** — B040, B045 Fracture: **PSF NS9530** — B040, B045, B049	
Finishing [a_p = 0.1 ~ 0.5 mm]	Basic: **PSS NS9530** — B042, B046, B049 Fracture: **PSS T9215** — B042, B045, B049 Wear: **PSS GT9530** — B042, B045, B049 Chip control: **PSF NS9530** — B040, B045, B049	Basic: **PSS NS9530** — B042, B046, B049 Fracture: **PSS T9215** — B042, B046, B049 Wear: **PSS GT9530** — B042, B046, B049 Chip control: **PSF NS9530** — B040, B045, B049	Basic: **PSS NS9530** — B042, B046, B049 Fracture: **PSS T9215** — B042, B046, B049 Wear: **PSS GT9530** — B042, B046, B049 Chip control: **PSF NS9530** — B040, B045, B049
Finishing to medium cutting [a_p = 0.5 ~ 2.5 mm]	Basic: **PS T9215** — B042, B046, B049 Fracture: **PS T9225** — B042, B046, B049 Wear: **PS NS9530** — B042, B046, B049 Chip control: **TSF, TM T9215** — B040, B042, B045, D046, B049	Basic: **PS T9215** — B042, B046, B049 Fracture: **PS T9225** — B042, B046, B049 Wear: **PS NS9530** — B042, B046, B049 Chip control: **TSF, TM T9215** — B040, B042, B045, D046, B049	Basic: **PS T9215** — B042, B046, B049 Fracture: **PS T9225** — B042, B046 Chip control: **TSF, TM T9215** — B040, B042, B045, D046, B049
Medium cutting [a_p = 1 ~ 3 mm]	Basic: **PM T9215** — B044, B048 Fracture: **PM T9225** — B044, B048 Wear: **PM NS9530** — B044, B048 Chip control: **TSF, TM T9215** — B040, B042, B045, D046, B049	Basic: **PM T9215** — B044, B048 Fracture: **PM T9225** — B044, B048 Chip control: **TSF, TM T9215** — B040, B042, B045, D046, B049	Basic: **PM T9215** — B044, B048 Fracture: **PM T9225** — B044, B048 Chip control: **TSF, TM T9215** — B040, B042, B045, D046, B049

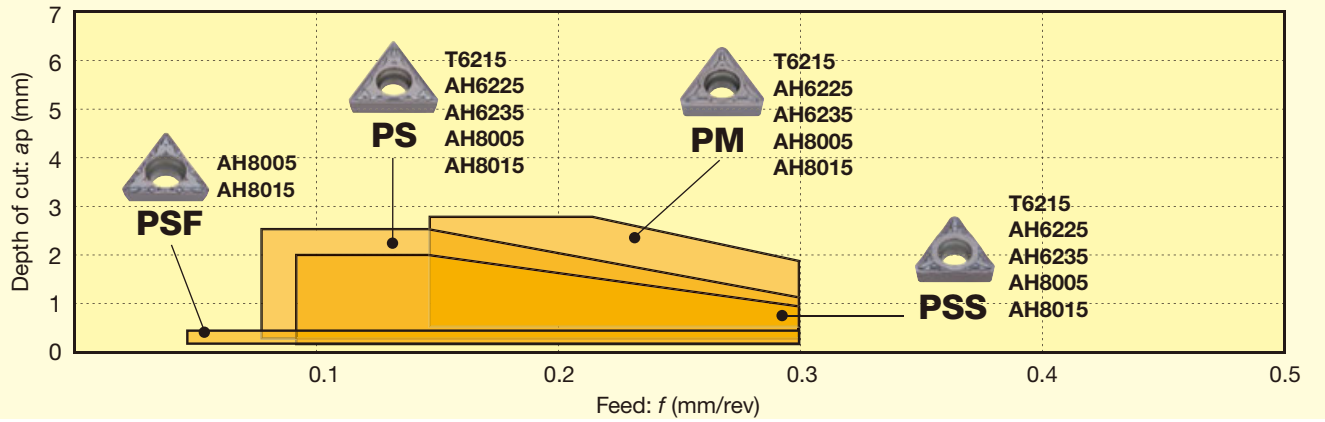
Please find the details on the pages: B***/7° relief angle, B***/11° relief angle, B***/5° relief angle.

Chipbreaker Guide

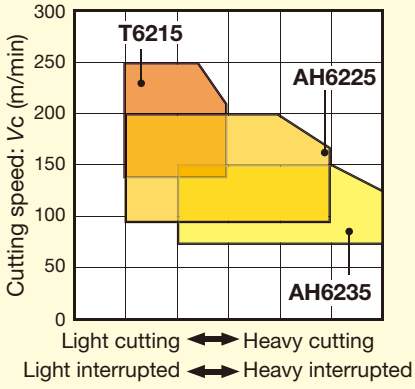
BASIC CHIPBREAKER: POSITIVE TYPE

M Stainless Steel

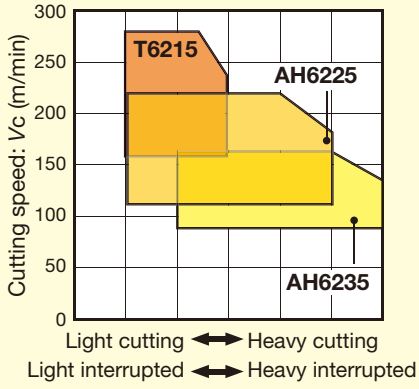
Chipbreaker System for Turning (Positive Type)



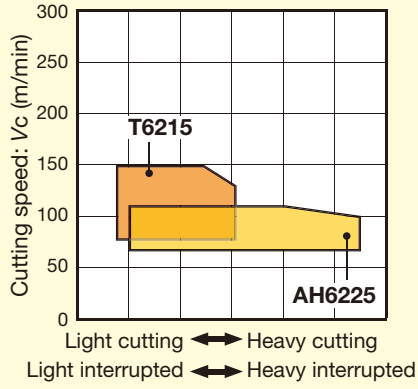
Austenitic stainless steel

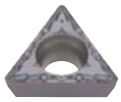
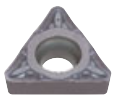


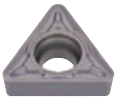
Ferritic / martensite stainless steel



Precipitation hardened stainless steel



Chipbreaker	Shape	Feature
PSF		Low cutting force and high wear resistance. First choice for finishing. Excellent chip control in finishing prevents chip entanglement in internal machining.
PSS		3D chipbreaker for finishing to medium cutting with excellent chip control and low cutting force.

Chipbreaker	Shape	Feature
PS		3D chipbreaker for finishing to medium cutting with excellent chip control and sharpness. M-class insert delivers cost reduction and highly efficient boring in a wide range of applications.
PM		First choice for medium cutting with excellent sharpness and good chip control. Delivers stable machining of stainless steel.

STANDARD CUTTING CONDITIONS

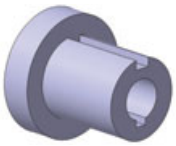
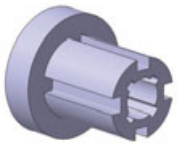
ISO	Operation	Chipbreaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)		
						Austenitic stainless steel	Ferritic / martensite stainless steel	Precipitation hardened stainless steel
M	Finishing	PSS	T6215	0.3 - 2	0.08 - 0.3	140 - 240	160 - 280	80 - 150
			AH6225	0.3 - 2	0.08 - 0.3	90 - 200	110 - 240	60 - 110
			AH6235	0.3 - 2	0.08 - 0.3	50 - 150	70 - 170	-
	Finishing to medium cutting	PS	T6215	0.5 - 2.5	0.08 - 0.3	140 - 240	160 - 280	80 - 150
			AH6225	0.5 - 2.5	0.08 - 0.3	90 - 200	110 - 240	60 - 110
			AH6235	0.5 - 2.5	0.08 - 0.3	50 - 150	70 - 170	-
	Medium cutting	PM	T6215	1 - 3	0.15 - 0.3	140 - 240	160 - 280	80 - 150
			AH6225	1 - 3	0.15 - 0.3	90 - 200	110 - 240	60 - 110
			AH6235	1 - 3	0.15 - 0.3	50 - 150	70 - 170	-

* For CCMT0602 and DCMT0702 type inserts, *ap* = 0.5 - 2.5
Stainless steels: SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.

Selection System

SELECTION SYSTEM: POSITIVE TYPE

M Stainless Steel

	Continuous	Light interrupted	Heavy interrupted
Finishing [a_p = 0.3 ~ 1.5 mm]	Basic: **PSS AH6225** B042, B046, B049 Wear: **PSS T6215** B042, B046, B049	Basic: **PSS AH6225** B042, B046, B049 Fracture: **PSS AH6235** B042, B046, B049 Wear: **PSS T6215** B042, B046, B049	Basic: **PSS AH6225** B042, B046, B049 Fracture: **PSS AH6235** B042, B046, B049 Wear: **PSS T6215** B042, B046, B049
Finishing to medium cutting [a_p = 0.5 ~ 2.5 mm]	Basic: **PS AH6225** B042, B046, B049 Wear: **PS T6215** B042, B046, B049	Basic: **PS AH6225** B042, B046, B049 Fracture: **PM AH6235** B044, B048 Wear: **PS T6215** B042, B046, B049	Basic: **PS AH6225** B042, B046, B049 Fracture: **PM AH6235** B044, B048 Wear: **PS T6215** B042, B046, B049
Medium cutting [a_p = 1 ~ 3 mm]	Basic: **PM AH6225** B044, B048 Wear: **PM T6215** B044, B048	Basic: **PM AH6225** B044, B048 Fracture: **PM AH6235** B044, B048 Wear: **PM T6215** B044, B048	Basic: **PM AH6225** B044, B048 Fracture: **PM AH6235** B044, B048

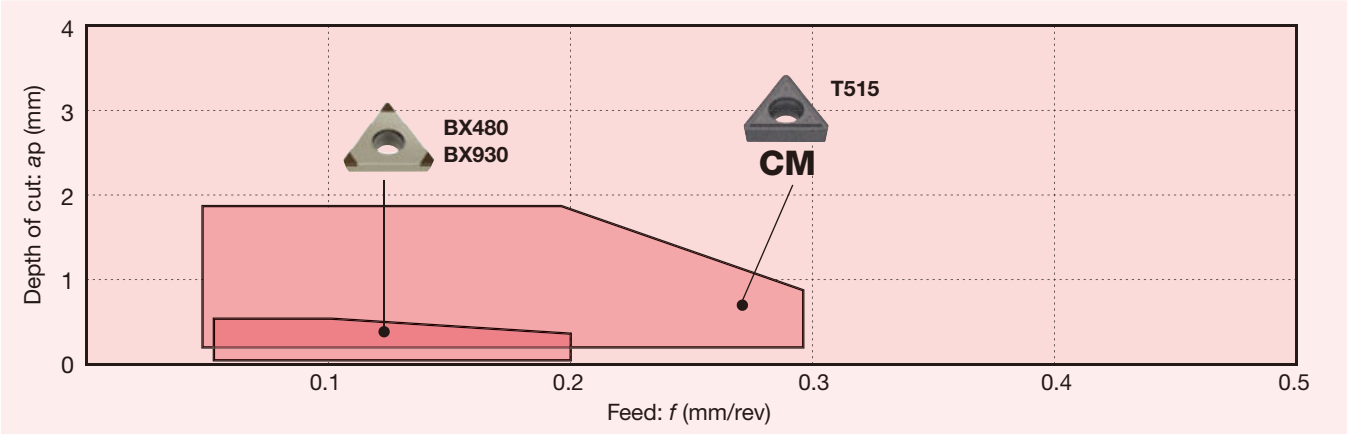
Please find the details on the pages: B***/7° relief angle, B***/11° relief angle, B***/5° relief angle.

Chipbreaker Guide

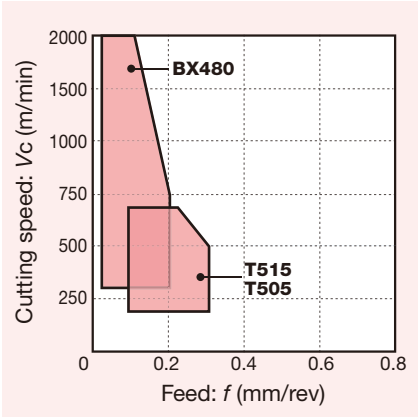
BASIC CHIPBREAKER: POSITIVE TYPE

K Cast Iron

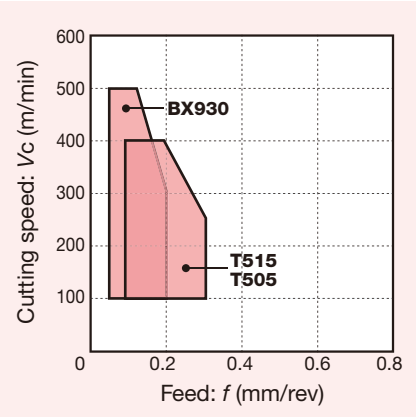
Chipbreaker System for Turning (Positive Type)



Grey cast iron



Ductile cast iron



Chipbreaker	Shape	Feature
-		Excellent performance in high-speed finishing of cast iron with CBN sintered body on the cutting edge.

Chipbreaker	Shape	Feature
CM		Highly versatile all-round chipbreaker with low cutting force. Suitable for finishing to medium cutting.

STANDARD CUTTING CONDITIONS

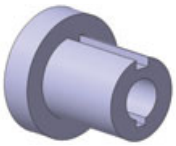
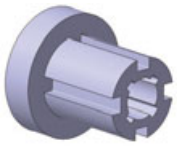
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)	
						Grey cast iron	Ductile cast iron
K	Precision finishing	-	BX930	0.05 - 0.5	0.05 - 0.2	300 - 1200	100 - 500
		-	BX480	0.05 - 0.5	0.05 - 0.2	300 - 2000	-
	Finishing	CM	T515	0.05 - 2	0.05 - 0.3	150 - 700	150 - 300
		CM	T515	0.05 - 2	0.05 - 0.3	100 - 200	100 - 200
	Medium cutting	CM	T515	0.05 - 2	0.05 - 0.3	100 - 300	100 - 250

Grey cast iron: FC250, etc. 250, etc.
Ductile cast iron: FCD450, etc. 450-10S, etc.

Selection System

SELECTION SYSTEM: POSITIVE TYPE

K Cast Iron

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic - BX480 B189 - B209	Basic - BX480 B189 - B209	
Finishing to Medium cutting [a_p = 0.5 ~ 3 mm]	Basic CM T515 B042, B046, B049 Wear → CM T505 B042, B046, B049	Basic CM T515 B042, B046, B049 Wear → CM T505 B042, B046, B049	Basic CM T515 B042, B046, B049 Wear → CM T505 B042, B046, B049

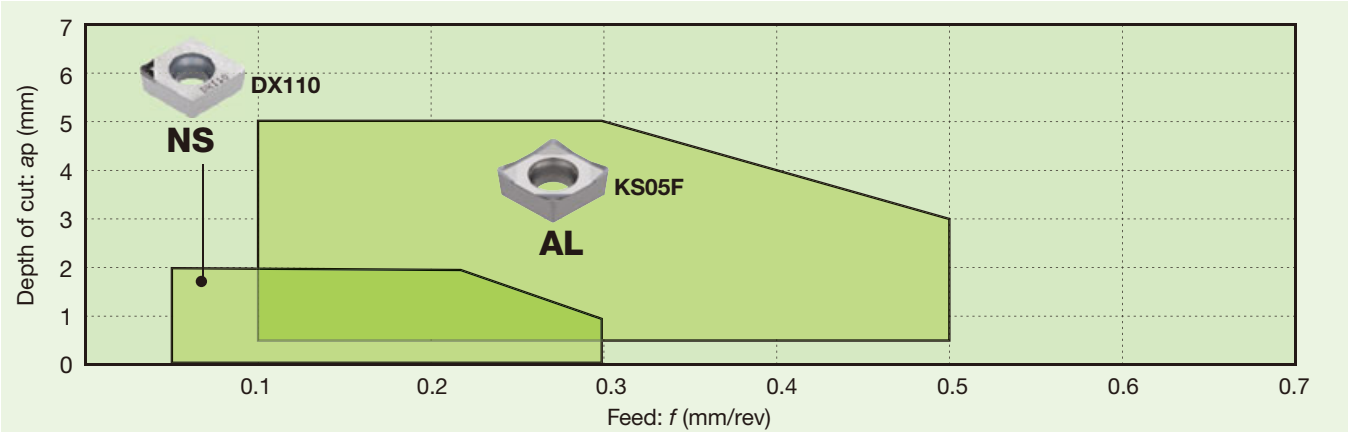
Please find the details on the pages: B***/7° relief angle, B***/11° relief angle, B***/5° relief angle.

Chipbreaker Guide

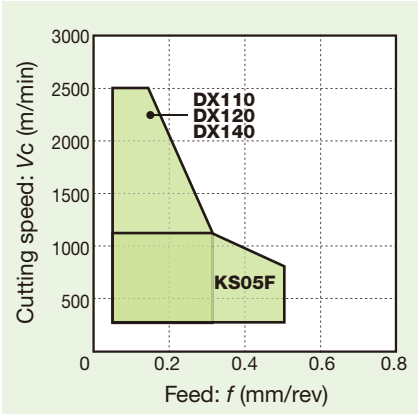
BASIC CHIPBREAKER: POSITIVE TYPE

N Non-ferrous Metal

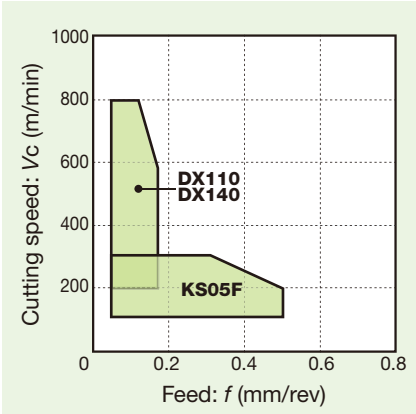
Chipbreaker System for Turning (Positive Type)



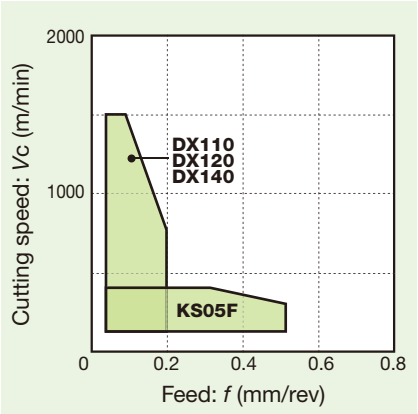
Aluminium alloy (Si < 12%)

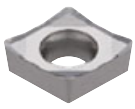


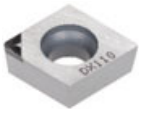
Aluminium alloy (Si ≥ 12%)



Copper alloy



Chipbreaker	Shape	Feature
-		Excellent performance in high-speed finishing of non-ferrous metal with diamond sintered body on the cutting edge.
AL		Large rake angle and sharp cutting edge reduce cutting force. Lapped rake face prevents adhesion. Large inclination on the cutting edge (wavy cutting edge) for more stable chip control.

Chipbreaker	Shape	Feature
NS		A unique three-dimensional chipbreaker. Covers a wide range of condition from roughing to finishing.

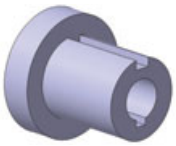
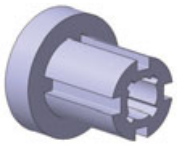
STANDARD CUTTING CONDITIONS

ISO	Operation	Work condition	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min) Aluminium alloy (Si < 12%)	Aluminium alloy (Si ≥ 12%)	Copper alloy
N	Precision finishing	Continuous	NS	DX110	0.05 - 2	0.05 - 0.15	500 - 2500	400 - 800	500 - 1500
		Light interrupted	-	DX140	0.05 - 1	0.05 - 0.2	300 - 2500	-	500 - 1500
	Finishing	Continuous	NS	DX110	0.05 - 2	0.05 - 0.3	500 - 2500	400 - 800	500 - 1500
		Light interrupted	-	DX140	0.05 - 1	0.05 - 0.15	300 - 1800	400 - 600	400 - 1200
		Heavy interrupted	AL	KS05F	0.5 - 5	0.1 - 0.5	100 - 600	100 - 200	-
	Medium cutting	Continuous	AL	KS05F	0.5 - 5	0.1 - 0.5	100 - 1200	100 - 300	100 - 300
		Light interrupted	AL	KS05F	0.5 - 5	0.1 - 0.5	100 - 900	100 - 200	100 - 200
		Heavy interrupted	AL	KS05F	0.5 - 5	0.1 - 0.5	100 - 600	100 - 200	-

Selection System

SELECTION SYSTEM: POSITIVE TYPE

N Non-ferrous Metal

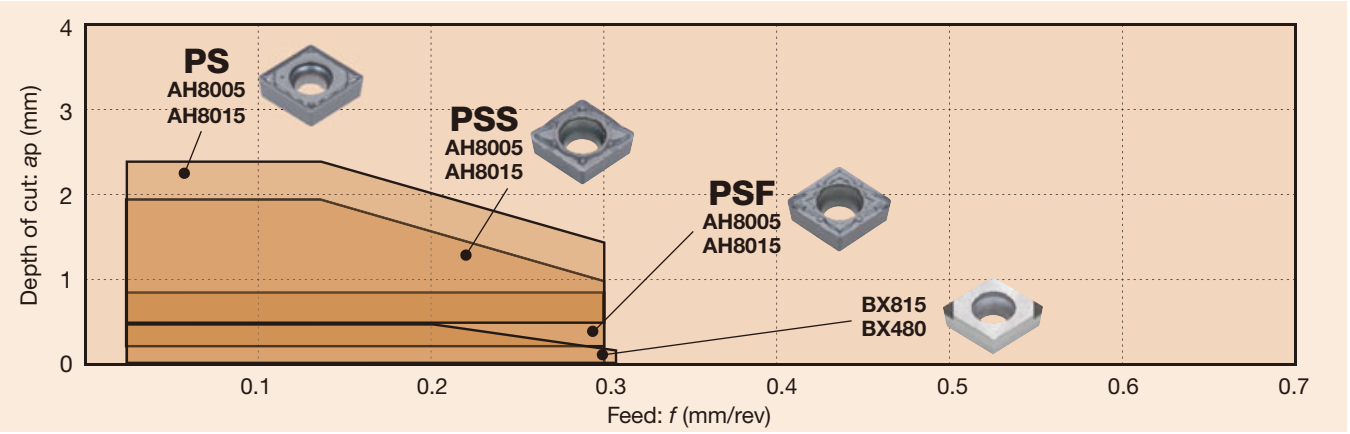
	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic **NS DX110** B213 - → Wear → **DX140** B213 -	Basic With chipbreaker **DX110** B213 - → Wear → **DX140** B213 -	
Finishing [a_p = 0.5 ~ 2 mm]	Basic **NS DX110** B213 - → Wear → **DX160** B213 -	Basic **DX140** B213 - → Fracture → **AL KS05F** B042; → Wear → **DX160** B213 -	Basic **AL KS05F** B043
Medium cutting [a_p = 1 ~ 5 mm]	Basic **AL KS05F** B043 → Wear → With chipbreaker **DX120** B213 -	Basic **AL KS05F** B043 → Wear → **DX140** B213 -	Basic **AL KS05F** B043

Chipbreaker Guide

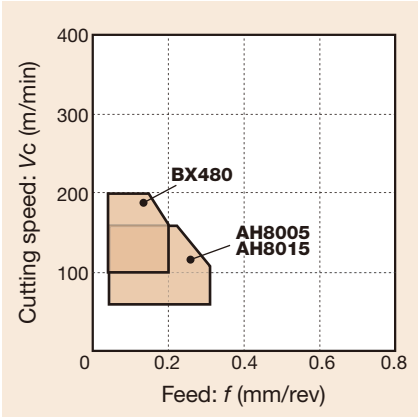
BASIC CHIPBREAKER: POSITIVE TYPE

S Heat resistant superalloys

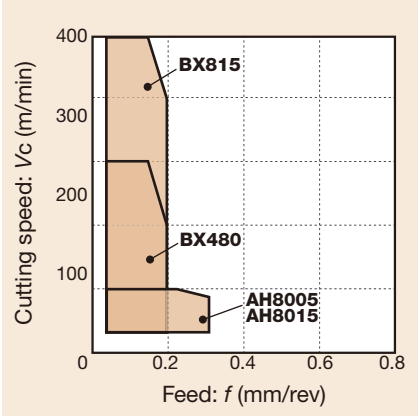
Chipbreaker System for Turning (Positive Type)

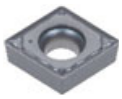
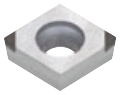


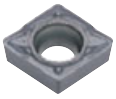
Titanium alloy



Ni-base alloy



Chipbreaker	Shape	Feature
PS		3D chipbreaker for finishing to medium cutting with excellent chip control and sharpness. M-class insert delivers cost reduction and highly efficient boring in a wide range of applications.
-		Excellent performance in finishing of heat-resistant alloy and titanium alloy with CBN sintered body on the cutting edge.

Chipbreaker	Shape	Feature
PSF		Low cutting force and high wear resistance. First choice for finishing. Excellent chip control in finishing prevents chip entanglement in internal machining.
PSS		3D chipbreaker for finishing to medium cutting with excellent chip control and low cutting force.

STANDARD CUTTING CONDITIONS

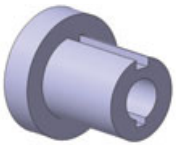
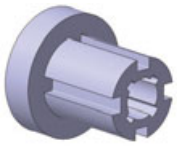
ISO	Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)	
						Titanium alloy	Ni-base alloy
S	Precision finishing	-	BX480	0.1 - 0.5	0.05 - 0.2	100 - 200	70 - 300
		-	BX815	0.1 - 0.5	0.05 - 0.2	-	70 - 500
	Finishing	PSS	AH8015	0.3 - 2	0.02 - 0.3	20 - 150	20 - 100
		PSS	AH8015	0.3 - 2	0.02 - 0.3	20 - 150	20 - 100
	Finishing to medium cutting	PS	AH8015	0.5 - 2.5	0.02 - 0.3	20 - 150	20 - 100
		PS	AH8015	0.5 - 2.5	0.02 - 0.3	20 - 150	20 - 100

Ni-base alloy: INCONEL718, etc. Titanium alloy: Ti-6Al-4V, etc.

Selection System

SELECTION SYSTEM: POSITIVE TYPE

S Heat resistant superalloys

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic: **BX815** — B189 - B209	Basic: **BX480** — B189 - B209	
Finishing [a_p = 0.3 ~ 2 mm]	Basic: **PSS AH8015** — B042, B046, B049 → Wear: **PSS AH8005** — B042, B046, B049	Basic: **PSS AH8015** — B042, B046, B049 → Wear: **PSS AH8005** — B042, B046, B049; Fracture: **PS AH8015** — B042, B046, B049	
Finishing to medium cutting [a_p = 0.5 ~ 2.5 mm]	Basic: **PS AH8015** — B042, B046, B049 → Wear: **PSS AH8005** — B042, B046, B049	Basic: **PS AH8015** — B042, B046, B049 → Fracture: **All-round AH8015** — B043, B047	Basic: **PS AH8015** — B042, B046, B049 → Fracture: **All-round AH8015** — B043, B047

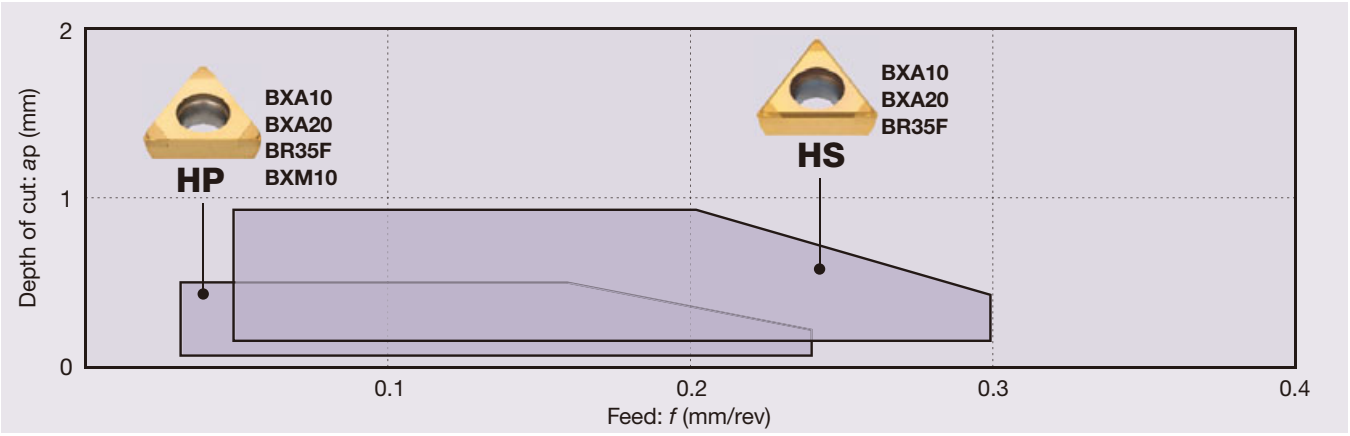
Please find the details on the pages: B***/7° relief angle, B***/11° relief angle, B***/5° relief angle.

Chipbreaker Guide

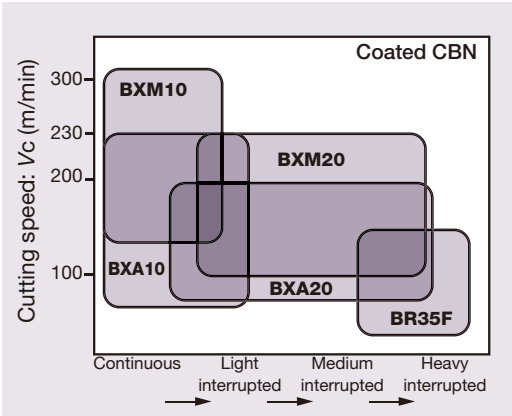
BASIC CHIPBREAKER: POSITIVE TYPE

H Hard Materials

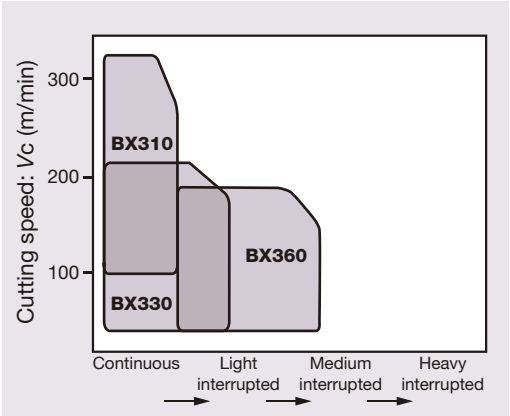
Chipbreaker System for Turning (Positive Type)



Coated CBN



CBN



Chipbreaker	Shape	Feature
-		Excellent performance in high-speed finishing of hard material with CBN sintered body on the cutting edge.

Chipbreaker	Shape	Feature
HP		Excellent chip control in precision finishing.
HS		Provides the excellent chip-control at a high-feed condition in the precise finishing operation.

STANDARD CUTTING CONDITIONS

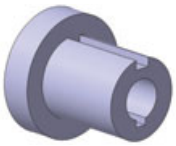
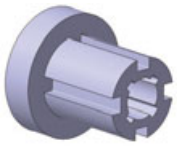
ISO	Operation	Chipbreaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed *Vc* (m/min)
H	Precision finishing	HP	BXM10 BXA20 BR35F	0.03 - 0.25	0.03 - 0.22	70 - 350
		HS	BXM10 BXA20 BR35F	0.1 - 0.35	0.05 - 0.3	70 - 350
	Finishing	-	BXM10 BXA20 BR35F	0.05 - 0.5	0.05 - 0.25	70 - 350

Hardened steels, Pre-hardened steels: SKD11, SKD61, etc. X153CrMoV12, X40CrMoV5-1, etc.

Selection System

SELECTION SYSTEM: POSITIVE TYPE

H Hard Materials

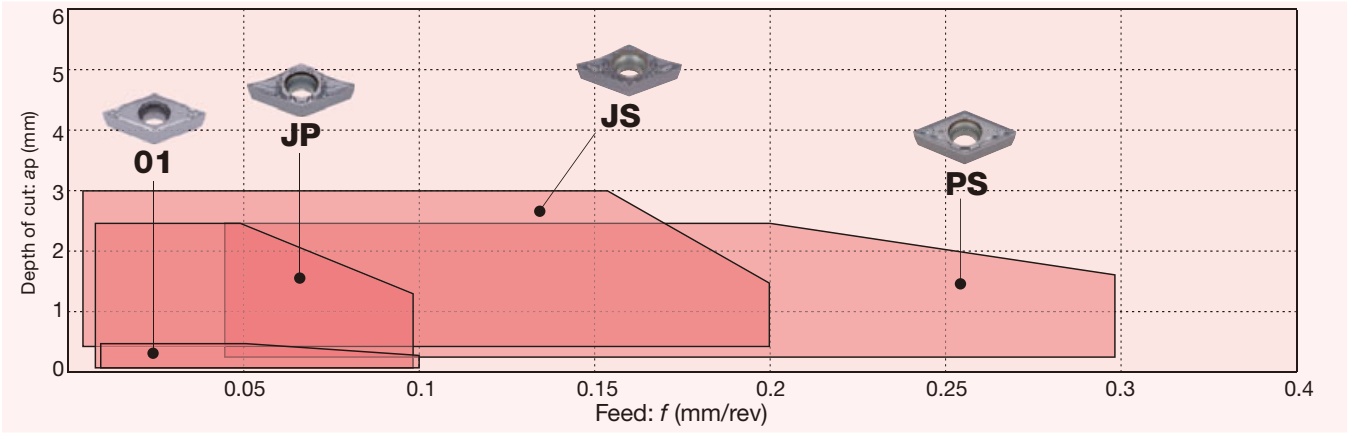




	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.35 mm]	Basic **HP BXA10** B189 - → High-feed → **HS BXA10** B189 -	Basic **BXA20** B189 - → Fracture → **-H BXA20** B189 -	
Finishing [a_p = ~ 0.5 mm]	Basic **BXA10** B189 -	Basic **BXA20** B189 - → Fracture → **-H BXA20** B189 - ; → High-speed wear → **BXA10** B189 -	Basic **SR BR35F** B189 - → Fracture → **HC BR35F** B189 -

Chipbreaker Guide

For Miniature machining

BASIC CHIPBREAKER: POSITIVE TYPE



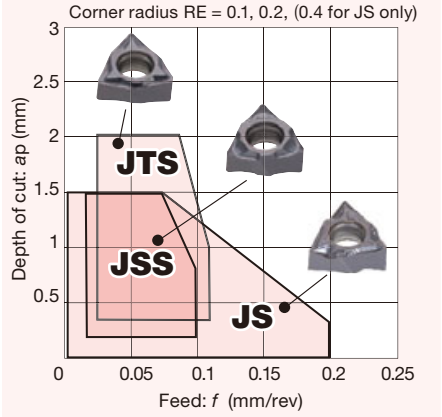
Chipbreaker	Shape	Feature
JP		Excellent performance in finishing of hard material with CBN sintered body on the cutting edge.

Chipbreaker	Shape	Feature
JS		Excellent chip control in removing carburized layer at small depth of cut.

BASIC CHIPBREAKER: DOUBLE-SIDED POSITIVE TYPE

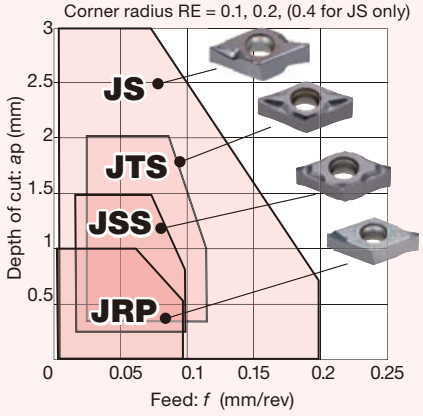
WXGU insert

Corner radius RE = 0.1, 0.2, (0.4 for JS only)



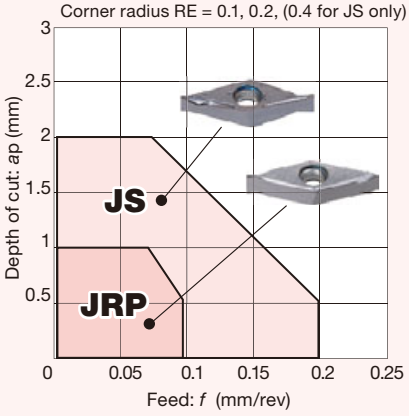
DXGU insert

Corner radius RE = 0.1, 0.2, (0.4 for JS only)



VXGU insert

Corner radius RE = 0.1, 0.2, (0.4 for JS only)



STANDARD CUTTING CONDITIONS POSITIVE TYPE

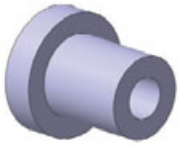
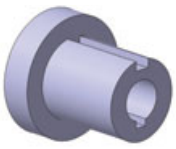
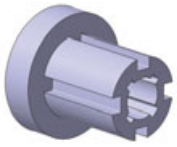
Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed *Vc* (m/min)
Precision finishing	JP	SH725	0.05 - 2.5	0.02 - 0.1	10 - 200
Finishing	JP	SH725	0.05 - 2.5	0.02 - 0.1	50 - 250
	JS	SH725	0.2 - 3	0.02 - 0.2	10 - 200
Finishing to light cutting	JP	SH725	0.05 - 2.5	0.02 - 0.1	50 - 250
	JS	SH725	0.5 - 2	0.02 - 0.2	10 - 200
Medium cutting	JS	SH725	0.5 - 3	0.03 - 0.15	10 - 200
	PS	AH8015	0.5 - 2.5	0.02 - 0.2	20 - 200
	PS	AH6225	0.5 - 2.5	0.02 - 0.2	60 - 240

STANDARD CUTTING CONDITIONS DOUBLE-SIDED POSITIVE TYPE

Operation	Chip-breaker	Grade	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed *Vc* (m/min)
Precision finishing	JRP	SH725	0.05 - 0.5	0.03 - 0.08	50 - 250
Finishing	JSS	SH725	0.2 - 1.5	0.03 - 0.1	50 - 250
	JS	SH725	0.2 - 3	0.03 - 0.2	50 - 250
Finishing to light cutting	JS	SH725	0.5 - 3	0.03 - 0.2	50 - 250
	JTS	SH725	0.5 - 2	0.03 - 0.1	50 - 250
Medium cutting	JS	SH725	0.5 - 3	0.03 - 0.2	50 - 250

Selection System

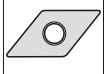
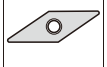
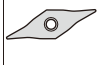
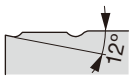
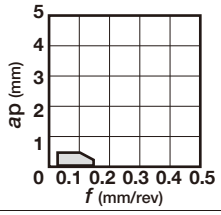
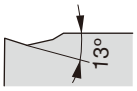
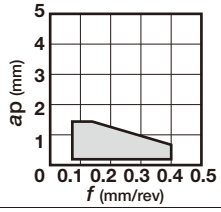
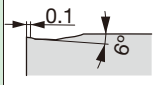
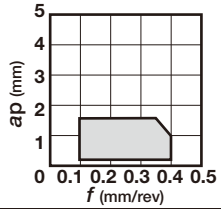
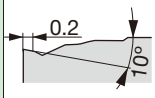
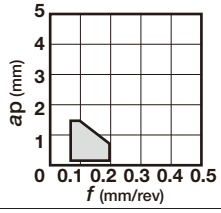
SELECTION SYSTEM: POSITIVE TYPE/DOUBLE-SIDED POSITIVE TYPE

	Continuous	Light interrupted	Heavy interrupted
Precision finishing [a_p = ~ 0.5 mm]	Basic Positive **JP SH725** Double-sided positive **JRP SH725** B040, B052	Basic Positive **JP SH725** Double-sided positive **JRP SH725** B040, B052	
Finishing [a_p = 0.1 ~ 0.5 mm]	Basic Positive **JS SH725** Double-sided positive **JSS SH725** Chip control → **JP SH725** B040 Fracture → **JSS AH725** B052 B040, B045, B049, B052	Basic Positive **JS SH725** Double-sided positive **JSS AH725** Chip control → **JP SH725** B040 Fracture → **JSS AH725** B052 B040, B045, B049, B052	Basic Positive **JS SH725** Double-sided positive **JSS AH725** B040, B045, B049, B052
Finishing to medium cutting [a_p = 0.5 ~ 3 mm]	Basic Positive **JS SH725** Double-sided positive **JTS SH725** Chip control → **JP SH725** B040 Fracture → **JSS AH725** B052 B040, B045, B049, B052	Basic Positive **JS SH725** Double-sided positive **JTS SH725** Chip control → **JP SH725** B040 Fracture → **JSS AH725** B052 B040, B045, B049, B052	Basic Positive **JS AH725** Double-sided positive **JTS AH725** Fracture → **TS AH8015** B052 B040, B045, B049, B052
Medium cutting [a_p = 1 ~ 4 (3) mm]	Basic Positive **JS SH725** Double-sided positive **JS SH725** Fracture → **PS AH8015 AH6225** B042, B046, B049 Fracture → **JSS AH725** B052 B040, B045, B049, B052	Basic Positive **PS AH8015 AH6225** Double-sided positive **JS SH725** Fracture → **JTS AH725** B052 B042, B046, B049, B052	Basic Positive **PS AH8015 AH6225** Double-sided positive **JS SH725** B042, B046, B049, B052

Please find the details on the pages: B***/7° relief angle, B***/11° relief angle, B***/5° relief angle, B***/Double-sided.

Chipbreaker Overview

Application	Negative type with hole	C	D	F	G	S	T	V	W	Y
										
		80°	55°	45°	70°	90°	60°	35°	80°	25°
Finishing	TF  	 B054	 B066			 B077	 B087	 B098	 B102	
Finishing	TSF  	 B054	 B066	 B075	 B075	 B077	 B087	 B098	 B102	
Finishing	PS  	 B054	 B066			 B077	 B087	 B098	 B102	
Finishing for mild steel	ZF  	 B054	 B066			 B077	B087	B098	B102	B110
Finishing	AS	B054	B066			B077	B087		B102	
Finishing	NS	B054	B066			B077	B087		B102	
Finishing	TS	B054	B067			B078	B089	B098	B103	

Chip control range

Please see the page B*** for the product details.

Application	Negative type with hole	C	D	S	T	V	W	Y
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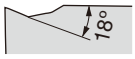
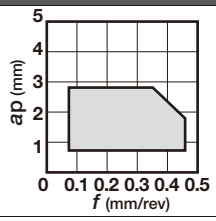
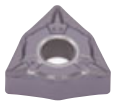
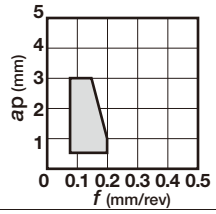
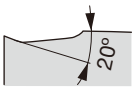
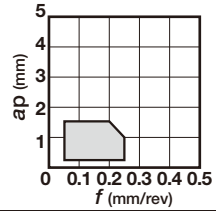
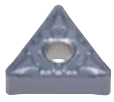
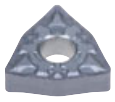
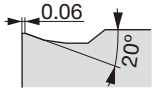
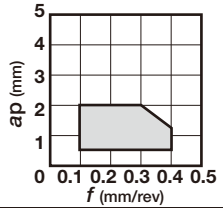
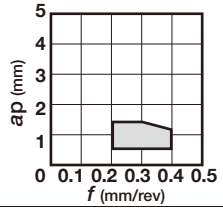
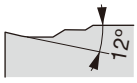
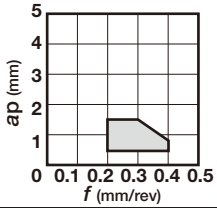
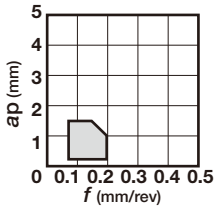
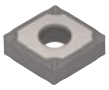
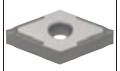
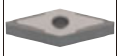
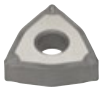
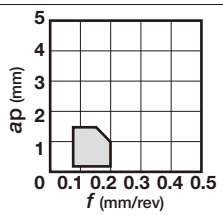
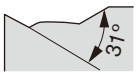
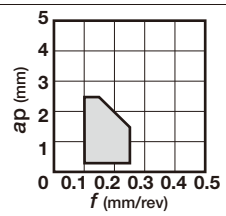
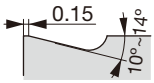
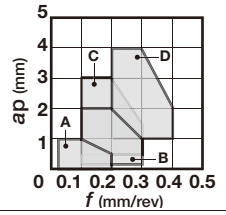
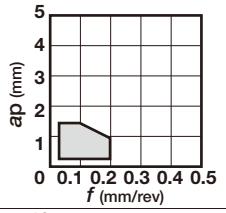
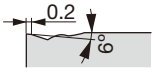
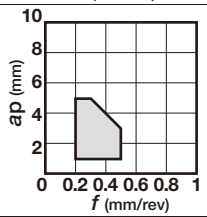
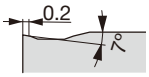
Finishing	SF  	 B055	 B067	 B078	 B088	 B098	 B103	
	SS  	 B055	 B067	 B078	 B088	 B098	 B103	
	HRF  	 B055	 B067	 B078	 B088	 B098	 B103	
	CF  	 B055	 B067	 B078	 B088	 B099	 B104	
Finishing (wiper)	FW  	 B056	 B067		 B088		 B104	
	AFW  	B056					B104	
Finishing	01	B056	B067	B078	B089	B099	B104	

Chip control range

Please see the page B*** for the product details.

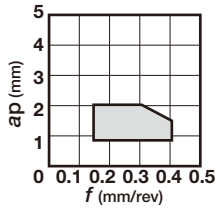
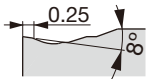
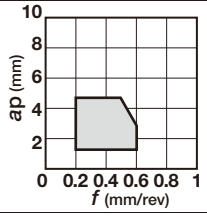
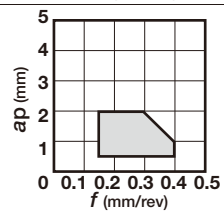
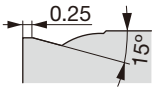
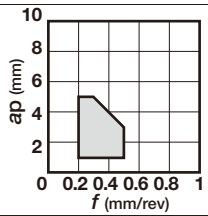
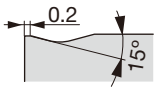
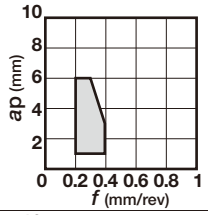
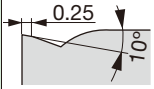
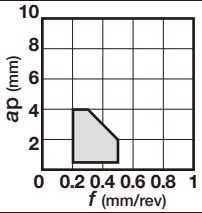
*-M,G: Without chipbreaker

Chipbreaker Overview

Application	Negative type with hole	C 80°	D 55°	F 45°	G 70°	S 90°	T 60°	V 35°	W 80°
Finishing	11  	 B056	 B068			 B078	 B089	 B099	 B104
Finishing for mild steel	17  	 B056	 B068			 B079	 B089		 B104
Boring (double side)	CB  	 B056	 B068				 B089		 B104
Finishing	A~D  	 B056				 B079	 B090		
Finishing	W  						 B090		
Medium cutting	TM  	 B057	 B069	 B075	 B075	 B079	 B090	 B099	 B105
	PM 	B057	B069			B079	B091	B099	B105

Chip control range

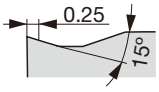
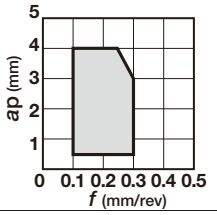
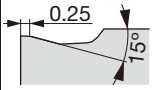
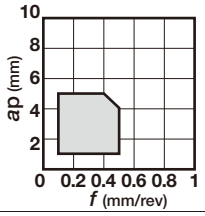
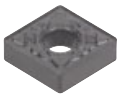
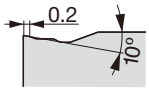
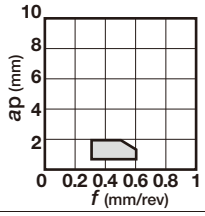
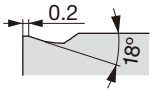
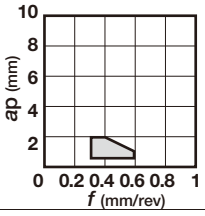
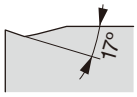
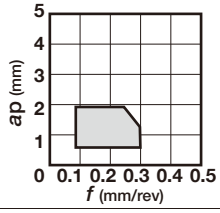
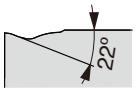
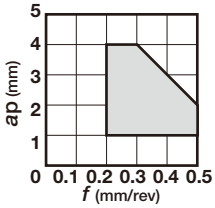
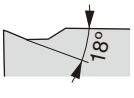
Please see the page B*** for the product details.

Application	Negative type with hole	C	D	S	T	V	W	Y
		80°	55°	90°	60°	35°	80°	25°
Medium cutting for mild steel	**ZM**  	 B057	 B069	 B080	 B091	 B099	 B105	 B110
Medium cutting	**AM**  	 B058	 B069		 B091		 B106	
	NM  	 B058	 B070		 B091		 B106	
	DM  	 B058	 B070	 B080	 B092	 B100	 B106	
	All-round  	 B058	 B070	 B080	 B092	 B100	 B106	
	SM  	 B059	B070	B080	B092	B100	B106	
	SDM	B059	B070	B080	B092	B100	B106	

Chip control range

Please see the page B*** for the product details.

Chipbreaker Overview

Application	Negative type with hole	C	D	S	T	V	W	Y
		80°	55°	90°	60°	35°	80°	25°
Medium cutting	HRM  	 B059	 B070	 B081	 B092	 B100	 B106	
	CM  	 B059	 B071	 B080	 B092	 B100	 B107	
Medium cutting (wiper)	SW  	 B059	 B071		 B093		 B107	
	ASW  	 B060					 B107	
Medium cutting	TQ  	 B060	 B071		 B093	 B100	 B107	
	TA  	 B060		 B081	 B093		 B107	
	SA 	B060	B071	B081	B093		B108	

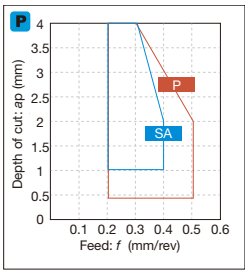
Chip control range

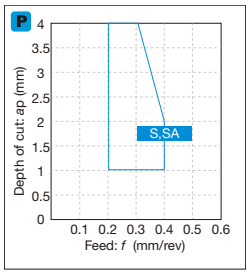
Please see the page B*** for the product details.

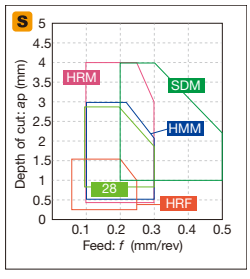
*-M,G: Without chipbreaker

Application	Negative type with hole	C	D	S	T	V	W	Y
		80°	55°	90°	60°	35°	80°	25°
Medium cutting	HMM	B060	B071	B081	B093	B100	B108	
	P	B060	B072	B081	B094			
	S	B060	B072	B082	B094			
	27	B061	B072	B082	B094		B108	
	28	B061	B072		B094	B101		
	33	B061	B072	B082	B094	B101	B108	
	37	B061	B072	B082	B094		B108	

Chip control range

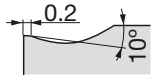
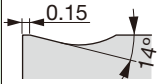
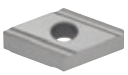
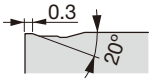
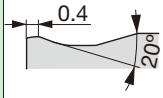
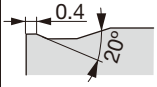
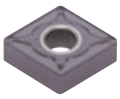
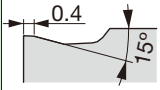
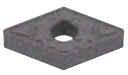
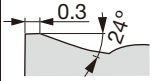




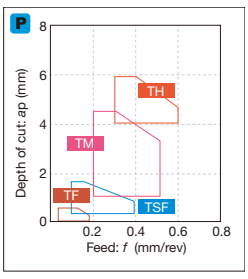


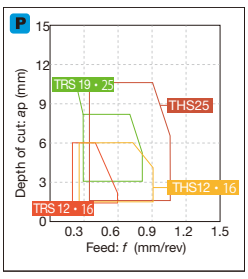
Please see the page B*** for the product details.

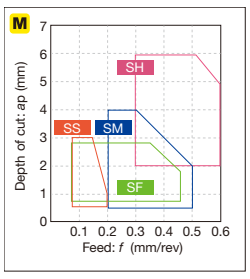
Chipbreaker Overview

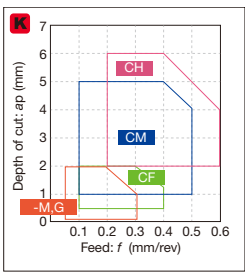
Application	Negative type with hole	C 80°	D 55°	S 90°	T 60°	V 35°	W 80°	Y 25°
Medium cutting	**38** 	 B061	 B072		 B095			
Medium cutting	**Parallel** 		 B072					
Medium to heavy cutting	**TH** 	 B061	 B073	 B082	 B095		 B108	
Medium to heavy cutting	**THS** 	 B062	 B073	 B082	 B095		 B108	
Medium to heavy cutting	**SH** 	 B062	 B073	 B083			 B109	
Medium to heavy cutting	**CH** 	 B062	 B073	 B083	 B095		 B109	
Medium to heavy cutting (single side)	**TRS** 	 B062		 B083				

Chip control range



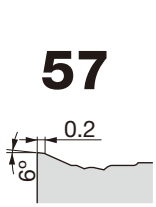
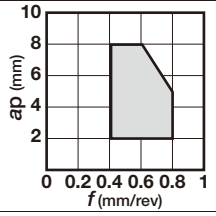
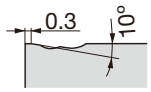
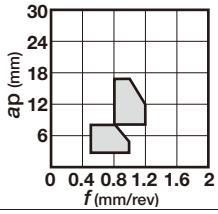
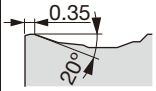
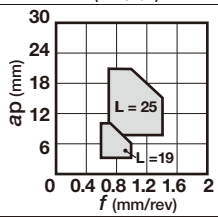
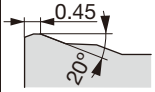
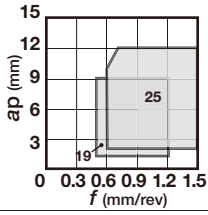
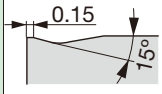
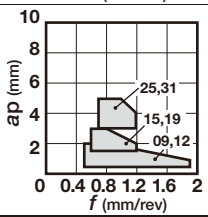




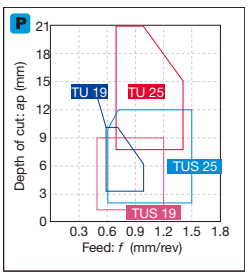


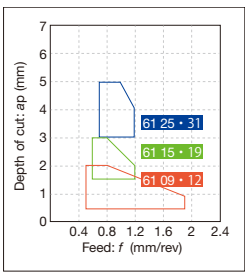
Please see the page B*** for the product details.

*-M,G: Without chipbreaker

Application	Negative type with hole	C	D	R	S	T	V	W
		80°	55°		90°	60°	35°	80°
Medium to heavy cutting (single side)	**57**  	 B062	 B073		 B083	 B095		
	65  	 B062			 B083			
Heavy cutting (single side)	**TU**  	 B063			 B084			
	TUS  	 B063			 B084			
Heavy cutting	**61**  			 B076				

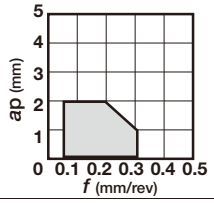
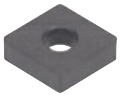
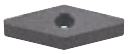
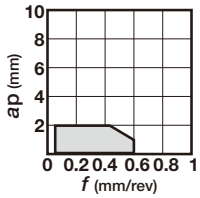
Chip control range

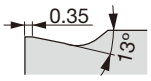
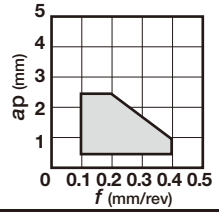




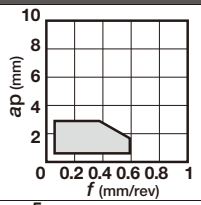
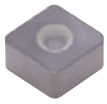
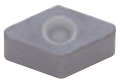
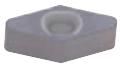
Please see the page B*** for the product details.

Chipbreaker Overview

Application	Negative type with hole	C	D	R	S	T	V	W
		80°	55°		90°	60°	35°	80°
Finishing to medium cutting	— M,G-class  	 B063	 B073, B074	 B076	 B084	 B096	 B101	 B109
	Wiper M-class  	 B064						

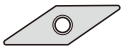
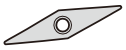
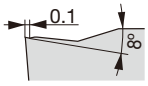
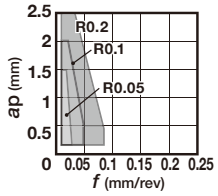
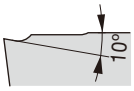
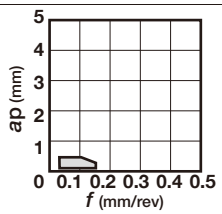
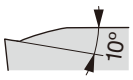
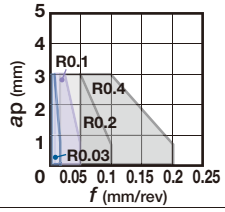
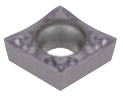
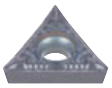
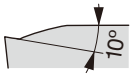
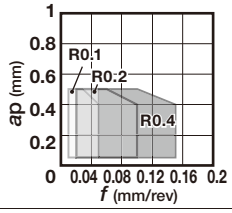
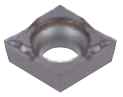
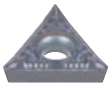
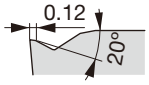
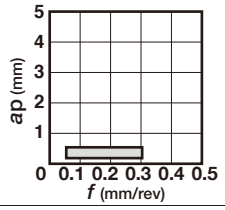
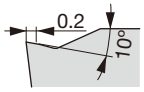
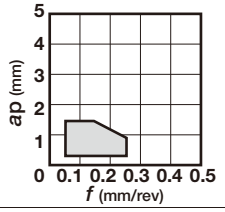
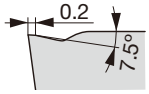
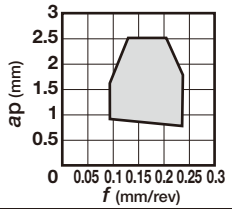
Application	Negative type without hole	C	D	KNMX	LNGN	R	S	T
		80°	55°	55°	90°		90°	60°
Finishing	S1  			 B110				

Please see the page B*** for the product details.

Application	Negative type without hole	C	D	H	R	S	T	V
		80°	55°	120°		90°	60°	35°
Finishing to medium cutting	— G-class  	 B065	 B074	 B111		 B085		 B101
	— M,G-class	 B065	 B074		 B076	 B085	 B097	

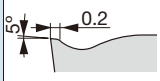
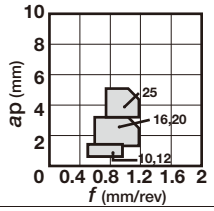
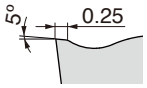
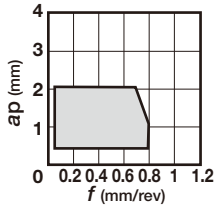
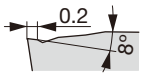
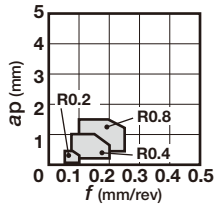
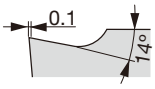
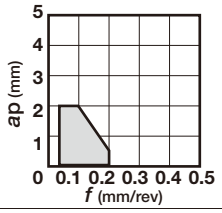
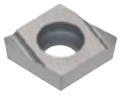
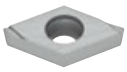
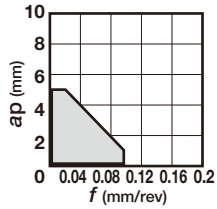
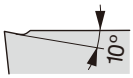
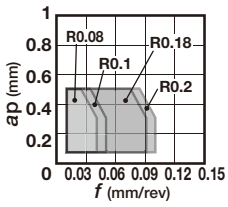
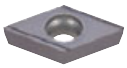
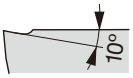
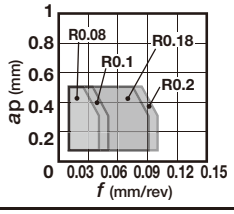
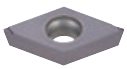
Please see the page B*** for the product details.

Chipbreaker Overview

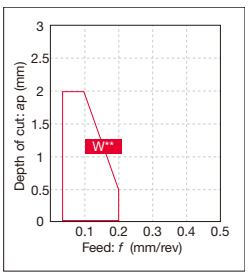
Application	Positive 7° with hole	C	D	R	S	T	V	Y
								
		80°	55°		90°	60°	35°	25°
Precision finishing (sharp edge)	**JP**  	 B112	 B121			 B138		
	01  	 B112	 B121			 B138		
Finishing (sharp edge)	**JS**  	 B112	 B121			 B138		
Finishing	**JS**  	 B112	 B121			 B138		
	PSF  	 B113	 B121			 B138	 B152	
	PF  	 B113	 B122				 B152	
	TSF  	B113	B122			B138	B152	

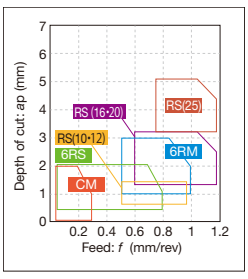
Chip control range

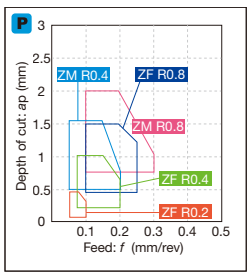
Please see the page B*** for the product details.

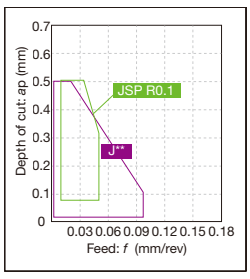
Application	Positive 7° with hole	C 80°	D 55°	R	S 90°	T 60°	V 35°	Y 25°
Finishing	**RS**  			 B130				
Finishing	**6RS**  			 B130				
Finishing	**ZF**  							 B159
Finishing	**W****  	 B114, B115	 B122			 B139		
Finishing	**J****  	 B113	 B122			 B139		
Finishing (sharp edge)	**JPP**  		 B123					
Finishing (sharp edge)	**JRP**  		 B123					

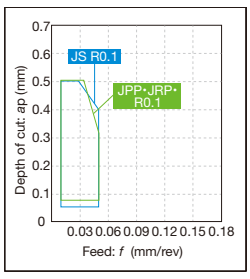
Chip control range





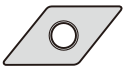
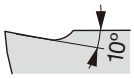
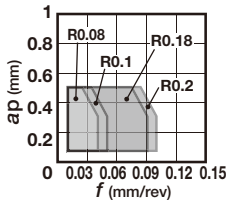
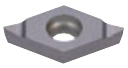
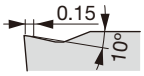
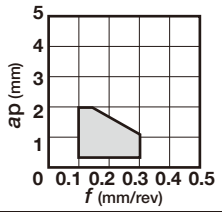
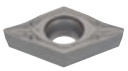
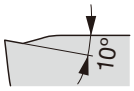
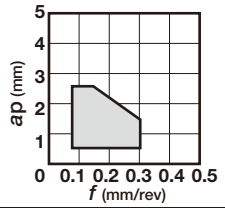
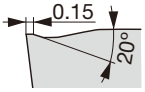
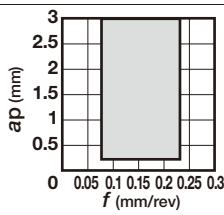
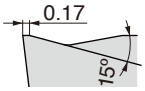
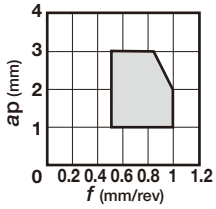
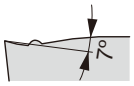
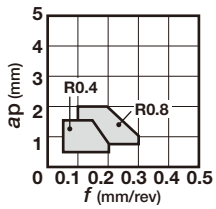
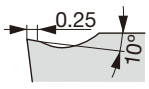
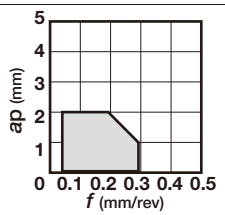






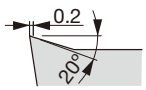
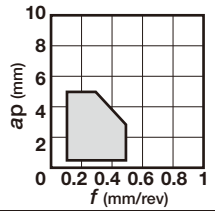
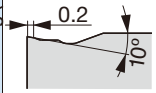
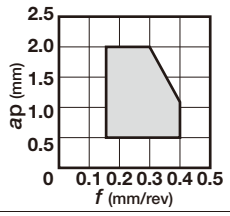
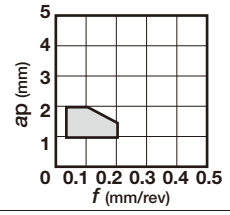
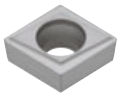
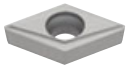
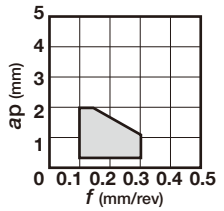
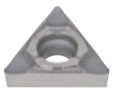
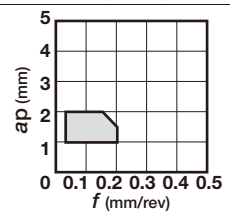
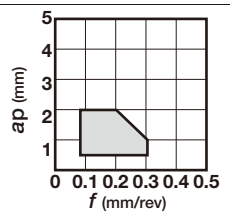
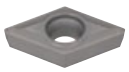
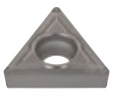
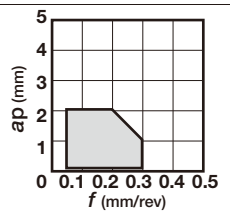
Please see the page B*** for the product details.

Chipbreaker Overview

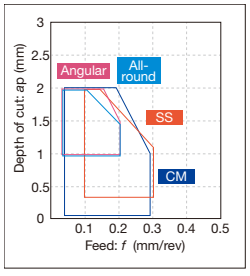
Application	Positive 7° with hole	C	D	R	S	T	V	Y
								
		80°	55°		90°	60°	35°	25°
Finishing (sharp edge)	**JSP**  		 B123					
Finishing to medium cutting	**PSS**  	 B115	 B124			 B140	 B152	
	PS  	 B115	 B124		 B134	 B140	 B152	
	TM  	 B115	 B124			 B140	 B152	
	6RM  			 B130				
	ZM  							 B159
	CM  	 B115	 B124	 B130	B134	B140	B152	

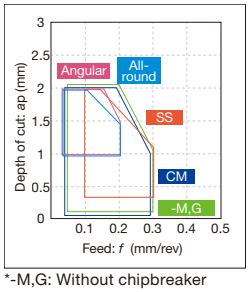
Chip control range

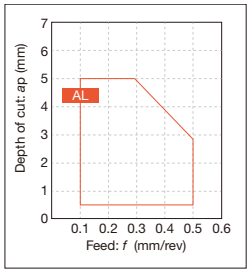
Please see the page B*** for the product details.

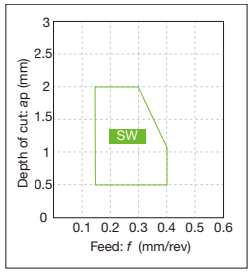
Application	Positive 7° with hole	C	D	R	S	T	V	Y
		80°	55°		90°	60°	35°	25°
Finishing to medium cutting (for non-ferrous alloys)	**AL**  	 B116	 B124	 B130		 B140	 B153	
Finishing to medium cutting (wiper)	**SW**  	 B116						
Finishing to medium cutting	**All-round**  	 B116	 B124				 B153	
	SS  					 B140		
	Angular  	 B116	 B124					
	23  	 B116	 B125		 B134	 B140		
	— **M,G-class**  	 B116, B117	 B125					

Chip control range





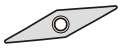
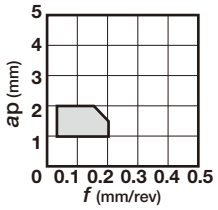
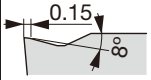
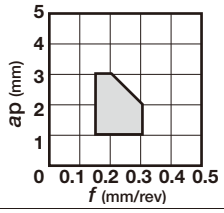
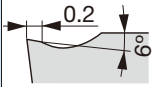
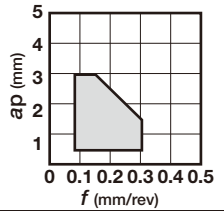
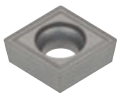
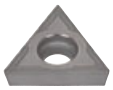
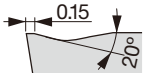
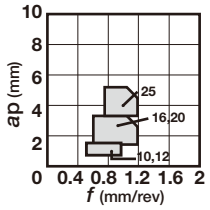




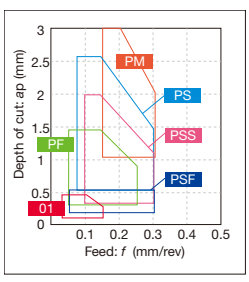
*-M,G: Without chipbreaker

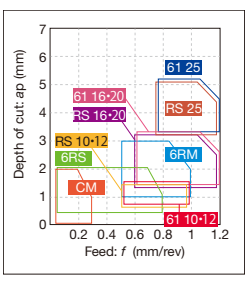
Please see the page B*** for the product details.

Chipbreaker Overview

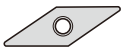
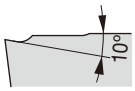
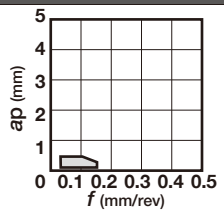
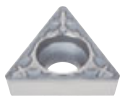
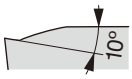
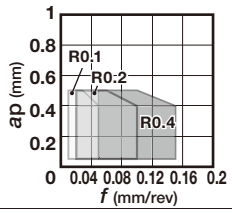
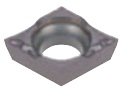
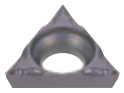
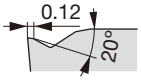
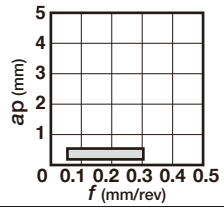
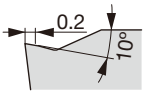
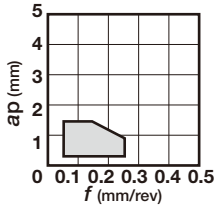
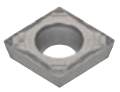
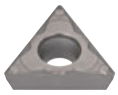
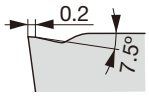
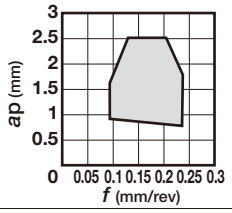
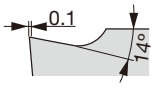
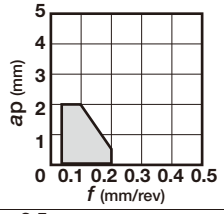
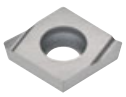
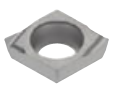
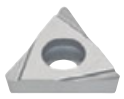
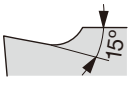
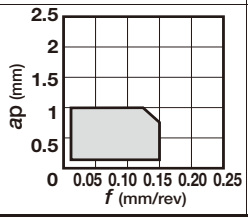
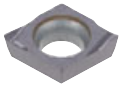
Application	Positive 7° with hole	C	D	R	S	T	V	Y
								
		80°	55°		90°	60°	35°	25°
Finishing to medium cutting	— (with hand)  					 B141		
	PM  	 B117	 B125		 B134	 B141		
	24  	 B117	 B125		 B134	 B141	 B153	
Heavy cutting	61  			 B131				

Chip control range

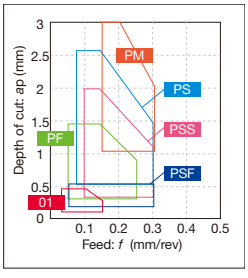


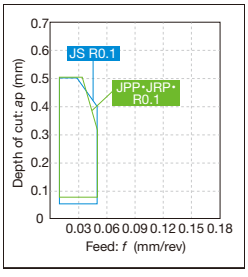


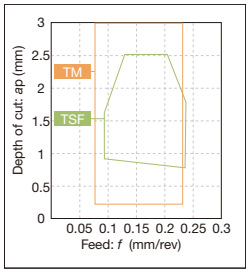
Please see the page B*** for the product details.

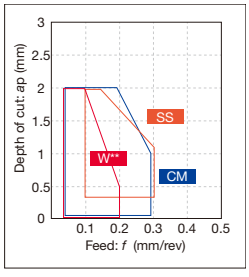
Application	Positive 11° with hole	C	E	S	T	V
						
		80°	75°	90°	60°	35°
Precision finishing	**01**  				 B142	
Precision finishing	**JS**  		 B128		 B142	
Finishing	**PSF**  	 B118			 B142	
Finishing	**PF**  	 B118			 B142	
Finishing	**TSF**  	 B118			 B143	
Finishing	**W****  	 B118	 B129	 B135	 B143, B144	
Finishing	**J08**  		 B128			

Chip control range



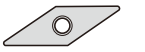
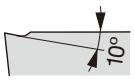
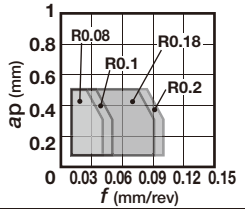
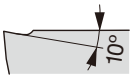
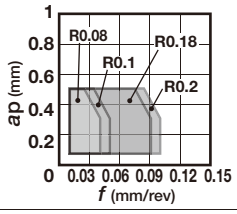
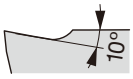
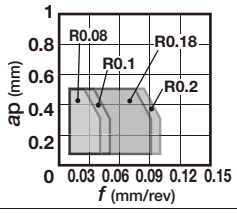
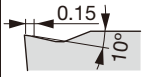
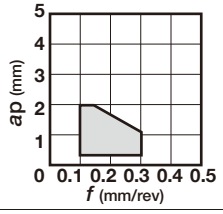
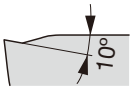
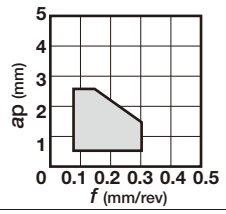
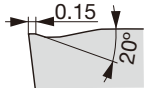
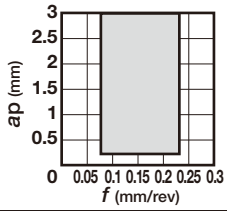
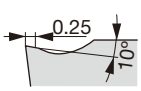
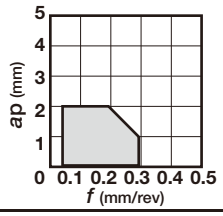




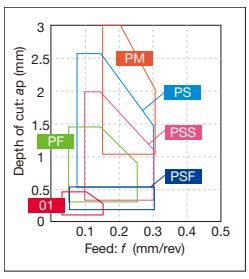


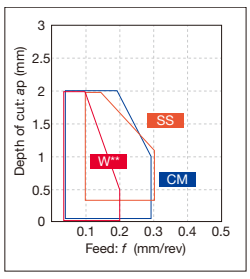
Please see the page B*** for the product details.

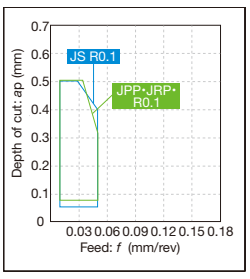
Chipbreaker Overview

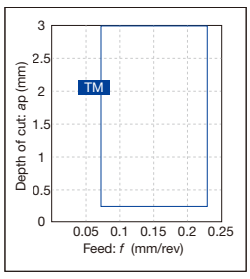
Application	Positive 11° with hole	C	D	S	T	V
						
		80°	55°	90°	60°	35°
Finishing (sharp edge)	**JPP**  					 B154
Finishing (sharp edge)	**JRP**  					 B154
Finishing (sharp edge)	**JSP**  					 B154
Finishing to medium cutting	**PSS**  	 B118			 B145	
Finishing to medium cutting	**PS**  	 B119	 B126	 B135	 B145	
Finishing to medium cutting	**TM**  	 B119			 B145	
Finishing to medium cutting	**CM**  	 B119		 B135	 B146	

Chip control range

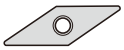
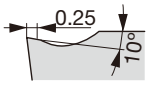
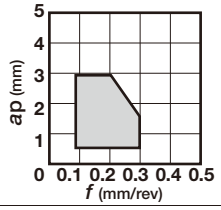
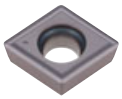
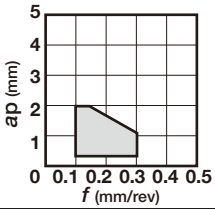
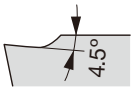
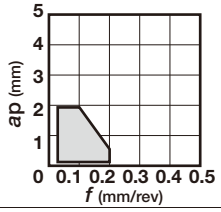
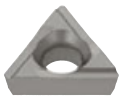
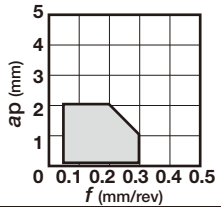
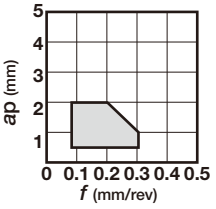
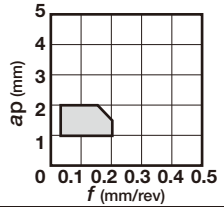
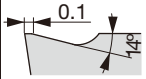
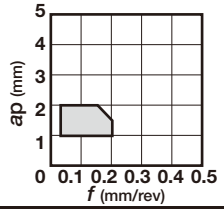




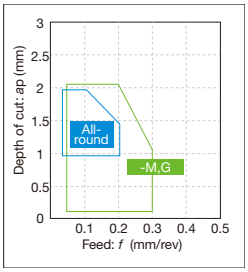




Please see the page B*** for the product details.

Application	Positive 11° with hole	C	S	T	V
					
		80°	90°	60°	35°
Finishing to medium cutting	**All-round**  	 B119			
	SS  			 B144	
	H**  			 B146	
	— **M,G-class**  	 B120	 B138	 B147	
	23  		 B135	 B146	
	— (with hand)  		 (Tungaloy standard hole specification) ISO non-compliant B136		
	— (with hand)  			 (Tungaloy standard hole specification) ISO non-compliant B146	

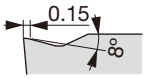
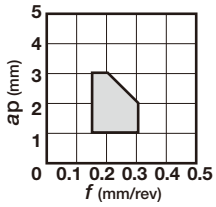
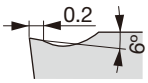
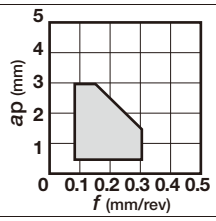
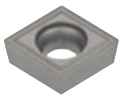
Chip control range

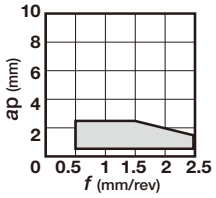


*-M,G: Without chipbreaker

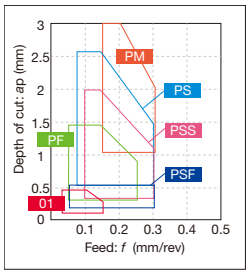
Please see the page B*** for the product details.

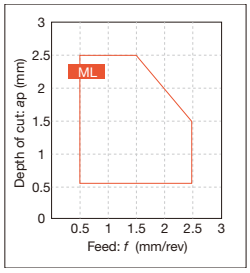
Chipbreaker Overview

Application	Positive 11° with hole	C	T
			
		80°	60°
Medium cutting	**PM**  	 B120	 B147
	24  	 B120	 B147

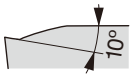
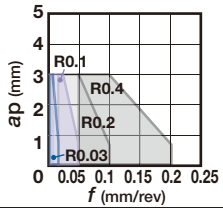
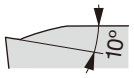
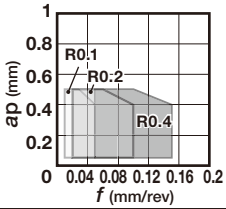
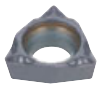
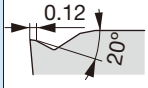
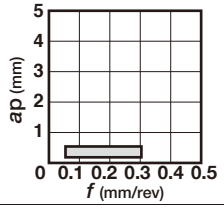
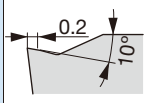
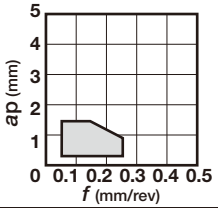
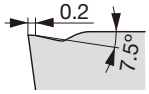
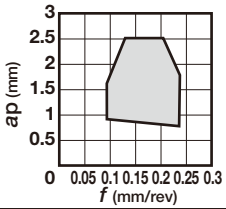
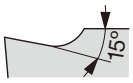
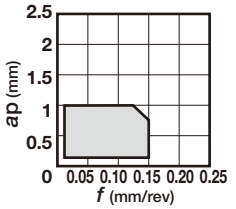
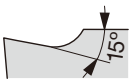
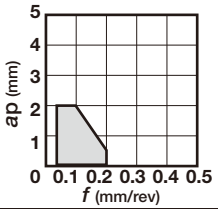
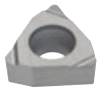
Application	Positive 11° with hole	W
		
		80°
Heavy cutting	**ML**  	 B155

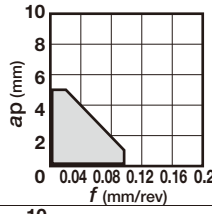
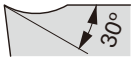
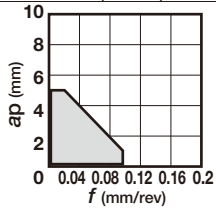
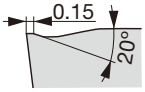
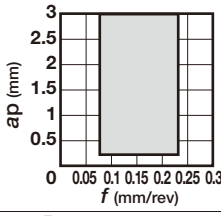
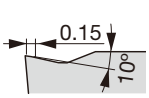
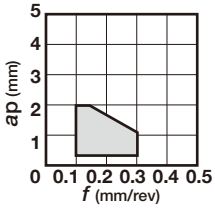
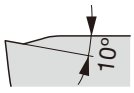
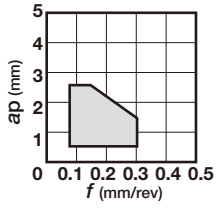
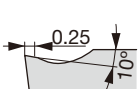
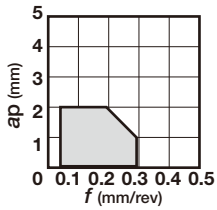
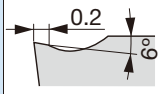
Chip control range





Please see the page B*** for the product details.

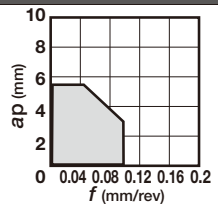
Application	Positive 5° with hole	V 35°	W 80°
Finishing (sharp edge)	**JS**  	 B150	
	JS  		 B156
Finishing	**PSF**  	 B150	
	PF  	 B150	
	TSF  	 B150	
	W08  		 B156
	W11  		 B156

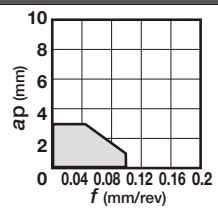
Application	Positive 5° with hole	V 35°	W 80°
Finishing (sharp edge)	**J10**  	 B150	
Finishing	**J10**  	 B150	
Finishing to medium cutting	**TM**  	 B151	
	PSS  	 B151	
	PS  	 B151	
	CM  	 B151	
Medium cutting	**24** 	B151	

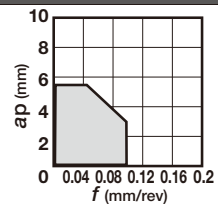
Chip control range

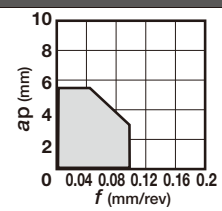
Please see the page B*** for the product details.

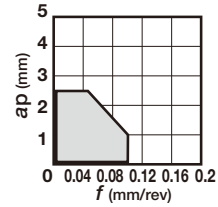
Chipbreaker Overview

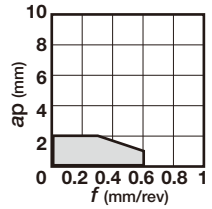
Application	Positive type with hole	JXF
Front turning	— 	 B159

Application	Positive type with hole	J10E
Back turning	— 	 B161

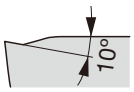
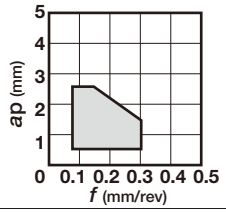
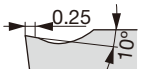
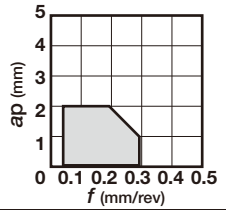
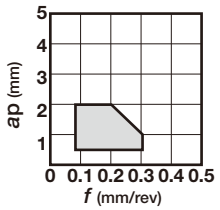
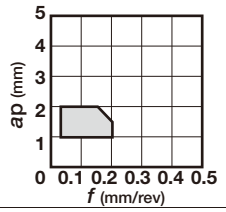
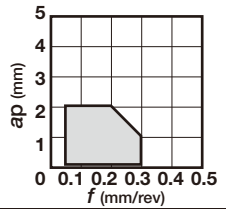
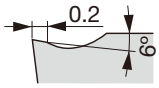
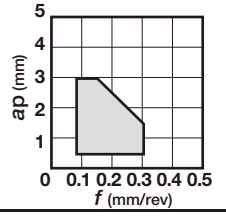
Application	Positive type with hole	JXB
Back turning	— 	 B160

Application	Positive type with hole	JXR
Reverse turning	— 	 B160

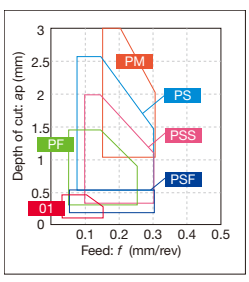
Application	Positive type with hole	JTB
Back turning	— 	 B161

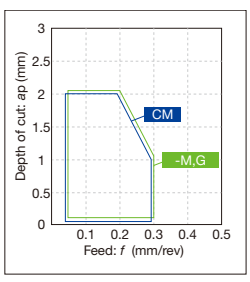
Application	Round	RT
Medium cutting	— 	 Special round insert B131

Please see the page B*** for the product details.

Application	Positive 11° without hole	R	S	T
				
			90°	60°
Finishing to medium cutting	**PS**  			 B148
	CM  		 B137	 B148
	23  		 B137	 B148
	— (with hand)  		 B137	 B148
	— M,G-class  		 B137	 B148, B149
Medium cutting	**24**  			 B149

Chip control range

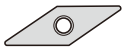
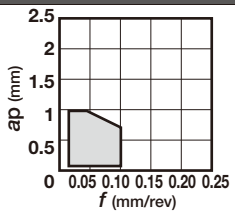
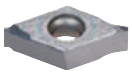
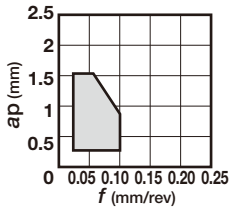
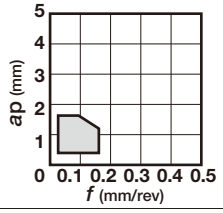
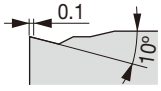
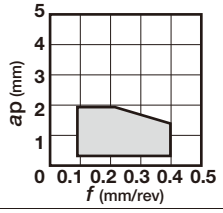
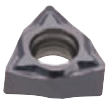
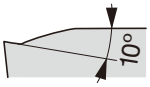
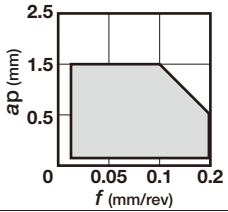
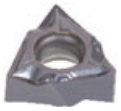
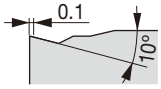
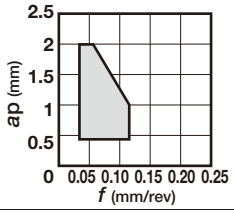
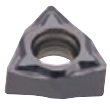
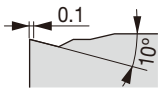
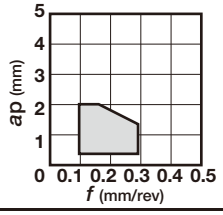
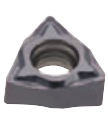




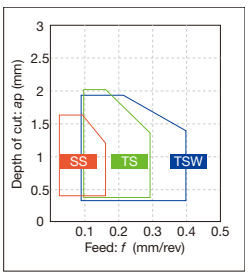
*-M,G: Without chipbreaker

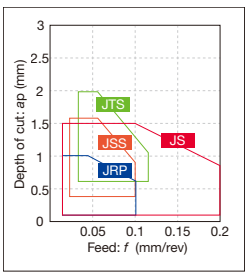
Please see the page B*** for the product details.

Chipbreaker Overview

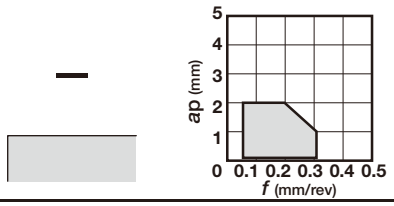
Application	Double-sided positive type with hole	D	V	W
				
		55°	35°	80°
Finishing (sharp edge)	**JRP**  	 B126	 B155	
Finishing (sharp edge)	**JSS**  	 B126		 B157
Finishing to medium cutting	**SS**  	 B126		 B157
Finishing	**TSW**  			 B157
Finishing to medium cutting (sharp edge)	**JS**  	 B127	 B155	 B157
Finishing to medium cutting (sharp edge)	**JTS**  	 B127		 B158
Finishing to medium cutting	**TS**  	 B127		 B158

Chip control range





Please see the page B*** for the product details.

Application	Positive 7° without hole	RCGX
		Special round insert
Medium cutting		 B132

Please see the page B*** for the product details.

Insert NEGATIVE TYPE

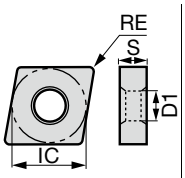
● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

		T9205	T9215	T9225	T9235	T6215	T505	T515	AH8015	AH6225	AH120	GT9530	AT9530	NS9530	NS520	TH10
P	Steel	●	●◐	◐✣	✣	◐				◐✣	●◐					
M	Stainless		●◐			●			◐	●◐	●◐					
K	Cast iron	●◐	●◐				●	●◐			●◐	●◐	●◐	●◐	●◐	●
N	Non-ferrous															●
S	Superalloy								◐		●◐					
H	Hard material															



Application	Chipbreaker	Designation	RE	IC	S	D1
Finishing	TF	CNMG090402E-TF	0.2	9.525	4.76	3.81
		CNMG090404E-TF	0.4	9.525	4.76	3.81
		CNMG090408E-TF	0.8	9.525	4.76	3.81
		CNMG120402-TF	0.2	12.7	4.76	5.16
		CNMG120404-TF	0.4	12.7	4.76	5.16
		CNMG120408-TF	0.8	12.7	4.76	5.16
	TSF	CNMG090402E-TSF	0.2	9.525	4.76	3.81
		CNMG090404E-TSF	0.4	9.525	4.76	3.81
		CNMG090408E-TSF	0.8	9.525	4.76	3.81
		CNMG120402-TSF	0.2	12.7	4.76	5.16
		CNMG120404-TSF	0.4	12.7	4.76	5.16
		CNMG120408-TSF	0.8	12.7	4.76	5.16
		CNMG120412-TSF	1.2	12.7	4.76	5.16
	PS	CNMG090402E-PS	0.2	9.525	4.76	3.81
		CNMG090404E-PS	0.4	9.525	4.76	3.81
		CNMG090408E-PS	0.8	9.525	4.76	3.81
		CNMG120402-PS	0.2	12.7	4.76	5.16
		CNMG120404-PS	0.4	12.7	4.76	5.16
		CNMG120408-PS	0.8	12.7	4.76	5.16
		CNMG120412-PS	1.2	12.7	4.76	5.16
Finishing for mild steel	ZF	CNMG090402E-ZF	0.2	9.525	4.76	3.81
		CNMG090404E-ZF	0.4	9.525	4.76	3.81
		CNMG090408E-ZF	0.8	9.525	4.76	3.81
		CNMG120402-ZF	0.2	12.7	4.76	5.16
		CNMG120404-ZF	0.4	12.7	4.76	5.16
		CNMG120408-ZF	0.8	12.7	4.76	5.16
		CNMG120412-ZF	1.2	12.7	4.76	5.16
Finishing	AS	CNMG120404-AS	0.4	12.7	4.76	5.16
		CNMG120408-AS	0.8	12.7	4.76	5.16
		CNMG120412-AS	1.2	12.7	4.76	5.16
	NS	CNMG120404-NS	0.4	12.7	4.76	5.16
		CNMG120408-NS	0.8	12.7	4.76	5.16
	TS	CNMG090402E-TS	0.2	9.525	4.76	3.81
		CNMG090404E-TS	0.4	9.525	4.76	3.81
		CNMG090408E-TS	0.8	9.525	4.76	3.81
		CNMG120402-TS	0.2	12.7	4.76	5.16
		CNMG120404-TS	0.4	12.7	4.76	5.16
		CNMG120408-TS	0.8	12.7	4.76	5.16
		CNMG120412-TS	1.2	12.7	4.76	5.16

● : Line up

Reference pages: External toolholder → C015 - Internal toolholder → D025 - J-Series toolholder → G050
TungCap → K008 - PINZBOHR® → K178 - Cartridge → K181 -

Insert NEGATIVE TYPE

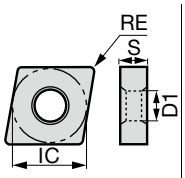
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN

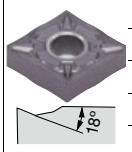


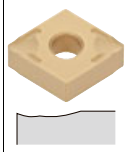
Rhombic, 80° with hole

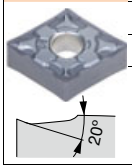
		T6215	T5105	T5115	AH8005	AH8015	AH6225	AH6235	AH120	GH330
P	Steel	◐					◐✠	✠	●◐	●◐
M	Stainless	●			●	◐	●◐	✠	●◐	●◐
K	Cast iron		●	◐					●◐	●◐
N	Non-ferrous									
S	Superalloy				●	◐			●◐	
H	Hard material									

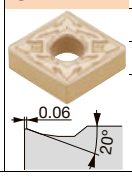


Application	Chipbreaker	Designation	T6215	T5105	T5115	AH8005	AH8015	AH6225	AH6235	AH120	GH330	RE	IC	S	D1
Finishing	SF	CNMG090304-SF	●					●				0.4	9.525	3.18	3.81
		CNMG090308-SF	●					●				0.8	9.525	3.18	3.81
		CNMG120404-SF	●					●				0.4	12.7	4.76	5.16
		CNMG120408-SF	●					●				0.8	12.7	4.76	5.16
		CNMG120412-SF	●					●				1.2	12.7	4.76	5.16
	SS	CNMG090404E-SS						●	●			0.4	9.525	4.76	3.81
		CNMG090408E-SS						●	●			0.8	9.525	4.76	3.81
		CNMG120404-SS	●					●	●	●	●	0.4	12.7	4.76	5.16
		CNMG120408-SS	●					●	●	●	●	0.8	12.7	4.76	5.16
		CNMG120412-SS	●					●	●		●	1.2	12.7	4.76	5.16
	HRF	CNMG120404-HRF				●	●					0.4	12.7	4.76	5.16
		CNMG120408-HRF				●	●					0.8	12.7	4.76	5.16
		CNMG120412-HRF				●	●					1.2	12.7	4.76	5.16
	CF	CNMG120404-CF		●	●							0.4	12.7	4.76	5.16
		CNMG120408-CF		●	●							0.8	12.7	4.76	5.16
		CNMG120412-CF		●	●							1.2	12.7	4.76	5.16



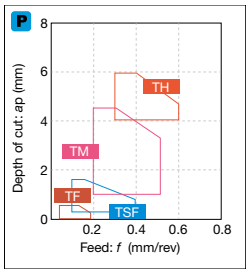


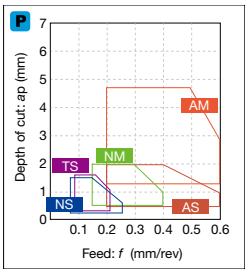


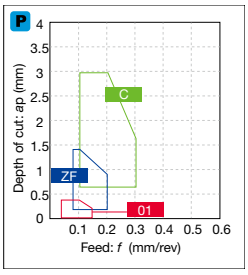


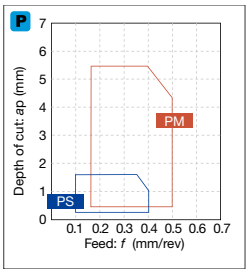
● : Line up

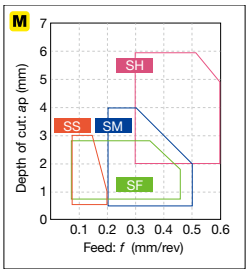
Chip control range

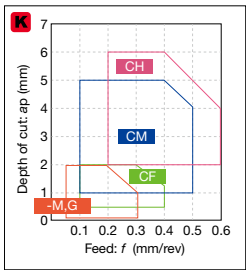


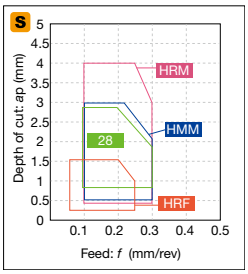












*-M,G: Without chipbreaker

Reference pages: External toolholder → C015 - Internal toolholder → D025 -
J-Series toolholder → G050 TungCap → K008 -
PINZBOHR® → K178 - Cartridge → K181 -

Insert NEGATIVE TYPE

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

| | | |

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

| | | |

Insert NEGATIVE TYPE

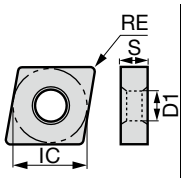
● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

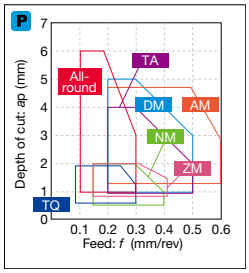
P	Steel	●	◐	◐	✣	◐							◐	✣	●	◐			◐	◐		◐	◐		●				
M	Stainless		◐			●						◐	◐	●	◐										●				
K	Cast iron	◐	◐				●	◐	●	◐	✣			●	◐				◐	◐		◐	◐		●				
N	Non-ferrous																								●				
S	Superalloy											◐		●	◐														
H	Hard material																												



Application	Chipbreaker	Designation	Coated														Coated cermet		Cermet		Uncoated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	AH8015	AH6225	AH110	AH120	GT9530	GT720	NS9530	NS520	TH10	RE	IC	S	D1
Medium cutting	**AM**	**CNMG120408-AM**		●	●																	0.8	12.7	4.76	5.16
		CNMG12012-AM		●	●																	1.2	12.7	4.76	5.16
		CNMG12016-AM		●	●																	1.6	12.7	4.76	5.16
	NM	**CNMG120408-NM**	●	●	●	●													●			0.8	12.7	4.76	5.16
		CNMG12012-NM		●	●	●																1.2	12.7	4.76	5.16
	DM	**CNMG120404-DM**		●	●		●						●	●								0.4	12.7	4.76	5.16
		CNMG12008-DM	●	●	●	●	●						●	●								0.8	12.7	4.76	5.16
		CNMG12012-DM	●	●	●	●	●						●	●								1.2	12.7	4.76	5.16
		CNMG12016-DM		●	●		●						●	●								1.6	12.7	4.76	5.16
	All-round	**CNMG090304**		●	●														●			0.4	9.525	3.18	3.81
		CNMG09030**8**	●	●	●	●												●	●			0.8	9.525	3.18	3.81
		CNMG120404	●	●	●	●		●	●	●	●	●			●	●	●		●		●	0.4	12.7	4.76	5.16
		CNMG12040**8**	●	●	●	●		●	●	●	●	●			●	●	●		●	●	●	0.8	12.7	4.76	5.16
		CNMG12041**2**	●	●	●	●		●	●	●	●	●			●	●				●	●	1.2	12.7	4.76	5.16
		CNMG12041**6**	●	●	●	●		●	●	●	●	●										1.6	12.7	4.76	5.16
		CNMG160608	●	●	●	●				●	●	●				●						0.8	15.875	6.35	6.35
		CNMG16061**2**	●	●	●	●			●	●	●	●				●						1.2	15.875	6.35	6.35
		CNMG16061**6**	●	●	●	●			●		●											1.6	15.875	6.35	6.35
		CNMG190608		●	●	●																0.8	19.05	6.35	7.93
		CNMG19061**2**	●	●	●	●			●		●	●				●						1.2	19.05	6.35	7.93
		CNMG19061**6**		●	●	●			●		●	●				●						1.6	19.05	6.35	7.93

● : Line up

Chip control range



Reference pages: External toolholder → C015 - Internal toolholder → D025 -
J-Series toolholder → G050 TungCap → K008 -
PINZBOHR® → K178 - Cartridge → K181 -

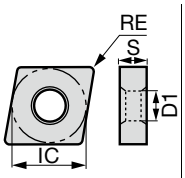
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

P	Steel	●	●ɔ	ɔ✣	ɔ									ɔ✣	✣		ɔ																
M	Stainless		●ɔ		●						●	ɔ	●ɔ	✣			ɔ																
K	Cast iron	●ɔ	●ɔ			●	●ɔ	●	ɔ	✣							ɔ																
N	Non-ferrous																																
S	Superalloy										●	ɔ			ɔ	●																
H	Hard material																																

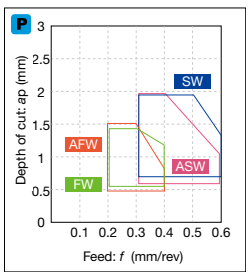


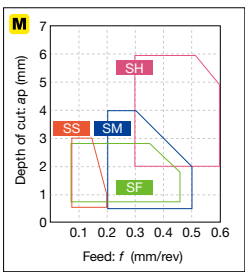
Application	Chipbreaker	Designation	Coated															Dimension (mm)			
			T9205	T9215	T9225	T6215	T505	T515	T5105	T5115	T5125	AH8005	AH8015	AH6225	AH6235	AH905	AH725	RE	IC	S	D1
Medium cutting	SM	CNMG090404E-SM				●								●				0.4	9.525	4.76	3.81
		CNMG090408E-SM				●								●				0.8	9.525	4.76	3.81
		CNMG090412E-SM				●								●				1.2	9.525	4.76	3.81
		CNMG120404-SM				●								●	●		●	0.4	12.7	4.76	5.16
		CNMG120408-SM				●								●	●	●	●	0.8	12.7	4.76	5.16
		CNMG120412-SM				●								●	●		●	1.2	12.7	4.76	5.16
		CNMG160612-SM				●								●				1.2	15.875	6.35	6.35
		CNMG160616-SM												●				1.6	15.875	6.35	6.35
		CNMG190612-SM												●				1.2	19.05	6.35	7.93
		CNMG190616-SM												●				1.6	19.05	6.35	7.93
	SDM	CNMG120404-SDM				●						●	●	●	●			0.4	12.7	4.76	5.16
		CNMG120408-SDM				●						●	●	●	●			0.8	12.7	4.76	5.16
		CNMG120412-SDM				●						●	●	●	●			1.2	12.7	4.76	5.16
	HRM	CNMG120404-HRM										●	●					0.4	12.7	4.76	5.16
		CNMG120408-HRM										●	●					0.8	12.7	4.76	5.16
		CNMG120412-HRM										●	●					1.2	12.7	4.76	5.16
		CNMG160608-HRM										●	●					0.8	15.875	6.35	6.35
		CNMG160612-HRM										●	●					1.2	15.875	6.35	6.35
		CNMG190612-HRM										●	●					1.2	19.05	6.35	7.93
		CNMG190616-HRM										●	●					1.6	19.05	6.35	7.93
	CM	CNMG120404-CM	●	●		●	●	●	●	●	●							0.4	12.7	4.76	5.16
		CNMG120408-CM	●	●		●	●	●	●	●	●							0.8	12.7	4.76	5.16
		CNMG120412-CM	●	●		●	●	●	●	●	●							1.2	12.7	4.76	5.16
		CNMG160608-CM	●	●		●	●	●	●	●	●							0.8	15.875	6.35	6.35
		CNMG160612-CM	●	●		●	●	●	●	●	●							1.2	15.875	6.35	6.35
Medium cutting (wiper)	SW	CNMG090408E-SW	●	●	●					●								0.8	9.525	4.76	3.81
		CNMG090412E-SW	●	●	●					●								1.2	9.525	4.76	3.81
		CNMG120408-SW	●	●	●			●		●								0.8	12.7	4.76	5.16
		CNMG120412-SW	●	●	●			●		●								1.2	12.7	4.76	5.16
		*Wiper																			

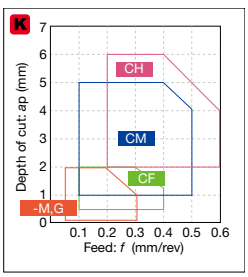
* Please see **L011 - L015** about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

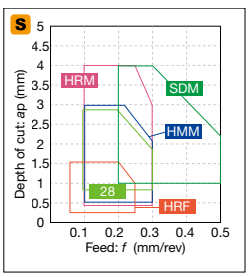
● : Line up

Chip control range









Reference pages: External toolholder → C015 - Internal toolholder → D025 -
J-Series toolholder → G050 TungCap → K008 -
PINZBOHR® → K178 - Cartridge → K181 -

Insert NEGATIVE TYPE

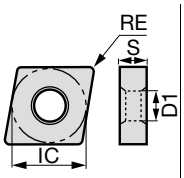
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

		T9205	T9215	T9225	T9235	T6215	AH6225	AH6235	AH905	AH110	AH120	GH330	GH110	GT9530	AT9530	GT720	NS9530	TH10	KS05F	KS20
P	Steel	●	●ɔ	ɔ✣	✣	ɔ	ɔ✣	✣		●	●ɔ	●ɔ	●	●ɔ	●ɔ	●ɔ	●ɔ	●		
M	Stainless		●ɔ			●	●ɔ	✣		●	●ɔ	●ɔ	●					●		
K	Cast iron	●ɔ	●ɔ							●	●ɔ	●ɔ	●	●ɔ	●ɔ	●ɔ	●ɔ	●	●	ɔ✣
N	Non-ferrous																	●	●	ɔ✣
S	Superalloy								ɔ	●	●ɔ		●						●	ɔ✣
H	Hard material																			



Application	Chipbreaker	Designation	RE	IC	S	D1
Medium cutting (wiper)	ASW	CNMG120408-ASW	0.8	12.7	4.76	5.16
		CNMG120412-ASW	1.2	12.7	4.76	5.16
	TQ	CNMG120404-TQ	0.4	12.7	4.76	5.16
		CNMG120408-TQ	0.8	12.7	4.76	5.16
	TA	CNMG120408-TA	0.8	12.7	4.76	5.16
		CNMG120412-TA	1.2	12.7	4.76	5.16
Medium cutting	SA	CNMG120404-SA	0.4	12.7	4.76	5.16
		CNMG120408-SA	0.8	12.7	4.76	5.16
		CNMG120412-SA	1.2	12.7	4.76	5.16
		CNMG190612-SA	1.2	19.05	6.35	7.93
		CNMG190616-SA	1.6	19.05	6.35	7.93
	HMM	CNMG120404-HMM				
		CNMG120408-HMM				
		CNMG120412-HMM				
		CNMG160608-HMM				
		CNMG160612-HMM				
		CNMG160616-HMM				
	P	CNGG120404R-P	0.4	12.7	4.76	5.16
		CNGG120404L-P	0.4	12.7	4.76	5.16
		CNGG120408R-P	0.8	12.7	4.76	5.16
		CNGG120408L-P	0.8	12.7	4.76	5.16
	S	CNMG120404R-S	0.4	12.7	4.76	5.16
		CNMG120404L-S	0.4	12.7	4.76	5.16
		CNMG120408R-S	0.8	12.7	4.76	5.16
		CNMG120408L-S	0.8	12.7	4.76	5.16

* Please see L011 - L015 about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

● : Line up

Reference pages: External toolholder → C015 - | Internal toolholder → D025 -
J-Series toolholder → G050 | TungCap → K008 -
PINZBOHR® → K178 - | Cartridge → K181 -

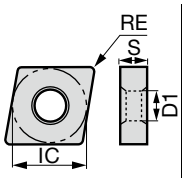
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

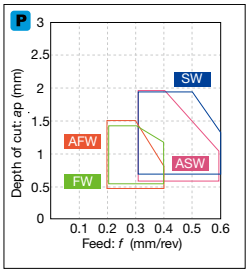
P	Steel	● ●ɔ ✠ ✠ ✠ ✠ ɔ ● ●ɔ ●ɔ ●ɔ ●ɔ ●ɔ ●
M	Stainless	●ɔ ● ɔ ●ɔ ɔ ● ●ɔ ●ɔ ●ɔ ●ɔ ●
K	Cast iron	●ɔ ●ɔ ●ɔ ɔ ● ●ɔ ●ɔ ●ɔ ●ɔ ●ɔ ● ●
N	Non-ferrous	● ●
S	Superalloy	● ɔ ● ● ●ɔ ●
H	Hard material	

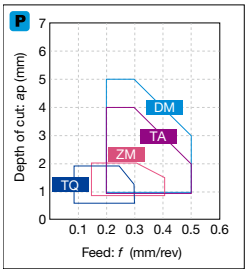


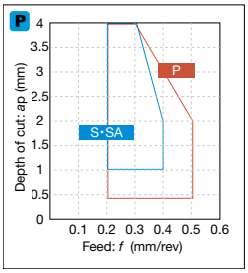
Application	Chipbreaker	Designation	Coated											Coated cermet			Cermet		Uncoated		Dimension (mm)			
			T9205	T9215	T9225	T9235	T515	AH8005	AH8015	AH6225	AH725	AH110	AH120	GH330	GT720			NS9530		KS05F	TH10	RE	IC	S	D1
Medium cutting	27	CNMG120404-27		●	●													●				0.4	12.7	4.76	5.16
		CNMG120408-27		●	●	●												●				0.8	12.7	4.76	5.16
		CNMG120412-27			●																	1.2	12.7	4.76	5.16
	28	CNMG120404-28			●			●	●			●	●							●		0.4	12.7	4.76	5.16
		CNMG120408-28						●	●			●	●							●		0.8	12.7	4.76	5.16
		CNMG120412-28						●	●													1.2	12.7	4.76	5.16
		CNGG120402-28																		●		0.2	12.7	4.76	5.16
		CNGG120404-28																		●		0.4	12.7	4.76	5.16
		CNGG120408-28																		●		0.8	12.7	4.76	5.16
	33	CNMG120408-33										●			●							0.8	12.7	4.76	5.16
		CNMG120416-33		●																		1.6	12.7	4.76	5.16
		CNMG160612-33		●																		1.2	15.875	6.35	6.35
		CNMG190612-33		●																		1.2	19.05	6.35	7.93
	37	CNMG120404-37		●														●				0.4	12.7	4.76	5.16
		CNMG120408-37		●	●									●				●			●	0.8	12.7	4.76	5.16
		CNMG120412-37		●																		1.2	12.7	4.76	5.16
	38	CNMG120404-38												●								0.4	12.7	4.76	5.16
		CNMG120408-38		●							●			●								0.8	12.7	4.76	5.16
Medium to heavy cutting	TH	CNMG120408-TH	●	●	●	●	●		●	●			●									0.8	12.7	4.76	5.16
		CNMG120412-TH	●	●	●	●	●		●	●			●									1.2	12.7	4.76	5.16
		CNMG120416-TH	●	●	●	●	●		●				●									1.6	12.7	4.76	5.16
		CNMG160612-TH	●	●	●	●							●									1.2	15.875	6.35	6.35
		CNMG160616-TH	●	●	●	●							●									1.6	15.875	6.35	6.35
		CNMG190612-TH	●	●	●	●							●									1.2	19.05	6.35	7.93
		CNMG190616-TH	●	●	●	●							●									1.6	19.05	6.35	7.93

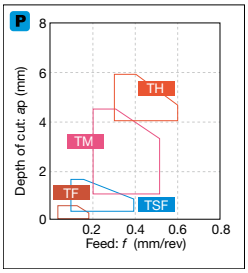
● : Line up

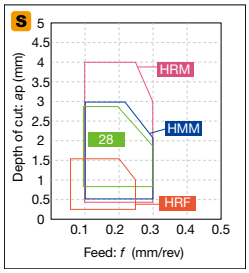
Chip control range











Reference pages: External toolholder → C015 - Internal toolholder → D025 -
J-Series toolholder → G050 TungCap → K008 -
PINZBOHR® → K178 - Cartridge → K181 -

Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

| | | |

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



Rhombic, 80° with hole

| | | |

Insert NEGATIVE TYPE

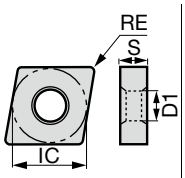
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

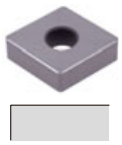
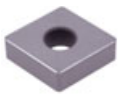
CN



Rhombic, 80° with hole

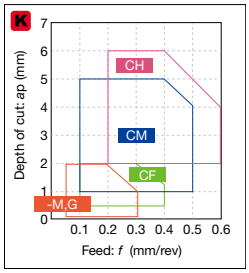
P	Steel	●ⓒ
M	Stainless	
K	Cast iron	●ⓒ ● ●ⓒ ●ⓒ
N	Non-ferrous	
S	Superalloy	
H	Hard material	●ⓒ ●ⓒ ●ⓒ



Application	Chipbreaker	Designation	Cermet NS520	Ceramic TZ120	FX105	CX710	LX10	LX11	LX21	RE	IC	S	D1
Finishing to medium cutting	Wiper	**CNMA120408W**			●					0.8	12.7	4.76	5.16
		CNMA1204**12W**			●					1.2	12.7	4.76	5.16
		CNMA1204**16W**			●					1.6	12.7	4.76	5.16
	-	**CNGA120404**			●		●	▲	●	0.4	12.7	4.76	5.16
		CNGA1204**08**	●	●	●	●	●	▲	●	0.8	12.7	4.76	5.16
		CNGA1204**12**			●		●	▲	●	1.2	12.7	4.76	5.16
		CNGA1204**16**			●		●	▲		1.6	12.7	4.76	5.16
		CNGA1204**20**					●	▲		2	12.7	4.76	5.16

● : Line up
▲ : To be discontinued

Chip control range



*-M,G: Without chipbreaker

Reference pages: External toolholder → C015 - | Internal toolholder → D025 -
J-Series toolholder → G050 | TungCap → K008 -
PINZBOHR® → K178 - | Cartridge → K181 -

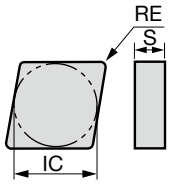
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



Rhombic, 80° without hole

		FX105	LX10	LX11	LX21	CX710	TS200	TS300
P	Steel							
M	Stainless							
K	Cast iron	●ⓒ				●ⓒ		
N	Non-ferrous							
S	Superalloy						●	●
H	Hard material		●ⓒ	●ⓒ	●ⓒ			

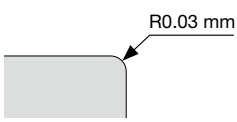


Application	Chipbreaker	Designation	FX105	LX10	LX11	LX21	CX710	TS200	TS300	RE	IC	S	D1
			Ceramic							Dimension (mm)			
Finishing to medium cutting	-	**CNGD120712**	●							1.2	12.7	7.94	-
		CNGD120716	●							1.6	12.7	7.94	-
	-	**CNMN120408**	●							0.8	12.7	4.76	-
		CNMN120412	●							1.2	12.7	4.76	-
	-	**CNGN120408-E**							●	0.8	12.7	4.76	-
		CNGN120412-E							●	1.2	12.7	4.76	-
		CNGN120412-T1						●		1.2	12.7	4.76	-
		CNGN120404		●	▲					0.4	12.7	4.76	-
		CNGN120408	●	●	▲					0.8	12.7	4.76	-
		CNGN120412	●	●	▲					1.2	12.7	4.76	-
		CNGN120416	●	●	▲	●				1.6	12.7	4.76	-
		CNGN120420	●							2	12.7	4.76	-
		CNGN120708-E							●	0.8	12.7	7.94	-
		CNGN120712-E						●	●	1.2	12.7	7.94	-
		CNGN120716-T1						●		1.6	12.7	7.96	
		CNGN120708	●	●	▲					0.8	12.7	7.94	-
		CNGN120712	●	●	▲					1.2	12.7	7.94	-
		CNGN120716	●	●	▲					1.6	12.7	7.94	-
		CNGN120720			▲					2	12.7	7.94	-

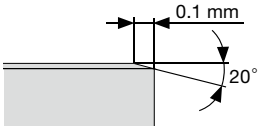
● : Line up
▲ : To be discontinued

Edge prep

E: Low cutting force



T1: Strong cutting edge



Reference pages: CNGD...: External toolholder → C020

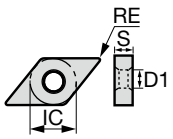
Insert NEGATIVE TYPE

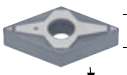
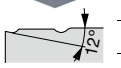
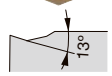
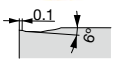
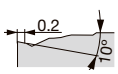
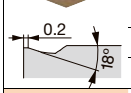
● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN

Rhombic, 55° with hole

P	Steel	●	●◐	◐✣	✣	◐			◐✣	●◐					●◐	●◐			●◐				●		
M	Stainless		●◐			●		◐	●◐	●◐													●		
K	Cast iron	●◐	●◐				●◐			●◐					●◐	●◐			●◐				●		
N	Non-ferrous																						●		
S	Superalloy							◐		●◐															
H	Hard material																								



Application	Chipbreaker	Designation	Coated									Coated cermet		Cermet	Uncoated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T515	AH8015	AH6225	AH120	GT9530	AT9530	NS9530	TH10	RE	IC	S	D1
Finishing	TF	DNMG110402E-TF		●	●		●		●	●				●		0.2	9.525	4.76	3.81
		DNMG110404E-TF		●	●		●		●	●				●		0.4	9.525	4.76	3.81
		DNMG110408E-TF		●	●		●		●	●				●		0.8	9.525	4.76	3.81
		DNMG150402-TF		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		DNMG150404-TF		●	●		●		●	●				●	●	0.4	12.7	4.76	5.16
		DNMG150408-TF		●	●		●		●	●				●		0.8	12.7	4.76	5.16
	TSF	DNMG110402E-TSF		●	●		●		●	●	●	●		●		0.2	9.525	4.76	3.81
		DNMG110404E-TSF		●	●	●	●		●	●	●	●	●	●		0.4	9.525	4.76	3.81
		DNMG110408E-TSF		●	●	●	●		●	●	●	●	●	●		0.8	9.525	4.76	3.81
		DNMG110412E-TSF		●	●				●		●	●	●	●		1.2	9.525	4.76	3.81
		DNMG150402-TSF		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		DNMG150404-TSF	●	●	●	●	●	●	●	●	●	●	●	●		0.4	12.7	4.76	5.16
		DNMG150408-TSF	●	●	●	●	●	●	●	●	●	●	●	●		0.8	12.7	4.76	5.16
		DNMG150412-TSF	●	●	●	●	●	●	●	●	●			●		1.2	12.7	4.76	5.16
		DNMG150602-TSF		●	●		●		●	●				●		0.2	12.7	6.35	5.16
		DNMG150604-TSF		●	●		●		●	●		●	●	●		0.4	12.7	6.35	5.16
		DNMG150608-TSF	●	●	●	●	●		●	●		●	●	●		0.8	12.7	6.35	5.16
		DNMG150612-TSF	●	●	●	●	●		●	●				●		1.2	12.7	6.35	5.16
	PS	DNMG110402E-PS		●	●		●		●	●				●		0.2	9.525	4.76	3.81
		DNMG110404E-PS		●	●		●		●	●				●		0.4	9.525	4.76	3.81
		DNMG110408E-PS		●	●		●		●	●				●		0.8	9.525	4.76	3.81
		DNMG150402-PS		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		DNMG150404-PS		●	●		●		●	●				●		0.4	12.7	4.76	5.16
		DNMG150408-PS		●	●		●		●	●				●		0.8	12.7	4.76	5.16
		DNMG150412-PS		●	●		●		●	●				●		1.2	12.7	4.76	5.16
		DNMG150602-PS		●	●		●		●	●				●		0.2	12.7	6.35	5.16
		DNMG150604-PS		●	●		●		●	●				●		0.4	12.7	6.35	5.16
		DNMG150608-PS		●	●		●		●	●				●		0.8	12.7	6.35	5.16
		DNMG150612-PS		●	●		●		●	●				●		1.2	12.7	6.35	5.16
Finishing for mild steel	ZF	DNMG110402E-ZF		●	●		●		●	●				●		0.2	9.525	4.76	3.81
		DNMG110404E-ZF		●	●		●		●	●				●		0.4	9.525	4.76	3.81
		DNMG110408E-ZF		●	●		●		●	●				●		0.8	9.525	4.76	3.81
		DNMG150402-ZF		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		DNMG150404-ZF		●	●	●	●		●	●		●	●	●		0.4	12.7	4.76	5.16
		DNMG150408-ZF		●	●	●	●		●	●		●	●	●		0.8	12.7	4.76	5.16
		DNMG150412-ZF		●	●	●	●		●	●				●		1.2	12.7	4.76	5.16
		DNMG150602-ZF		●	●		●		●	●				●		0.2	12.7	6.35	5.16
		DNMG150604-ZF		●	●		●		●	●				●		0.4	12.7	6.35	5.16
		DNMG150608-ZF		●	●	●	●		●	●				●		0.8	12.7	6.35	5.16
		DNMG150612-ZF		●	●		●		●	●				●		1.2	12.7	6.35	5.16
Finishing	AS	DNMG150404-AS		●		●								●		0.4	12.7	4.76	5.16
		DNMG150408-AS		●	●	●								●		0.8	12.7	4.76	5.16
		DNMG150412-AS		●	●	●										1.2	12.7	4.76	5.16
		DNMG150604-AS		●												0.4	12.7	6.35	5.16
		DNMG150608-AS		●	●											0.8	12.7	6.35	5.16
		DNMG150612-AS		●												1.2	12.7	6.35	5.16
	NS	DNMG150404-NS			●									●		0.4	12.7	4.76	5.16
		DNMG150408-NS	●	●	●									●		0.8	12.7	4.76	5.16
																			

● : Line up

Reference pages:
External toolholder → C034 -
J-Series toolholder → G068
Internal toolholder → D069 -
TungCap → C034 -, K012 -

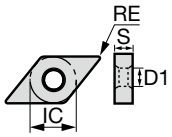
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN



Rhombic, 55° with hole

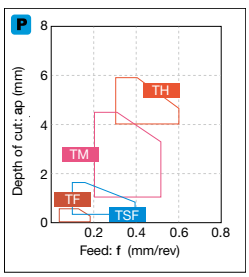
P	Steel	●	●ɔ	ɔ✣	✣	ɔ			ɔ✣	✣	●ɔ	●ɔ			●ɔ	●ɔ			●ɔ	●ɔ									
M	Stainless		●ɔ			●	●	ɔ	●ɔ	✣	●ɔ	●ɔ																	
K	Cast iron	●ɔ	●ɔ								●ɔ	●ɔ			●ɔ	●ɔ			●ɔ	●ɔ			ɔ✣						
N	Non-ferrous																						ɔ✣						
S	Superalloy					●	ɔ				●ɔ												ɔ✣						
H	Hard material																												

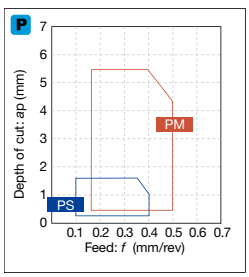


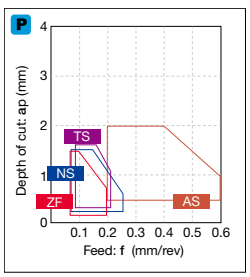
Application	Chipbreaker	Designation	Coated											Coated cermet		Cermet		Uncoated		Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	AH8005	AH8015	AH6225	AH6235	AH120	GH330	GT9530	AT9530	NS9530	NS520	KS20		RE	IC	S	D1
Finishing	TS	DNMG110402E-TS		●	●		●		●	●				●		●				0.2	9.525	4.76	3.81
		DNMG110404E-TS		●	●		●		●	●				●		●				0.4	9.525	4.76	3.81
		DNMG110408E-TS		●	●		●		●	●				●		●				0.8	9.525	4.76	3.81
		DNMG150402-TS		●	●		●		●	●						●				0.2	12.7	4.76	5.16
		DNMG150404-TS		●	●	●	●		●	●				●	●	●	●			0.4	12.7	4.76	5.16
		DNMG150408-TS	●	●	●	●	●		●	●				●	●	●	●			0.8	12.7	4.76	5.16
		DNMG150412-TS	●	●	●	●	●		●	●						●				1.2	12.7	4.76	5.16
		DNMG150602-TS		●	●		●		●	●						●				0.2	12.7	6.35	5.16
		DNMG150604-TS		●	●		●		●	●				●	●	●	●			0.4	12.7	6.35	5.16
		DNMG150608-TS		●	●		●		●	●				●	●	●	●			0.8	12.7	6.35	5.16
		DNMG150612-TS		●	●		●		●	●						●				1.2	12.7	6.35	5.16
	SF	DNMG150404-SF					●			●										0.4	12.7	4.76	5.16
		DNMG150408-SF					●			●										0.8	12.7	4.76	5.16
		DNMG150604-SF					●			●										0.4	12.7	6.35	5.16
		DNMG150608-SF					●			●										0.8	12.7	6.35	5.16
	SS	DNMG110404E-SS								●	●									0.4	9.525	4.76	3.81
		DNMG110408E-SS								●	●									0.8	9.525	4.76	3.81
		DNMG150404-SS					●			●	●		●							0.4	12.7	4.76	5.16
		DNMG150408-SS					●			●	●		●					●		0.8	12.7	4.76	5.16
		DNMG150412-SS					●			●	●		●							1.2	12.7	4.76	5.16
		DNMG150604-SS					●			●	●	●	●							0.4	12.7	6.35	5.16
		DNMG150608-SS					●			●	●	●	●							0.8	12.7	6.35	5.16
		DNMG150612-SS					●			●	●									1.2	12.7	6.35	5.16
	HRF	DNMG150404-HRF						●	●											0.4	12.7	4.76	5.16
		DNMG150408-HRF						●	●											0.8	12.7	4.76	5.16
		DNMG150604-HRF						●	●											0.4	12.7	6.35	5.16
		DNMG150608-HRF						●	●											0.8	12.7	6.35	5.16

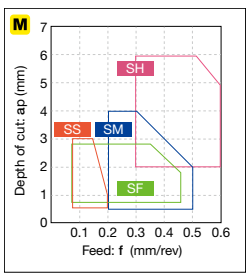
● : Line up

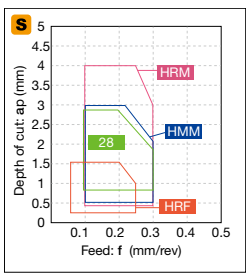
Chip control range











Reference pages: External toolholder → C034 -
J-Series toolholder → G068
Internal toolholder → D069 -
TungCap → C034 -, K012 -

Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

DN

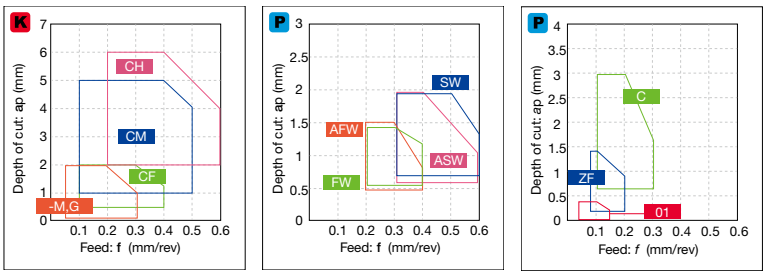
Rhombic, 55° with hole

		Coated					Coated cermet		Cermet		Uncoated	Dimension (mm)			
Application	Chipbreaker	Designation	T9215	T5105	T5115	GH330	GH110	GT9530	GT720	NS9530	NS520	TH10	RE	IC	S	D1
Finishing	CF	DNMG150404-CF		●	●								0.4	12.7	4.76	5.16
		DNMG150408-CF		●	●								0.8	12.7	4.76	5.16
		DNMG150412-CF		●	●								1.2	12.7	4.76	5.16
		DNMG150604-CF		●	●								0.4	12.7	6.35	5.16
		DNMG150608-CF		●	●								0.8	12.7	6.35	5.16
		DNMG150612-CF		●	●								1.2	12.7	6.35	5.16
Finishing (wiper)	FW	DNMG110404E-FW	●										0.4	9.525	4.76	3.81
		DNMG110408E-FW	●										0.8	9.525	4.76	3.81
		DNMG150404-FW	●										0.4	12.7	4.76	5.16
		DNMG150408-FW	●										0.8	12.7	4.76	5.16
		DNMG150604-FW	●										0.4	12.7	6.35	5.16
		DNMG150608-FW	●										0.8	12.7	6.35	5.16
		*Wiper														
Finishing	01	DNGG110402-01								●			0.2	9.525	4.76	3.81
		DNGG110404-01								●	●		0.4	9.525	4.76	3.81
		DNGG110408-01							●	●			0.8	9.525	4.76	3.81
		DNGG150402-01								●	●	●	0.2	12.7	4.76	5.16
		DNGG150404-01					●			●	●	●	0.4	12.7	4.76	5.16
		DNGG150408-01					●			●	●	●	0.8	12.7	4.76	5.16
	11	DNMG110404-11								●			0.4	9.525	4.76	3.81
		DNMG110408-11								●			0.8	9.525	4.76	3.81
		DNMG150404-11				●				●		●	0.4	12.7	4.76	5.16
		DNMG150408-11	●							●			0.8	12.7	4.76	5.16
Finishing for mild steel	17	DNMG150404-17								●			0.4	12.7	4.76	5.16
		DNMG150408-17								●			0.8	12.7	4.76	5.16
Boring (double side)	CB	DNMG110404-CB						●		●			0.4	9.525	4.76	3.81
		DNMG110408-CB	●					●		●			0.8	9.525	4.76	3.81

* Please see L011 - L015 about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

● : Line up

Chip control range



*-M,G: Without chipbreaker

Reference pages: External toolholder → C034 -
J-Series toolholder → G068
Internal toolholder → D069 -
TungCap → C034 -, K012 -

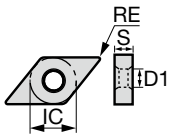
● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN



Rhombic, 55° with hole

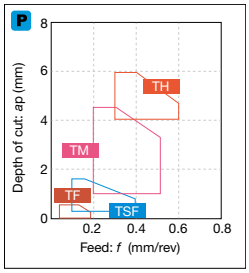
P	Steel	● ◐ ◐✣ ✣ ◐ ✣ ◐ ◐✣ ✣ ● ◐ ◐ ◐
M	Stainless	◐ ● ◐ ◐ ✣ ● ◐
K	Cast iron	◐ ◐ ◐ ● ◐ ◐ ● ◐
N	Non-ferrous	
S	Superalloy	● ◐ ● ◐
H	Hard material	

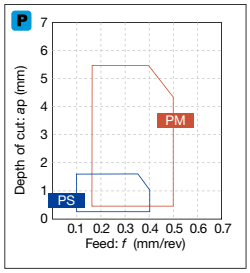


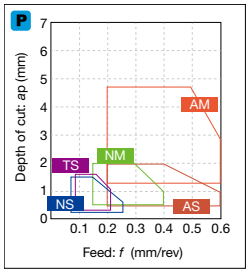
Application	Chipbreaker	Designation	Coated											Coated cermet		Cermet			Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T515	AH8005	AH8015	AH6225	AH6235	AH110	AH120	GT9530		NS9530			RE	IC	S	D1
Medium cutting	TM	DNMG110404E-TM		●	●		●			●	●			●						0.4	9.525	4.76	3.81
		DNMG110408E-TM		●	●		●			●	●			●						0.8	9.525	4.76	3.81
		DNMG110412E-TM		●	●		●			●	●			●						1.2	9.525	4.76	3.81
		DNMG110404-TM		●	●	●														0.4	9.525	4.76	3.81
		DNMG110408-TM		●	●	●														0.8	9.525	4.76	3.81
		DNMG150404-TM	●	●	●	●	●	●		●	●	●		●						0.4	12.7	4.76	5.16
		DNMG150408-TM	●	●	●	●	●	●		●	●	●		●						0.8	12.7	4.76	5.16
		DNMG150412-TM	●	●	●	●	●	●		●	●	●	●	●						1.2	12.7	4.76	5.16
		DNMG150416-TM		●	●		●	●		●	●	●		●						1.6	12.7	4.76	5.16
		DNMG150604-TM	●	●	●	●	●			●	●			●						0.4	12.7	6.35	5.16
		DNMG150608-TM	●	●	●	●	●			●	●			●						0.8	12.7	6.35	5.16
		DNMG150612-TM	●	●	●	●	●			●	●			●						1.2	12.7	6.35	5.16
		DNMG150616-TM	●	●	●	●	●		●		●									1.6	12.7	6.35	5.16
	PM	DNMG110404E-PM		●	●		●			●	●									0.4	9.525	4.76	3.81
		DNMG110408E-PM		●	●		●			●	●									0.8	9.525	4.76	3.81
		DNMG110412E-PM		●	●		●			●	●									1.2	9.525	4.76	3.81
		DNMG150404-PM		●	●		●			●	●									0.4	12.7	4.76	5.16
		DNMG150408-PM		●	●		●			●	●									0.8	12.7	4.76	5.16
		DNMG150412-PM		●	●		●			●	●									1.2	12.7	4.76	5.16
		DNMG150416-PM		●	●		●			●	●									1.6	12.7	4.76	5.16
		DNMG150604-PM		●	●		●			●	●									0.4	12.7	6.35	5.16
		DNMG150608-PM		●	●		●			●	●									0.8	12.7	6.35	5.16
		DNMG150612-PM		●	●		●			●	●									1.2	12.7	6.35	5.16
		DNMG150616-PM		●	●		●			●	●									1.6	12.7	6.35	5.16
Medium cutting for mild steel	ZM	DNMG110404E-ZM		●	●		●			●	●									0.4	9.525	4.76	3.81
		DNMG110408E-ZM		●	●		●			●	●									0.8	9.525	4.76	3.81
		DNMG110412E-ZM		●	●		●			●	●									1.2	9.525	4.76	3.81
		DNMG150404-ZM		●	●		●			●	●									0.4	12.7	4.76	5.16
		DNMG150408-ZM		●	●	●	●			●	●				●		●			0.8	12.7	4.76	5.16
		DNMG150412-ZM		●	●	●	●			●	●									1.2	12.7	4.76	5.16
		DNMG150416-ZM		●	●		●			●	●									1.6	12.7	4.76	5.16
		DNMG150604-ZM		●	●		●			●	●									0.4	12.7	6.35	5.16
		DNMG150608-ZM		●	●	●	●			●	●									0.8	12.7	6.35	5.16
		DNMG150612-ZM		●	●		●			●	●									1.2	12.7	6.35	5.16
		DNMG150616-ZM		●	●		●			●	●									1.6	12.7	6.35	5.16
Medium cutting	AM	DNMG150408-AM		●	●															0.8	12.7	4.76	5.16
		DNMG150412-AM		●	●															1.2	12.7	4.76	5.16
		DNMG150416-AM		●	●															1.6	12.7	4.76	5.16
		DNMG150608-AM		●	●															0.8	12.7	6.35	5.16
		DNMG150612-AM		●	●															1.2	12.7	6.35	5.16
		DNMG150616-AM		●	●															1.6	12.7	6.35	5.16

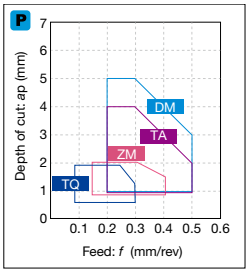
● : Line up

Chip control range









Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

Insert NEGATIVE TYPE

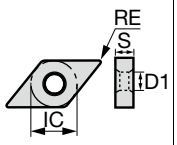
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN



Rhombic, 55° with hole

P	Steel	●	●ɔ	●✣	✣	ɔ									●✣	✣	●	●ɔ		●ɔ			●ɔ	●ɔ		●					
M	Stainless		●ɔ			●						●	ɔ	●ɔ	✣	●	●ɔ								●					
K	Cast iron	●ɔ	●ɔ				●	●ɔ	●	ɔ	✣					●	●ɔ		●ɔ				●ɔ	●ɔ	●					
N	Non-ferrous																								●					
S	Superalloy											●	ɔ			●	●ɔ													
H	Hard material																													



Application	Chipbreaker	Designation	Coated															Coated cermet		Cermet		Un-coated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	AH8005	AH8015	AH6225	AH6235	AH110	AH120	GT9530		NS9530	NS520	TH10	RE	IC	S	D1
Medium cutting	**NM**	**DNMG150408-NM**		●	●	●													●		●			0.8	12.7	4.76	5.16
		DNMG150412-NM	●	●	●	●																		1.2	12.7	4.76	5.16
		DNMG150608-NM																	●		●			0.8	12.7	6.35	5.16
	DM	**DNMG150404-DM**		●	●		●							●	●									0.4	12.7	4.76	5.16
		DNMG150408-DM		●	●	●	●							●	●									0.8	12.7	4.76	5.16
		DNMG150412-DM	●	●	●	●	●							●	●									1.2	12.7	4.76	5.16
		DNMG150416-DM		●	●		●							●	●									1.6	12.7	4.76	5.16
		DNMG150604-DM		●	●		●							●	●									0.4	12.7	6.35	5.16
		DNMG150608-DM		●	●	●	●							●	●									0.8	12.7	6.35	5.16
		DNMG150612-DM	●	●	●	●	●							●	●									1.2	12.7	6.35	5.16
		DNMG150616-DM	●	●	●		●							●	●									1.6	12.7	6.35	5.16
Finishing to medium cutting	**All-round**	**DNMG110404**		●	●					●	●	●							●		●			0.4	9.525	4.76	3.81
		DNMG110408	●	●	●	●				●	●	●							●		●			0.8	9.525	4.76	3.81
		DNMG150404		●	●	●				●	●	●					●	●	●		●	●	●	0.4	12.7	4.76	5.16
		DNMG150408	●	●	●	●		●	●	●	●	●					●	●	●		●	●	●	0.8	12.7	4.76	5.16
		DNMG150412	●	●	●	●		●	●	●	●	●					●	●			●	●	●	1.2	12.7	4.76	5.16
		DNMG150416		●	●						●													1.6	12.7	4.76	5.16
		DNMG150604		●	●					●	●												●	0.4	12.7	6.35	5.16
		DNMG150608	●	●	●	●		●	●	●	●	●											●	0.8	12.7	6.35	5.16
		DNMG150612	●	●	●	●		●	●		●	●											●	1.2	12.7	6.35	5.16
		DNMG150616		●	●																			1.6	12.7	6.35	5.16
Medium cutting	**SM**	**DNMG110404E-SM**					●								●									0.4	9.525	4.76	3.81
		DNMG110408E-SM					●								●									0.8	9.525	4.76	3.81
		DNMG150404-SM					●								●	●								0.4	12.7	4.76	5.16
		DNMG150408-SM					●								●	●								0.8	12.7	4.76	5.16
		DNMG150412-SM					●								●	●								1.2	12.7	4.76	5.16
		DNMG150604-SM					●								●	●								0.4	12.7	6.35	5.16
		DNMG150608-SM					●								●	●								0.8	12.7	6.35	5.16
		DNMG150612-SM					●								●	●								1.2	12.7	6.35	5.16
	SDM	**DNMG150404-SDM**					●						●	●	●	●								0.4	12.7	4.76	5.16
		DNMG150408-SDM					●						●	●	●	●								0.8	12.7	4.76	5.16
		DNMG150412-SDM					●								●	●								1.2	12.7	4.76	5.16
		DNMG150604-SDM					●								●	●								0.4	12.7	6.35	5.16
		DNMG150608-SDM					●						●	●	●	●								0.8	12.7	6.35	5.16
		DNMG150612-SDM					●						●	●	●	●								1.2	12.7	6.35	5.16
	HRM	**DNMG150404-HRM**											●	●										1.2	12.7	6.35	5.16
		DNMG150408-HRM											●	●										0.4	12.7	4.76	5.16
		DNMG150412-HRM											●	●										0.8	12.7	4.76	5.16
		DNMG150604-HRM											●	●										1.2	12.7	4.76	5.16
		DNMG150608-HRM											●	●										0.4	12.7	6.35	5.16
		DNMG150612-HRM											●	●										0.8	12.7	6.35	5.16

● : Line up

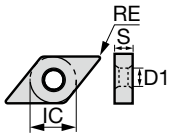
Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

DN

Rhombic, 55° with hole

P	Steel	●ⓒ ⓒ✠ ● ●ⓒ ● ⓒ ✠ ●ⓒ
M	Stainless	●ⓒ ●ⓒ
K	Cast iron	●ⓒ ● ●ⓒ ● ⓒ ✠ ●ⓒ
N	Non-ferrous	
S	Superalloy	ⓒ ●ⓒ
H	Hard material	

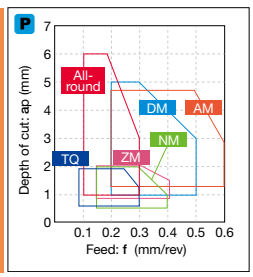


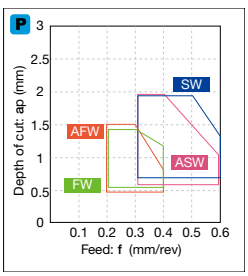
Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet			Dimension (mm)			
			T9205	T9215	T9225	T6215	T505	T515	T5105	T5115	T5125	AH905	AH120	GT9530	AT9530	NS9530			RE	IC	S	D1
Medium cutting	CM	DNMG150404-CM	●	●		●	●	●	●	●	●								0.4	12.7	4.76	5.16
		DNMG150408-CM	●	●		●	●	●	●	●	●								0.8	12.7	4.76	5.16
		DNMG150412-CM	●	●		●	●	●	●	●	●								1.2	12.7	4.76	5.16
		DNMG150604-CM	●	●		●	●	●		●	●								0.4	12.7	6.35	5.16
		DNMG150608-CM	●	●		●	●	●	●	●	●								0.8	12.7	6.35	5.16
		DNMG150612-CM	●	●		●	●	●	●	●	●								1.2	12.7	6.35	5.16
Finishing (wiper)	SW	DNMG110408E-SW		●															0.8	9.525	4.76	3.81
		DNMG110412E-SW		●															1.2	9.525	4.76	3.81
		DNMG150408-SW		●															0.8	12.7	4.76	5.16
		DNMG150412-SW		●															1.2	12.7	4.76	5.16
		DNMG150608-SW		●															0.8	12.7	6.35	5.16
		DNMG150612-SW		●															1.2	12.7	6.35	5.16
		*Wiper																				
Medium cutting	TQ	DNMG150404-TQ		●	●									●	●		●		0.4	12.7	4.76	5.16
		DNMG150408-TQ		●	●									●	●		●		0.8	12.7	4.76	5.16
	SA	DNMG150404-SA											●						0.4	12.7	4.76	5.16
		DNMG150408-SA											●						0.8	12.7	4.76	5.16
		DNMG150604-SA											●						0.4	12.7	6.35	5.16
		DNMG150608-SA											●						0.8	12.7	6.35	5.16
	HMM	DNMG150404-HMM										●							0.4	12.7	4.76	5.16
		DNMG150408-HMM										●							0.8	12.7	4.76	5.16
		DNMG150412-HMM										●							1.2	12.7	4.76	5.16

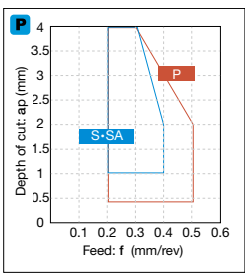
* Please see L011 - L015 about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

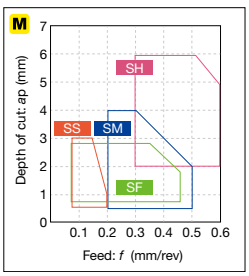
● : Line up

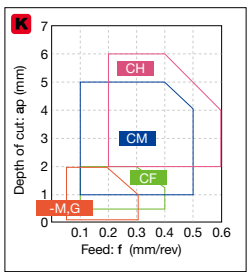
Chip control range

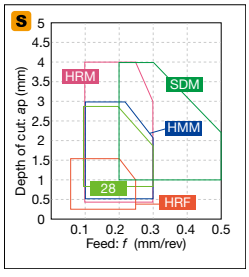












Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068
TungCap → C034 -, K012 -

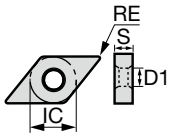
Insert NEGATIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN

Rhombic, 55° with hole

P	Steel	●ɔ	ɔ✣	✣			ɔ✣	✣	●	●ɔ	●	●ɔ			●ɔ			●ɔ			●				
M	Stainless	●ɔ			●	ɔ	●ɔ	✣	●	●ɔ	●	●ɔ									●				
K	Cast iron	●ɔ							●	●ɔ	●	●ɔ			●ɔ			●ɔ			●	●			
N	Non-ferrous																				●	●			
S	Superalloy				●	ɔ			●	●ɔ	●											●			
H	Hard material																								



Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet		Uncoated			Dimension (mm)			
			T9215	T9225	T9235	AH8005	AH8015	AH6225	AH6235	AH110	AH120	GH110	GH330	GT9530		NS9530		TH10	KS05F		RE	IC	S	D1
Medium cutting	P	DNGG150402R-P										●						●			0.2	12.7	4.76	5.16
		DNGG150402L-P										●						●			0.2	12.7	4.76	5.16
		DNGG150404R-P										●						●			0.4	12.7	4.76	5.16
		DNGG150404L-P										●						●			0.4	12.7	4.76	5.16
		DNGG150408R-P																●			0.8	12.7	4.76	5.16
		DNGG150408L-P																●			0.8	12.7	4.76	5.16
	S	DNMG150404R-S		●	●			●	●				●			●					0.4	12.7	4.76	5.16
		DNMG150404L-S		●	●			●	●				●			●					0.4	12.7	4.76	5.16
		DNMG150408R-S		●	●			●	●				●			●					0.8	12.7	4.76	5.16
		DNMG150408L-S		●	●			●	●				●			●					0.8	12.7	4.76	5.16
		DNMG150604R-S		●	●			●	●												0.4	12.7	6.35	5.16
		DNMG150604L-S		●	●			●	●												0.4	12.7	6.35	5.16
		DNMG150608R-S		●	●			●	●				●								0.8	12.7	6.35	5.16
		DNMG150608L-S		●	●			●	●												0.8	12.7	6.35	5.16
	27	DNMG150404-27		●												●					0.4	12.7	4.76	5.16
		DNMG150408-27	●	●												●					0.8	12.7	4.76	5.16
		DNMG150412-27		●																	1.2	12.7	4.76	5.16
	28	DNMG150404-28				●	●				●								●		0.4	12.7	4.76	5.16
		DNMG150408-28				●	●				●								●		0.8	12.7	4.76	5.16
		DNMG150604-28				●	●												●		0.4	12.7	6.35	5.16
		DNMG150608-28				●	●												●		0.8	12.7	6.35	5.16
	33	DNMG150404-33								●											0.4	12.7	4.76	5.16
		DNMG150408-33								●								●			0.8	12.7	4.76	5.16
	37	DNMG150404-37														●					0.4	12.7	4.76	5.16
		DNMG150408-37											●			●					0.8	12.7	4.76	5.16
		DNMG150608-37	●																		0.8	12.7	6.35	5.16
	38	DNMG150412-38	●																		1.2	12.7	4.76	5.16
	Parallel	DNGG150404R												●		●					0.4	12.7	4.76	5.16
		DNGG150404L												●		●					0.4	12.7	4.76	5.16
		DNGG150408R														●					0.8	12.7	4.76	5.16
		DNGG150408L														●					0.8	12.7	4.76	5.16

● : Line up

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

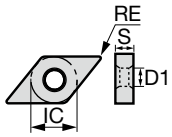
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

DN



Rhombic, 55° with hole

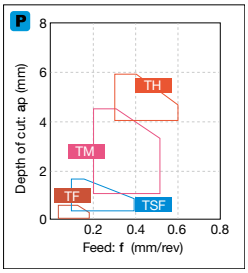
P	Steel	●ⓒ ⓒ✠ ✠ ● ●ⓒ ● ⓒ ✠ ✠✠ ●✠ ✠ ●ⓒ ●ⓒ ●ⓒ ●ⓒ ●
M	Stainless	●ⓒ ⓒ ●ⓒ ●✠ ✠ ●ⓒ ●
K	Cast iron	●ⓒ ● ●ⓒ ● ⓒ ✠ ●ⓒ ●ⓒ ●ⓒ ●
N	Non-ferrous	●
S	Superalloy	ⓒ ●ⓒ ●
H	Hard material	

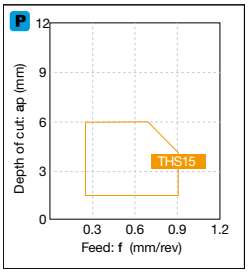


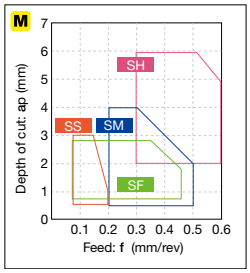
Application	Chipbreaker	Designation	Coated T9215	T9225	T9235	T505	T515	T5105	T5115	T5125	AH8015	AH6225	AH6235	AH120	Coated cermet GT720	Cermet NS520	Uncoated TH10	Dimension (mm) RE	IC	S	D1
Medium to heavy cutting	TH	DNMG150408-TH	●	●	●		●				●			●				0.8	12.7	4.76	5.16
		DNMG150412-TH	●	●	●		●				●			●				1.2	12.7	4.76	5.16
		DNMG150416-TH	●	●														1.6	12.7	4.76	5.16
		DNMG150608-TH	●	●	●									●				0.8	12.7	6.35	5.16
		DNMG150612-TH	●	●	●									●				1.2	12.7	6.35	5.16
		DNMG150616-TH	●	●	●													1.6	12.7	6.35	5.16
	THS	DNMG150408-THS	●	●	●													0.8	12.7	4.76	5.16
		DNMG150412-THS	●	●	●													1.2	12.7	4.76	5.16
		DNMG150416-THS	●	●														1.6	12.7	4.76	5.16
		DNMG150608-THS	●	●	●													0.8	12.7	6.35	5.16
		DNMG150612-THS	●	●	●													1.2	12.7	6.35	5.16
		DNMG150616-THS	●	●														1.6	12.7	6.35	5.16
	SH	DNMG150408-SH										●	●					0.8	12.7	4.76	5.16
		DNMG150412-SH										●	●					1.2	12.7	4.76	5.16
		DNMG150416-SH										●	●					1.6	12.7	4.76	5.16
		DNMG150608-SH										●	●					0.8	12.7	6.35	5.16
		DNMG150612-SH										●	●					1.2	12.7	6.35	5.16
	CH	DNMG150404-CH							●	●								0.4	12.7	4.76	5.16
		DNMG150408-CH					●	●	●	●								0.8	12.7	4.76	5.16
		DNMG150412-CH					●		●	●								1.2	12.7	4.76	5.16
		DNMG150608-CH							●	●								0.8	12.7	6.35	5.16
		DNMG150612-CH						●										1.2	12.7	6.35	5.16
Medium to heavy cutting (single side)	57	DNMM150608-57		●														0.8	12.7	6.35	5.16
		DNMM150612-57		●														1.2	12.7	6.35	5.16
Finishing to medium cutting	-	DNMA110404E					●											0.4	9.525	4.76	3.81
		DNMA110408E					●											0.8	9.525	4.76	3.81
		DNMA110412E					●											1.2	9.525	4.76	3.81
		DNMA150404				●	●	●	●	●					●	●	●	0.4	12.7	4.76	5.16
		DNMA150408				●	●	●	●	●							●	0.8	12.7	4.76	5.16
		DNMA150412						●	●	●								1.2	12.7	4.76	5.16
		DNMA150604				●	●											0.4	12.7	6.35	5.16
		DNMA150608				●	●	●	●									0.8	12.7	6.35	5.16
		DNMA150612						●	●	●								1.2	12.7	6.35	5.16

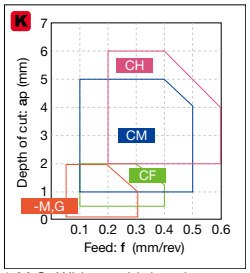
● : Line up

Chip control range









*-M,G: Without chipbreaker

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

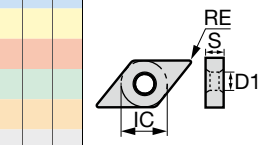
Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

DN

Rhombic, 55° with hole

P	Steel	●◐ ●
M	Stainless	●
K	Cast iron	●◐ ● ◐
N	Non-ferrous	●
S	Superalloy	
H	Hard material	◐ ◐ ◐

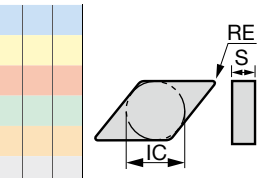


Application	Chipbreaker	Designation	Cermet NS520	Uncoated TH10	Ceramic FX105	Ceramic LX10	Ceramic LX11	Ceramic LX21	Dimension (mm) RE	IC	S	D1
Finishing to medium cutting	-	**DNGA150404**	●	●		●	▲	●	0.4	12.7	4.76	5.16
		DNGA150408	●	●	●	●	▲	●	0.8	12.7	4.76	5.16
		DNGA150412			●	●	▲	●	1.2	12.7	4.76	5.16
		DNGA150416			●		▲		1.6	12.7	4.76	5.16
		DNGA150604				●	▲		-	-	-	-
		DNGA150608				●	▲		0.8	12.7	6.35	5.16
		DNGA150612				●	▲		1.2	12.7	6.35	5.16
		DNGA150616				●	▲		1.6	12.7	6.35	5.16
		DNGA150620				●	▲		2	12.7	6.35	5.16

DN

Rhombic, 55° without hole

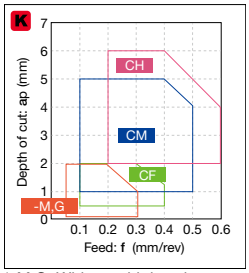
P	Steel	
M	Stainless	
K	Cast iron	●◐
N	Non-ferrous	
S	Superalloy	
H	Hard material	◐ ◐



Application	Chipbreaker	Designation	Ceramic FX105	Ceramic LX10	Ceramic LX11	Dimension (mm) RE	IC	S	D1
Finishing to medium cutting	-	**DNGD150708**	●			0.8	12.7	7.94	-
		DNGD150712	●			1.2	12.7	7.94	-
		DNGD150716	●			1.6	12.7	7.94	-
	-	**DNGN150404**			▲	0.4	12.7	4.76	-
		DNGN150408		●	▲	0.8	12.7	4.76	-
		DNGN150412	●		▲	1.2	12.7	4.76	-
		DNGN150416	●			1.6	12.7	4.76	-
		DNGN150708		●	▲	0.8	12.7	7.94	-
		DNGN150712		●	▲	1.2	12.7	7.94	-
		DNGN150716		●	▲	1.6	12.7	7.94	-

● : Line up
▲ : To be discontinued

Chip control range



*-M,G: Without chipbreaker

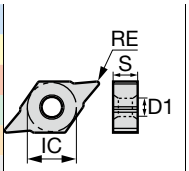
Reference pages: DNGA...: External toolholder → C034 -, Internal toolholder → D069 -, J-Series toolholder → G068, TungCap → C034 -, K012 -
DNGD...: External toolholder → C040

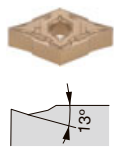
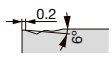
● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

FN

Rhombic, 45° with hole

P	Steel	●ᑕ	●ᑕ✠	ᑕ		ᑕ✠	
M	Stainless	●ᑕ		●	ᑕ	●ᑕ	
K	Cast iron	●ᑕ					
N	Non-ferrous						
S	Superalloy				ᑕ		
H	Hard material						



Application	Chipbreaker	Designation	Coated T9215	T9225	T6215	AH8015	AH6225	RE	IC	S	D1
Finishing	TSF	FNMG110402E-TSF	●	●	●	●	●	0.2	9.525	4.76	3.81
		FNMG110404E-TSF	●	●	●	●	●	0.4	9.525	4.76	3.81
		FNMG110408E-TSF	●	●	●	●	●	0.8	9.525	4.76	3.81
		FNMG110412E-TSF	●	●	●	●	●	1.2	9.525	4.76	3.81
Medium cutting	TM	FNMG110404E-TM	●	●	●	●	●	0.4	9.525	4.76	3.81
		FNMG110408E-TM	●	●	●	●	●	0.8	9.525	4.76	3.81
		FNMG110412E-TM	●	●	●	●	●	1.2	9.525	4.76	3.81
											

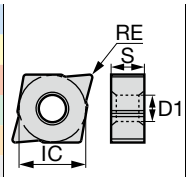
Make sure to offset the cutting edge position after insert change.
Please note that the insert shim may interfere with the workpiece when FNMG insert is used with Q-style toolholder to undercut a work diameter of 50 mm or smaller.

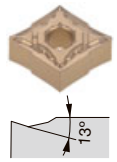
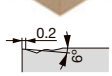
● : Line up

GN

Rhombic, 70° with hole

P	Steel	●ᑕ	●ᑕ✠	ᑕ		ᑕ✠	
M	Stainless	●ᑕ		●	ᑕ	●ᑕ	
K	Cast iron	●ᑕ					
N	Non-ferrous						
S	Superalloy				ᑕ		
H	Hard material						

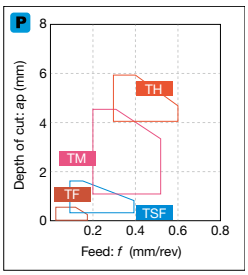


Application	Chipbreaker	Designation	Coated T9215	T9225	T6215	AH8015	AH6225	RE	IC	S	D1
Finishing	TSF	GNMG090402E-TSF	●	●	●	●	●	0.2	9.525	4.76	3.81
		GNMG090404E-TSF	●	●	●	●	●	0.4	9.525	4.76	3.81
		GNMG090408E-TSF	●	●	●	●	●	0.8	9.525	4.76	3.81
Medium cutting	TM	GNMG090404E-TM	●	●	●	●	●	0.4	9.525	4.76	3.81
		GNMG090408E-TM	●	●	●	●	●	0.8	9.525	4.76	3.81
		GNMG090412E-TM	●	●	●	●	●	1.2	9.525	4.76	3.81
											

Make sure to offset the cutting edge position after insert change.
Do not use ISO-EcoTurn cartridge set for CNMG09 (AD-CL-4/3-SET or -SET-S) with GNMG09 insert.
The insert may move during machining.

● : Line up

Chip control range



Reference pages: FNMG... : External toolholder → C034 - Internal toolholder → D069 -
GNMG...: External toolholder → C015 - Internal toolholder → D025 -

Insert NEGATIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

RN

Round, with hole

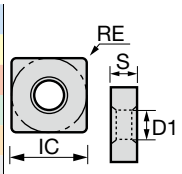
| | | |

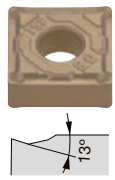
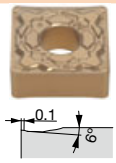
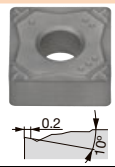
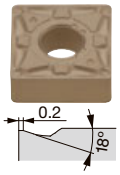
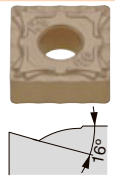
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

SN

Square with hole

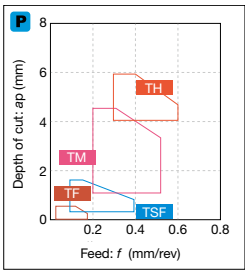
P	Steel	●	●ɔ	ɔ✠	ɔ		ɔ✠			●ɔ	●ɔ			●ɔ																			
M	Stainless		●ɔ		●	ɔ	●ɔ																										
K	Cast iron	●ɔ	●ɔ							●ɔ	●ɔ			●ɔ																			
N	Non-ferrous																																
S	Superalloy					ɔ																											
H	Hard material																																

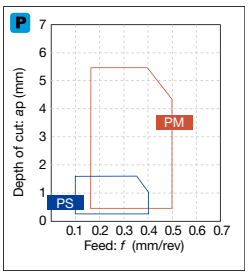


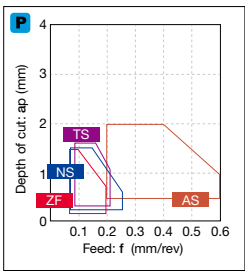
Application	Chipbreaker	Designation	Coated						Coated cermet		Cermet					Dimension (mm)			
			T9205	T9215	T9225	T6215	AH8015	AH6225	GT9530	AT9530	NS9530					RE	IC	S	D1
Finishing	TF	SNMG120402-TF		●	●	●	●	●			●					0.2	12.7	4.76	5.16
		SNMG120404-TF		●	●	●	●	●			●					0.4	12.7	4.76	5.16
		SNMG120408-TF		●	●	●	●	●			●					0.8	12.7	4.76	5.16
	TSF	SNMG120402-TSF		●	●	●	●	●			●					0.2	12.7	4.76	5.16
		SNMG120404-TSF		●	●	●	●	●	●	●	●					0.4	12.7	4.76	5.16
		SNMG120408-TSF		●	●	●	●	●	●	●	●					0.8	12.7	4.76	5.16
		SNMG120412-TSF		●	●	●	●	●			●					1.2	12.7	4.76	5.16
	PS	SNMG120402-PS		●	●	●	●	●								0.2	12.7	4.76	5.16
		SNMG120404-PS		●	●	●	●	●			●					0.4	12.7	4.76	5.16
		SNMG120408-PS		●	●	●	●	●			●					0.8	12.7	4.76	5.16
		SNMG120412-PS		●	●	●	●	●								1.2	12.7	4.76	5.16
Finishing for mild steel	ZF	SNMG120402-ZF		●	●	●	●	●			●					0.2	12.7	4.76	5.16
		SNMG120404-ZF		●	●	●	●	●			●					0.4	12.7	4.76	5.16
		SNMG120408-ZF		●	●	●	●	●			●					0.8	12.7	4.76	5.16
		SNMG120412-ZF		●	●	●	●	●			●					1.2	12.7	4.76	5.16
Finishing	AS	SNMG120404-AS									●					0.4	12.7	4.76	5.16
		SNMG120408-AS	●	●							●					0.8	12.7	4.76	5.16
	NS	SNMG120408-NS		●	●											0.8	12.7	4.76	5.16
																			

● : Line up

Chip control range







Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

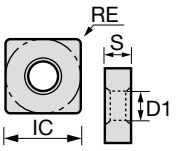
Insert NEGATIVE TYPE

● : Continuous cutting
c : Light interrupted cutting
✣ : Heavy interrupted cutting

SN

Square with hole

		T9205	T9215	T9225	T9235	T6215	T5105	T5115	AH8005	AH8015	AH6225	AH6235	GH330	GT9530	AT9530	NS9530	NS520	TH10
P	Steel	●	●c	●✣	✣	c					c✣	✣	●c					●
M	Stainless		●c			●			●	c	●c	✣	●c					●
K	Cast iron	●c	●c				●	c					●c	●c	●c	●c	●c	●
N	Non-ferrous																	●
S	Superalloy								●	c								
H	Hard material																	



Application	Chipbreaker	Designation	RE	IC	S	D1
Finishing	TS	SNMG120402-TS	0.2	12.7	4.76	5.16
		SNMG120404-TS	0.4	12.7	4.76	5.16
		SNMG120408-TS	0.8	12.7	4.76	5.16
		SNMG120412-TS	1.2	12.7	4.76	5.16
	SF	SNMG120404-SF	0.4	12.7	4.76	5.16
		SNMG120408-SF	0.8	12.7	4.76	5.16
	SS	SNMG120404-SS	0.4	12.7	4.76	5.16
		SNMG120408-SS	0.8	12.7	4.76	5.16
		SNMG120412-SS	1.2	12.7	4.76	5.16
	HRF	SNMG120408-HRF	0.8	12.7	4.76	5.16
		SNMG120412-HRF	1.2	12.7	4.76	5.16
	CF	SNMG120408-CF	0.8	12.7	4.76	5.16
		SNMG120412-CF	1.2	12.7	4.76	5.16
	01	SNGG090302-01	0.2	9.525	3.18	3.81
		SNGG090304-01	0.4	9.525	3.18	3.81
		SNGG090308-01	0.8	9.525	3.18	3.81
		SNGG120402-01	0.2	12.7	4.76	5.16
		SNGG120404-01	0.4	12.7	4.76	5.16
		SNGG120408-01	0.8	12.7	4.76	5.16
	11	SNMG120404-11	0.4	12.7	4.76	5.16
		SNMG120408-11	0.8	12.7	4.76	5.16

● : Line up

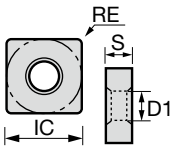
Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

SN

Square with hole

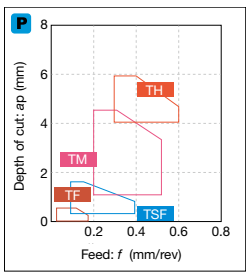
P	Steel	●	●ɔ	ɔ✣	✣	ɔ		ɔ✣	●ɔ			●ɔ					●ɔ	●													
M	Stainless		●ɔ			●	ɔ	●ɔ	●ɔ																						
K	Cast iron	●ɔ	●ɔ						●ɔ			●ɔ					●ɔ	●													
N	Non-ferrous																														
S	Superalloy						ɔ		●ɔ																						
H	Hard material																														

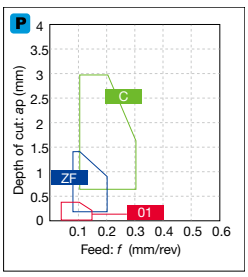


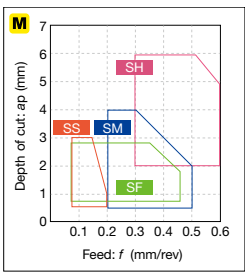
Application	Chipbreaker	Designation	Coated								Coated cermet	Cermet							Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	AH8015	AH6225	AH120	GT9530	NS9530	X407						RE	IC	S	D1
Finishing for mild steel	17	SNMG120408-17										●							0.8	12.7	4.76	5.16
Finishing	B ~ D	SNGG090304R-B									●	●	●						0.4	9.525	3.18	3.81
		SNGG090304L-B									●	●	●						0.4	9.525	3.18	3.81
		SNGG090308R-B										●	●						0.8	9.525	3.18	3.81
		SNGG090308L-B										●	●						0.8	9.525	3.18	3.81
		SNGG120404R-C									●	●							0.4	12.7	4.76	5.16
		SNGG120404L-C									●	●	●						0.4	12.7	4.76	5.16
		SNGG120408R-C										●							0.8	12.7	4.76	5.16
		SNGG120408L-C										●	●						0.8	12.7	4.76	5.16
		SNGG120408R-D										●							0.8	12.7	4.76	5.16
		SNGG120408L-D										●							0.8	12.7	4.76	5.16
Medium cutting	TM	SNMG090304-TM		●	●	●													0.4	9.525	3.18	3.81
		SNMG090308-TM		●	●	●													0.8	9.525	3.18	3.81
		SNMG120404-TM		●	●		●	●	●	●									0.4	12.7	4.76	5.16
		SNMG120408-TM	●	●	●	●	●	●	●	●									0.8	12.7	4.76	5.16
		SNMG120412-TM	●	●	●	●	●	●	●	●									1.2	12.7	4.76	5.16
		SNMG120416-TM		●	●	●	●	●	●										1.6	12.7	4.76	5.16
		SNMG150608-TM		●															0.8	15.875	6.35	6.35
		SNMG150612-TM		●						●									1.2	15.875	6.35	6.35
		SNMG190608-TM		●						●									0.8	19.05	6.35	7.93
		SNMG190612-TM		●						●									1.2	19.05	6.35	7.93
	PM	SNMG120404-PM		●	●		●	●	●										0.4	12.7	4.76	5.16
		SNMG120408-PM		●	●		●	●	●										0.8	12.7	4.76	5.16
		SNMG120412-PM		●	●		●	●	●										1.2	12.7	4.76	5.16
		SNMG120416-PM		●	●		●	●	●										1.6	12.7	4.76	5.16

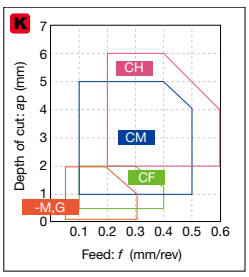
● : Line up

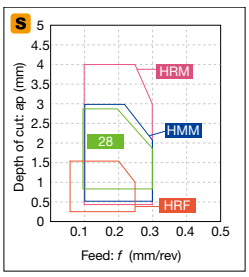
Chip control range



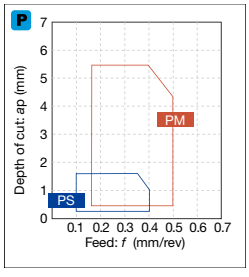


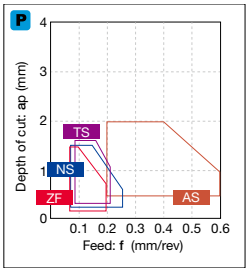






*-M,G: Without chipbreaker





Reference pages: External toolholder → C101 -
Internal toolholder → D043 -
Cartridge → K181 -

Insert NEGATIVE TYPE

● : Continuous cutting
c : Light interrupted cutting
✣ : Heavy interrupted cutting

SN

Square with hole

		T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	AH8015	AH6225	AH6235	AH725	AH110	AH120	GT720	NS9530	NS520	TH10
P	Steel	●	●c	c✣	✣	c							c✣	✣	c	●	●c	●c		●c	●
M	Stainless		●c			●						c	●c	✣	c	●	●c			●c	●
K	Cast iron	●c	●c				●	●c	●	c	✣				c	●	●c	●c		●c	●
N	Non-ferrous																				●
S	Superalloy											c			●	●	●c				
H	Hard material																				

Application	Chipbreaker	Designation	RE	IC	S	D1
Medium cutting for mild steel	ZM	SNMG120404-ZM	0.4	12.7	4.76	5.16
		SNMG120408-ZM	0.8	12.7	4.76	5.16
		SNMG120412-ZM	1.2	12.7	4.76	5.16
		SNMG120416-ZM	1.6	12.7	4.76	5.16
Medium cutting	DM	SNMG120404-DM	0.4	12.7	4.76	5.16
		SNMG120408-DM	0.8	12.7	4.76	5.16
		SNMG120412-DM	1.2	12.7	4.76	5.16
		SNMG120416-DM	1.6	12.7	4.76	5.16
Medium cutting	All-round	SNMG090304	0.4	9.525	3.18	3.81
		SNMG090308	0.8	9.525	3.18	3.81
		SNMG120404	0.4	12.7	4.76	5.16
		SNMG120408	0.8	12.7	4.76	5.16
		SNMG120412	1.2	12.7	4.76	5.16
		SNMG120416	1.6	12.7	4.76	5.16
		SNMG120420	2	12.7	4.76	5.16
		SNMG150612	1.2	15.875	6.35	6.35
		SNMG150616	1.6	15.875	6.35	6.35
		SNMG190612	1.2	19.05	6.35	7.93
		SNMG190616	1.6	19.05	6.35	7.93
		SNMG250724	2.4	25.4	7.94	9.12
	SM	SNMG120408-SM	0.8	12.7	4.76	5.16
		SNMG120412-SM	1.2	12.7	4.76	5.16
	SDM	SNMG120408-SDM	0.8	12.7	4.76	5.16
		SNMG120412-SDM	1.2	12.7	4.76	5.16
	CM	SNMG120408-CM	0.8	12.7	4.76	5.16
		SNMG120412-CM	1.2	12.7	4.76	5.16

● : Line up

Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

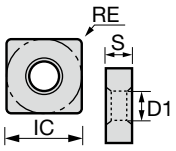
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

SN



Square with hole

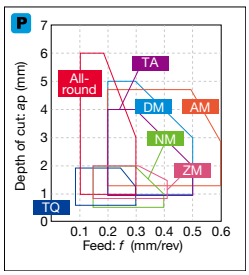
P	Steel	●ⓒ ⓒ✠ ⓒ ● ⓒ ✠ ●ⓒ ● ●ⓒ ●
M	Stainless	●ⓒ ● ● ⓒ ●ⓒ ✠ ●ⓒ ● ●ⓒ ●
K	Cast iron	●ⓒ ●ⓒ ● ●ⓒ ●
N	Non-ferrous	● ⓒ✠
S	Superalloy	● ⓒ ⓒ ●ⓒ ● ⓒ✠
H	Hard material	

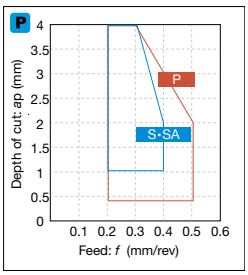


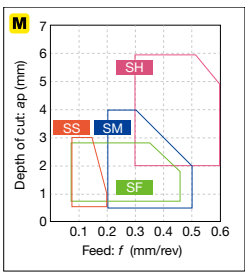
Application	Chipbreaker	Designation	Coated T9215	T9225	T6215	AH8005	AH8015	AH6225	AH6235	AH905	AH120	GH110	GH330	Uncoated TH10	KS20	RE	IC	S	D1
Medium cutting	HRM	SNMG120408-HRM				●	●									0.8	12.7	4.76	5.16
		SNMG12012-HRM				●	●									1.2	12.7	4.76	5.16
		SNMG150608-HRM				●	●									0.8	15.875	6.35	6.35
		SNMG15012-HRM				●	●									1.2	15.875	6.35	6.35
		SNMG190612-HRM				●	●									1.2	19.05	6.35	7.93
		SNMG19016-HRM				●	●									1.6	19.05	6.35	7.93
	TA	SNMG120408-TA	●	●												0.8	12.7	4.76	5.16
		SNMG12012-TA	●	●												1.2	12.7	4.76	5.16
	SA	SNMG120404-SA			●			●	●		●					0.4	12.7	4.76	5.16
		SNMG12008-SA			●			●	●		●				●	0.8	12.7	4.76	5.16
		SNMG12012-SA			●			●	●		●					1.2	12.7	4.76	5.16
		SNMG190612-SA									●				●	1.2	19.05	6.35	7.93
	HMM	SNMG120408-HMM								●						0.8	12.7	4.76	5.16
		SNMG12012-HMM								●						1.2	12.7	4.76	5.16
	P	SNGG090304R-P										●		●		0.4	9.525	3.18	3.81
		SNGG09030 4L-P										●		●		0.4	9.525	3.18	3.81
		SNGG09030 8R-P										●	●	●		0.8	9.525	3.18	3.81
		SNGG09030 8L-P												●		0.8	9.525	3.18	3.81
		SNGG120404R-P										●		●		0.4	12.7	4.76	5.16
		SNGG12040 4L-P										●		●		0.4	12.7	4.76	5.16
		SNGG12040 8R-P										●		●		0.8	12.7	4.76	5.16
		SNGG12040 8L-P										●		●		0.8	12.7	4.76	5.16

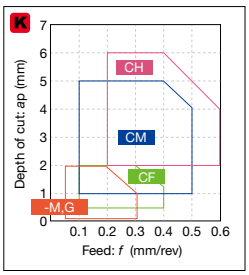
● : Line up

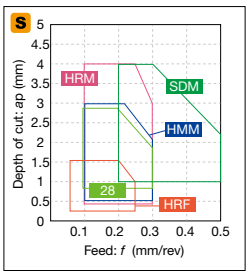
Chip control range











*-M,G: Without chipbreaker

Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

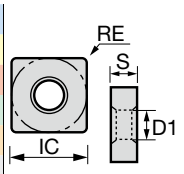
Insert NEGATIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

SN

Square with hole

P	Steel	●	●ɔ	ɔ✣	✣	ɔ✣	✣	●ɔ	●ɔ					●ɔ																			
M	Stainless		●ɔ			●ɔ	✣	●ɔ	●ɔ																								
K	Cast iron	●ɔ	●ɔ					●ɔ	●ɔ					●ɔ																			
N	Non-ferrous																																
S	Superalloy							●ɔ																									
H	Hard material																																



Application	Chipbreaker	Designation	Coated								Cermet				Dimension (mm)			
			T9205	T9215	T9225	T9235	AH6225	AH6235	AH120	GH330	NS9530				RE	IC	S	D1
Medium cutting	S	SNMG120404R-S			●	●	●	●			●				0.4	12.7	4.76	5.16
		SNMG12040**4L-S**			●	●	●	●			●				0.4	12.7	4.76	5.16
		SNMG12040**8R-S**			●	●	●	●		●	●				0.8	12.7	4.76	5.16
		SNMG12040**8L-S**			●	●	●	●		●	●				0.8	12.7	4.76	5.16
	27	SNMG120408-27			●						●				0.8	12.7	4.76	5.16
		SNMG12041**2-27**			●										1.2	12.7	4.76	5.16
	33	SNMG120408-33		●	●										0.8	12.7	4.76	5.16
		SNMG12041**2-33**			●										1.2	12.7	4.76	5.16
		SNMG150612-33		●	●										1.2	15.875	6.35	6.35
		SNMG190616-33			●	●									1.6	19.05	6.35	7.93
	37	SNMG120408-37		●						●	●				0.8	12.7	4.76	5.16
		SNMG12041**2-37**		●											1.2	12.7	4.76	5.16
Medium to heavy cutting	TH	SNMG120408-TH		●	●	●			●						0.8	12.7	4.76	5.16
		SNMG12041**2-TH**		●	●	●			●						1.2	12.7	4.76	5.16
		SNMG150612-TH	●	●	●				●						1.2	15.875	6.35	6.35
		SNMG15061**6-TH**	●	●	●				●						1.6	15.875	6.35	6.35
		SNMG190612-TH	●	●	●	●			●						1.2	19.05	6.35	7.93
		SNMG19061**6-TH**	●	●	●	●			●						1.6	19.05	6.35	7.93
	THS	SNMG120408-THS		●	●	●									0.8	12.7	4.76	5.16
		SNMG12041**2-THS**		●	●	●									1.2	12.7	4.76	5.16
		SNMG150612-THS		●	●										1.2	15.875	6.35	6.35
		SNMG15061**6-THS**		●	●										1.6	15.875	6.35	6.35
		SNMG190608-THS		●	●	●									0.8	19.05	6.35	7.93
		SNMG19061**2-THS**		●	●	●									1.2	19.05	6.35	7.93
		SNMG19061**6-THS**		●	●	●									1.6	19.05	6.35	7.93
		SNMG19062**4-THS**		●	●	●									2.4	19.05	6.35	7.93
		SNMG250716-THS		●	●	●									1.6	25.4	7.94	9.12
		SNMG25072**4-THS**		●	●	●									2.4	25.4	7.94	9.12

● : Line up

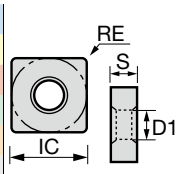
Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

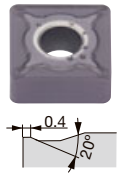
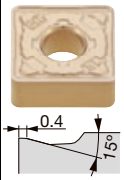
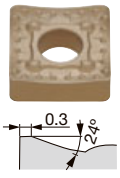
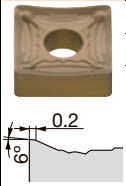
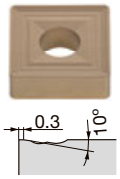
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

SN

Square with hole

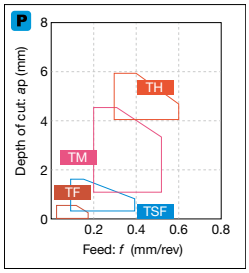
P	Steel	●◐ ◐✠ ✠ ✠✠ ✠
M	Stainless	●◐ ●◐ ✠
K	Cast iron	●◐ ● ◐ ✠
N	Non-ferrous	
S	Superalloy	
H	Hard material	

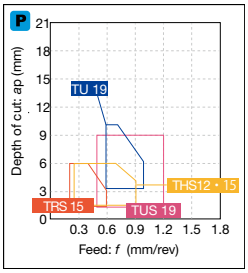


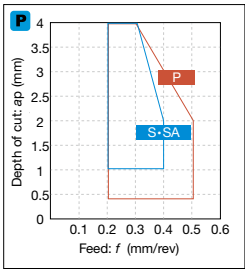
Application	Chipbreaker	Designation	Coated T9215	T9225	T9235	T5105	T5115	T5125	AH6225	AH6235	RE	IC	S	D1
Medium to heavy cutting	SH	SNMG120408-SH							●	●	0.8	12.7	4.76	5.16
		SNMG12012-SH							●	●	1.2	12.7	4.76	5.16
		SNMG150612-SH							●	●	1.2	15.875	6.35	6.35
		SNMG15016-SH							●	●	1.6	15.875	6.35	6.35
		SNMG190612-SH							●	●	1.2	19.05	6.35	7.93
		SNMG19016-SH							●	●	1.6	19.05	6.35	7.93
	CH	SNMG120408-CH				●	●	●			0.8	12.7	4.76	5.16
		SNMG12012-CH				●	●	●			1.2	12.7	4.76	5.16
		SNMG12016-CH					●	●			1.6	12.7	4.76	5.16
Medium to heavy cutting (single side)	TRS	SNMM150612-TRS	●	●	●						1.2	15.875	6.35	6.35
		SNMM15016-TRS	●	●	●						1.6	15.875	6.35	6.35
		SNMM190616-TRS	●	●	●						1.6	19.05	6.35	7.93
		SNMM19024-TRS	●	●	●						2.4	19.05	6.35	7.93
		SNMM250924-TRS	●	●	●						2.4	25.4	9.52	9.12
	57	SNMM120408-57	●	●							0.8	12.7	4.76	5.16
		SNMM150616-57		●							1.6	15.875	6.35	6.35
		SNMM190612-57		●							1.2	19.05	6.35	7.93
	65	SNMM190612-65		●							1.2	19.05	6.35	7.93
		SNMM190624-65		●							2.4	19.05	6.35	7.93
		SNMM310924-65		●							2.4	31.75	9.52	8.8

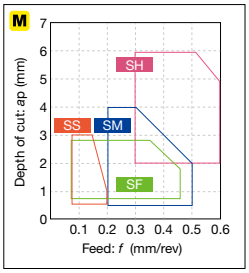
● : Line up

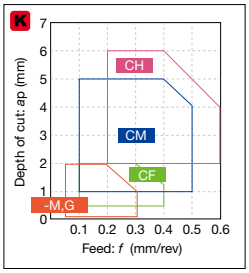
Chip control range











*-M,G: Without chipbreaker

Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

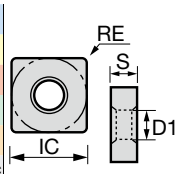
Insert NEGATIVE TYPE

● : Continuous cutting
c : Light interrupted cutting
✣ : Heavy interrupted cutting

SN

Square with hole

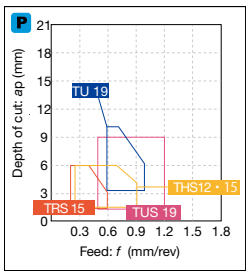
		T9215	T9225	T9235	T505	T515	T5105	T5115	T5125	GT720	NS520	TH10	FX105	LX10	LX11	LX21
P	Steel	●c	c✣	✣						●c			●c			
M	Stainless	●c											●			
K	Cast iron	●c			●	●c	●	c	✣	●c			●c			
N	Non-ferrous												●			
S	Superalloy															
H	Hard material													●c	●c	●c

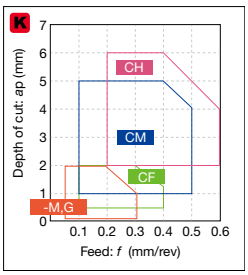


Application	Chipbreaker	Designation	RE	IC	S	D1
Heavy cutting (single side)	TU	SNMM190616-TU	1.6	19.05	6.35	7.93
		SNMM190624-TU	2.4	19.05	6.35	7.93
		SNMM250724-TU	2.4	25.4	7.94	9.12
		SNMM250924-TU	2.4	25.4	9.52	9.12
	TUS	SNMM190612-TUS	1.2	19.05	6.35	7.93
		SNMM190616-TUS	1.6	19.05	6.35	7.93
		SNMM190624-TUS	2.4	19.05	6.35	7.93
		SNMM250724-TUS	2.4	25.4	7.94	9.12
		SNMM250732-TUS	3.2	25.4	7.94	9.12
		SNMM250924-TUS	2.4	25.4	9.52	9.12
		SNMM250932-TUS	3.2	25.4	9.52	9.12
Finishing to medium cutting	-	SNMA090308	0.8	9.525	3.18	3.81
		SNMA120404	0.4	12.7	4.76	5.16
		SNMA120408	0.8	12.7	4.76	5.16
		SNMA120412	1.2	12.7	4.76	5.16
		SNMA120416	1.6	12.7	4.76	5.16
	-	SNGA090304	0.4	9.525	3.18	3.81
		SNGA120404	0.4	12.7	4.76	5.16
		SNGA120408	0.8	12.7	4.76	5.16
		SNGA120412	1.2	12.7	4.76	5.16
		SNGA120416	1.6	12.7	4.76	5.16

● : Line up
▲ : To be discontinued

Chip control range





Reference pages: External toolholder → C101 -, Cartridge → K181 -

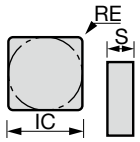
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

SN



Square without hole

P	Steel	●ⓒ
M	Stainless	●ⓒ
K	Cast iron	●ⓒ
N	Non-ferrous	
S	Superalloy	●ⓒ
H	Hard material	

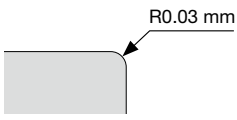


Application	Chipbreaker	Designation	Coated AH120	Uncoated TH10	Ceramic TZ120	FX105	LX10	LX11	LX21	TS300	Dimension (mm) RE	IC	S	D1
Finishing to medium cutting	-	SNGD120712				●					1.2	12.7	7.94	-
		SNGD120716				●					1.6	12.7	7.94	-
	-	SNMN120408		●							0.8	12.7	4.76	-
		SNMN120412	●								1.2	12.7	4.76	-
	-	SNGN090308					●	▲	●		0.8	9.525	3.18	-
		SNGN120304					●	▲			0.4	12.7	3.18	-
		SNGN120312						▲			1.2	12.7	3.18	-
		SNGN120404					●	▲			0.4	12.7	4.76	-
		SNGN120408		●		●	●	▲	●		0.8	12.7	4.76	-
		SNGN120412			●	●	●	▲	●		1.2	12.7	4.76	-
		SNGN120416				●	●	▲	●		1.6	12.7	4.76	-
		SNGN120420				●			●		2	12.7	4.76	-
		SNGN120424				●					2.4	12.7	4.76	-
		SNGN120708			●		●	▲			0.8	12.7	7.94	-
		SNGN120712			●	●	●	▲			1.2	12.7	7.94	-
		SNGN120712-T1								●	1.2	12.7	7.94	-
		SNGN120716			●	●	●	▲			1.6	12.7	7.94	-
		SNGN120720						▲			2	12.7	7.94	-

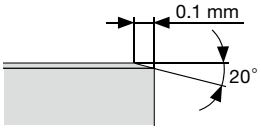
● : Line up
▲ : To be discontinued

Edge prep

E: Low cutting force



T1: Strong cutting edge



Reference pages: SNGD...: External toolholder → C082 -

MEMO

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN

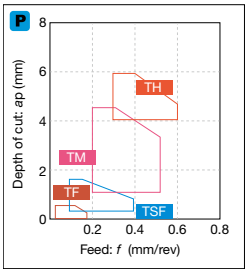


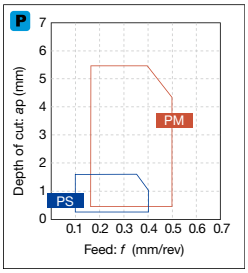
Triangular with hole

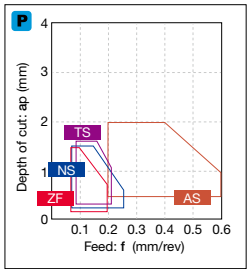
		T9205	T9215	T9225	T9235	T6215	AH8015	AH6225	AH120	GT9530	AT9530	NS9530	NS520	TH10	RE	IC	S	D1
		Coated								Coated cermet		Cermet		Uncoated	Dimension (mm)			
Application	Chipbreaker	Designation																
Finishing	TF	TNMG110402E-TF		●	●		●	●	●				●			0.2	6.35	4.76	2.26
		TNMG110404E-TF		●	●		●	●	●				●			0.4	6.35	4.76	2.26
		TNMG110408E-TF		●	●		●	●	●				●			0.8	6.35	4.76	2.26
		TNMG160402-TF		●	●		●	●	●				●			0.2	9.525	4.76	3.81
		TNMG160404-TF		●	●		●	●	●				●	●	●	0.4	9.525	4.76	3.81
		TNMG160408-TF		●	●		●	●	●				●	●		0.8	9.525	4.76	3.81
	TSF	TNMG110402E-TSF		●	●		●	●	●		●		●			0.2	6.35	4.76	2.26
		TNMG110404E-TSF		●	●		●	●	●		●	●	●			0.4	6.35	4.76	2.26
		TNMG110408E-TSF		●	●		●	●	●		●	●	●			0.8	6.35	4.76	2.26
		TNMG160402-TSF		●	●		●	●	●	●	●	●	●			0.2	9.525	4.76	3.81
		TNMG160404-TSF		●	●	●	●	●	●	●	●	●	●			0.4	9.525	4.76	3.81
		TNMG160408-TSF	●	●	●	●	●	●	●	●	●	●	●			0.8	9.525	4.76	3.81
		TNMG160412-TSF		●	●	●	●	●	●	●		●	●			1.2	9.525	4.76	3.81
	PS	TNMG110402E-PS		●	●		●	●	●				●			0.2	6.35	4.76	2.26
		TNMG110404E-PS		●	●		●	●	●				●			0.4	6.35	4.76	2.26
		TNMG110408E-PS		●	●		●	●	●				●			0.8	6.35	4.76	2.26
		TNMG160402-PS		●	●		●	●	●				●			0.2	9.525	4.76	3.81
		TNMG160404-PS		●	●		●	●	●				●			0.4	9.525	4.76	3.81
		TNMG160408-PS		●	●		●	●	●				●			0.8	9.525	4.76	3.81
		TNMG160412-PS		●	●		●	●	●				●			1.2	9.525	4.76	3.81
Finishing for mild steel	ZF	TNMG110402E-ZF		●	●		●	●	●				●			0.2	6.35	4.76	2.26
		TNMG110404E-ZF		●	●		●	●	●				●			0.4	6.35	4.76	2.26
		TNMG110408E-ZF		●	●		●	●	●				●			0.8	6.35	4.76	2.26
		TNMG160402-ZF		●	●		●	●	●				●			0.2	9.525	4.76	3.81
		TNMG160404-ZF		●	●	●	●	●	●		●		●			0.4	9.525	4.76	3.81
		TNMG160408-ZF		●	●	●	●	●	●		●		●			0.8	9.525	4.76	3.81
		TNMG160412-ZF		●	●		●	●	●				●			1.2	9.525	4.76	3.81
Finishing	AS	TNMG160404-AS			●	●							●			0.4	9.525	4.76	3.81
		TNMG160408-AS	●	●	●	●							●			0.8	9.525	4.76	3.81
		TNMG160412-AS	●	●	●											1.2	9.525	4.76	3.81
	NS	TNMG160404-NS		●	●								●			0.4	9.525	4.76	3.81
		TNMG160408-NS	●	●	●								●			0.8	9.525	4.76	3.81

● : Line up

Chip control range







Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

Insert NEGATIVE TYPE

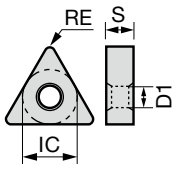
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

TN



Triangular with hole

P	Steel	●	●ɔ	ɔ✣	✣	ɔ					ɔ✣	✣	●ɔ	●ɔ		●ɔ	●ɔ			●ɔ	●ɔ					ɔ✣			
M	Stainless		●ɔ			●			●	ɔ	●ɔ	✣	●ɔ	●ɔ															
K	Cast iron	●ɔ	●ɔ				●	ɔ					●ɔ	●ɔ		●ɔ	●ɔ			●ɔ	●ɔ					ɔ✣			
N	Non-ferrous																									ɔ✣			
S	Superalloy								●	ɔ			●ɔ													ɔ✣			
H	Hard material																												



Application	Chipbreaker	Designation	Coated												Coated cermet			Cermet			Uncoated		Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T5105	T5115	AH8005	AH8015	AH6225	AH6235	AH120	GH330	GT9530	AT9530		NS9530	NS520		KS20		RE	IC	S	D1
Finishing	TS	TNMG110402E-TS		●	●		●				●	●							●					0.2	6.35	4.76	2.26
		TNMG110404E-TS		●	●		●				●	●							●					0.4	6.35	4.76	2.26
		TNMG110408E-TS		●	●		●				●	●							●					0.8	6.35	4.76	2.26
		TNMG160402-TS		●	●		●				●	●							●					0.2	9.525	4.76	3.81
		TNMG160404-TS		●	●	●	●				●	●				●	●		●	●				0.4	9.525	4.76	3.81
		TNMG160408-TS	●	●	●	●	●				●	●				●	●		●	●				0.8	9.525	4.76	3.81
		TNMG160412-TS	●	●	●	●	●				●	●							●					1.2	9.525	4.76	3.81
	SF	TNMG160404-SF					●					●												0.4	9.525	4.76	3.81
		TNMG160408-SF					●					●												0.8	9.525	4.76	3.81
		TNMG160412-SF					●					●												1.2	9.525	4.76	3.81
	SS	TNMG110404E-SS										●	●											0.4	6.35	4.76	2.26
		TNMG110408E-SS										●	●											0.8	6.35	4.76	2.26
		TNMG160404-SS					●					●	●	●	●							●		0.4	9.525	4.76	3.81
		TNMG160408-SS					●					●	●	●	●							●		0.8	9.525	4.76	3.81
		TNMG160412-SS					●					●	●		●									1.2	9.525	4.76	3.81
		TNMG220404-SS					●					●	●		●									0.4	12.7	4.76	5.16
		TNMG220408-SS					●					●	●		●									0.8	12.7	4.76	5.16
		TNMG220412-SS					●					●	●											1.2	12.7	4.76	5.16
	HRF	TNMG160404-HRF								●	●													0.4	9.525	4.76	3.81
		TNMG160408-HRF								●	●													0.8	9.525	4.76	3.81
	CF	TNMG160404-CF						●	●															0.4	9.525	4.76	3.81
		TNMG160408-CF						●	●															0.8	9.525	4.76	3.81
Finishing (wiper)	FW	TNMG110404E-FW		●																				0.4	6.35	4.76	2.26
		TNMG110408E-FW		●																				0.8	6.35	4.76	2.26
		TNMG160404-FW		●																				0.4	9.525	4.76	3.81
		TNMG160408-FW		●																				0.8	9.525	4.76	3.81
		*Wiper																									

* Please see L011 - L015 about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

● : Line up

Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

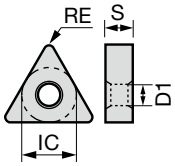
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

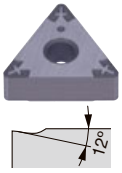
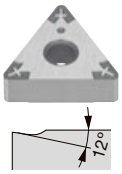
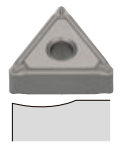
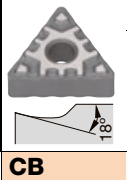
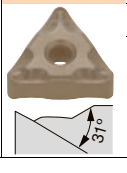
TN



Triangular with hole

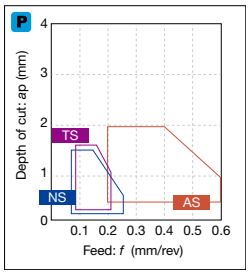
P	Steel	●ⓒ	ⓒ✠	●	●ⓒ	●ⓒ				●ⓒ					●ⓒ	●ⓒ				●														
M	Stainless	●ⓒ		●	●ⓒ	●ⓒ														●														
K	Cast iron	●ⓒ		●	●ⓒ					●ⓒ					●ⓒ	●ⓒ				●														
N	Non-ferrous																			●														
S	Superalloy			●																														
H	Hard material																																	

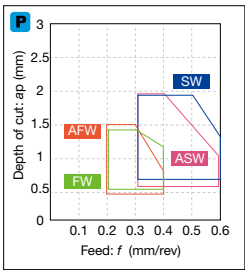


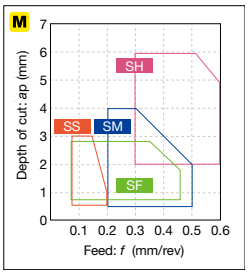
Application	Chipbreaker	Designation	Coated					Coated cermet	Cermet		Uncoated		Dimension (mm)			
			T9215	T9225	GH110	GH330	SH725	GT720	NS9530	NS520	TH10		RE	IC	S	D1
Finishing (sharp edge)	01	TNGG160402F-01					●						0.2	9.525	4.76	3.81
		TNGG160404F-01					●						0.4	9.525	4.76	3.81
		TNGG160408F-01					●						0.8	9.525	4.76	3.81
Finishing	01	TNGG110302-01							●				0.2	6.35	3.18	2.26
		TNGG110304-01							●				0.4	6.35	3.18	2.26
		TNGG110308-01							●	●			0.8	6.35	3.18	2.26
		TNGG160402-01			●				●	●	●		0.2	9.525	4.76	3.81
		TNGG160404-01			●				●	●	●		0.4	9.525	4.76	3.81
		TNGG160408-01			●				●	●			0.8	9.525	4.76	3.81
		TNGG160412-01						●	●				1.2	9.525	4.76	3.81
	11	TNMG110304-11							●				0.4	6.35	3.18	2.26
		TNMG110308-11							●				0.8	6.35	3.18	2.26
		TNMG160402-11							●				0.2	9.525	4.76	3.81
		TNMG160404-11				●			●		●		0.4	9.525	4.76	3.81
		TNMG160408-11							●				0.8	9.525	4.76	3.81
		TNMG220404-11							●				0.4	12.7	4.76	5.16
		TNMG220408-11							●				0.8	12.7	4.76	5.16
Finishing for mild steel	17	TNMG160404-17		●		●			●				0.4	9.525	4.76	3.81
		TNMG160408-17		●					●				0.8	9.525	4.76	3.81
Boring (double side)	CB	TNMG110304-CB	●						●				0.4	6.35	3.18	2.26
		TNMG110308-CB	●						●				0.8	6.35	3.18	2.26

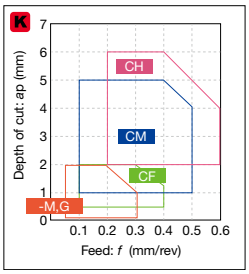
● : Line up

Chip control range

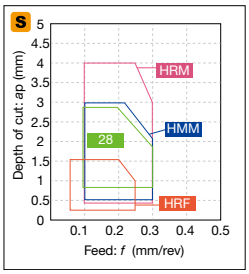


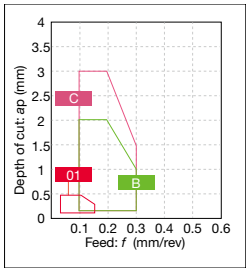






*-M,G: Without chipbreaker





Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

Insert NEGATIVE TYPE

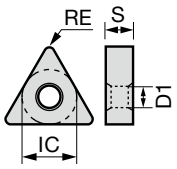
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN



Triangular with hole

P	Steel	●	●ɔ	●✠	✠	ɔ			ɔ✠	ɔ	●ɔ	●	●ɔ	●ɔ			●ɔ			●ɔ	●ɔ	●		●					
M	Stainless		●ɔ			●	●	ɔ	●ɔ	ɔ	●ɔ	●	●ɔ	●ɔ										●					
K	Cast iron	●ɔ	●ɔ							ɔ	●ɔ	●	●ɔ				●ɔ			●ɔ	●ɔ	●		●					
N	Non-ferrous																							●					
S	Superalloy						●	ɔ		●	●ɔ	●																	
H	Hard material																												



Application	Chipbreaker	Designation	Coated													Coated cermet	Cermet			Uncoated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	AH8005	AH8015	AH6225	AH725	AH120	GH110	GH330	SH725	GT9530	NS9530	NS520	X407	TH10	RE	IC	S	D1
Finishing	A, C	TNGG110304R-A														●	●				0.4	6.35	3.18	2.26
		TNGG110304L-A														●	●				0.4	6.35	3.18	2.26
		TNGG110308R-A														●	●				0.8	6.35	3.18	2.26
		TNGG110308L-A														●	●				0.8	6.35	3.18	2.26
		TNGG160304R-C															●		●		0.4	9.525	3.18	3.81
		TNGG160304L-C															●				0.4	9.525	3.18	3.81
		TNGG160308R-C															●				0.8	9.525	3.18	3.81
		TNGG160308L-C															●				0.8	9.525	3.18	3.81
		TNGG160400R-C															●				0.03	9.525	4.76	3.81
		TNGG160400L-C															●				0.03	9.525	4.76	3.81
		TNGG160402R-C														●	●		●	●	0.2	9.525	4.76	3.81
		TNGG160402L-C														●	●				0.2	9.525	4.76	3.81
		TNGG160404R-C											●	●		●	●	●	●	●	0.4	9.525	4.76	3.81
		TNGG160404L-C											●	●		●	●		●	●	0.4	9.525	4.76	3.81
		TNGG160408R-C											●	●		●	●	●	●	●	0.8	9.525	4.76	3.81
		TNGG160408L-C											●	●		●	●		●	●	0.8	9.525	4.76	3.81
	D	TNGG220404R-D															●		●		0.4	12.7	4.76	5.16
		TNGG220404L-D															●				0.4	12.7	4.76	5.16
		TNGG220408R-D															●		●		0.8	12.7	4.76	5.16
		TNGG220408L-D															●				0.8	12.7	4.76	5.16
Finishing (sharp edge)	W	TNGG160402FR-W													●						0.2	9.525	4.76	3.81
		TNGG160402FL-W													●						0.2	9.525	4.76	3.81
		TNGG160404FR-W													●						0.4	9.525	4.76	3.81
		TNGG160404FL-W													●						0.4	9.525	4.76	3.81
		TNGG160408FR-W													●						0.8	9.525	4.76	3.81
		TNGG160408FL-W													●						0.8	9.525	4.76	3.81
Finishing	W	TNGG160404R-W															●			●	0.4	9.525	4.76	3.81
		TNGG160404L-W															●			●	0.4	9.525	4.76	3.81
		TNGG160408R-W															●				0.8	9.525	4.76	3.81
		TNGG160408L-W															●				0.8	9.525	4.76	3.81
Medium cutting	TM	TNMG110304-TM		●	●	●															0.4	6.35	3.18	2.26
		TNMG110308-TM		●	●	●															0.8	6.35	3.18	2.26
		TNMG110404E-TM		●	●		●		●	●											0.4	6.35	4.76	2.26
		TNMG110408E-TM		●	●		●		●	●											0.8	6.35	4.76	2.26
		TNMG110412E-TM		●	●		●		●	●											1.2	6.35	4.76	2.26
		TNMG160404-TM		●	●	●	●		●	●	●	●									0.4	9.525	4.76	3.81
		TNMG160408-TM	●	●	●	●	●		●	●	●	●									0.8	9.525	4.76	3.81
		TNMG160412-TM	●	●	●	●	●		●	●											1.2	9.525	4.76	3.81
		TNMG160416-TM		●	●		●	●	●	●											1.6	9.525	4.76	3.81
		TNMG220404-TM		●	●							●									0.4	12.7	4.76	5.16
		TNMG220408-TM	●	●	●	●						●									0.8	12.7	4.76	5.16
		TNMG220412-TM		●	●	●						●									1.2	12.7	4.76	5.16
		TNMG220416-TM		●	●																1.6	12.7	4.76	5.16

● : Line up

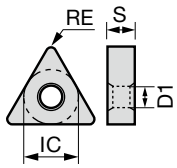
Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN

Triangular with hole

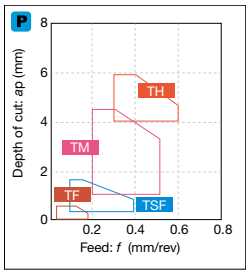
P	Steel	●ᑕ ᑕ✠ ✠ ᑕ ✠
M	Stainless	●ᑕ ● ᑕ ●ᑕ
K	Cast iron	●ᑕ ●ᑕ ●ᑕ
N	Non-ferrous	
S	Superalloy	ᑕ
H	Hard material	

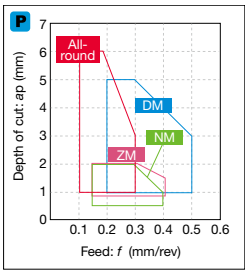


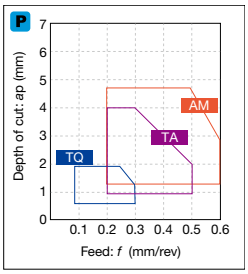
Application	Chipbreaker	Designation	Coated T9215	Coated T9225	Coated T9235	Coated T6215	Coated AH8015	Coated AH6225	Coated cermet GT9530	Cermet NS9530	Dimension (mm) RE	IC	S	D1
Medium cutting	PM	TNMG110404E-PM	●	●		●	●	●			0.4	6.35	4.76	2.26
		TNMG110408E-PM	●	●		●	●	●			0.8	6.35	4.76	2.26
		TNMG110412E-PM	●	●		●	●	●			1.2	6.35	4.76	2.26
		TNMG160404-PM	●	●		●	●	●			0.4	9.525	4.76	3.81
		TNMG160408-PM	●	●		●	●	●			0.8	9.525	4.76	3.81
		TNMG160412-PM	●	●		●	●	●			1.2	9.525	4.76	3.81
		TNMG160416-PM	●	●		●	●	●			1.6	9.525	4.76	3.81
Medium cutting for mild steel	ZM	TNMG110404E-ZM	●	●		●	●	●			0.4	6.35	4.76	2.26
		TNMG110408E-ZM	●	●		●	●	●			0.8	6.35	4.76	2.26
		TNMG110412E-ZM	●	●		●	●	●			1.2	6.35	4.76	2.26
		TNMG160404-ZM	●	●	●	●	●	●	●	●	0.4	9.525	4.76	3.81
		TNMG160408-ZM	●	●	●	●	●	●	●	●	0.8	9.525	4.76	3.81
		TNMG160412-ZM	●	●	●	●	●	●			1.2	9.525	4.76	3.81
		TNMG160416-ZM	●	●		●	●	●			1.6	9.525	4.76	3.81
		TNMG220412-ZM		●							1.2	12.7	4.76	5.16
Medium cutting	AM	TNMG160408-AM	●	●							0.8	9.525	4.76	3.81
		TNMG160412-AM	●	●							1.2	9.525	4.76	3.81
	NM	TNMG160408-NM		●							0.8	9.525	4.76	3.81
		TNMG160412-NM	●	●							1.2	9.525	4.76	3.81

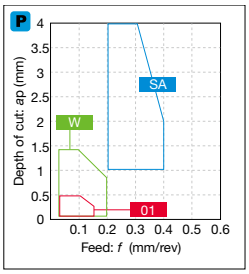
● : Line up

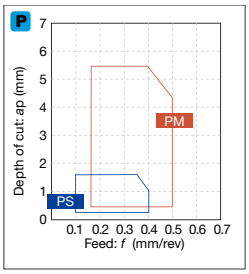
Chip control range

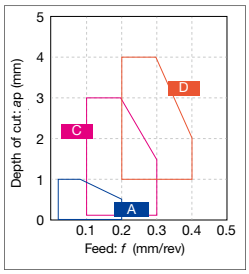












Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

Insert NEGATIVE TYPE

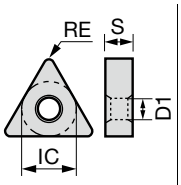
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN



Triangular with hole

P	Steel	●	●ɔ	●ɔ✠	✠	ɔ									ɔ✠	✠	ɔ	●	●ɔ	●ɔ			●ɔ	●ɔ		●			
M	Stainless		●ɔ			●						●	ɔ	●ɔ	✠	ɔ	●	●ɔ								●			
K	Cast iron	●ɔ	●ɔ				●	●ɔ	●	ɔ	✠					ɔ	●	●ɔ	●ɔ	●ɔ			●ɔ	●ɔ		●			
N	Non-ferrous																									●			
S	Superalloy											●	ɔ			●	●	●ɔ											
H	Hard material																												



Application	Chipbreaker	Designation	Coated																Coated cermet		Cermet		Un-coated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	AH8005	AH8015	AH6225	AH6235	AH725	AH110	AH120	GT720	NS9530	NS520	TH10	RE	IC	S	D1
Medium cutting	DM	TNMG160404-DM		●	●		●							●	●									0.4	9.525	4.76	3.81
		TNMG160408-DM	●	●	●	●	●							●	●									0.8	9.525	4.76	3.81
		TNMG160412-DM		●	●		●							●	●									1.2	9.525	4.76	3.81
		TNMG160416-DM		●	●		●							●	●									1.6	9.525	4.76	3.81
	All-round	TNMG110304		●	●					●	●	●									●		●	0.4	6.35	3.18	2.26
		TNMG110308		●	●					●	●	●									●		●	0.8	6.35	3.18	2.26
		TNMG160304																					●	0.4	9.525	3.18	3.81
		TNMG160308																					●	0.8	9.525	3.18	3.81
		TNMG160404	●	●	●	●		●	●	●	●	●						●	●		●	●	●	0.4	9.525	4.76	3.81
		TNMG160408	●	●	●	●		●	●	●	●	●						●	●	●	●	●	●	0.8	9.525	4.76	3.81
		TNMG160412	●	●	●	●		●	●	●	●	●						●	●				●	1.2	9.525	4.76	3.81
		TNMG160416		●	●	●						●											●	1.6	9.525	4.76	3.81
		TNMG160420		●	●	●																		2	9.525	4.76	3.81
		TNMG220408	●	●	●	●					●	●											●	0.8	12.7	4.76	5.16
		TNMG220412	●	●	●	●						●			●								●	1.2	12.7	4.76	5.16
		TNMG220416		●	●						●				●								●	1.6	12.7	4.76	5.16
		TNMG270608			●														●					0.8	15.875	6.35	6.35
		TNMG270612			●														●					1.2	15.875	6.35	6.35
		TNMG270616																	●					1.6	15.875	6.35	6.35
	SM	TNMG110404E-SM					●								●									0.4	6.35	4.76	2.26
		TNMG110408E-SM					●								●									0.8	6.35	4.76	2.26
		TNMG160404-SM					●								●	●	●							0.4	9.525	4.76	3.81
		TNMG160408-SM					●								●	●	●							0.8	9.525	4.76	3.81
		TNMG160412-SM					●								●	●								1.2	9.525	4.76	3.81
		TNMG220408-SM					●								●	●								0.8	12.7	4.76	5.16
		TNMG220412-SM					●								●	●								1.2	12.7	4.76	5.16
	SDM	TNMG160404-SDM					●								●	●								0.4	9.525	4.76	3.81
		TNMG160408-SDM					●								●	●								0.8	9.525	4.76	3.81
		TNMG160412-SDM					●								●	●								1.2	9.525	4.76	3.81
	HRM	TNMG160404-HRM											●	●										0.4	9.525	4.76	3.81
		TNMG160408-HRM											●	●										0.8	9.525	4.76	3.81
		TNMG160412-HRM											●	●										1.2	9.525	4.76	3.81
	CM	TNMG160404-CM	●	●			●	●	●	●	●	●												0.4	9.525	4.76	3.81
		TNMG160408-CM	●	●			●	●	●	●	●	●												0.8	9.525	4.76	3.81
		TNMG160412-CM	●	●			●	●	●	●	●	●												1.2	9.525	4.76	3.81
		TNMG220408-CM	●	●			●	●	●		●	●												0.8	12.7	4.76	5.16
		TNMG220412-CM	●	●			●	●	●	●	●	●												1.2	12.7	4.76	5.16

● : Line up

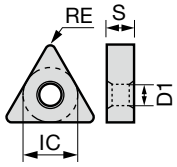
Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

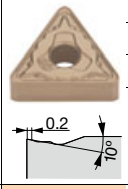
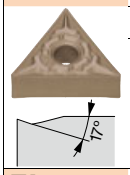
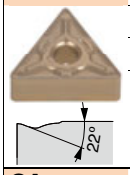
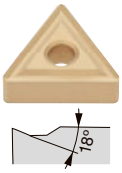
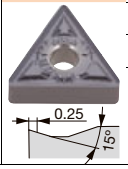
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN

Triangular with hole

P	Steel	●◐ ◐✠ ◐ ◐✠ ◐✠ ✠ ●◐ ●◐ ●◐ ●◐ ●◐
M	Stainless	●◐ ● ●◐ ◐✠ ✠ ●◐
K	Cast iron	●◐ ●◐ ●◐ ●◐ ●◐ ◐✠
N	Non-ferrous	◐✠
S	Superalloy	◐ ●◐ ◐✠
H	Hard material	

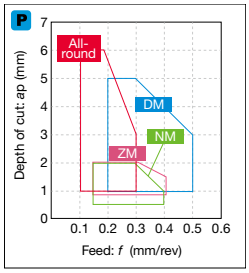


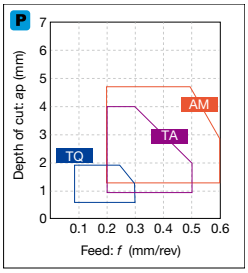
Application	Chipbreaker	Designation	Coated T9215	Coated T9225	Coated T6215	Coated AH6225	Coated AH6235	Coated AH905	Coated AH120	Coated cermet GT9530	Coated cermet AT9530	Cermet NS9530	Uncoated KS20	Dimension (mm) RE	IC	S	D1
Medium cutting (wiper)	SW	TNMG110408E-SW	●											0.8	6.35	4.76	2.26
		TNMG110412E-SW	●											1.2	6.35	4.76	2.26
		TNMG160408-SW	●											0.8	9.525	4.76	3.81
		TNMG160412-SW	●											1.2	9.525	4.76	3.81
		*Wiper															
Medium cutting	TQ	TNMG160404-TQ	●	●						●	●	●					
		TNMG160408-TQ	●	●						●	●	●					
	TA	TNMG160404-TA	●	●										0.4	9.525	4.76	3.81
		TNMG160408-TA	●	●										0.8	9.525	4.76	3.81
		TNMG160412-TA	●	●										1.2	9.525	4.76	3.81
	SA	TNMG160404-SA			●	●	●		●					0.4	9.525	4.76	3.81
		TNMG160408-SA			●	●	●		●				●	0.8	9.525	4.76	3.81
		TNMG160412-SA			●	●	●		●				●	1.2	9.525	4.76	3.81
		TNMG220408-SA			●	●	●		●				●	0.8	12.7	4.76	5.16
		TNMG220412-SA			●	●	●							1.2	12.7	4.76	5.16
	HMM	TNMG160404-HMM						●						0.4	9.525	4.76	3.81
		TNMG160408-HMM						●						0.8	9.525	4.76	3.81
		TNMG160412-HMM						●						1.2	9.525	4.76	3.81

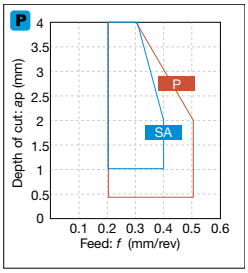
* Please see **L011 - L015** about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

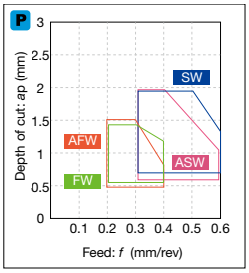
● : Line up

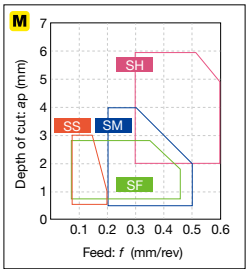
Chip control range

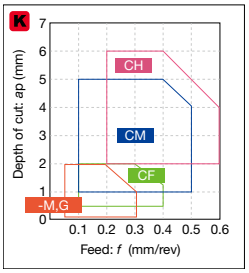


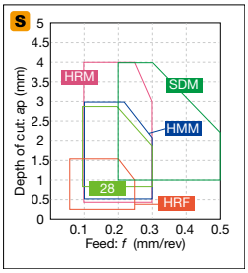












*-M,G: Without chipbreaker

Reference pages: External toolholder → C032 -
Internal toolholder → D049 -
J-Series toolholder → G051 -
Cartridge → K181 -

Insert NEGATIVE TYPE

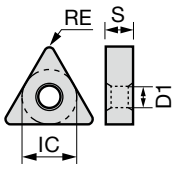
● : Continuous cutting
ⓒ : Light interrupted cutting
✣ : Heavy interrupted cutting

TN



Triangular with hole

P	Steel	●ⓒ	●✣	✣			●✣	✣	ⓒ	●ⓒ	●	●ⓒ	●ⓒ		●ⓒ	●ⓒ		●ⓒ					●						
M	Stainless	●ⓒ			●	ⓒ	●ⓒ	✣	ⓒ	●ⓒ	●	●ⓒ	●ⓒ										●						
K	Cast iron	●ⓒ							ⓒ	●ⓒ	●	●ⓒ			●ⓒ	●ⓒ		●ⓒ			●	●							
N	Non-ferrous																				●	●							
S	Superalloy				●	ⓒ			●	●ⓒ	●										●								
H	Hard material																												



Application	Chipbreaker	Designation	Coated											Coated cermet		Cermet		Uncoated		Dimension (mm)			
			T9215	T9225	T9235	AH8005	AH8015	AH6225	AH6235	AH725	AH120	GH110	GH330	SH725	GT720		NS9530		KS05F	TH10	RE	IC	S	D1
Medium cutting (sharp edge)	P	TNGG160402FR-P												●							0.2	9.525	4.76	3.81
		TNGG160402FL-P												●							0.2	9.525	4.76	3.81
		TNGG160404FR-P												●							0.4	9.525	4.76	3.81
		TNGG160404FL-P												●							0.4	9.525	4.76	3.81
		TNGG160408FR-P												●							0.8	9.525	4.76	3.81
		TNGG160408FL-P												●							0.8	9.525	4.76	3.81
Medium cutting	P	TNGG160402R-P										●	●				●			●	0.2	9.525	4.76	3.81
		TNGG160402L-P										●	●				●			●	0.2	9.525	4.76	3.81
		TNGG160404R-P										●	●				●			●	0.4	9.525	4.76	3.81
		TNGG160404L-P										●	●				●			●	0.4	9.525	4.76	3.81
		TNGG160408R-P										●	●				●			●	0.8	9.525	4.76	3.81
		TNGG160408L-P										●	●				●			●	0.8	9.525	4.76	3.81
	S	TNMG160404R-S	●	●	●			●	●	●			●				●				0.4	9.525	4.76	3.81
		TNMG160404L-S	●	●	●			●	●				●				●				0.4	9.525	4.76	3.81
		TNMG160408R-S	●	●	●			●	●	●			●				●				0.8	9.525	4.76	3.81
		TNMG160408L-S	●	●	●			●	●				●				●				0.8	9.525	4.76	3.81
		TNMG220404R-S		●	●			●	●				●				●				0.4	12.7	4.76	5.16
		TNMG220404L-S		●	●			●	●				●				●				0.4	12.7	4.76	5.16
		TNMG220408R-S		●	●			●	●				●				●				0.8	12.7	4.76	5.16
		TNMG220408L-S		●	●			●	●				●				●				0.8	12.7	4.76	5.16
	27	TNMG160404-27	●	●																	0.4	9.525	4.76	3.81
		TNMG160408-27	●	●													●				0.8	9.525	4.76	3.81
		TNMG160412-27	●	●																	1.2	9.525	4.76	3.81
		TNMG220404-27		●																	0.4	12.7	4.76	5.16
		TNMG220408-27		●																	0.8	12.7	4.76	5.16
		TNMG220412-27		●																	1.2	12.7	4.76	5.16
	28	TNMG160404-28				●	●				●								●		0.4	9.525	4.76	3.81
		TNMG160408-28				●	●				●								●		0.8	9.525	4.76	3.81
		TNMG220404-28									●										0.4	12.7	4.76	5.16
		TNMG220408-28									●										0.8	12.7	4.76	5.16
	33	TNMG160404-33																		●	0.4	9.525	4.76	3.81
		TNMG160408-33																		●	0.8	9.525	4.76	3.81
		TNMG160416-33		●																	1.6	9.525	4.76	3.81
		TNMG220404-33		●											●						0.4	12.7	4.76	5.16
		TNMG220412-33			●																1.2	12.7	4.76	5.16
		TNMG220416-33		●																	1.6	12.7	4.76	5.16
	37	TNMG160404-37	●										●				●				0.4	9.525	4.76	3.81
		TNMG160408-37	●										●				●				0.8	9.525	4.76	3.81

● : Line up

Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

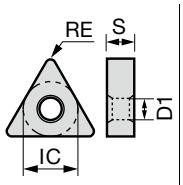
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

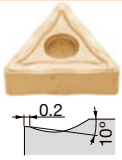
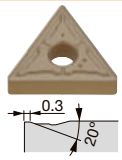
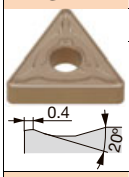
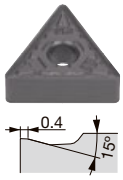
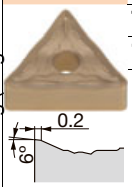
TN



Triangular with hole

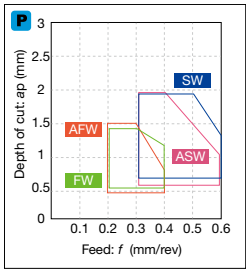
P	Steel	●ɔ ɔ✠ ✠ ●ɔ ●ɔ
M	Stainless	●ɔ ●ɔ ●ɔ
K	Cast iron	●ɔ ●ɔ ● ɔ ✠ ●ɔ ●ɔ
N	Non-ferrous	
S	Superalloy	●ɔ
H	Hard material	

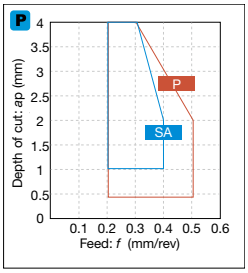


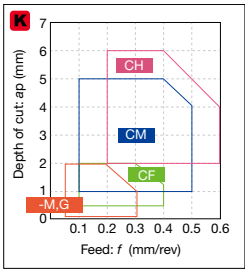
Application	Chipbreaker	Designation	Coated T9215	T9225	T9235	T515	T5105	T5115	T5125	AH120	GH330	Dimension (mm) RE	IC	S	D1
Medium cutting	**38**	**TNMG160404-38**									●	0.4	9.525	4.76	3.81
		TNMG160408-38									●	0.8	9.525	4.76	3.81
Medium to heavy cutting	**TH**	**TNMG220408-TH**	●	●	●					●		0.8	12.7	4.76	5.16
		TNMG220412-TH	●	●	●							1.2	12.7	4.76	5.16
	THS	**TNMG220408-THS**	●	●	●							0.8	12.7	4.76	5.16
		TNMG220412-THS	●	●	●							1.2	12.7	4.76	5.16
	CH	**TNMG160404-CH**				●	●	●	●			0.4	9.525	4.76	3.81
		TNMG160408-CH				●	●	●	●			0.8	9.525	4.76	3.81
		TNMG160412-CH				●	●	●	●			1.2	9.525	4.76	3.81
		TNMG220408-CH							●			0.8	12.7	4.76	5.16
		TNMG220412-CH					●	●				1.2	12.7	4.76	5.16
		TNMG220416-CH					●	●	●			1.6	12.7	4.76	5.16
Medium to heavy cutting (single side)	**57**	**TNMM160408-57**		●								0.8	9.525	4.76	3.81
		**TNMM220408-57**		●								0.8	12.7	4.76	5.16
		TNMM220412-57		●								1.2	12.7	4.76	5.16

● : Line up

Chip control range







*-M,G: Without chipbreaker

Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

Insert NEGATIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

TN



Triangular with hole

		Coated						Coated cermet	Cermet	Uncoated		Ceramic				Dimension (mm)			
		T505	T515	T5105	T5115	T5125	GH110	GT720	NS520	TH03	TH10	FX105	LX10	LX11	LX21	RE	IC	S	D1
P	Steel						●		●ɔ			●	●						
M	Stainless						●					●	●						
K	Cast iron	●	●ɔ	●	ɔ	✣	●		●ɔ			●	●			●ɔ				
N	Non-ferrous											●	●						
S	Superalloy						●												
H	Hard material												●ɔ	●ɔ	●ɔ				
-	TNMA110404E		●													0.4	6.35	4.76	2.26
	TNMA110408E		●													0.8	6.35	4.76	2.26
	TNMA110412E		●													1.2	6.35	4.76	2.26
	TNMA160404	●	●	●	●	●				●	●					0.4	9.525	4.76	3.81
	TNMA160408	●	●	●	●	●		●	●		●	●				0.8	9.525	4.76	3.81
	TNMA160412	●	●	●	●							●				1.2	9.525	4.76	3.81
	TNMA160416			●	●	●										1.6	9.525	4.76	3.81
	TNMA160420			●	●	●										2	9.525	4.76	3.81
	TNMA220404				●	●										0.4	12.7	4.76	5.16
	TNMA220408			●	●	●										0.8	12.7	4.76	5.16
	TNMA220412			●	●	●										1.2	12.7	4.76	5.16
	TNMA220416			●	●											1.6	12.7	4.76	5.16
-	TNGA110304									●	●					0.4	6.35	3.18	2.26
	TNGA110308										●					0.8	6.35	3.18	2.26
	TNGA160304										●					0.4	9.525	3.18	3.81
	TNGA160308										●					0.8	9.525	3.18	3.81
	TNGA160402												●	▲		0.2	9.525	4.76	3.81
	TNGA160404						●		●	●	●		●	▲	●	0.4	9.525	4.76	3.81
	TNGA160408						●		●	●	●	●	●	▲	●	0.8	9.525	4.76	3.81
	TNGA160412								●		●	●	●	▲	●	1.2	9.525	4.76	3.81
	TNGA160416										●	●	●	▲		1.6	9.525	4.76	3.81
	TNGA220408										●					0.8	12.7	4.76	5.16

Application: Finishing to medium cutting

● : Line up
▲ : To be discontinued

Reference pages: External toolholder → C032 - Internal toolholder → D049 -
TungCap → K013 -

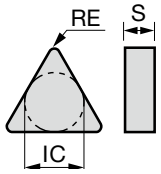
Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN

Triangular without hole

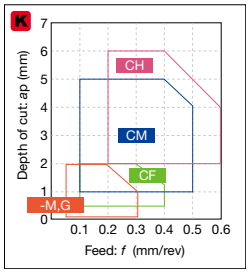
		TH10	TZ120	FX105	LX10	LX11	LX21
P	Steel	●					
M	Stainless	●					
K	Cast iron	●	●	●◐			
N	Non-ferrous	●					
S	Superalloy						
H	Hard material				●◐	●◐	●◐



Application	Chipbreaker	Designation	Uncoated TH10	Ceramic TZ120	FX105	LX10	LX11	LX21	Dimension (mm) RE	IC	S	D1
Finishing to medium cutting	-	TNGN110308	●						0.8	6.35	3.18	-
		TNGN160404				●	▲	●	0.4	9.525	4.76	-
		TNGN160408	●			●	▲	●	0.8	9.525	4.76	-
		TNGN160412	●	●	●	●	▲	●	1.2	9.525	4.76	-
		TNGN160416			●	●	▲		1.6	9.525	4.76	-
		TNGN160420			●				2	9.525	4.76	-
		TNGN160708				●	▲		0.8	9.525	7.94	-
		TNGN160712					▲		1.2	9.525	7.94	-

● : Line up
▲ : To be discontinued

Chip control range



*-M,G: Without chipbreaker

Reference pages: Cartridge → K193 -

Insert NEGATIVE TYPE

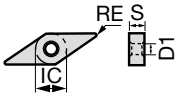
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

VN



Rhombic, 35° with hole

P	Steel	● ●ⓒ ⓒ✠ ✠ ⓒ ⓒ✠ ✠ ●ⓒ ●ⓒ ●ⓒ ●ⓒ ●ⓒ
M	Stainless	●ⓒ ● ⓒ ●ⓒ ✠ ●ⓒ ●ⓒ ●ⓒ ●ⓒ
K	Cast iron	●ⓒ ●ⓒ ●ⓒ ●ⓒ ●ⓒ ●ⓒ ●ⓒ ●ⓒ
N	Non-ferrous	
S	Superalloy	● ⓒ ●ⓒ
H	Hard material	



Application	Chipbreaker	Designation	Coated											Coated cermet			Cermet			Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	AH8005	AH8015	AH6225	AH6235	AH120	GH330	GT9530	GT720	AT9530	NS9530	NS520		RE	IC	S	D1
Finishing	TF	VNMG120402E-TF		●	●		●		●	●							●			0.2	7.15	4.76	3.81
		VNMG120404E-TF		●	●		●		●	●							●			0.4	7.15	4.76	3.81
		VNMG120408E-TF		●	●		●		●	●							●			0.8	7.15	4.76	3.81
		VNMG160402-TF		●	●		●		●	●							●			0.2	9.525	4.76	3.81
		VNMG160404-TF		●	●		●		●	●							●			0.4	9.525	4.76	3.81
		VNMG160408-TF		●	●		●		●	●					●		●			0.8	9.525	4.76	3.81
	TSF	VNMG120402E-TSF		●	●		●		●	●				●		●	●			0.2	7.15	4.76	3.81
		VNMG120404E-TSF		●	●		●		●	●				●		●	●			0.4	7.15	4.76	3.81
		VNMG120408E-TSF		●	●		●		●	●				●		●	●			0.8	7.15	4.76	3.81
		VNMG160402-TSF		●	●		●		●	●		●		●		●	●			0.2	9.525	4.76	3.81
		VNMG160404-TSF	●	●	●	●	●		●	●		●		●		●	●			0.4	9.525	4.76	3.81
		VNMG160408-TSF	●	●	●	●	●		●	●		●		●		●	●			0.8	9.525	4.76	3.81
		VNMG160412-TSF	●	●	●	●	●		●	●										1.2	9.525	4.76	3.81
	PS	VNMG120402E-PS		●	●		●		●	●							●			0.2	7.15	4.76	3.81
		VNMG120404E-PS		●	●		●		●	●							●			0.4	7.15	4.76	3.81
		VNMG120408E-PS		●	●		●		●	●							●			0.8	7.15	4.76	3.81
		VNMG160402-PS		●	●		●		●	●							●			0.2	9.525	4.76	3.81
		VNMG160404-PS		●	●		●		●	●							●			0.4	9.525	4.76	3.81
		VNMG160408-PS		●	●		●		●	●							●			0.8	9.525	4.76	3.81
		VNMG160412-PS		●	●		●		●	●							●			1.2	9.525	4.76	3.81
Finishing for mild steel	ZF	VNMG120402E-ZF		●	●		●		●	●							●			0.2	7.15	4.76	3.81
		VNMG120404E-ZF		●	●		●		●	●							●			0.4	7.15	4.76	3.81
		VNMG120408E-ZF		●	●		●		●	●							●			0.8	7.15	4.76	3.81
		VNMG160402-ZF		●	●		●		●	●							●			0.25	9.525	4.76	3.81
		VNMG160404-ZF		●	●	●	●		●	●				●		●	●			0.4	9.525	4.76	3.81
		VNMG160408-ZF		●	●	●	●		●	●				●		●	●			0.8	9.525	4.76	3.81
		VNMG160412-ZF		●	●	●	●		●	●							●			1.2	9.525	4.76	3.81
Finishing	TS	VNMG120402E-TS		●	●		●		●	●							●			0.2	7.15	4.76	3.81
		VNMG120404E-TS		●	●		●		●	●							●			0.4	7.15	4.76	3.81
		VNMG120408E-TS		●	●		●		●	●							●			0.8	7.15	4.76	3.81
		VNMG160402-TS		●	●		●		●	●							●			0.2	9.525	4.76	3.81
		VNMG160404-TS		●	●	●	●		●	●				●		●	●	●		0.4	9.525	4.76	3.81
		VNMG160408-TS		●	●	●	●		●	●				●		●	●	●		0.8	9.525	4.76	3.81
		VNMG160412-TS		●	●	●	●		●	●							●			1.2	9.525	4.76	3.81
	SF	VNMG160404-SF					●			●										0.4	9.525	4.76	3.81
		VNMG160408-SF					●			●										0.8	9.525	4.76	3.81
	SS	VNMG120404E-SS					●			●	●									0.4	7.15	4.76	3.81
		VNMG120408E-SS					●			●	●									0.8	7.15	4.76	3.81
		VNMG160404-SS					●			●	●	●	●							0.4	9.525	4.76	3.81
		VNMG160408-SS					●			●	●	●	●							0.8	9.525	4.76	3.81
		VNMG160412-SS					●			●	●	●	●							1.2	9.525	4.76	3.81
	HRF	VNMG160404-HRF						●	●											0.4	9.525	4.76	3.81
		VNMG160408-HRF						●	●											0.8	9.525	4.76	3.81

● : Line up

Reference pages: External toolholder → C041 - Internal toolholder → D074 -
TungCap → C042 -, K014 -

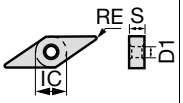
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

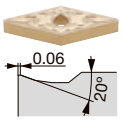
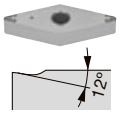
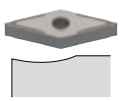
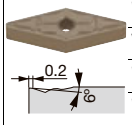
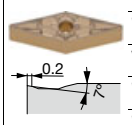
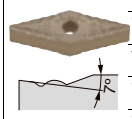
VN



Rhombic, 35° with hole

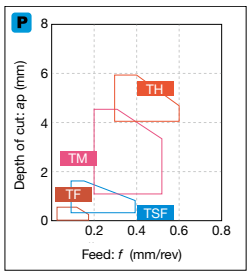
P	Steel	●	●ɔ	●✣	✣	ɔ				ɔ✣	●	●ɔ	●	●ɔ		●ɔ				●ɔ	●ɔ			●					
M	Stainless		●ɔ			●			ɔ	●ɔ	●	●ɔ	●	●ɔ										●					
K	Cast iron	●ɔ	●ɔ				●	ɔ			●	●ɔ	●	●ɔ		●ɔ				●ɔ	●ɔ			●					
N	Non-ferrous																							●					
S	Superalloy								ɔ		●	●ɔ	●																
H	Hard material																												

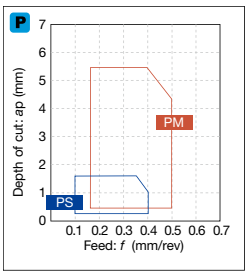


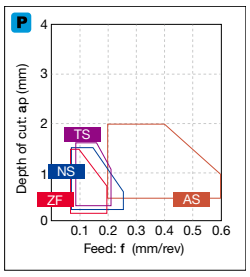
Application	Chipbreaker	Designation	Coated												Coated cermet				Cermet			Uncoated		Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T5105	T5115	AH8015	AH6225	AH110	AH120	GH110	GH330	GT9530				NS9530	NS520		TH10		RE	IC	S	D1
Finishing	**CF**	**VNMG160404-CF**						●	●																0.4	9.525	4.76	3.81
		VNMG160408-CF						●	●																0.8	9.525	4.76	3.81
	01	**VNGG160402-01**												●						●	●		●		0.2	9.525	4.76	3.81
		VNGG160404-01																		●	●		●		0.4	9.525	4.76	3.81
		VNGG160408-01																		●	●				0.8	9.525	4.76	3.81
	11	**VNMG160404-11**													●					●			●		0.4	9.525	4.76	3.81
		VNMG160408-11																		●					0.8	9.525	4.76	3.81
		VNMG160412-11														●				●					1.2	9.525	4.76	3.81
Medium cutting	**TM**	**VNMG120404E-TM**		●	●		●			●	●														0.4	7.15	4.76	3.81
		VNMG120408E-TM		●	●		●			●	●														0.8	7.15	4.76	3.81
		VNMG120412E-TM		●	●		●			●	●														1.2	7.15	4.76	3.81
		VNMG160404-TM	●	●	●	●	●			●	●		●												0.4	9.525	4.76	3.81
		VNMG160408-TM	●	●	●	●	●			●	●	●	●												0.8	9.525	4.76	3.81
		VNMG160412-TM	●	●	●	●	●			●	●	●													1.2	9.525	4.76	3.81
	PM	**VNMG120404E-PM**		●	●		●			●	●														0.4	7.15	4.76	3.81
		VNMG120408E-PM		●	●		●			●	●														0.8	7.15	4.76	3.81
		VNMG120412E-PM		●	●		●			●	●														1.2	7.15	4.76	3.81
		VNMG160404-PM		●	●		●			●	●														0.4	9.525	4.76	3.81
		VNMG160408-PM		●	●		●			●	●														0.8	9.525	4.76	3.81
		VNMG160412-PM		●	●		●			●	●														1.2	9.525	4.76	3.81
Medium cutting for mild steel	**ZM**	**VNMG120404E-ZM**		●	●		●			●	●														0.4	7.15	4.76	3.81
		VNMG120408E-ZM		●	●		●			●	●														0.8	7.15	4.76	3.81
		VNMG120412E-ZM		●	●		●			●	●														1.2	7.15	4.76	3.81
		VNMG160404-ZM		●	●		●			●	●														0.4	9.525	4.76	3.81
		VNMG160408-ZM		●	●	●	●			●	●														0.8	9.525	4.76	3.81
		VNMG160412-ZM		●	●	●	●			●	●														1.2	9.525	4.76	3.81

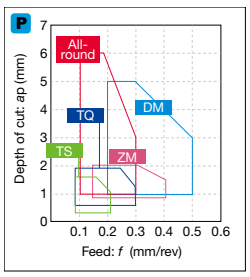
● : Line up

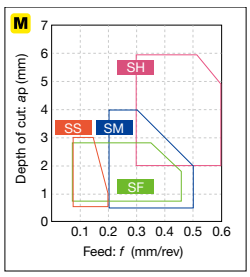
Chip control range

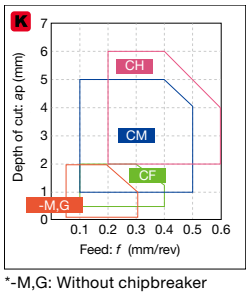


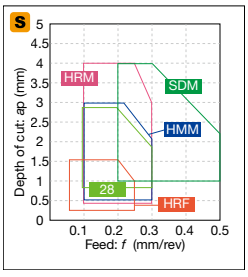












*-M,G: Without chipbreaker

Reference pages: External toolholder → C041 -
Internal toolholder → D074 -
TungCap → C042 -, K014 -

Insert NEGATIVE TYPE

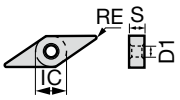
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

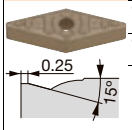
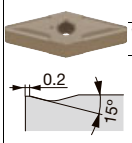
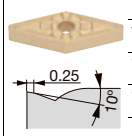
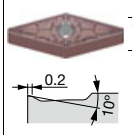
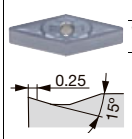
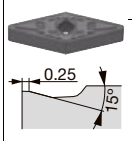
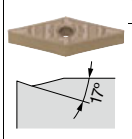
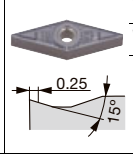
VN



Rhombic, 35° with hole

P	Steel	●	●ɔ	ɔ✣	✣	ɔ										ɔ✣	✣		●	●ɔ	●ɔ	●ɔ		●ɔ				●			
M	Stainless		●ɔ			●						●	ɔ	●ɔ	✣			●	●ɔ									●			
K	Cast iron	●ɔ	●ɔ				●	●ɔ	●	ɔ	✣							●	●ɔ	●ɔ	●ɔ		●ɔ				●			
N	Non-ferrous																											●			
S	Superalloy											●	ɔ			ɔ		●	●ɔ												
H	Hard material																														



Application	Chipbreaker	Designation	Coated																Coated cermet		Cermet		Un-coated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	AH8005	AH8015	AH6225	AH6235	AH905	AH110	AH120	GT9530	AT9530	NS9530		TH10	RE	IC	S	D1
Medium cutting	**DM**	**VNMG160404-DM**		●	●		●							●	●										0.8	9.525	4.76	3.81
		VNMG160408-DM	●	●	●	●	●							●	●										0.8	9.525	4.76	3.81
		VNMG160412-DM		●	●	●	●							●	●										1.2	9.525	4.76	3.81
	All-round	**VNMG160404**	●	●	●	●		●	●	●	●	●						●	●			●		●	0.4	9.525	4.76	3.81
		VNMG160408	●	●	●	●		●	●	●	●	●						●	●			●		●	0.8	9.525	4.76	3.81
		VNMG160412		●	●			●	●	●	●	●										●			1.2	9.525	4.76	3.81
	SM	**VNMG120404E-SM**					●								●	●									0.4	7.15	4.76	3.81
		VNMG120408E-SM					●								●	●									0.8	7.15	4.76	3.81
		VNMG160404-SM					●								●	●									0.4	9.525	4.76	3.81
		VNMG160408-SM					●								●	●									0.8	9.525	4.76	3.81
		VNMG160412-SM					●								●	●									1.2	9.525	4.76	3.81
	SDM	**VNMG160404-SDM**					●								●	●									0.4	9.525	4.76	3.81
		VNMG160408-SDM					●								●	●									0.8	9.525	4.76	3.81
		VNMG160412-SDM					●								●	●									1.2	9.525	4.76	3.81
	HRM	**VNMG160404-HRM**											●	●											0.4	9.525	4.76	3.81
		VNMG160408-HRM											●	●											0.8	9.525	4.76	3.81
		VNMG160412-HRM											●	●											1.2	9.525	4.76	3.81
	CM	**VNMG160408-CM**	●	●			●	●	●	●	●	●													0.8	9.525	4.76	3.81
		VNMG160412-CM	●	●			●	●	●	●	●	●													1.2	9.525	4.76	3.81
	TQ	**VNMG160404-TQ**		●	●															●	●	●			0.4	9.525	4.76	3.81
		VNMG160408-TQ		●	●															●	●	●			0.8	9.525	4.76	3.81
	HMM	**VNMG160404-HMM**															●								0.4	9.525	4.76	3.81
		VNMG160408-HMM															●								0.8	9.525	4.76	3.81
		VNMG160412-HMM															●								1.2	9.525	4.76	3.81

● : Line up

Reference pages: External toolholder → C041 - Internal toolholder → D074 -
TungCap → C042 -, K014 -

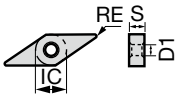
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

VN

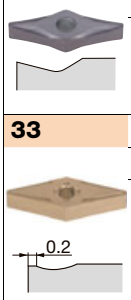


Rhombic, 35° with hole

P	Steel	●ⓒ ⓒ✠ ● ●ⓒ ●ⓒ ● ●ⓒ
M	Stainless	●ⓒ ● ⓒ ● ●ⓒ ●
K	Cast iron	●ⓒ ●ⓒ ● ⓒ ✠ ● ●ⓒ ●ⓒ ● ●
N	Non-ferrous	● ●
S	Superalloy	● ⓒ ● ●ⓒ ●
H	Hard material	●ⓒ ●ⓒ



Application	Chipbreaker	Designation	Coated: T9215	T9225	T515	T5105	T5115	T5125	AH8005	AH8015	AH110	AH120	Cermet: NS520	Uncoated: KS05F	TH10	Ceramic: LX10	LX11	RE	IC	S	D1
Medium cutting	28	**VNMG160404-28**							●	●		●		●				0.4	9.525	4.76	3.81
		VNMG160408-28							●	●		●		●				0.8	9.525	4.76	3.81
	33	**VNMG160404-33**		●							●				●			0.4	9.525	4.76	3.81
		VNMG160408-33	●	●											●			0.8	9.525	4.76	3.81
Finishing to medium cutting	-	**VNMA120404E**			●													0.4	7.15	4.76	3.81
		VNMA120408E			●													0.8	7.15	4.76	3.81
		VNMA160402													●			0.2	9.525	4.76	3.81
		VNMA160404				●	●	●					●		●			0.4	9.525	4.76	3.81
		VNMA160408				●	●	●					●		●			0.8	9.525	4.76	3.81
		VNGA160404														●	▲	0.4	9.525	4.76	3.81
		VNGA160408														●	▲	0.8	9.525	4.76	3.81



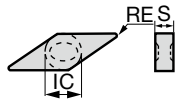
● : Line up
▲ : To be discontinued

VN



Rhombic, 35° without hole

P	Steel	
M	Stainless	
K	Cast iron	●ⓒ
N	Non-ferrous	
S	Superalloy	
H	Hard material	

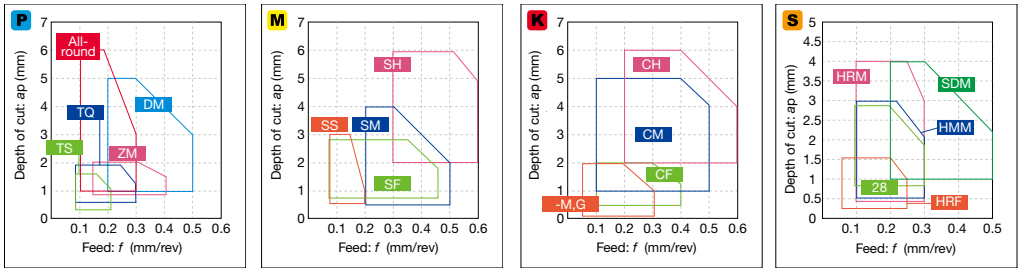


Application	Chipbreaker	Designation	Ceramic: FX105	RE	IC	S	D1
Finishing to medium cutting	-	**VNGD160712**	●	1.2	9.525	4.76	-



● : Line up

Chip control range



*-M,G: Without chipbreaker

Reference pages: VNMG..., VNMA..., VNGA...:
External toolholder → C041 -, Internal toolholder → D074 -
TungCap → C042 -, K014 -
VNGD...: External toolholder → C051

Insert NEGATIVE TYPE

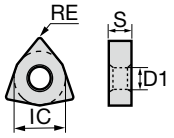
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

WN



Trigon, 80°
with hole

P	Steel	●	●ɔ	ɔ✠	✠	ɔ			✠	●ɔ		●●	●ɔ							●●														
M	Stainless		●ɔ			●		ɔ	●ɔ	●ɔ																								
K	Cast iron	●●	●ɔ				●ɔ			●ɔ		●●	●ɔ							●ɔ														
N	Non-ferrous																																	
S	Superalloy							ɔ		●ɔ																								
H	Hard material																																	



Application	Chipbreaker	Designation	Coated									Coated cermet		Cermet		Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T515	AH8015	AH6225	AH120	GT9530	AT9530	NS9530		RE	IC	S	D1
Finishing	TF	WNMG060402E-TF		●	●		●		●	●				●		0.2	9.525	4.76	3.81
		WNMG060404E-TF		●	●		●		●	●				●		0.4	9.525	4.76	3.81
		WNMG060408E-TF		●	●		●		●	●				●		0.8	9.525	4.76	3.81
		WNMG080402-TF		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		WNMG080404-TF		●	●		●		●	●				●		0.4	12.7	4.76	5.16
		WNMG080408-TF		●	●		●		●	●				●		0.8	12.7	4.76	5.16
	TSF	WNMG060402E-TSF		●	●		●		●	●	●	●		●		0.2	9.525	4.76	3.81
		WNMG060404E-TSF		●	●		●		●	●	●	●	●	●		0.4	9.525	4.76	3.81
		WNMG060408E-TSF		●	●		●		●	●	●	●	●	●		0.8	9.525	4.76	3.81
		WNMG060412E-TSF		●	●				●		●	●		●		1.2	9.525	4.76	3.81
		WNMG060404-TSF		●	●											0.4	9.525	4.76	3.81
		WNMG060408-TSF		●	●											0.8	9.525	4.76	3.81
		WNMG080402-TSF		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		WNMG080404-TSF		●	●	●	●	●	●	●	●	●	●	●		0.4	12.7	4.76	5.16
		WNMG080408-TSF		●	●	●	●	●	●	●	●	●	●	●		0.8	12.7	4.76	5.16
		WNMG080412-TSF	●	●	●	●	●	●	●	●	●			●		1.2	12.7	4.76	5.16
Finishing	PS	WNMG060402E-PS		●	●		●		●	●				●		0.2	9.525	4.76	3.81
		WNMG060404E-PS		●	●		●		●	●				●		0.4	9.525	4.76	3.81
		WNMG060408E-PS		●	●		●		●	●				●		0.8	9.525	4.76	3.81
		WNMG080402-PS		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		WNMG080404-PS		●	●		●		●	●				●		0.4	12.7	4.76	5.16
		WNMG080408-PS		●	●		●		●	●				●		0.8	12.7	4.76	5.16
		WNMG080412-PS		●	●		●		●	●				●		1.2	12.7	4.76	5.16
Finishing for mild steel	ZF	WNMG060402E-ZF		●	●		●		●	●				●		0.2	9.525	4.76	3.81
		WNMG060404E-ZF		●	●		●		●	●				●		0.4	9.525	4.76	3.81
		WNMG060408E-ZF		●	●		●		●	●				●		0.8	9.525	4.76	3.81
		WNMG060404-ZF		●	●											0.4	9.525	4.76	3.81
		WNMG060408-ZF		●	●											0.8	9.525	4.76	3.81
		WNMG080402-ZF		●	●		●		●	●				●		0.2	12.7	4.76	5.16
		WNMG080404-ZF		●	●	●	●		●	●		●	●	●		0.4	12.7	4.76	5.16
		WNMG080408-ZF		●	●	●	●		●	●		●	●	●		0.8	12.7	4.76	5.16
		WNMG080412-ZF		●	●		●		●	●				●		1.2	12.7	4.76	5.16
Finishing	AS	WNMG080404-AS	●											●		0.4	12.7	4.76	5.16
		WNMG080408-AS	●	●	●	●								●		0.8	12.7	4.76	5.16
		WNMG080412-AS	●	●	●	●										1.2	12.7	4.76	5.16
	NS	WNMG080404-NS		●	●									●		0.4	12.7	4.76	5.16
		WNMG080408-NS		●	●									●		0.8	12.7	4.76	5.16

● : Line up

Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

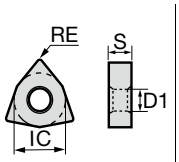
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

WN



Trigon, 80°
with hole

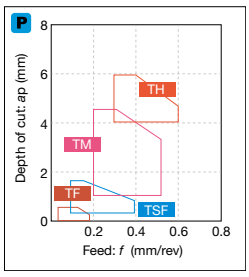
		T9215	T9225	T9235	T6215	AH8005	AH8015	AH6225	AH6235	AH120	GH330	GT9530	AT9530	NS9530	NS520
P	Steel	●ⓒ	●✠	✠	ⓒ			ⓒ✠	✠	●ⓒ	●ⓒ	●ⓒ	●ⓒ	●ⓒ	●ⓒ
M	Stainless	●ⓒ			●	●	ⓒ	●ⓒ	✠	●ⓒ	●ⓒ				
K	Cast iron	●ⓒ								●ⓒ	●ⓒ	●ⓒ	●ⓒ	●ⓒ	●ⓒ
N	Non-ferrous														
S	Superalloy					●	ⓒ			●ⓒ					
H	Hard material														

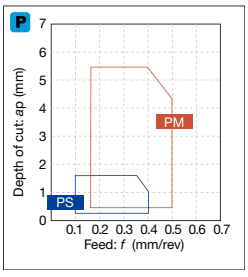


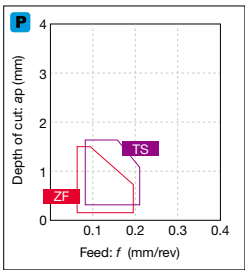
Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet		Dimension (mm)			
			T9215	T9225	T9235	T6215	AH8005	AH8015	AH6225	AH6235	AH120	GH330	GT9530	AT9530	NS9530	NS520	RE	IC	S	D1
Finishing	TS	WNMG060402E-TS	●	●		●		●	●				●		●		0.2	9.525	4.76	3.81
		WNMG060404E-TS	●	●		●		●	●				●		●		0.4	9.525	4.76	3.81
		WNMG060408E-TS	●	●		●		●	●				●		●		0.8	9.525	4.76	3.81
		WNMG080402-TS	●	●		●		●	●						●		0.2	12.7	4.76	5.16
		WNMG080404-TS	●	●	●	●		●	●				●	●	●	●	0.4	12.7	4.76	5.16
		WNMG080408-TS	●	●	●	●		●	●				●	●	●	●	0.8	12.7	4.76	5.16
		WNMG080412-TS	●	●	●	●		●	●						●		1.2	12.7	4.76	5.16
	SF	WNMG060404-SF				●			●								0.4	9.525	4.76	3.81
		WNMG060408-SF				●			●								0.8	9.525	4.76	3.81
		WNMG080404-SF				●			●								0.4	12.7	4.76	5.16
		WNMG080408-SF				●			●								0.8	12.7	4.76	5.16
	SS	WNMG060404E-SS							●	●							0.4	9.525	4.76	3.81
		WNMG060408E-SS							●	●							0.8	9.525	4.76	3.81
		WNMG060412E-SS							●	●							1.2	9.525	4.76	3.81
		WNMG080404-SS				●			●	●	●	●					0.4	12.7	4.76	5.16
		WNMG080408-SS				●			●	●	●	●					0.8	12.7	4.76	5.16
		WNMG080412-SS				●			●	●							1.2	12.7	4.76	5.16
	HRF	WNMG080404-HRF					●	●									0.4	12.7	4.76	5.16
		WNMG080408-HRF					●	●									0.8	12.7	4.76	5.16

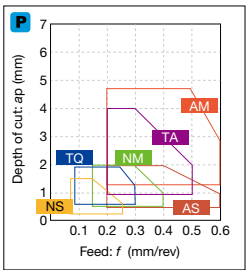
● : Line up

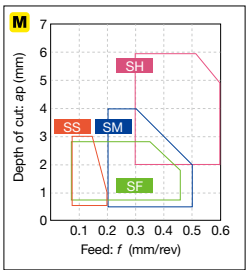
Chip control range

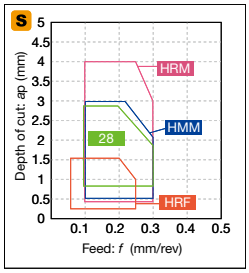












Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

Insert NEGATIVE TYPE

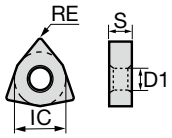
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

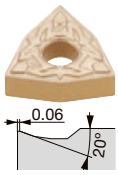
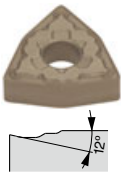
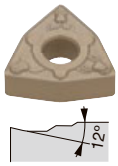
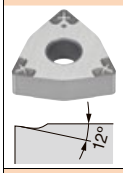
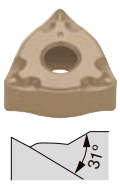
WN



Trigon, 80°
with hole

		T9205	T9215	T9225	T9235	T5105	T5115	GT9530	GT720	NS9530	NS520
P	Steel	●	●ɔ	ɔ✠	✠			●ɔ	●ɔ	●ɔ	●ɔ
M	Stainless		●ɔ								
K	Cast iron	●ɔ	●ɔ			●	ɔ	●ɔ	●ɔ	●ɔ	●ɔ
N	Non-ferrous										
S	Superalloy										
H	Hard material										



Application	Chipbreaker	Designation	Coated						Coated cermet		Cermet		Dimension (mm)			
			T9205	T9215	T9225	T9235	T5105	T5115	GT9530	GT720	NS9530	NS520	RE	IC	S	D1
Finishing	CF	WNMG080404-CF					●	●					0.4	12.7	4.76	5.16
		WNMG080408-CF					●	●					0.8	12.7	4.76	5.16
		WNMG080412-CF					●	●					1.2	12.7	4.76	5.16
Finishing (wiper)	FW	WNMG060404E-FW	●	●	●				●		●		0.4	9.525	4.76	3.81
		WNMG060408E-FW	●	●	●				●		●		0.8	9.525	4.76	3.81
		WNMG080404-FW		●	●				●		●		0.4	12.7	4.76	5.16
		WNMG080408-FW	●	●	●				●		●		0.8	12.7	4.76	5.16
		*Wiper														
	AFW	WNMG060404-AFW		●	●						●		0.4	9.525	4.76	3.81
		WNMG060408-AFW	●	●	●	●					●		0.8	9.525	4.76	3.81
		WNMG080404-AFW		●	●						●		0.4	12.7	4.76	5.16
		WNMG080408-AFW	●	●	●	●					●		0.8	12.7	4.76	5.16
		*Wiper														
Finishing	01	WNGG080402-01									●	●	0.2	12.7	4.76	5.16
		WNGG080404-01								●	●	●	0.4	12.7	4.76	5.16
		WNGG080408-01								●	●		0.8	12.7	4.76	5.16
	11	WNMG080404-11									●		0.4	12.7	4.76	5.16
		WNMG080408-11									●		0.8	12.7	4.76	5.16
Finishing for mild steel	17	WNMG080404-17									●		0.4	12.7	4.76	5.16
		WNMG080408-17									●		0.8	12.7	4.76	5.16
Boring (double side)	CB	WNMG060404-CB			●						●		0.4	9.525	4.76	3.81
		WNMG060408-CB			●						●		0.8	9.525	4.76	3.81

* Please see L011 - L015 about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

● : Line up

Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

WN

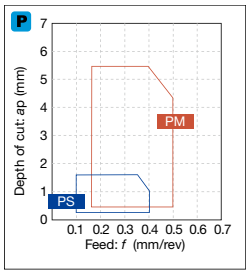


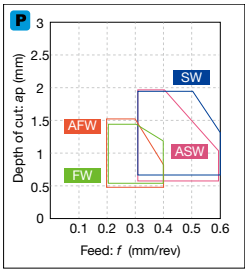
Trigon, 80° with hole

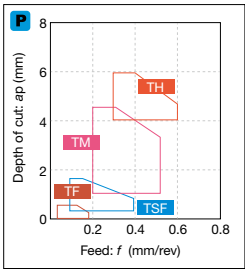
		T9205	T9215	T9225	T9235	T6215	T515	AH8015	AH6225	AH6235	AH725	AH120	GT9530	NS9530	RE	IC	S	D1
		Coated											Coated cermet	Cermet	Dimension (mm)			
Application	Chipbreaker	Designation																
Medium cutting	TM	WNMG060404E-TM		●	●		●		●	●			●			0.4	9.525	4.76	3.81
		WNMG060408E-TM		●	●		●		●	●			●			0.8	9.525	4.76	3.81
		WNMG060412E-TM		●	●		●		●	●			●			1.2	9.525	4.76	3.81
		WNMG060404-TM		●	●	●										0.4	9.525	4.76	3.81
		WNMG060408-TM	●	●	●	●							●			0.8	9.525	4.76	3.81
		WNMG080404-TM	●	●	●	●	●	●	●	●	●	●	●			0.4	12.7	4.76	5.16
		WNMG080408-TM	●	●	●	●	●	●	●	●	●	●	●			0.8	12.7	4.76	5.16
		WNMG080412-TM	●	●	●	●	●	●	●	●	●		●			1.2	12.7	4.76	5.16
		WNMG080416-TM	●	●	●		●	●	●	●	●		●			1.6	12.7	4.76	5.16
	PM	WNMG060404E-PM		●	●		●		●	●						0.4	9.525	4.76	3.81
		WNMG060408E-PM		●	●		●		●	●						0.8	9.525	4.76	3.81
		WNMG060412E-PM		●	●		●		●	●						1.2	9.525	4.76	3.81
		WNMG080404-PM		●	●		●		●	●						0.4	12.7	4.76	5.16
		WNMG080408-PM		●	●		●		●	●						0.8	12.7	4.76	5.16
		WNMG080412-PM		●	●		●		●	●						1.2	12.7	4.76	5.16
		WNMG080416-PM		●	●		●		●	●						1.6	12.7	4.76	5.16
Medium cutting for mild steel	ZM	WNMG060404E-ZM		●	●		●		●	●						0.4	9.525	4.76	3.81
		WNMG060408E-ZM		●	●		●		●	●						0.8	9.525	4.76	3.81
		WNMG060412E-ZM		●	●		●		●	●						1.2	9.525	4.76	3.81
		WNMG060408-ZM		●	●	●										0.8	9.525	4.76	3.81
		WNMG060412-ZM		●	●	●										1.2	9.525	4.76	3.81
		WNMG080404-ZM		●	●		●		●	●						0.4	12.7	4.76	5.16
		WNMG080408-ZM		●	●	●	●		●	●			●	●		0.8	12.7	4.76	5.16
		WNMG080412-ZM	●	●	●	●	●		●	●						1.2	12.7	4.76	5.16
		WNMG080416-ZM		●	●		●		●	●						1.6	12.7	4.76	5.16

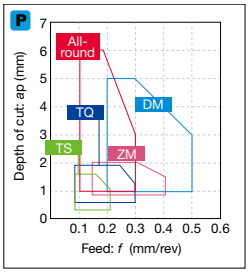
● : Line up

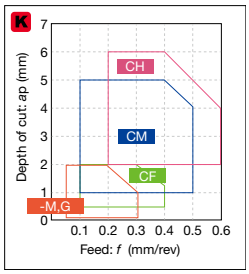
Chip control range



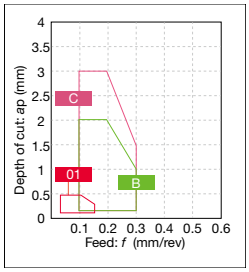








*-M,G: Without chipbreaker



Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

Insert NEGATIVE TYPE

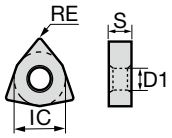
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

WN



Trigon, 80° with hole

P	Steel	●	●ɔ	ɔ✣	✣	ɔ									ɔ✣	✣	ɔ	●	●ɔ			●ɔ	●ɔ		●					
M	Stainless		●ɔ			●						●	ɔ	●ɔ	✣	ɔ	●	●ɔ						●						
K	Cast iron	●ɔ	●ɔ				●	●ɔ	●	ɔ	✣					ɔ	●	●ɔ			●ɔ	●ɔ		●					
N	Non-ferrous																							●					
S	Superalloy											●	ɔ			●	●	●ɔ											
H	Hard material																												



Application	Chipbreaker	Designation	Coated																		Cermet		Uncoated	Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	AH8005	AH8015	AH6225	AH6235	AH725	AH110	AH120		NS9530	NS520	TH10	RE	IC	S	D1
Medium cutting	AM	WNMG080408-AM		●	●																			0.8	12.7	4.76	5.16
		WNMG080412-AM		●	●																			1.2	12.7	4.76	5.16
		WNMG080416-AM		●	●																			1.6	12.7	4.76	5.16
	NM	WNMG060412E-NM			●																			1.2	9.525	4.76	3.81
		WNMG080408-NM	●	●	●																			0.8	12.7	4.76	5.16
		WNMG080412-NM	●	●	●	●																		1.2	12.7	4.76	5.16
	DM	WNMG080404-DM		●	●		●							●	●									0.4	12.7	4.76	5.16
		WNMG080408-DM	●	●	●	●	●							●	●									0.8	12.7	4.76	5.16
		WNMG080412-DM	●	●	●	●	●							●	●									1.2	12.7	4.76	5.16
		WNMG080416-DM		●	●		●							●	●									1.6	12.7	4.76	5.16
	All-round	WNMG060404		●	●					●	●	●												0.4	9.525	4.76	3.81
		WNMG060408		●	●					●	●	●												0.8	9.525	4.76	3.81
		WNMG080404	●	●	●	●		●	●	●	●	●						●	●		●		●	0.4	12.7	4.76	5.16
		WNMG080408	●	●	●	●		●	●	●	●	●						●	●		●	●	●	0.8	12.7	4.76	5.16
		WNMG080412	●	●	●	●		●	●	●	●	●						●	●				●	1.2	12.7	4.76	5.16
		WNMG080416	●	●	●	●		●	●	●	●													1.6	12.7	4.76	5.16
	SM	WNMG060404E-SM					●								●									0.4	9.525	4.76	3.81
		WNMG060408E-SM					●								●									0.8	9.525	4.76	3.81
		WNMG060412E-SM					●								●									1.2	9.525	4.76	3.81
		WNMG060408-SM															●							0.8	9.525	4.76	3.81
		WNMG080404-SM					●								●	●								0.4	12.7	4.76	5.16
		WNMG080408-SM					●								●	●	●							0.8	12.7	4.76	5.16
		WNMG080412-SM					●								●	●	●							1.2	12.7	4.76	5.16
	SDM	WNMG080404-SDM					●								●	●								0.4	12.7	4.76	5.16
		WNMG080408-SDM					●								●	●								0.8	12.7	4.76	5.16
		WNMG080412-SDM					●								●	●								1.2	12.7	4.76	5.16
	HRM	WNMG080404-HRM											●	●										0.4	12.7	4.76	5.16
		WNMG080408-HRM											●	●										0.8	12.7	4.76	5.16
		WNMG080412-HRM											●	●										1.2	12.7	4.76	5.16

● : Line up

Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

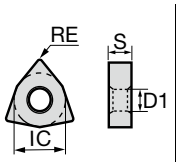
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

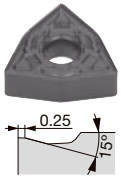
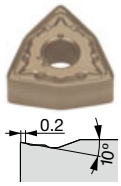
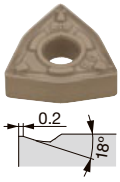
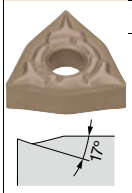
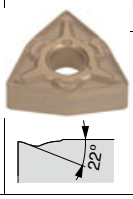
WN



Trigon, 80° with hole

P	Steel	●	●ⓒ	ⓒ✠	✠									●ⓒ	●ⓒ		●ⓒ																
M	Stainless		●ⓒ																														
K	Cast iron	●ⓒ	●ⓒ			●	●ⓒ	●	ⓒ	✠				●ⓒ	●ⓒ		●ⓒ																
N	Non-ferrous																																
S	Superalloy																																
H	Hard material																																

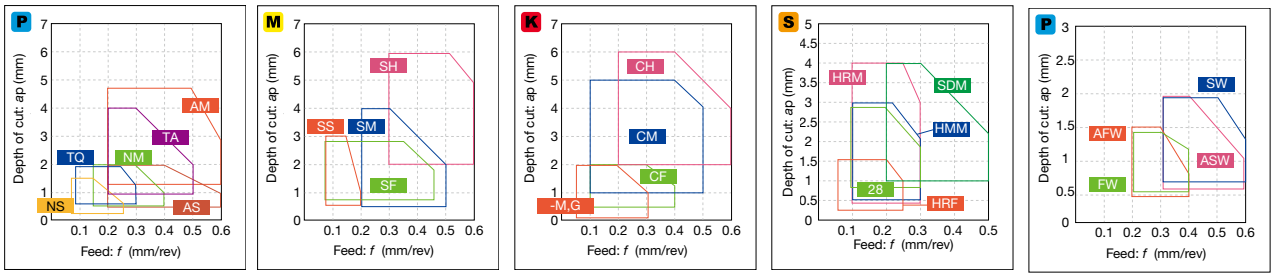


Application	Chipbreaker	Designation	Coated									Coated cermet		Cermet				Dimension (mm)			
			T9205	T9215	T9225	T9235	T6215	T505	T515	T5105	T5115	T5125	GT9530	AT9530	NS9530				RE	IC	S	D1
Medium cutting	CM	WNMG080404-CM	●	●			●	●	●		●								0.4	12.7	4.76	5.16
		WNMG080408-CM	●	●			●	●	●	●	●	●							0.8	12.7	4.76	5.16
		WNMG080412-CM	●	●			●	●	●	●	●	●							1.2	12.7	4.76	5.16
Finishing cutting (wiper)	SW	WNMG060408E-SW	●	●	●						●								0.8	9.525	4.76	3.81
		WNMG060412E-SW	●	●	●						●								1.2	9.525	4.76	3.81
		WNMG080408-SW	●	●	●				●		●								0.8	12.7	4.76	5.16
		WNMG080412-SW		●	●				●		●								1.2	12.7	4.76	5.16
		*Wiper																				
	ASW	WNMG060408-ASW	●	●	●														0.8	9.525	4.76	3.81
		WNMG060412-ASW	●	●	●	●													1.2	9.525	4.76	3.81
		WNMG080408-ASW	●	●	●	●													0.8	12.7	4.76	5.16
		WNMG080412-ASW	●	●	●	●													1.2	12.7	4.76	5.16
		*Wiper																				
Medium cutting	TQ	WNMG080404-TQ		●	●								●	●	●				0.4	12.7	4.76	5.16
		WNMG080408-TQ		●	●								●	●	●				0.8	12.7	4.76	5.16
	TA	WNMG080408-TA		●	●														0.8	12.7	4.76	5.16
		WNMG080412-TA		●	●														1.2	12.7	4.76	5.16

* Please see **L011 - L015** about the adjustment of the machining program for rounding or taper machining by using SW/FW.
Please contact our sales representatives if you have any question.

● : Line up

Chip control range



*-M,G: Without chipbreaker

Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

Insert NEGATIVE TYPE

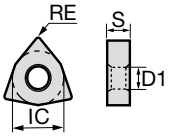
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

WN



Trigon, 80° with hole

		T9205	T9215	T9225	T9235	T6215	T515	AH8015	AH6225	AH6235	AH905	AH725	AH120	GH330	GT720	NS9530	TH10	KS20
P	Steel	●	●ɔ	●ɔ✣	✣	ɔ			ɔ✣	✣		ɔ	●ɔ	●ɔ	●ɔ	●ɔ	●	
M	Stainless		●ɔ			●		ɔ	●ɔ	✣		ɔ	●ɔ	●ɔ			●	
K	Cast iron	●ɔ	●ɔ				●ɔ					ɔ	●ɔ	●ɔ	●ɔ	●ɔ	●	ɔ✣
N	Non-ferrous																●	ɔ✣
S	Superalloy							ɔ			ɔ	●	●ɔ					ɔ✣
H	Hard material																	



Application	Chipbreaker	Designation	RE	IC	S	D1
Medium cutting	SA	WNMG080408-SA	0.8	12.7	4.76	5.16
		WNMG080412-SA	1.2	12.7	4.76	5.16
	HMM	WNMG080404-HMM	0.4	12.7	4.76	5.16
		WNMG080408-HMM	0.8	12.7	4.76	5.16
		WNMG080412-HMM	1.2	12.7	4.76	5.16
	27	WNMG080408-27	0.8	12.7	4.76	5.16
	33	WNMG080404-33	0.4	12.7	4.76	5.16
		WNMG080408-33	0.8	12.7	4.76	5.16
	37	WNMG080404-37	0.4	12.7	4.76	5.16
		WNMG080408-37	0.8	12.7	4.76	5.16
Medium to heavy cutting	TH	WNMG080408-TH	0.8	12.7	4.76	5.16
		WNMG080412-TH	1.2	12.7	4.76	5.16
		WNMG080416-TH	1.6	12.7	4.76	5.16
		WNMG100612-TH	1.2	15.875	6.35	6.35
		WNMG100616-TH	1.6	15.875	6.35	6.35
	THS	WNMG080408-THS	0.8	12.7	4.76	5.16
		WNMG080412-THS	1.2	12.7	4.76	5.16
		WNMG080416-THS	1.6	12.7	4.76	5.16
		WNMG100612-THS	1.2	15.875	6.35	6.35
		WNMG100616-THS	1.6	15.875	6.35	6.35

● : Line up

Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

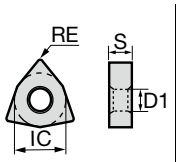
● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

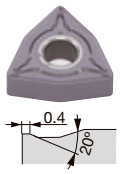
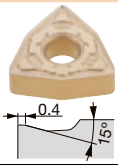
WN



Trigon, 80° with hole

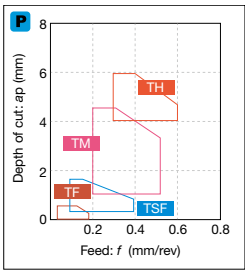
		T505	T515	T5105	T5115	T5125	AH6225	AH6235	NS520	TH10	LX10	LX11	RE	IC	S	D1
P	Steel						ᑕ✠	✠	●ᑕ	●						
M	Stainless						●ᑕ	✠		●						
K	Cast iron	●	●ᑕ	●	ᑕ	✠			●ᑕ	●						
N	Non-ferrous									●						
S	Superalloy															
H	Hard material										●ᑕ	●ᑕ				

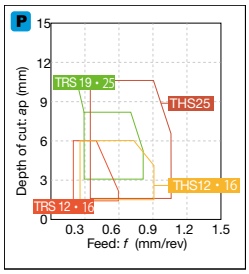


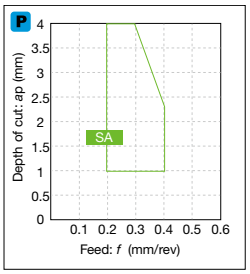
Application	Chipbreaker	Designation	Coated							Cermet	Uncoated	Ceramic		Dimension (mm)			
			T505	T515	T5105	T5115	T5125	AH6225	AH6235	NS520	TH10	LX10	LX11	RE	IC	S	D1
Medium to heavy cutting	SH	WNMG080408-SH						●	●					0.8	12.7	4.76	5.16
		WNMG080412-SH						●	●					1.2	12.7	4.76	5.16
																	
	CH	WNMG080408-CH			●	●	●							0.8	12.7	4.76	5.16
		WNMG080412-CH			●	●	●							1.2	12.7	4.76	5.16
																	
Finishing to medium cutting	-	WNMA060404E		●										0.4	9.525	4.76	3.81
		WNMA060408E		●										0.8	9.525	4.76	3.81
		WNMA060412E		●										1.2	9.525	4.76	3.81
		WNMA060416E		●										1.6	9.525	4.76	3.81
		WNMA080404			●	●	●				●			0.4	12.7	4.76	5.16
		WNMA080408	●	●	●	●	●			●	●			0.8	12.7	4.76	5.16
		WNMA080412	●	●	●	●	●							1.2	12.7	4.76	5.16
		WNMA080416	●	●	●	●	●							1.6	12.7	4.76	5.16
		WNGA080404										●	▲	0.4	12.7	4.76	5.16
		WNGA080408										●	▲	0.8	12.7	4.76	5.16
		WNGA080412										●	▲	1.2	12.7	4.76	5.16
																	

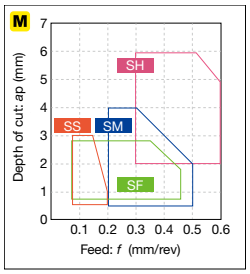
● : Line up
▲ : To be discontinued

Chip control range

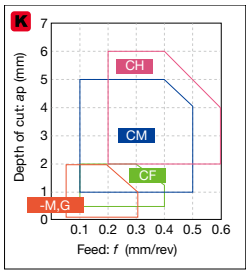


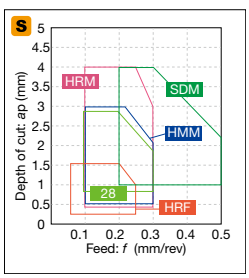






*-M,G: Without chipbreaker





Reference pages: External toolholder → C024 - Internal toolholder → D031 -
TungCap → C024 -, K010

Insert NEGATIVE TYPE

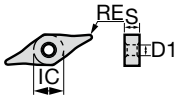
● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

YN



Rhombic, 25° with hole

P	Steel	●ᑕ ᑕ✠ ✠ ᑕ ✠ ᑕ✠ ●ᑕ ●ᑕ
M	Stainless	●ᑕ ● ᑕ ●ᑕ
K	Cast iron	●ᑕ ●ᑕ ●ᑕ
N	Non-ferrous	
S	Superalloy	ᑕ
H	Hard material	



Application	Chipbreaker	Designation	Coated						Coated cermet		Cermet		Dimension (mm)			
			T9215	T9225	T9235	T6215	AH8015	AH6225	GT9530		NS9530		RE	IC	S	D1
Finishing for mild steel	ZF	YNMG160402-ZF	●	●	●	●	●	●	●		●		0.2	9.525	4.76	3.81
		YNMG160404-ZF	●	●	●	●	●	●	●		●		0.4	9.525	4.76	3.81
		YNMG160408-ZF	●	●	●	●	●	●	●		●		0.8	9.525	4.76	3.81
Medium cutting for mild steel	ZM	YNMG160404-ZM	●	●	●	●	●	●	●		●		0.4	9.525	4.76	3.81
		YNMG160408-ZM	●	●	●	●	●	●	●		●		0.8	9.525	4.76	3.81

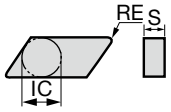
● : Line up

KN



Parallelogram, 55° without hole

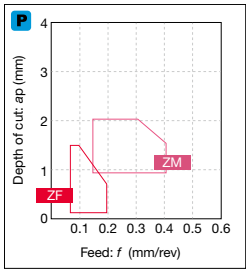
P	Steel	●ᑕ
M	Stainless	●ᑕ
K	Cast iron	●ᑕ
N	Non-ferrous	
S	Superalloy	
H	Hard material	



Application	Chipbreaker	Designation	Coated	Dimension (mm)			
			GH330	RE	IC	S	D1
Finishing	S1	KNMX160405R-S1	●	0.5	9.525	4.76	-
		KNMX160405L-S1	●	0.5	9.525	4.76	-

● : Line up

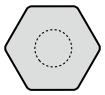
Chip control range



Reference pages: YNMG...: External toolholder → C041 -, Internal toolholder → D074 -
TungCap → C042 -, K014 -

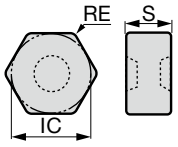
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

HN



Hexagonal, 120° without hole

P	Steel	
M	Stainless	
K	Cast iron	●◐
N	Non-ferrous	
S	Superalloy	
H	Hard material	



Application	Chipbreaker	Designation	Ceramic FX105	RE	IC	S	D1
Finishing to medium cutting	-	HNGD050712	●	1.2	12.7	7.94	-
		HNGD050716	●	1.6	12.7	7.94	-

● : Line up

Reference pages: HNGD...: External toolholder → C083

Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

| | | |

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

| | | |

Insert POSITIVE TYPE

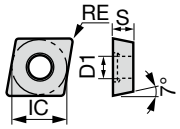
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

		T9215	T9225	T6215	AH8005	AH8015	AH6225	AH725	SH7025	SH725	GH730	J740	GT9530	NS9530	TH10
P	Steel	●ɔ	ɔ✣	ɔ			ɔ✣	ɔ	●ɔ	ɔ	●ɔ		●ɔ	●ɔ	●
M	Stainless	●ɔ		●	●	ɔ	●ɔ	ɔ	●ɔ	ɔ	●ɔ				●
K	Cast iron	●ɔ						ɔ		ɔ			●ɔ	●ɔ	●
N	Non-ferrous														●
S	Superalloy				●	ɔ		●							
H	Hard material														

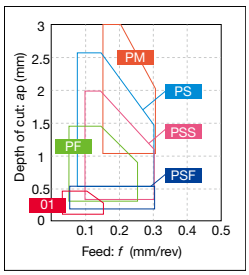


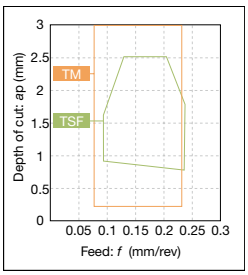
Application	Chipbreaker	Designation	T9215	T9225	T6215	AH8005	AH8015	AH6225	AH725	SH7025	SH725	GH730	J740	GT9530	NS9530	TH10	RE	IC	S	D1
			Coated											Coated cermet	Cermet	Uncoated	Dimension (mm)			
Finishing	PSF	CCMT060202-PSF							●					●	●		0.2	6.35	2.38	2.8
		CCMT060204-PSF	●	●		●	●		●					●	●		0.4	6.35	2.38	2.8
		CCMT09T302-PSF							●						●		0.2	9.525	3.97	4.4
		CCMT09T304-PSF	●	●		●	●		●					●	●		0.4	9.525	3.97	4.4
		CCMT09T308-PSF	●	●					●					●	●		0.8	9.525	3.97	4.4
	PF	CCMT060202-PF										●		●	●		0.2	6.35	2.38	2.8
		CCMT060204-PF						●				●		●	●		0.4	6.35	2.38	2.8
		CCMT060208-PF												●	●		0.8	6.35	2.38	2.8
		CCMT09T302-PF										●			●		0.2	9.525	3.97	4.4
		CCMT09T304-PF										●		●	●		0.4	9.525	3.97	4.4
		CCMT09T308-PF		●										●	●		0.8	9.525	3.97	4.4
	TSF	CCMT060202-TSF	●	●	●		●	●							●		0.2	6.35	2.38	2.8
		CCMT060204-TSF	●	●	●		●	●							●		0.4	6.35	2.38	2.8
		CCMT060208-TSF	●	●	●		●	●							●		0.8	6.35	2.38	2.8
		CCMT09T302-TSF	●	●	●		●	●							●		0.2	9.525	3.97	4.4
		CCMT09T304-TSF	●	●	●		●	●							●		0.4	9.525	3.97	4.4
		CCMT09T308-TSF	●	●	●		●	●							●		0.8	9.525	3.97	4.4
Finishing (sharp edge)	J10	CCGT060200FR-J10								●	●		●			●	0.03	6.35	2.38	2.8
		CCGT060200FL-J10									●		●			●	0.03	6.35	2.38	2.8
		CCGT060201FR-J10								●	●		●		●	●	0.1	6.35	2.38	2.8
		CCGT060201FL-J10									●		●			●	0.1	6.35	2.38	2.8
		CCGT060202FR-J10								●	●		●		●	●	0.2	6.35	2.38	2.8
		CCGT060202FL-J10								●	●		●		●	●	0.2	6.35	2.38	2.8
		CCGT09T300FR-J10								●	●		●			●	0.03	9.525	3.97	4.4
		CCGT09T300FL-J10									●		●			●	0.03	9.525	3.97	4.4
		CCGT09T301FR-J10								●	●		●			●	0.1	9.525	3.97	4.4
		CCGT09T301FL-J10									●		●			●	0.1	9.525	3.97	4.4
		CCGT09T302FR-J10								●	●		●			●	0.2	9.525	3.97	4.4
		CCGT09T302FL-J10								●	●		●			●	0.2	9.525	3.97	4.4
		CCGT09T304FR-J10									●						0.4	9.525	3.97	4.4

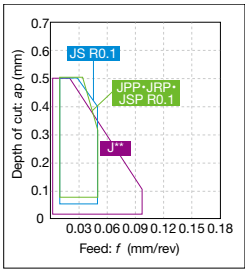
*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

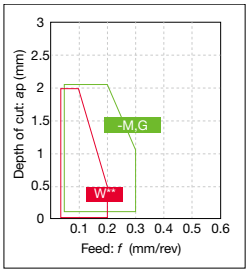
Chip control range







*Chip control range with typical R0.1



*-M,G: Without chipbreaker

Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

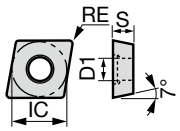
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

P	Steel	●ɔ	●ɔ	●ɔ	●			●ɔ				●ɔ				●	ɔ																
M	Stainless	●ɔ	●ɔ	●ɔ	●											●	ɔ																
K	Cast iron			●ɔ	●			●ɔ				●ɔ				●																	
N	Non-ferrous															●																	
S	Superalloy		●ɔ		●																												
H	Hard material																																



Application	Chipbreaker	Designation	Coated					Coated cermet		Cermet		Uncoated				Dimension (mm)			
			SH7025	SH725	SH730	GH330	GH110	GT9530		NS9530		TH10	UX30			RE	IC	S	D1
Finishing (sharp edge)	W08	CCGT03X100FL-W08	●	●												0.03	3.57	1.39	1.9
		CCGT03X100FR-W08		●												0.03	3.57	1.39	1.9
		CCGT03X101FL-W08	●	●												0.1	3.57	1.39	1.9
		CCGT03X101FR-W08		●												0.1	3.57	1.39	1.9
		CCGT03X102FL-W08	●	●												0.2	3.57	1.39	1.9
		CCGT03X102FR-W08	●	●												0.2	3.57	1.39	1.9
		CCGT03X104FL-W08	●	●												0.4	3.57	1.39	1.9
		CCGT03X104FR-W08	●	●												0.4	3.57	1.39	1.9
		CCGT04T100FL-W08	●	●												0.03	4.37	1.79	2.2
		CCGT04T100FR-W08		●												0.03	4.37	1.79	2.2
		CCGT04T101FL-W08	●	●												0.1	4.37	1.79	2.2
		CCGT04T101FR-W08		●												0.1	4.37	1.79	2.2
		CCGT04T102FL-W08	●	●												0.2	4.37	1.79	2.2
		CCGT04T102FR-W08	●	●												0.2	4.37	1.79	2.2
		CCGT04T104FL-W08	●	●												0.4	4.37	1.79	2.2
		CCGT04T104FR-W08	●	●												0.4	4.37	1.79	2.2
Finishing	W08	CCGT03X100R-W08			●							●				0.03	3.57	1.39	1.9
		CCGT03X100L-W08			●							●				0.03	3.57	1.39	1.9
		CCGT03X101R-W08			●							●				0.1	3.57	1.39	1.9
		CCGT03X101L-W08			●							●				0.1	3.57	1.39	1.9
		CCGT03X102R-W08			●							●				0.2	3.57	1.39	1.9
		CCGT03X102L-W08			●							●				0.2	3.57	1.39	1.9
		CCGT03X104R-W08			●							●				0.4	3.57	1.39	1.9
		CCGT03X104L-W08			●							●				0.4	3.57	1.39	1.9
		CCGT04T100R-W08			●							●				0.03	4.37	1.79	2.2
		CCGT04T100L-W08			●							●				0.03	4.37	1.79	2.2
		CCGT04T101R-W08			●							●				0.1	4.37	1.79	2.2
		CCGT04T101L-W08			●							●				0.1	4.37	1.79	2.2
		CCGT04T102R-W08			●							●				0.2	4.37	1.79	2.2
		CCGT04T102L-W08			●							●				0.2	4.37	1.79	2.2
		CCGT04T104R-W08			●							●				0.4	4.37	1.79	2.2
		CCGT04T104L-W08			●							●				0.4	4.37	1.79	2.2
	W15	CCGT060200R-W15										●				0.03	6.35	2.38	2.8
		CCGT060200L-W15								●		●				0.03	6.35	2.38	2.8
		CCGT060202R-W15								●		●				0.2	6.35	2.38	2.8
		CCGT060202L-W15						●		●		●				0.2	6.35	2.38	2.8
		CCGT060204R-W15				●				●		●				0.4	6.35	2.38	2.8
		CCGT060204L-W15				●	●	●		●		●	●			0.4	6.35	2.38	2.8

● : Line up

Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

Insert POSITIVE TYPE

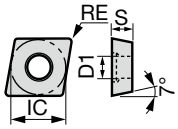
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

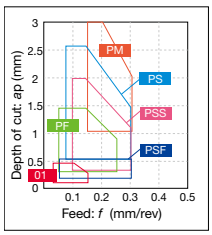
P	Steel	●ɔ	ɔ✠	ɔ							ɔ✠	✠	ɔ	●ɔ	ɔ	●ɔ	●		●ɔ	●ɔ		●ɔ				●			
M	Stainless	●ɔ		●				●	ɔ	●ɔ	✠	ɔ	●ɔ	ɔ	●ɔ	●										●			
K	Cast iron	●ɔ			●	●ɔ	ɔ					ɔ	●ɔ	ɔ	●ɔ	●		●ɔ	●ɔ		●ɔ					●			
N	Non-ferrous																									●			
S	Superalloy							●	ɔ			●	●ɔ			●													
H	Hard material																												

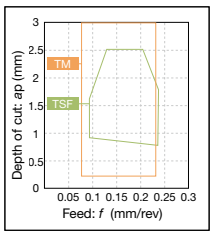


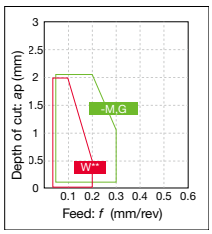
Application	Chipbreaker	Designation	Coated														Coated cermet		Cermet	Uncoated	Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH8005	AH8015	AH6225	AH6235	AH725	AH120	GH730	GH330	GH110	GT9530	AT9530	NS9530	TH10	RE	IC	S	D1
Finishing	**W20**	**CCGT09T302R-W20**																		●	●	0.2	9.525	3.97	4.4
		CCGT09T302L-W20																●		●	●	0.2	9.525	3.97	4.4
		CCGT09T304R-W20																		●		0.4	9.525	3.97	4.4
		CCGT09T304L-W20														●	●	●		●	●	0.4	9.525	3.97	4.4
		CCGT09T308R-W20																		●		0.8	9.525	3.97	4.4
		CCGT09T308L-W20																●		●		0.8	9.525	3.97	4.4
Finishing to medium cutting	**PSS**	**CCMT060204-PSS**	●	●	●				●	●	●	●	●					●		●		0.4	6.35	2.38	2.8
		CCMT060208-PSS	●	●	●				●	●	●	●	●					●		●		0.8	6.35	2.38	2.8
		CCMT09T304-PSS	●	●	●				●	●	●	●	●					●		●		0.4	9.525	3.97	4.4
		CCMT09T308-PSS	●	●	●				●	●	●	●	●					●		●		0.8	9.525	3.97	4.4
		CCMT120404-PSS	●	●	●						●	●	●									0.4	12.7	4.76	5.5
		CCMT120408-PSS	●	●	●						●	●	●									0.8	12.7	4.76	5.5
		CCMT120412-PSS	●	●	●						●	●	●									1.2	12.7	4.76	5.5
	PS	**CCMT060202-PS**	●	●	●				●	●	●	●	●	●	●			●	●	●		0.2	6.35	2.38	2.8
		CCMT060204-PS	●	●	●				●	●	●	●	●	●	●			●	●	●		0.4	6.35	2.38	2.8
		CCMT060208-PS	●	●	●				●	●	●	●	●	●	●			●	●	●		0.8	6.35	2.38	2.8
		CCMT09T302-PS	●	●	●				●	●	●	●	●	●	●			●	●	●		0.2	9.525	3.97	4.4
		CCMT09T304-PS	●	●	●				●	●	●	●	●	●	●			●	●	●		0.4	9.525	3.97	4.4
		CCMT09T308-PS	●	●	●				●	●	●	●	●	●	●			●	●	●		0.8	9.525	3.97	4.4
		CCMT120404-PS	●	●	●				●	●	●	●	●									0.4	12.7	4.76	5.5
		CCMT120408-PS	●	●	●				●	●	●	●	●									0.8	12.7	4.76	5.5
		CCMT120412-PS	●	●	●						●	●	●									1.2	12.7	4.76	5.5
	TM	**CCMT060202-TM**	●	●	●					●	●									●		0.2	6.35	2.38	2.8
		CCMT060204-TM	●	●	●					●	●									●		0.4	6.35	2.38	2.8
		CCMT060208-TM	●	●	●					●	●									●		0.8	6.35	2.38	2.8
		CCMT09T302-TM	●	●	●					●	●									●		0.2	9.525	3.97	4.4
		CCMT09T304-TM	●	●	●					●	●									●		0.4	9.525	3.97	4.4
		CCMT09T308-TM	●	●	●					●	●									●		0.8	9.525	3.97	4.4
	CM	**CCMT060204-CM**				●	●	●														0.4	6.35	2.38	2.8
		CCMT060208-CM				●	●	●														0.8	6.35	2.38	2.8
		CCMT09T304-CM				●	●	●														0.4	9.525	3.97	4.4
		CCMT09T308-CM				●	●	●														0.8	9.525	3.97	4.4
		CCMT09T312-CM						●														1.2	9.525	3.97	4.4
		CCMT120404-CM						●														0.4	12.7	4.76	5.5
		CCMT120408-CM						●														0.8	12.7	4.76	5.5

● : Line up

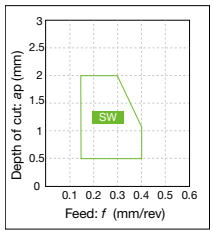
Chip control range

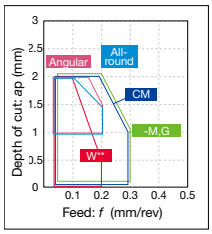




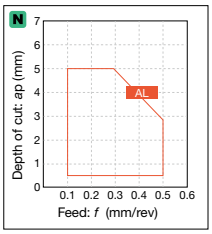


*-M,G: Without chipbreaker





*-M,G: Without chipbreaker



Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

| | | |

Insert POSITIVE TYPE

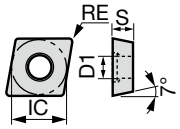
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

CC



Rhombic, 80° with hole Positive 7°

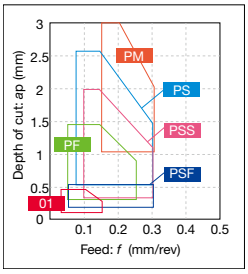
P	Steel	●ɔ	ɔ✣	ɔ	ɔ✣	✣	ɔ	●ɔ	ɔ	●				●ɔ			●ɔ			●							
M	Stainless	●ɔ		●	●ɔ	✣	ɔ	●ɔ	ɔ	●										●							
K	Cast iron	●ɔ					ɔ	●ɔ	ɔ	●				●ɔ			●ɔ			●							
N	Non-ferrous																			●							
S	Superalloy						●	●ɔ		●																	
H	Hard material																										

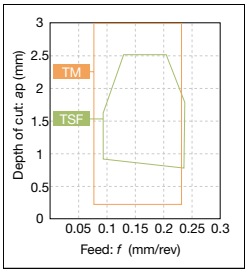


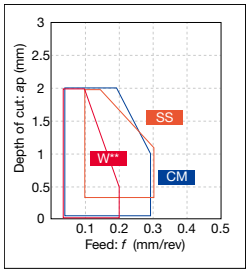
Application	Chipbreaker	Designation	Coated									Coated cermet		Cermet		Uncoated				Dimension (mm)			
			T9215	T9225	T6215	AH6225	AH6235	AH725	AH120	GH730	GH110	GT9530		NS9530		TH10				RE	IC	S	D1
Finishing to medium cutting	-	CCGW060202														●				0.2	6.35	2.38	2.8
		CCGW060204														●				0.4	6.35	2.38	2.8
		CCGW09T304									●					●				0.4	9.525	3.97	4.4
Medium cutting	PM	CCMT060204-PM	●	●	●	●	●	●	●	●		●		●						0.4	6.35	2.38	2.8
		CCMT060208-PM	●	●	●	●	●	●	●	●		●		●						0.8	6.35	2.38	2.8
		CCMT09T304-PM	●	●	●	●	●	●	●	●		●		●						0.4	9.525	3.97	4.4
		CCMT09T308-PM	●	●	●	●	●	●	●	●		●		●						0.8	9.525	3.97	4.4
		CCMT09T312-PM	●	●	●	●	●	●												1.2	9.525	3.97	4.4
		CCMT120408-PM			●	●	●	●												0.8	12.7	4.76	5.5
		CCMT120412-PM			●	●	●	●												1.2	12.7	4.76	5.5
	24	CCMT060202-24		●										●						0.2	6.35	2.38	2.8
		CCMT060204-24	●	●					●					●						0.4	6.35	2.38	2.8
		CCMT060208-24	●	●		●								●						0.8	6.35	2.38	2.8
		CCMT09T302-24		●										●						0.2	9.525	3.97	4.4
		CCMT09T304-24	●	●										●						0.4	9.525	3.97	4.4
		CCMT09T308-24	●	●		●			●					●						0.8	9.525	3.97	4.4
		CCMT120408-24	●	●					●					●						0.8	12.7	4.76	5.5

● : Line up

Chip control range







Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

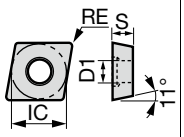
● : Continuous cutting
c : Light interrupted cutting
✠ : Heavy interrupted cutting

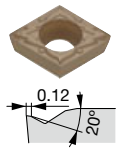
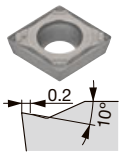
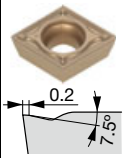
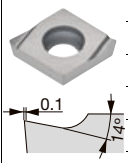
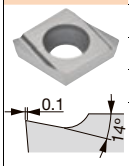
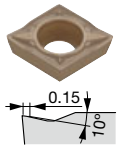
CP



Rhombic, 80° with hole Positive 11°

P	Steel	●c	c✠	c		c✠	✠	c							●c			●c			●										
M	Stainless	●c		●	c	●c	✠	c													●										
K	Cast iron	●c						c							●c			●c			●										
N	Non-ferrous																				●										
S	Superalloy				c			●																							
H	Hard material																														



Application	Chipbreaker	Designation	Coated								Coated cermet		Cermet		Uncoated				Dimension (mm)			
			T9215	T9225	T6215	AH8015	AH6225	AH6235	AH725		GT9530		NS9530		TH10				RE	IC	S	D1
Finishing	**PSF**	**CPMT060202-PSF**							●										0.2	6.35	2.38	2.8
		CPMT060204-PSF	●	●					●										0.4	6.35	2.38	2.8
		CPMT080202-PSF							●										0.2	7.94	2.38	3.4
		CPMT080204-PSF	●	●					●										0.4	7.94	2.38	3.4
		CPMT090302-PSF							●		●		●						0.2	9.525	3.18	4.4
		CPMT090304-PSF	●	●					●		●		●						0.4	9.525	3.18	4.4
		CPMT09T302-PSF							●										0.2	9.525	3.97	4.4
		CPMT09T304-PSF	●	●					●										0.4	9.525	3.97	4.4
	PF	**CPMT090302-PF**									●		●						0.2	9.525	3.18	4.4
		CPMT090304-PF									●		●						0.4	9.525	3.18	4.4
	TSF	**CPMT060202-TSF**	●	●	●	●	●						●						0.2	6.35	2.38	2.8
		CPMT060204-TSF	●	●	●	●	●						●						0.4	6.35	2.38	2.8
		CPMT060208-TSF	●	●	●	●	●						●						0.8	6.35	2.38	2.8
		CPMT09T302-TSF	●	●	●	●	●						●						0.2	9.525	3.97	4.4
		CPMT09T304-TSF	●	●	●	●	●						●						0.4	9.525	3.97	4.4
		CPMT09T308-TSF	●	●	●	●	●						●						0.8	9.525	3.97	4.4
	W15	**CPGT050202L-W15**											●						0.2	5.56	2.35	2.5
		CPGT050204L-W15											●						0.4	5.56	2.35	2.5
		CPGT080202R-W15													●				0.2	7.94	2.38	3.4
		CPGT080202L-W15											●		●				0.2	7.94	2.38	3.4
		CPGT080204R-W15													●				0.4	7.94	2.38	3.4
		CPGT080204L-W15											●		●				0.4	7.94	2.38	3.4
	W20	**CPGT090302R-W20**											●		●				0.2	9.525	3.18	4.4
		CPGT090302L-W20											●		●				0.2	9.525	3.18	4.4
		CPGT090304R-W20											●		●				0.4	9.525	3.18	4.4
		CPGT090304L-W20											●		●				0.4	9.525	3.18	4.4
Finishing to medium cutting	**PSS**	**CPMT060204-PSS**	●	●					●		●		●						0.4	6.35	2.38	2.8
		**CPMT080204-PSS**	●	●	●		●	●	●		●		●						0.4	7.94	2.38	3.4
		CPMT080208-PSS	●	●	●		●	●	●		●		●						0.8	7.94	2.38	3.4
		CPMT090304-PSS	●	●	●		●	●	●		●		●						0.4	9.525	3.18	4.4
		CPMT090308-PSS	●	●	●		●	●	●		●		●						0.8	9.525	3.18	4.4
		CPMT09T304-PSS	●	●					●										0.4	9.525	3.97	4.4
		CPMT09T308-PSS	●	●					●										0.8	9.525	3.97	4.4

● : Line up

Reference pages: Internal toolholder → D018 - Cartridge → K181 -
Boring bar tool → K199

Insert POSITIVE TYPE

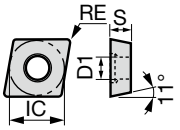
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

CP



Rhombic, 80° with hole Positive 11°

P	Steel	●ɔ	ɔ✣	ɔ						ɔ✣	✣		ɔ	●ɔ	ɔ			●ɔ	●ɔ		●ɔ			●				
M	Stainless	●ɔ		●				●	ɔ	●ɔ	✣		ɔ	●ɔ	ɔ									●				
K	Cast iron	●ɔ			●	●ɔ	ɔ						ɔ	●ɔ	ɔ			●ɔ	●ɔ		●ɔ			●				
N	Non-ferrous																							●				
S	Superalloy							●	ɔ			ɔ	●	●ɔ														
H	Hard material																												



Application	Chipbreaker	Designation	Coated														Coated cermet		Cermet	Uncoated	Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH8005	AH8015	AH6225	AH6235	AH905	AH725	AH120	GH730	GT9530	AT9530	NS9530	TH10	RE	IC	S	D1
Finishing to medium cutting	**PS**	**CPMT060202-PS**	●	●	●				●	●	●			●		●			●		0.2	6.35	2.38	2.8
		CPMT060204-PS	●	●	●				●	●	●			●	●	●	●	●	●		0.4	6.35	2.38	2.8
		CPMT060208-PS	●	●	●					●	●								●		0.8	6.35	2.38	2.8
		CPMT080202-PS	●	●	●						●	●		●			●	●	●		0.2	7.94	2.38	3.4
		CPMT080204-PS	●	●	●						●	●		●			●	●	●		0.4	7.94	2.38	3.4
		CPMT080208-PS	●	●	●						●	●		●			●	●	●		0.8	7.94	2.38	3.4
		CPMT090304-PS	●	●	●						●	●		●			●	●	●		0.4	9.525	3.18	4.4
		CPMT090308-PS	●	●	●						●	●		●			●	●	●	●	0.8	9.525	3.18	4.4
		CPMT09T302-PS	●	●	●				●	●	●			●					●		0.2	9.525	3.97	4.4
		CPMT09T304-PS	●	●	●				●	●	●			●					●		0.4	9.525	3.97	4.4
		CPMT09T308-PS	●	●	●				●	●	●			●	●				●		0.8	9.525	3.97	4.4
	TM	**CPMT060202-TM**	●	●	●					●	●								●		0.2	6.35	2.38	2.8
		CPMT060204-TM	●	●	●					●	●								●		0.4	6.35	2.38	2.8
		CPMT060208-TM	●	●	●					●	●								●		0.8	6.35	2.38	2.8
		CPMT09T302-TM	●	●	●					●	●								●		0.2	9.525	3.97	4.4
		CPMT09T304-TM	●	●	●					●	●								●		0.4	9.525	3.97	4.4
		CPMT09T308-TM	●	●	●					●	●								●		0.8	9.525	3.97	4.4
	CM	**CPMT060204-CM**						●													0.4	6.35	2.38	2.8
		CPMT060208-CM						●													0.8	6.35	2.38	2.8
		CPMT080204-CM						●													0.4	7.94	2.38	3.4
		CPMT080208-CM						●													0.8	7.94	2.38	3.4
		CPMT090304-CM				●	●	●													0.4	9.525	3.18	4.4
		CPMT090308-CM				●	●	●													0.8	9.525	3.18	4.4
		CPMT09T304-CM				●	●	●													0.4	9.525	3.97	4.4
		CPMT09T308-CM				●	●	●													0.8	9.525	3.97	4.4
		CPMT09T312-CM						●													1.2	9.525	3.97	4.4
		CPMT120408-CM						●													0.8	12.7	4.76	5.5
		CPMT120412-CM						●													1.2	12.7	4.76	5.5
	All-round	**CPMT120408**							●	●			●								0.8	12.7	4.76	5.5

● : Line up

Reference pages: Internal toolholder → D018 - Cartridge → K181 -
Boring bar tool → K199

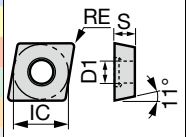
POSITIVE TYPE / DOUBLE SIDED

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

CP

Rhombic, 80° with hole
Positive 11°

P	Steel	●ⓒ ⓒ✠ ⓒ ⓒ ✠ ⓒ ●ⓒ
M	Stainless	●ⓒ ● ●ⓒ ✠ ⓒ
K	Cast iron	●ⓒ ⓒ ⓒ ●ⓒ
N	Non-ferrous	
S	Superalloy	●
H	Hard material	



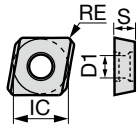
Application	Chipbreaker	Designation	Coated T9215	T9225	T6215	T5115	AH6225	AH6235	AH725	Cermet NS9530	RE	IC	S	D1
Finishing to medium cutting	-	CPMW080204				●					0.4	7.94	2.38	3.4
		CPMW080208				●					0.8	7.94	2.38	3.4
		CPMW090304				●					0.4	9.525	3.18	4.4
		CPMW090308				●					0.8	9.525	3.18	4.4
Medium cutting	PM	CPMT060204-PM			●		●	●	●		0.4	6.35	2.38	2.8
		CPMT060208-PM		●	●		●	●	●		0.8	6.35	2.38	2.8
		CPMT090304-PM		●	●		●	●	●	●	0.4	9.525	3.18	4.4
		CPMT090308-PM		●	●		●	●	●	●	0.8	9.525	3.18	4.4
	24	CPMT080204-24	●								0.4	7.94	2.38	3.4
		CPMT080208-24		●							0.8	7.94	2.38	3.4
		CPMT090308-24		●							0.8	9.525	3.18	4.4
		CPMT120408-24								●	0.8	12.7	4.76	5.5
		CPMT160508-24		●						●	0.8	15.875	5.56	5.5
		CPMT160512-24								●	1.2	15.875	5.56	5.5

● : Line up

CX

Rhombic, 80° with hole

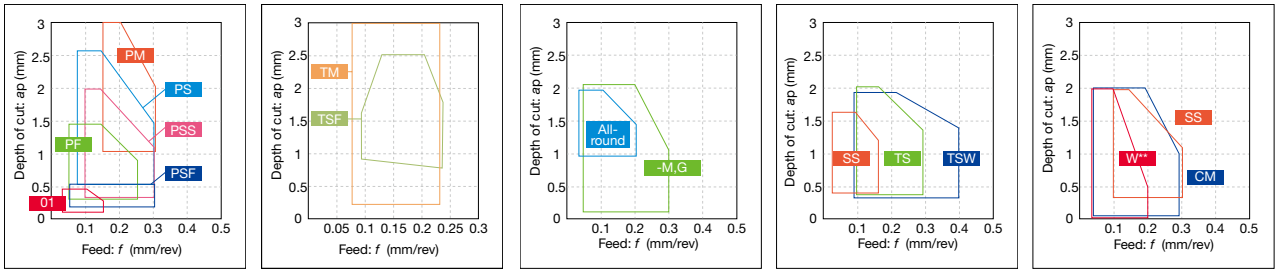
P	Steel	●ⓒ ⓒ✠ ⓒ
M	Stainless	●ⓒ ⓒ ⓒ
K	Cast iron	●ⓒ ⓒ
N	Non-ferrous	
S	Superalloy	ⓒ ●
H	Hard material	



Application	Chipbreaker	Designation	Coated T9215	T9225	AH8015	AH725	RE	IC	S	D1
Finishing to medium cutting	TS	CXMU060302R-TS	●	●	●	●	0.2	6.35	3.18	2.7
		CXMU060302L-TS	●	●	●	●	0.2	6.35	3.18	2.7
		CXMU060304R-TS	●	●	●	●	0.4	6.35	3.18	2.7
		CXMU060304L-TS	●	●	●	●	0.4	6.35	3.18	2.7
		CXMU060308R-TS	●	●	●	●	0.8	6.35	3.18	2.7
		CXMU060308L-TS	●	●	●	●	0.8	6.35	3.18	2.7

● : Line up

Chip control range



*-M,G: Without chipbreaker

Reference pages: CPM*... : Internal toolholder → D018 -, Cartridge → K181 -, Boring bar tool → K199
CXMU...: Internal toolholder → D021 -

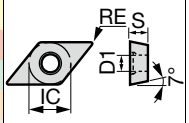
Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

DC

Rhombic, 55°
with hole
Positive 7°

		AH725	SH7025	SH725	SH730	J740	AT9530	J9530	NS9530	KS05F
P	Steel	ɔ	●ɔ	●ɔ	●ɔ		●ɔ	●ɔ	●ɔ	
M	Stainless	ɔ	●ɔ	●ɔ	●ɔ					
K	Cast iron	ɔ					●ɔ	●ɔ	●ɔ	●
N	Non-ferrous									●
S	Superalloy	●		●ɔ						●
H	Hard material									



Application	Chipbreaker	Designation	Coated					Coated cermet		Cermet	Uncoated	RE	IC	S	D1
			AH725	SH7025	SH725	SH730	J740	AT9530	J9530	NS9530	KS05F	Dimension (mm)			
Precision finishing (sharp edge)	JP	DCGT070200FN-JP		●	●							<0.05	6.35	2.38	2.8
		DCGT070201FN-JP		●	●							<0.1	6.35	2.38	2.8
		DCGT070202FN-JP		●	●							<0.2	6.35	2.38	2.8
		DCGT11T300FN-JP		●	●					●		<0.05	9.525	3.97	4.4
		DCGT11T301FN-JP		●	●					●		<0.1	9.525	3.97	4.4
		DCGT11T302FN-JP		●	●					●		<0.2	9.525	3.97	4.4
	JP	DCGT11T300MF-JP									●	<0.05	9.525	3.97	4.4
		DCGT11T301MF-JP									●	<0.1	9.525	3.97	4.4
		DCGT11T302MF-JP									●	<0.2	9.525	3.97	4.4
	01	DCGT070202F-01		●	●							<0.2	6.35	2.38	2.8
		DCGT070204F-01		●	●							<0.4	6.35	2.38	2.8
		DCGT11T302F-01		●	●							<0.2	9.525	3.97	4.4
		DCGT11T304F-01		●	●							<0.4	9.525	3.97	4.4
Precision finishing	01	DCGT070202-01					●		●			0.2	6.35	2.38	2.8
		DCGT11T302-01					●					0.2	9.525	3.97	4.4
Finishing (sharp edge)	JS	DCGT070200FN-JS		●	●	●						<0.05	6.35	2.38	2.8
		DCGT070201FN-JS		●	●	●						<0.1*	6.35	2.38	2.8
		DCGT070202FN-JS		●	●	●						<0.2*	6.35	2.38	2.8
		DCGT11T300FN-JS		●	●	●				●		0.03	9.525	3.97	4.4
		DCGT11T301FN-JS		●	●	●				●		<0.1*	9.525	3.97	4.4
		DCGT11T302FN-JS		●	●	●				●		<0.2*	9.525	3.97	4.4
		DCGT11T304FN-JS		●	●	●				●		<0.4*	9.525	3.97	4.4
Finishing	JS	DCGT070201N-JS	●					●				0.1	6.35	2.38	2.8
		DCGT070202N-JS	●									0.2	6.35	2.38	2.8
		DCGT11T301N-JS	●					●				0.1	9.525	3.97	4.4
		DCGT11T302N-JS	●					●				0.2	9.525	3.97	4.4
		DCGT11T304N-JS	●					●				0.4	9.525	3.97	4.4

*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

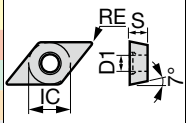
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

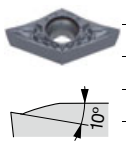
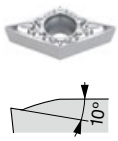
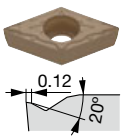
DC

Rhombic, 55° with hole Positive 7°



		T9215	T9225	AH8005	AH8015	AH6225	AH905	AH725	GT9530	NS9530	KS05F
P	Steel	●◐	◐✠			◐✠		◐	●◐	●◐	
M	Stainless	●◐		●	◐	●◐		◐			
K	Cast iron	●◐						◐	●◐	●◐	●
N	Non-ferrous										●
S	Superalloy			●	◐		◐	●			●
H	Hard material										

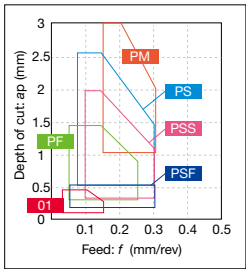


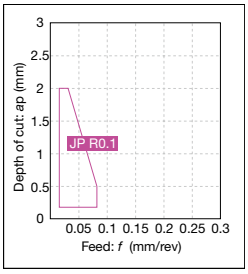
Application	Chipbreaker	Designation	Coated T9215	Coated T9225	Coated AH8005	Coated AH8015	Coated AH6225	Coated AH905	Coated AH725	Coated cermet GT9530	Cermet NS9530	Uncoated KS05F	Dimension (mm) RE	IC	S	D1
Finishing	JS 	DCGT070201M-JS				●	●						<0.1	6.35	2.38	2.8
		DCGT070202M-JS				●	●						<0.2	6.35	2.38	2.8
		DCGT11T301M-JS				●	●						<0.1	9.525	3.97	4.4
		DCGT11T302M-JS				●	●						<0.2	9.525	3.97	4.4
		DCGT11T304M-JS				●	●						<0.4	9.525	3.97	4.4
Finishing (sharp edge)	JS 	DCGT11T300MF-JS										●	<0.05	9.525	3.97	4.4
		DCGT11T301MF-JS										●	<0.1	9.525	3.97	4.4
		DCGT11T302MF-JS										●	<0.2	9.525	3.97	4.4
		DCGT11T304MF-JS										●	<0.4	9.525	3.97	4.4
Finishing	PSF 	DCMT070202-PSF							●	●	●		0.2	6.35	2.38	2.8
		DCMT070204-PSF	●	●					●	●	●		0.4	6.35	2.38	2.8
		DCMT11T302-PSF							●	●	●		0.2	9.525	3.97	4.4
		DCMT11T304-PSF	●	●	●	●		●	●	●	●		0.4	9.525	3.97	4.4
		DCMT11T308-PSF	●	●	●	●		●	●				0.8	9.525	3.97	4.4

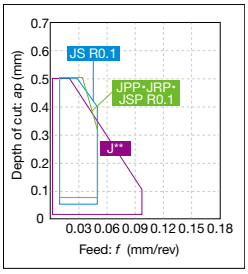
*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Chip control range







*Chip control range with typical R0.1

Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

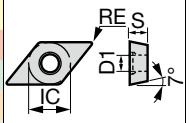
Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

DC

Rhombic, 55° with hole
Positive 7°

P	Steel	●ɔ	●ɔ✣	●ɔ		●ɔ✣	●ɔ	●ɔ	●ɔ	●ɔ	●ɔ			●ɔ	●ɔ			●ɔ			●									
M	Stainless	●ɔ		●	●ɔ	●ɔ	●ɔ	●ɔ	●ɔ	●ɔ	●ɔ										●									
K	Cast iron	●ɔ							●ɔ	●ɔ				●ɔ	●ɔ			●ɔ			●									
N	Non-ferrous																				●									
S	Superalloy				●ɔ																									
H	Hard material																													



Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet		Uncoated				Dimension (mm)			
			T9215	T9225	T6215	AH8015	AH6225	SH7025	SH725	J740	GH730	GH330	GT9530	J9530	NS9530		TH10				RE	IC	S	D1
Finishing	PF	DCMT070202-PF									●		●		●						0.2	6.35	2.38	2.8
		DCMT070204-PF					●				●		●		●						0.4	6.35	2.38	2.8
		DCMT070208-PF					●						●		●						0.8	6.35	2.38	2.8
		DCMT11T302-PF									●		●		●						0.2	9.525	3.97	4.4
		DCMT11T304-PF									●		●		●						0.4	9.525	3.97	4.4
		DCMT11T308-PF											●								0.8	9.525	3.97	4.4
	TSF	DCMT070202-TSF	●	●	●	●	●								●						0.2	6.35	2.38	2.8
		DCMT070204-TSF	●	●	●	●	●								●						0.4	6.35	2.38	2.8
		DCMT070208-TSF	●	●	●	●	●								●						0.8	6.35	2.38	2.8
		DCMT11T302-TSF	●	●	●	●	●								●						0.2	9.525	3.97	4.4
		DCMT11T304-TSF	●	●	●	●	●								●						0.4	9.525	3.97	4.4
		DCMT11T308-TSF	●	●	●	●	●								●						0.8	9.525	3.97	4.4
Finishing (sharp edge)	J10	DCGT070200FR-J10						●	●	●							●				0.03	6.35	2.38	2.8
		DCGT070200FL-J10							●	●							●				0.03	6.35	2.38	2.8
		DCGT070201FR-J10						●	●	●					●		●				0.1	6.35	2.38	2.8
		DCGT070201FL-J10							●	●					●		●				0.1	6.35	2.38	2.8
		DCGT070202FR-J10						●	●	●					●		●				0.2	6.35	2.38	2.8
		DCGT070202FL-J10						●	●	●					●		●				0.2	6.35	2.38	2.8
		DCGT070204FR-J10						●	●												0.4	6.35	2.38	2.8
		DCGT070204FL-J10						●	●												0.4	6.35	2.38	2.8
		DCGT11T300FR-J10						●	●	●							●				0.03	9.525	3.97	4.4
		DCGT11T300FL-J10							●	●							●				0.03	9.525	3.97	4.4
		DCGT11T301FR-J10						●	●	●					●		●				0.1	9.525	3.97	4.4
		DCGT11T301FL-J10							●	●					●		●				0.1	9.525	3.97	4.4
		DCGT11T302FR-J10						●	●	●					●		●				0.2	9.525	3.97	4.4
		DCGT11T302FL-J10						●	●	●					●		●				0.2	9.525	3.97	4.4
Finishing	J10	DCGT070202R-J10												●							0.2	6.35	2.38	2.8
		DCGT11T302R-J10												●							0.2	9.525	3.97	4.4
	W10	DCGT070200R-W10															●				0.03	6.35	2.38	2.8
		DCGT070200L-W10															●				0.03	6.35	2.38	2.8
		DCGT070202R-W10													●		●				0.2	6.35	2.38	2.8
		DCGT070202L-W10											●		●						0.2	6.35	2.38	2.8
		DCGT070204R-W10										●			●		●				0.4	6.35	2.38	2.8
		DCGT070204L-W10										●	●		●		●				0.4	6.35	2.38	2.8
	W15	DCGT11T302R-W15													●		●				0.2	9.525	3.97	4.4
		DCGT11T302L-W15											●		●						0.2	9.525	3.97	4.4
		DCGT11T304R-W15													●						0.4	9.525	3.97	4.4
		DCGT11T304L-W15										●	●		●		●				0.4	9.525	3.97	4.4
		DCGT11T308R-W15													●		●				0.8	9.525	3.97	4.4
		DCGT11T308L-W15													●		●				0.8	9.525	3.97	4.4

● : Line up

Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

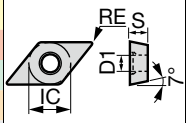
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

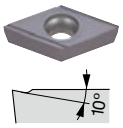
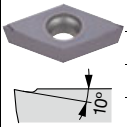
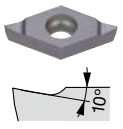
DC

Rhombic, 55° with hole Positive 7°



P	Steel	●◐	●◐
M	Stainless	●◐	●◐
K	Cast iron		
N	Non-ferrous		
S	Superalloy		●◐
H	Hard material		

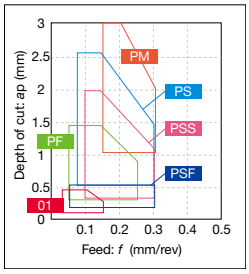


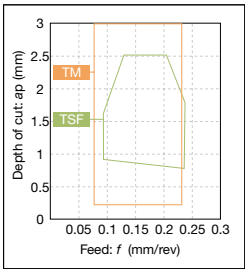
Application	Chipbreaker	Designation	Coated SH725	Coated SH730	RE	IC	S	D1
Finishing (sharp edge)	JPP	DCET0702008MFR-JPP	●	●	<0.08*	6.35	2.38	2.8
		DCET070201MFR-JPP	●	●	<0.1*	6.35	2.38	2.8
		DCET070201MFL-JPP	●	●	<0.1*	6.35	2.38	2.8
		DCET070202MFR-JPP	●	●	<0.2*	6.35	2.38	2.8
		DCET070202MFL-JPP	●	●	<0.2*	6.35	2.38	2.8
		DCET11T3008MFR-JPP	●	●	<0.08*	9.525	3.97	4.4
		DCET11T301MFR-JPP	●	●	<0.1*	9.525	3.97	4.4
		DCET11T301MFL-JPP	●	●	<0.1*	9.525	3.97	4.4
		DCET11T3018MFR-JPP	●	●	<0.18*	9.525	3.97	4.4
		DCET11T3018MFL-JPP	●		<0.18*	9.525	3.97	4.4
		DCET11T302MFR-JPP	●	●	<0.2*	9.525	3.97	4.4
		DCET11T302MFL-JPP	●	●	<0.2*	9.525	3.97	4.4
	JRP	DCET0702008MFR-JRP	●	●	<0.08*	6.35	2.38	2.8
		DCET070201MFR-JRP	●	●	<0.1*	6.35	2.38	2.8
		DCET070201MFL-JRP	●		<0.1*	6.35	2.38	2.8
		DCET070218MFR-JRP		●	<0.18*	6.35	2.38	2.8
		DCET070218MFL-JRP	●	●	<0.18*	6.35	2.38	2.8
		DCET070202MFR-JRP	●	●	<0.2*	6.35	2.38	2.8
		DCET070202MFL-JRP	●	●	<0.2*	6.35	2.38	2.8
		DCET11T3008MFR-JRP	●	●	<0.08*	9.525	3.97	4.4
		DCET11T301MFR-JRP	●	●	<0.1*	9.525	3.97	4.4
		DCET11T3018MFR-JRP		●	<0.18*	9.525	3.97	4.4
		DCET11T3018MFL-JRP	●		<0.18*	9.525	3.97	4.4
		DCET11T302MFR-JRP	●	●	<0.2*	9.525	3.97	4.4
		DCET11T302MFL-JRP	●	●	<0.2*	9.525	3.97	4.4
	JSP	DCET0702008MFN-JSP	●	●	<0.08*	6.35	2.38	2.8
		DCET070201MFN-JSP	●	●	<0.1*	6.35	2.38	2.8
		DCET070202MFN-JSP	●	●	<0.2*	6.35	2.38	2.8
		DCET11T3008MFN-JSP	●	●	<0.08*	9.525	3.97	4.4
		DCET11T301MFN-JSP	●	●	<0.1*	9.525	3.97	4.4
		DCET11T3018MFN-JSP	●	●	<0.18*	9.525	3.97	4.4
		DCET11T302MFN-JSP	●	●	<0.2*	9.525	3.97	4.4

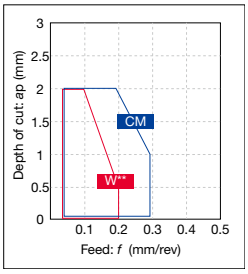
*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

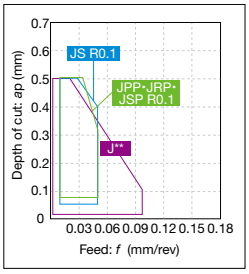
● : Line up

Chip control range









*Chip control range with typical R0.1

Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

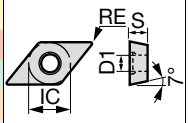
Insert POSITIVE TYPE

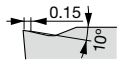
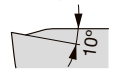
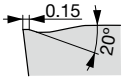
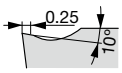
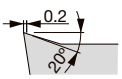
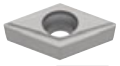
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

DC

Rhombic, 55°
with hole
Positive 7°

P	Steel	●ɔ	ɔ✠	ɔ							ɔ✠	✠		ɔ	●ɔ	ɔ		●ɔ	●ɔ			●ɔ				●					
M	Stainless	●ɔ		●				●	ɔ	●ɔ	✠		ɔ	●ɔ	ɔ											●					
K	Cast iron	●ɔ			●	●ɔ	ɔ						ɔ	●ɔ	ɔ		●ɔ	●ɔ			●ɔ				●	●					
N	Non-ferrous																								●	●					
S	Superalloy							●	ɔ				ɔ	●	●ɔ										●						
H	Hard material																														



Application	Chipbreaker	Designation	Coated														Coated cermet		Cermet	Uncoated		Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH8005	AH8015	AH6225	AH6235	AH905	AH725	AH120	GH730	GT9530	AT9530	NS9530	KS05F	TH10	RE	IC	S	D1
Finishing to medium cutting	**PSS**	**DCMT070204-PSS**	●	●	●						●	●		●			●		●			0.4	6.35	2.38	2.8
		DCMT070208-PSS	●	●	●						●	●		●			●		●			0.8	6.35	2.38	2.8
		DCMT11T304-PSS	●	●	●				●	●	●	●	●	●			●		●			0.4	9.525	3.97	4.4
		DCMT11T308-PSS	●	●	●				●	●	●	●	●	●			●		●			0.8	9.525	3.97	4.4
		DCMT11T312-PSS	●	●	●				●	●	●	●	●	●								1.2	9.525	3.97	4.4
	PS	**DCMT070202-PS**	●	●	●				●	●	●	●		●	●	●	●	●	●			0.2	6.35	2.38	2.8
		DCMT070204-PS	●	●	●				●	●	●	●		●	●	●	●	●	●			0.4	6.35	2.38	2.8
		DCMT070208-PS	●	●	●				●	●	●			●		●	●	●	●			0.8	6.35	2.38	2.8
		DCMT11T302-PS	●	●	●				●	●	●	●		●	●	●	●	●	●			0.2	9.525	3.97	4.4
		DCMT11T304-PS	●	●	●				●	●	●	●	●	●	●	●	●	●	●			0.4	9.525	3.97	4.4
		DCMT11T308-PS	●	●	●				●	●	●	●	●	●	●	●	●	●	●			0.8	9.525	3.97	4.4
		DCMT11T312-PS	●	●	●				●	●	●	●	●	●								1.2	9.525	3.97	4.4
	TM	**DCMT070202-TM**	●	●	●					●	●								●			0.2	6.35	2.38	2.8
		DCMT070204-TM	●	●	●					●	●								●			0.4	6.35	2.38	2.8
		DCMT070208-TM	●	●	●					●	●								●			0.8	6.35	2.38	2.8
		DCMT11T302-TM	●	●	●					●	●								●			0.2	9.525	3.97	4.4
		DCMT11T304-TM	●	●	●					●	●								●			0.4	9.525	3.97	4.4
		DCMT11T308-TM	●	●	●					●	●								●			0.8	9.525	3.97	4.4
	CM	**DCMT070204-CM**						●														0.4	6.35	2.38	2.8
		DCMT070208-CM						●														0.8	6.35	2.38	2.8
		**DCMT11T304-CM**				●	●	●														0.4	9.525	3.97	4.4
		DCMT11T308-CM				●	●	●														0.8	9.525	3.97	4.4
		DCMT11T312-CM						●														1.2	9.525	3.97	4.4
Finishing to medium cutting for non-ferrous alloys	**AL**	**DCGT070202-AL**																		●		0.2	6.35	2.38	2.8
		DCGT070204-AL																		●		0.4	6.35	2.38	2.8
		**DCGT11T302-AL**																		●		0.2	9.525	3.97	4.4
		DCGT11T304-AL																		●		0.4	9.525	3.97	4.4
		DCGT11T308-AL																		●		0.8	9.525	3.97	4.4
Finishing to medium cutting	**All-round**	**DCGT070202**																	●			0.2	6.35	2.38	2.8
		DCGT070204																	●			0.4	6.35	2.38	2.8
		**DCGT11T302**																	●			0.2	9.525	3.97	4.4
		DCGT11T304																	●			0.4	9.525	3.97	4.4
		DCGT11T308																	●			0.8	9.525	3.97	4.4
	Angular	**DCGT070202R**																			●	0.2	6.35	2.38	2.8
		DCGT070202L																			●	0.2	6.35	2.38	2.8
		DCGT070204R																			●	0.4	6.35	2.38	2.8
		DCGT070204L																			●	0.4	6.35	2.38	2.8
		DCGT11T302R																			●	0.2	9.525	3.97	4.4
		DCGT11T302L																			●	0.2	9.525	3.97	4.4
		DCGT11T304R																			●	0.4	9.525	3.97	4.4
		DCGT11T304L																			●	0.4	9.525	3.97	4.4

Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

● : Line up

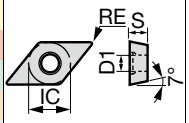
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

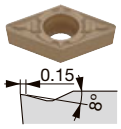
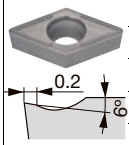
DC



Rhombic, 55° with hole Positive 7°

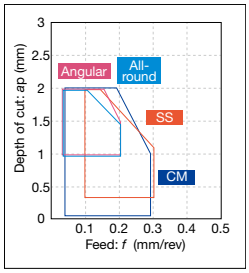
P	Steel	●ⓒ	●ⓒ	●ⓒ	✠	●ⓒ	●ⓒ	✠	●ⓒ	●ⓒ	●ⓒ	●			●ⓒ			●ⓒ			●										
M	Stainless	●ⓒ		●		●ⓒ	●ⓒ	✠	●ⓒ	●ⓒ	●ⓒ	●									●										
K	Cast iron	●ⓒ			●ⓒ				●ⓒ	●ⓒ	●ⓒ	●			●ⓒ			●ⓒ			●										
N	Non-ferrous																				●										
S	Superalloy								●	●ⓒ		●																			
H	Hard material																														

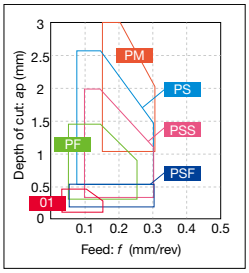


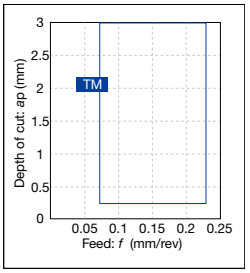
Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet		Uncoated				Dimension (mm)			
			T9215	T9225	T6215	T5115	AH6225	AH6235	AH725	AH120	GH730	GH110	GT9530		NS9530		TH10				RE	IC	S	D1
Finishing to medium cutting	23	DCMT070204-23													●						0.4	6.35	2.38	2.8
		DCMT11T304-23													●						0.4	9.525	3.97	4.4
		DCMT11T308-23													●						0.8	9.525	3.97	4.4
	-	DCMW070204				●															0.4	6.35	2.38	2.8
		DCMW070208				●															0.8	6.35	2.38	2.8
		DCMW11T304				●															0.4	9.525	3.97	4.4
		DCMW11T308				●															0.8	9.525	3.97	4.4
	-	DCGW070202															●				0.2	6.35	2.38	2.8
		DCGW070204										●					●				0.4	6.35	2.38	2.8
		DCGW11T304															●				0.4	9.525	3.97	4.4
		DCGW11T308															●				0.8	9.525	3.97	4.4
Medium cutting	PM	DCMT070204-PM	●	●	●		●	●	●	●	●		●		●						0.4	6.35	2.38	2.8
		DCMT070208-PM	●	●	●		●	●	●	●	●		●		●						0.8	6.35	2.38	2.8
		DCMT11T304-PM	●	●	●		●	●	●	●	●		●		●						0.4	9.525	3.97	4.4
		DCMT11T308-PM	●	●	●		●	●	●	●	●		●		●						0.8	9.525	3.97	4.4
		DCMT11T312-PM		●	●		●	●	●												1.2	9.525	3.97	4.4
	24	DCMT070202-24													●						0.2	6.35	2.38	2.8
		DCMT070204-24	●	●											●						0.4	6.35	2.38	2.8
		DCMT070208-24		●											●						0.8	6.35	2.38	2.8
		DCMT11T302-24		●											●						0.2	9.525	3.97	4.4
		DCMT11T304-24	●	●											●						0.4	9.525	3.97	4.4
		DCMT11T308-24	●	●			●								●						0.8	9.525	3.97	4.4

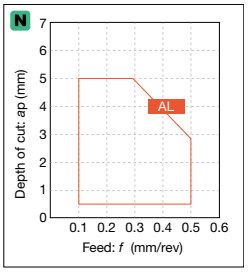
● : Line up

Chip control range









Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

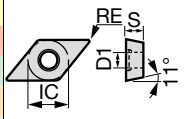
Insert POSITIVE TYPE

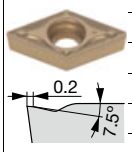
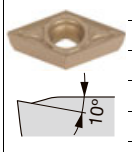
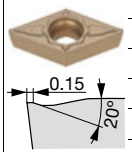
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

DP

Rhombic, 55° with hole Positive 11°

P	Steel	●ɔ ɔ✣ ɔ ✣
M	Stainless	●ɔ ● ɔ ●ɔ
K	Cast iron	●ɔ ●ɔ
N	Non-ferrous	
S	Superalloy	ɔ
H	Hard material	



Application	Chipbreaker	Designation	Coated T9215	Coated T9225	Coated T6215	Coated AH8015	Coated AH6225	Cermet NS9530	Dimension (mm) RE	IC	S	D1
Finishing	TSF	DPMT070202-TSF	●	●	●	●	●	●	0.2	6.35	2.38	2.8
		DPMT070204-TSF	●	●	●	●	●	●	0.4	6.35	2.38	2.8
		DPMT070208-TSF	●	●	●	●	●	●	0.8	6.35	2.38	2.8
		DPMT11T302-TSF	●	●	●	●	●	●	0.2	9.525	3.97	4.4
		DPMT11T304-TSF	●	●	●	●	●	●	0.4	9.525	3.97	4.4
		DPMT11T308-TSF	●	●	●	●	●	●	0.8	9.525	3.97	4.4
Finishing to medium cutting	PS	DPMT070202-PS	●	●	●	●	●	●	0.2	6.35	2.38	2.8
		DPMT070204-PS	●	●	●	●	●	●	0.4	6.35	2.38	2.8
		DPMT070208-PS	●	●	●	●	●	●	0.8	6.35	2.38	2.8
		DPMT11T302-PS	●	●	●	●	●	●	0.2	9.525	3.97	4.4
		DPMT11T304-PS	●	●	●	●	●	●	0.4	9.525	3.97	4.4
		DPMT11T308-PS	●	●	●	●	●	●	0.8	9.525	3.97	4.4
	TM	DPMT070202-TM	●	●	●	●	●	●	0.2	6.35	2.38	2.8
		DPMT070204-TM	●	●	●	●	●	●	0.4	6.35	2.38	2.8
		DPMT070208-TM	●	●	●	●	●	●	0.8	6.35	2.38	2.8
		DPMT11T302-TM	●	●	●	●	●	●	0.2	9.525	3.97	4.4
		DPMT11T304-TM	●	●	●	●	●	●	0.4	9.525	3.97	4.4
		DPMT11T308-TM	●	●	●	●	●	●	0.8	9.525	3.97	4.4

● : Line up

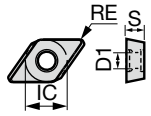
Insert POSITIVE TYPE / DOUBLE SIDE

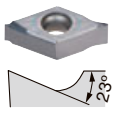
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

DX

Rhombic, 55° with hole

P	Steel	●ɔ
M	Stainless	●ɔ
K	Cast iron	
N	Non-ferrous	
S	Superalloy	
H	Hard material	



Application	Chipbreaker	Designation	Coated SH725	Dimension (mm) RE	IC	S	D1
Finishing (sharp edge)	JRP	DXGU070301MFRE-JRP**	●	<0.1*	6.35	3.18	2.7
		DXGU070301MFLE-JRP**	●	<0.1*	6.35	3.18	2.7
		DXGU070302MFRE-JRP**	●	<0.2*	6.35	3.18	2.7
		DXGU070302MFLE-JRP**	●	<0.2*	6.35	3.18	2.7
	JSS	DXGU070301MFR-JSS	●	<0.1*	6.35	3.18	2.7
		DXGU070301MFL-JSS	●	<0.1*	6.35	3.18	2.7
		DXGU070302MFR-JSS	●	<0.2*	6.35	3.18	2.7
		DXGU070302MFL-JSS	●	<0.2*	6.35	3.18	2.7

* Corner radius (RE) with a sign of inequality (<) means minus tolerance.
** For external turning applications

● : Line up

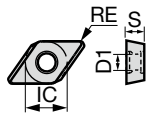
Reference pages: DPMT...: Internal toolholder → D058 -
DXGU...: External toolholder → C045 -, Internal toolholder → D036 -

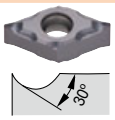
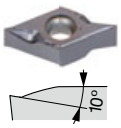
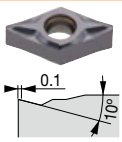
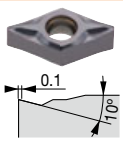
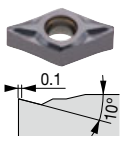
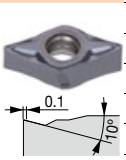
● : Continuous cutting
ᑕ : Light interrupted cutting
✣ : Heavy interrupted cutting

DX

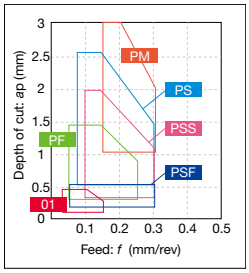
Rhombic, 55° with hole

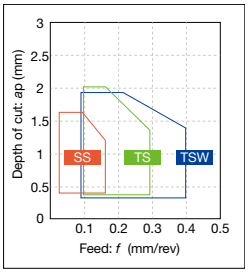
P	Steel	●ᑕ	●✣		ᑕ	●ᑕ		●ᑕ					●ᑕ																		
M	Stainless	●ᑕ		ᑕ	ᑕ	●ᑕ																									
K	Cast iron	●ᑕ			ᑕ			●ᑕ					●ᑕ			●														
N	Non-ferrous															●														
S	Superalloy			ᑕ	●											●														
H	Hard material																														

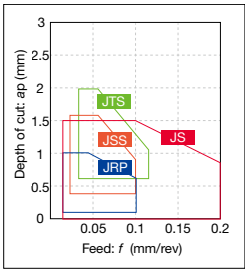


Application	Chipbreaker	Designation	Coated					Coated cermet		Cermet		Uncoated				Dimension (mm)			
			T9215	T9225	AH8015	AH725	SH725	GT9530		NS9530		KS05F				RE	IC	S	D1
Finishing	JSS	DXGU070301MR-JSS				●										<0.1*	6.35	3.18	2.7
		DXGU070301ML-JSS				●										<0.1*	6.35	3.18	2.7
		DXGU070302MR-JSS				●										<0.2*	6.35	3.18	2.7
		DXGU070302ML-JSS				●										<0.2*	6.35	3.18	2.7
	SS	DXGU070302R-SS			●	●		●		●		●				0.2	6.35	3.18	2.7
		DXGU070302L-SS			●	●		●		●		●				0.2	6.35	3.18	2.7
		DXGU070304R-SS			●	●		●		●		●				0.4	6.35	3.18	2.7
		DXGU070304L-SS			●	●		●		●		●				0.4	6.35	3.18	2.7
Finishing to medium cutting (sharp edge)	JS	DXGU070301MFR-JS(1)					●									<0.1*	6.35	3.18	2.7
		DXGU070301MFL-JS(1)					●									<0.1*	6.35	3.18	2.7
		DXGU070302MFR-JS(1)					●									<0.2*	6.35	3.18	2.7
		DXGU070302MFL-JS(1)					●									<0.2*	6.35	3.18	2.7
		DXGU070304MFR-JS(1)					●									<0.4*	6.35	3.18	2.7
		DXGU070304MFL-JS(1)					●									<0.4*	6.35	3.18	2.7
	JTS	DXGU070301MFR-JTS					●									<0.1*	6.35	3.18	2.7
		DXGU070301MFL-JTS					●									<0.1*	6.35	3.18	2.7
		DXGU070302MFR-JTS					●									<0.2*	6.35	3.18	2.7
		DXGU070302MFL-JTS					●									<0.2*	6.35	3.18	2.7
Finishing to medium cutting	JTS	DXGU070301MR-JTS				●										<0.1*	6.35	3.18	2.7
		DXGU070301ML-JTS				●										<0.1*	6.35	3.18	2.7
		DXGU070302MR-JTS				●										<0.2*	6.35	3.18	2.7
		DXGU070302ML-JTS				●										<0.2*	6.35	3.18	2.7
	TS	DXGU070302R-TS			●	●		●		●		●				0.2	6.35	3.18	2.7
		DXGU070302L-TS			●	●		●		●		●				0.2	6.35	3.18	2.7
		DXGU070304R-TS			●	●		●		●		●				0.4	6.35	3.18	2.7
		DXGU070304L-TS			●	●		●		●		●				0.4	6.35	3.18	2.7
		DXGU070308R-TS			●	●		●		●		●				0.8	6.35	3.18	2.7
		DXGU070308L-TS			●	●		●		●		●				0.8	6.35	3.18	2.7
	TS	DXMU070302R-TS	●	●	●	●										0.2	6.35	3.18	2.7
		DXMU070302L-TS	●	●	●	●										0.2	6.35	3.18	2.7
		DXMU070304R-TS	●	●	●	●										0.4	6.35	3.18	2.7
		DXMU070304L-TS	●	●	●	●										0.4	6.35	3.18	2.7
		DXMU070308R-TS	●	●	●	●										0.8	6.35	3.18	2.7
		DXMU070308L-TS	●	●	●	●										0.8	6.35	3.18	2.7

Chip control range







● : Line up

* Corner radius (RE) with a sign of inequality (<) means minus tolerance.

(1) Due to chipbreaker profile, max ap for face or ID turning is 1 mm

Reference pages: External toolholder → C045 - / Internal toolholder → D036 -

Insert POSITIVE TYPE

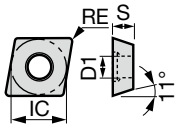
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

EP



Rhombic, 75° with hole Positive 11°

P	Steel	◐	◐	◐
M	Stainless	◐	◐	◐
K	Cast iron			
N	Non-ferrous			
S	Superalloy		◐	
H	Hard material			

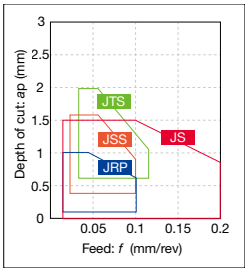


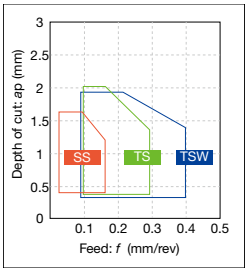
Application	Chipbreaker	Designation	Coated SH7025	Coated SH725	Coated SH730	Coated J740	Dimension (mm) RE	IC	S	D1
Finishing (sharp edge)	JS	EPGT03X101F-JS	●	●			<0.1	3.57	1.39	1.9
		EPGT03X102F-JS	●	●			<0.2	3.57	1.39	1.9
		EPGT03X104F-JS	●	●			<0.4	3.57	1.39	1.9
		EPGT040101F-JS	●	●			<0.1	3.97	1.59	2.3
		EPGT040102F-JS	●	●			<0.2	3.97	1.59	2.3
		EPGT040104F-JS	●	●			<0.4	3.97	1.59	2.3
Finishing	JS	EPGT03X101-JS			●		<0.1	3.57	1.39	1.9
		EPGT03X102-JS			●		<0.2	3.57	1.39	1.9
		EPGT03X104-JS			●		<0.4	3.57	1.39	1.9
		EPGT040101-JS			●		<0.1	3.97	1.59	2.3
		EPGT040102-JS			●		<0.2	3.97	1.59	2.3
		EPGT040104-JS			●		<0.4	3.97	1.59	2.3
Finishing (sharp edge)	J08	EPGT040100FL-J08		●			0.03	3.97	1.59	2.3
		EPGT040102FL-J08	●	●			0.2	3.97	1.59	2.3
		EPGT040104FL-J08	●	●			0.4	3.97	1.59	2.3
Finishing	J08	EPGT040100L-J08			●	●	0.03	3.97	1.59	2.3
		EPGT040102L-J08			●	●	0.2	3.97	1.59	2.3
		EPGT040104L-J08			●	●	0.4	3.97	1.59	2.3

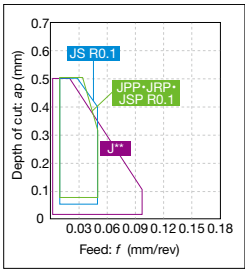
*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Chip control range







*Chip control range with typical R0.1

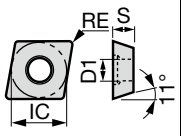
Reference pages: Internal toolholder → D034 - Boring bar tool → K201 - Top-borer tool → K202

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

EP

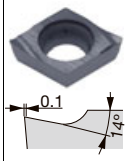
Rhombic, 75° with hole Positive 11°

P	Steel	●	●ɔ	●ɔ				●ɔ				●ɔ				●	ɔ																
M	Stainless	●	●ɔ	●ɔ												●	ɔ																
K	Cast iron	●						●ɔ				●ɔ				●																	
N	Non-ferrous															●																	
S	Superalloy	●		●ɔ																													
H	Hard material																																

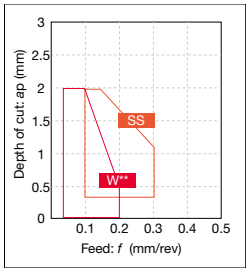


Application	Chipbreaker	Designation	Coated				Coated cermet	Cermet	Uncoated			Dimension (mm)			
			GH110	SH7025	SH725	SH730	GT9530	NS9530	TH10	UX30		RE	IC	S	D1
Finishing (sharp edge)	W08	EPGT03X100FL-W08		●	●							0.03	3.57	1.39	1.9
		EPGT03X100FR-W08			●							0.03	3.57	1.39	1.9
		EPGT03X101FL-W08		●	●							0.1	3.57	1.39	1.9
		EPGT03X101FR-W08			●							0.1	3.57	1.39	1.9
		EPGT03X102FL-W08		●	●							0.2	3.57	1.39	1.9
		EPGT03X102FR-W08		●	●							0.2	3.57	1.39	1.9
		EPGT03X104FL-W08		●	●							0.4	3.57	1.39	1.9
		EPGT03X104FR-W08		●	●							0.4	3.57	1.39	1.9
		EPGT040100FL-W08		●	●							0.03	3.97	1.59	2.3
		EPGT040100FR-W08			●							0.03	3.97	1.59	2.3
		EPGT040101FL-W08		●	●							0.1	3.97	1.59	2.3
		EPGT040101FR-W08			●							0.1	3.97	1.59	2.3
		EPGT040102FL-W08		●	●							0.2	3.97	1.59	2.3
		EPGT040102FR-W08		●	●							0.2	3.97	1.59	2.3
		EPGT040104FL-W08		●	●							0.4	3.97	1.59	2.3
		EPGT040104FR-W08		●	●							0.4	3.97	1.59	2.3
Finishing	W08	EPGT03X100R-W08				●			●			0.03	3.57	1.39	1.9
		EPGT03X100L-W08				●			●			0.03	3.57	1.39	1.9
		EPGT03X101R-W08				●			●			0.1	3.57	1.39	1.9
		EPGT03X101L-W08				●			●			0.1	3.57	1.39	1.9
		EPGT03X102R-W08				●			●			0.2	3.57	1.39	1.9
		EPGT03X102L-W08				●			●			0.2	3.57	1.39	1.9
		EPGT03X104R-W08				●			●			0.4	3.57	1.39	1.9
		EPGT03X104L-W08				●			●			0.4	3.57	1.39	1.9
		EPGT040100R-W08				●			●			0.03	3.97	1.59	2.3
		EPGT040100L-W08	●			●		●	●			0.03	3.97	1.59	2.3
		EPGT040101R-W08				●			●			0.1	3.97	1.59	2.3
		EPGT040101L-W08				●			●			0.1	3.97	1.59	2.3
		EPGT040102R-W08	●			●		●	●			0.2	3.97	1.59	2.3
		EPGT040102L-W08	●			●	●	●	●	●		0.2	3.97	1.59	2.3
		EPGT040104R-W08	●			●		●	●			0.4	3.97	1.59	2.3
		EPGT040104L-W08	●			●	●	●	●	●		0.4	3.97	1.59	2.3

● : Line up



Chip control range



Reference pages: Internal toolholder → D034 - Boring bar tool → K201 - Top-borer tool → K202

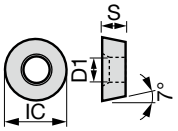
Insert POSITIVE TYPE

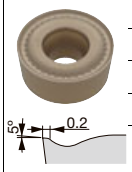
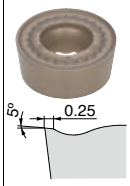
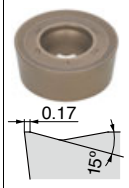
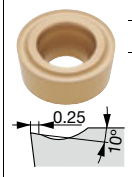
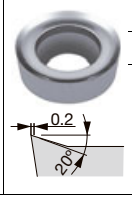
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

RC

Round, with hole
Positive 7°

P	Steel	●ɔ ɔ✣
M	Stainless	●ɔ ● ɔ
K	Cast iron	●ɔ ɔ ●ɔ ●
N	Non-ferrous	●
S	Superalloy	● ɔ ɔ ●
H	Hard material	



Application	Chipbreaker	Designation	Coated T9215	Coated T9225	Coated T5115	Coated AH8005	Coated AH8015	Coated AH905	Cermet NS9530	Uncoated KS05F	Dimension (mm) RE	IC	S	D1
Finishing	RS	RCMT10T3M0-RS	●	●		●	●	●			-	10	3.97	4.4
		RCMT1204M0-RS	●	●		●	●	●			-	12	4.76	4.4
		RCMT1606M0-RS	●	●							-	16	6.35	5.5
		RCMT2006M0-RS		●							-	20	6.35	6.5
		RCMT2507M0-RS		●							-	25	7.94	7.6
	6RS	RCMT1204M0-6RS	●	●					●		-	12	4.76	4.4
														
Finishing to medium cutting	6RM	RCMT1204M0-6RM	●	●					●		-	12	4.76	4.4
														
	CM	RCMT0502M0-CM			●						-	5	2.38	2.5
		RCMT0602M0-CM			●						-	6	2.38	2.8
		RCMT0803M0-CM			●						-	8	3.18	3.4
Finishing to medium cutting for non-ferrous alloys	AL	RCGT0602M0-AL								●	-	6	2.38	2.8
		RCGT0803M0-AL								●	-	8	3.18	3.4
		RCGT1003M0-AL								●	-	10	3.18	4.4

● : Line up

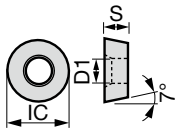
Reference pages: External toolholder → C056 -

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

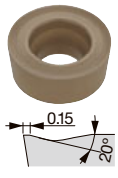
RC

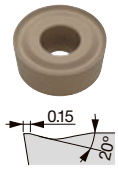
Round, with hole Positive 7°

P	Steel	●ɔ ɔ✠ ●ɔ ●
M	Stainless	●ɔ ● ɔ ●
K	Cast iron	●ɔ ●ɔ ●
N	Non-ferrous	●
S	Superalloy	● ɔ ɔ
H	Hard material	



Application	Chipbreaker	Designation	Coated T9215	Coated T9225	Coated AH8005	Coated AH8015	Coated AH905	Cermet NS9530	Uncoated TH10	RE	IC	S	D1
Heavy cutting	61	RCMT0502M0-61	●	●				●	●	-	5	2.38	2.5
		RCMT0602M0-61	●	●				●	●	-	6	2.38	2.8
		RCMT0803M0-61	●	●				●	●	-	8	3.18	3.4
	61	RCMM1003M0-61	●	●	●	●	●	●	●	-	10	3.18	3.6
		RCMM1204M0-61	●	●	●	●	●	●	●	-	12	4.76	4.2
		RCMM1606M0-61	●	●					●	-	16	6.35	5.2
		RCMM2006M0-61		●					●	-	20	6.35	6.5
		RCMM2507M0-61		●						-	25	7.94	7.2





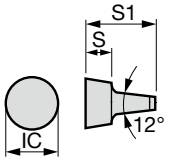
● : Line up

D1 (mm)	0502M0	0602M0	0803M0	1003M0	1204M0	1606M0	2006M0	2507M0
RC*T	2.5	2.8	3.4	4.4	4.4	5.5	6.5	7.6
RCMM	-	-	-	3.6	4.2	5.2	6.5	7.2

RT

Special round insert

P	Steel	●
M	Stainless	●
K	Cast iron	● ɔ✠
N	Non-ferrous	● ɔ✠
S	Superalloy	ɔ✠
H	Hard material	

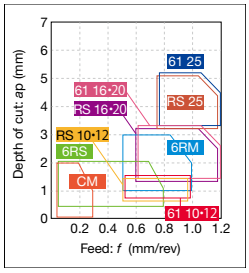


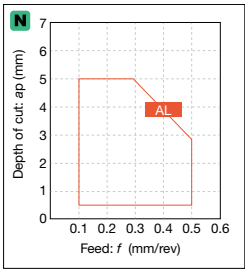
Application	Chipbreaker	Designation	Uncoated TH10	Uncoated KS20	RE	IC	S	S1
Medium cutting	-	RT05	●		-	5	2.5	6.5
		RT06	●	●	-	6	3	7.7
		RT08	●		-	8	4.2	10.3



● : Line up

Chip control range





Reference pages: RC...: External toolholder → C056 -

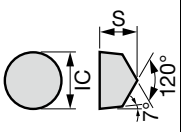
Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

RC

Round, without hole
Positive 7°

P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	
S	Superalloy	● ●
H	Hard material	

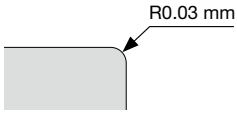


Application	Chipbreaker	Designation	Ceramic TS200	Ceramic TS300	RE	IC	S	D1
Medium cutting	-	**RCGX090700-E**	●	●	-	9.525	8	-
		RCGX**070700-T1**	●	●	-	9.525	8	-
		RCGX**120700-E**	●	●	-	12.7	8	-
		RCGX**120700-T1**	●	●	-	12.7	8	-

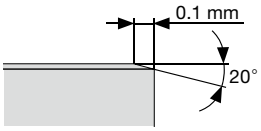
● : Line up

Edge prep

E: Low cutting force



T1: Strong cutting edge



MEMO

Insert POSITIVE TYPE

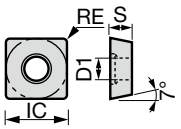
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

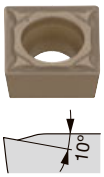
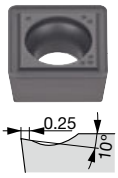
SC



Square with hole Positive 7°

P	Steel	●ɔ	ɔ✣	ɔ				ɔ✣	✣	ɔ	●ɔ				●ɔ	●ɔ				●ɔ									
M	Stainless	●ɔ		●				●ɔ	✣	ɔ	●ɔ																		
K	Cast iron	●ɔ			●	●ɔ	ɔ			ɔ	●ɔ				●ɔ	●ɔ				●ɔ									
N	Non-ferrous																												
S	Superalloy									●	●ɔ																		
H	Hard material																												



Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet		Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH6225	AH6235	AH725	AH120	GT9530	AT9530	NS9530		RE	IC	S	D1
Finishing to medium cutting	**PS**	**SCMT09T304-PS**	●	●	●				●	●	●		●	●	●		0.4	9.525	3.97	4.4
		SCMT09T308-PS	●	●	●				●	●	●		●	●	●		0.8	9.525	3.97	4.4
		SCMT120404-PS	●	●	●				●	●	●				●		0.4	12.7	4.76	5.5
		SCMT120408-PS	●	●	●				●	●	●				●		0.8	12.7	4.76	5.5
	CM	**SCMT09T304-CM**				●	●	●									0.4	9.525	3.97	4.4
		SCMT09T308-CM				●	●	●									0.8	9.525	3.97	4.4
		SCMT09T312-CM						●									1.2	9.525	3.97	4.4
		SCMT120404-CM				●	●	●									0.4	12.7	4.76	5.5
		SCMT120408-CM				●	●	●									0.8	12.7	4.76	5.5
	23	**SCMT09T302-23**													●		0.2	9.525	3.97	4.4
		SCMT09T308-23		●								●					0.8	9.525	3.97	4.4
		SCMT120408-23		●							●	●					0.8	12.7	4.76	5.5
Medium cutting	**PM**	**SCMT09T304-PM**	●	●	●				●	●	●				●		0.4	9.525	3.97	4.4
		SCMT09T308-PM	●	●	●				●	●	●				●		0.8	9.525	3.97	4.4
		SCMT120408-PM	●	●	●				●	●	●				●		0.8	12.7	4.76	5.5
		SCMT120412-PM		●	●				●	●	●				●		1.2	12.7	4.76	5.5
	24	**SCMT070204-24**		●											●		0.4	7.94	2.38	3.4
		**SCMT09T302-24**													●		0.2	9.525	3.97	4.4
		SCMT09T304-24		●											●		0.4	9.525	3.97	4.4
		SCMT09T308-24	●	●											●		0.8	9.525	3.97	4.4
		SCMT120404-24		●											●		0.4	12.7	4.76	5.5
		SCMT120408-24		●											●		0.8	12.7	4.76	5.5

● : Line up

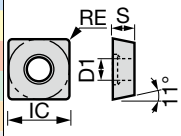
Reference pages: External toolholder → G079 -

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

SP

Square with hole Positive 11°

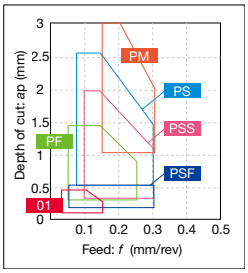
P	Steel	●ⓒ ⓒ✠ ⓒ ✠ ⓒ ●ⓒ ●ⓒ ●ⓒ ●
M	Stainless	●ⓒ ● ✠ ⓒ ●ⓒ ✠ ⓒ ●ⓒ ●ⓒ ●ⓒ ●
K	Cast iron	●ⓒ ● ●ⓒ ⓒ ⓒ ●ⓒ ●ⓒ ●ⓒ ●
N	Non-ferrous	●
S	Superalloy	●
H	Hard material	

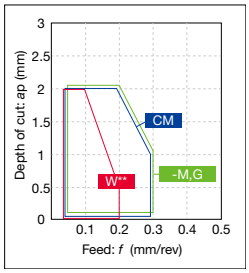


Application	Chipbreaker	Designation	Coated T9215	T9225	T6215	T505	T515	T5115	AH6225	AH6235	AH725	Coated cermet GT9530	AT9530	Cermet NS9530	Uncoated TH10	Dimension (mm) RE	IC	S	D1
Finishing	W15	SPGT090302L-W15												●		0.2	9.525	3.18	4.4
		SPGT090304L-W15												●	●	0.4	9.525	3.18	4.4
		SPGT090308R-W15													●	0.8	9.525	3.18	4.4
		SPGT090308L-W15												●	●	0.8	9.525	3.18	4.4
	W20	SPGT120404L-W20												●		0.4	12.7	4.76	5.5
Finishing to medium cutting	PS	SPMT090304-PS	●	●	●				●	●	●	●	●	●		0.4	9.525	3.18	4.4
		SPMT090308-PS	●	●	●				●	●	●	●	●	●		0.8	9.525	3.18	4.4
		SPMT120404-PS	●	●	●				●	●	●					0.4	12.7	4.76	5.5
		SPMT120408-PS	●	●	●				●	●	●					0.8	12.7	4.76	5.5
	CM	SPMT090304-CM						●								0.4	9.525	3.18	4.4
		SPMT090308-CM						●								0.8	9.525	3.18	4.4
		SPMT120404-CM				●	●	●								0.4	12.7	4.76	5.5
		SPMT120408-CM				●	●	●								0.8	12.7	4.76	5.5
	23	SPMT090304-23		●										●		0.4	9.525	3.18	4.4
		SPMT090308-23		●										●		0.8	9.525	3.18	4.4

● : Line up

Chip control range





*-M,G: Without chipbreaker

Reference pages: Internal toolholder → D041 - Cartridge → K181 -

Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

SP

Square with hole Positive 11°

| | | |

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

SP

Square without hole
Positive 11°

| | | |

Insert POSITIVE TYPE

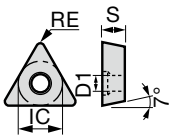
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

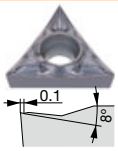
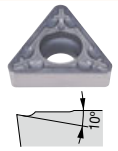
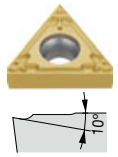
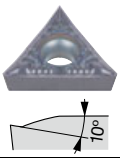
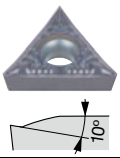
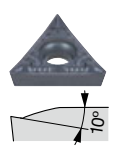
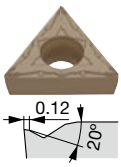
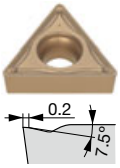
TC



Triangular with hole Positive 7°

		T9215	T9225	T6215	AH8015	AH6225	AH725	SH7025	SH725	SH730	J740	GT9530	NS9530	NS520	TH10
P	Steel	●ɔ	ɔ✣			ɔ✣	ɔ	●ɔ	●ɔ	●ɔ		●ɔ			●
M	Stainless	●ɔ			ɔ	●ɔ	ɔ	●ɔ	●ɔ	●ɔ					●
K	Cast iron	●ɔ					ɔ					●ɔ	●ɔ	●ɔ	●
N	Non-ferrous								●ɔ						●
S	Superalloy				ɔ		●		●ɔ						
H	Hard material														



Application	Chipbreaker	Designation	Coated										Coated cermet	Cermet		Uncoated	Dimension (mm)			
			T9215	T9225	T6215	AH8015	AH6225	AH725	SH7025	SH725	SH730	J740	GT9530	NS9530	NS520	TH10	RE	IC	S	D1
Precision finishing (sharp edge)	JP	TCGT110200FN-JP							●	●							<0.05	6.35	2.38	2.8
		TCGT110201FN-JP							●	●							<0.1	6.35	2.38	2.8
		TCGT110202FN-JP							●	●							<0.2	6.35	2.38	2.8
	01	TCGT110202F-01							●	●							<0.2	6.35	2.38	2.8
		TCGT110204F-01							●	●							<0.4	6.35	2.38	2.8
Precision finishing	01	TCGT090204-01													●	●	0.4	5.56	2.38	2.5
		TCGT110202-01										●					0.2	6.35	2.38	2.8
		TCGT110204-01											●	●	●	●	0.4	6.35	2.38	2.8
		TCGT110208-01												●			0.8	6.35	2.38	2.8
		TCGT16T304-01														●	0.4	9.525	3.97	4.4
		TCGT16T308-01													●	●	0.8	9.525	3.97	4.4
Finishing (sharp edge)	JS	TCGT110200FN-JS							●	●	●						<0.05	6.35	2.38	2.8
		TCGT110201FN-JS							●	●	●						<0.1	6.35	2.38	2.8
		TCGT110202FN-JS							●	●	●						<0.2	6.35	2.38	2.8
		TCGT110204FN-JS							●	●	●						<0.4	6.35	2.38	2.8
Finishing	JS	TCGT110201N-JS						●									0.1	6.35	2.38	2.8
		TCGT110202N-JS						●									0.2	6.35	2.38	2.8
		TCGT110204N-JS						●									0.4	6.35	2.38	2.8
	JS	TCGT110201M-JS				●	●										<0.1	6.35	2.38	2.8
		TCGT110202M-JS				●	●										<0.2	6.35	2.38	2.8
		TCGT110204M-JS				●	●										<0.4	6.35	2.38	2.8
	PSF	TCMT090202-PSF						●									0.2	5.56	2.38	2.5
		TCMT090204-PSF	●	●				●									0.4	5.56	2.38	2.5
		TCMT110202-PSF						●									0.2	6.35	2.38	2.8
		TCMT110204-PSF	●	●				●									0.4	6.35	2.38	2.8
		TCMT110302-PSF						●									0.2	6.35	3.18	2.8
		TCMT110304-PSF	●	●				●									0.4	6.35	3.18	2.8
		TCMT16T304-PSF	●	●				●									0.4	9.525	3.97	4.4
	TSF	TCMT110204-TSF	●	●		●											0.4	6.35	2.38	2.8
		TCMT110208-TSF	●	●		●											0.8	6.35	2.38	2.8
		TCMT110302-TSF	●	●	●	●	●							●			0.2	6.35	3.18	2.8
		TCMT110304-TSF	●	●	●	●	●							●			0.4	6.35	3.18	2.8
		TCMT110308-TSF	●	●	●	●	●							●			0.8	6.35	3.18	2.8
		TCMT16T304-TSF	●	●		●											0.4	9.525	3.97	4.4
		TCMT16T308-TSF	●	●		●											0.8	9.525	3.97	4.4

*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Reference pages: External toolholder → C054 Internal toolholder → D045
J-Series toolholder → G074 - PINZBOHR® → K178 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TC

Triangular with hole Positive 7°



| | | |

Insert POSITIVE TYPE

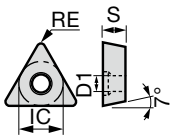
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

TC



Triangular with hole Positive 7°

P	Steel	●ɔ	ɔ✠	ɔ					ɔ✠	✠	ɔ	ɔ			●ɔ	●ɔ			●ɔ												
M	Stainless	●ɔ		●				ɔ	●ɔ	✠	ɔ	ɔ																			
K	Cast iron	●ɔ			●	●ɔ	ɔ				ɔ	ɔ			●ɔ	●ɔ			●ɔ				●								
N	Non-ferrous																						●								
S	Superalloy							ɔ			●												●								
H	Hard material																														



Application	Chipbreaker	Designation	Coated											Coated cermet		Cermet		Uncoated		Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH8015	AH6225	AH6235	AH725	GH730	GT9530	AT9530	NS9530		KS05F		RE	IC	S	D1
Finishing	PSS	TCMT090204-PSS	●	●								●								0.4	5.56	2.38	2.5
		TCMT09020**8**-PSS	●	●								●								0.8	5.56	2.38	2.5
		TCMT110204-PSS	●	●								●								0.4	6.35	2.38	2.8
		TCMT11020**8**-PSS	●	●								●								0.8	6.35	2.38	2.8
		TCMT110304-PSS	●	●								●								0.4	6.35	3.18	2.8
		TCMT11030**8**-PSS	●	●								●								0.8	6.35	3.18	2.8
		TCMT16T304-PSS	●	●								●								0.4	9.525	3.97	4.4
		TCMT16T3**08**-PSS	●	●								●								0.8	9.525	3.97	4.4
		TCMT16T3**12**-PSS	●	●								●								1.2	9.525	3.97	4.4
	PS	TCMT090204-PS										●								0.4	5.56	2.38	2.5
		TCMT09020**8**-PS										●								0.8	5.56	2.38	2.5
		TCMT110202-PS	●	●	●					●	●	●	●	●	●	●				0.2	6.35	2.38	2.8
		TCMT11020**4**-PS	●	●	●					●	●	●	●	●	●	●				0.4	6.35	2.38	2.8
		TCMT11020**8**-PS	●	●	●					●	●	●	●	●	●	●				0.8	6.35	2.38	2.8
		TCMT110302-PS	●	●	●				●	●	●					●				0.2	6.35	3.18	2.8
		TCMT11030**4**-PS	●	●	●				●	●	●					●				0.4	6.35	3.18	2.8
		TCMT11030**8**-PS	●	●	●				●	●	●					●				0.8	6.35	3.18	2.8
		TCMT16T302-PS	●	●	●					●	●	●				●				0.2	9.525	3.97	4.4
		TCMT16T3**04**-PS	●	●	●					●	●	●				●				0.4	9.525	3.97	4.4
		TCMT16T3**08**-PS	●	●	●					●	●	●								0.8	9.525	3.97	4.4
	TM	TCMT110204-TM	●	●					●											0.4	6.35	2.38	2.8
		TCMT11020**8**-TM	●	●					●											0.8	6.35	2.38	2.8
		TCMT110302-TM	●	●	●				●	●						●				0.2	6.35	3.18	2.8
		TCMT11030**4**-TM	●	●	●				●	●						●				0.4	6.35	3.18	2.8
		TCMT11030**8**-TM	●	●	●				●	●						●				0.8	6.35	3.18	2.8
		TCMT16T304-TM	●	●					●											0.4	9.525	3.97	4.4
		TCMT16T3**08**-TM	●	●					●											0.8	9.525	3.97	4.4
Finishing to medium cutting	CM	TCMT090204-CM						●												0.4	5.56	2.38	2.5
		TCMT09020**8**-CM						●												0.8	5.56	2.38	2.5
		TCMT110204-CM						●												0.4	6.35	2.38	2.8
		TCMT11020**8**-CM						●												0.8	6.35	2.38	2.8
		TCMT110304-CM						●												0.4	6.35	3.18	2.8
		TCMT11030**8**-CM						●												0.8	6.35	3.18	2.8
		TCMT16T304-CM				●	●	●												0.4	9.525	3.97	4.4
		TCMT16T3**08**-CM				●	●	●												0.8	9.525	3.97	4.4
		TCMT16T3**12**-CM				●	●	●												1.2	9.525	3.97	4.4
Finishing to medium cutting for aluminium cutting	AL	TCGT110202-AL																●		0.2	6.35	2.38	2.8
		TCGT11020**4**-AL																●		0.4	6.35	2.38	2.8
		TCGT16T302-AL																●		0.2	9.525	3.97	4.4
		TCGT16T3**04**-AL																●		0.4	9.525	3.97	4.4
		TCGT16T3**08**-AL																●		0.8	9.525	3.97	4.4

● : Line up

Reference pages: External toolholder → C054 Internal toolholder → D045
J-Series toolholder → G074 - PINZBOHR® → K178 -

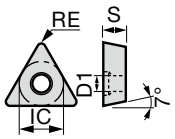
● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

TC



Triangular with hole Positive 7°

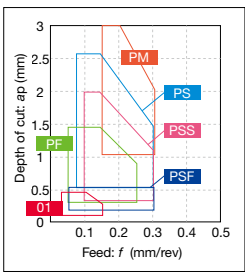
		T9215	T9225	T6215	AH6225	AH6235	AH725	NS9530	TH10
P	Steel	●ⓒ	ⓒ✠	ⓒ	ⓒ✠	✠	ⓒ	●ⓒ	●
M	Stainless	●ⓒ		●	●ⓒ	✠	ⓒ		●
K	Cast iron	●ⓒ					ⓒ	●ⓒ	●
N	Non-ferrous								●
S	Superalloy						●		
H	Hard material								

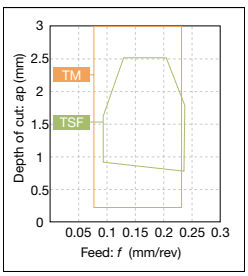


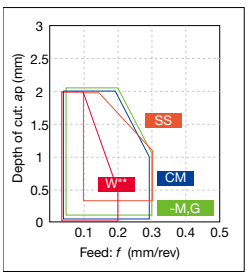
Application	Chipbreaker	Designation	Coated						Cermet	Uncoated	Dimension (mm)			
			T9215	T9225	T6215	AH6225	AH6235	AH725	NS9530	TH10	RE	IC	S	D1
Finishing	SS	TCGT110202-SS							●		0.2	6.35	2.38	2.8
		TCGT110204-SS							●		0.4	6.35	2.38	2.8
		TCGT110208-SS							●		0.8	6.35	2.38	2.8
		TCGT16T304-SS							●		0.4	9.525	3.97	4.4
Finishing to medium cutting	23	TCMT090204-23		●					●		0.4	5.56	2.38	2.5
		TCMT110204-23							●		0.4	6.35	2.38	2.8
		TCMT16T304-23							●		0.4	9.525	3.97	4.4
		TCMT16T308-23		●							0.8	9.525	3.97	4.4
	-	TCGT080102R							●	●	0.2	4.76	1.59	2.7
Medium cutting	PM	TCMT110202-PM			●	●	●	●			0.2	6.35	2.38	2.8
		TCMT110204-PM	●	●	●	●	●	●	●		0.4	6.35	2.38	2.8
		TCMT110208-PM	●	●	●	●	●	●	●		0.8	6.35	2.38	2.8
		TCMT110302-PM			●	●	●				0.2	6.35	3.18	2.8
		TCMT110304-PM			●	●	●				0.4	6.35	3.18	2.8
		TCMT110308-PM			●	●	●				0.8	6.35	3.18	2.8
		TCMT16T304-PM	●	●	●	●	●	●	●		0.4	9.525	3.97	4.4
		TCMT16T308-PM	●	●	●	●	●	●	●		0.8	9.525	3.97	4.4
		TCMT16T312-PM	●	●	●	●	●	●			1.2	9.525	3.97	4.4
	24	TCMT090202-24							●		0.2	5.56	2.38	2.5
		TCMT090204-24	●	●					●		0.4	5.56	2.38	2.5
		TCMT110202-24							●		0.2	6.35	2.38	2.8
		TCMT110204-24	●	●					●		0.4	6.35	2.38	2.8
		TCMT110208-24		●							0.8	6.35	2.38	2.8
		TCMT16T304-24	●	●					●		0.4	9.525	3.97	4.4
		TCMT16T308-24	●	●				●			0.8	9.525	3.97	4.4

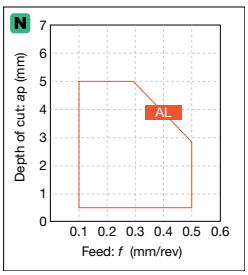
● : Line up

Chip control range









*-M,G: Without chipbreaker

Reference pages: External toolholder → C054 Internal toolholder → D045
J-Series toolholder → G074 - PINZBOHR® → K178 -

Insert POSITIVE TYPE

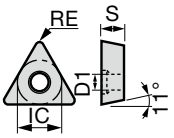
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP



Triangular with hole Positive 11°

P	Steel	●ɔ ɔ✣ ɔ ɔ ●ɔ ●ɔ ●ɔ ●ɔ ●
M	Stainless	●ɔ ɔ ɔ ●ɔ ●ɔ ●
K	Cast iron	●ɔ ɔ ɔ ●ɔ ●ɔ ●ɔ ●ɔ ●
N	Non-ferrous	●
S	Superalloy	● ɔ ●ɔ
H	Hard material	



Application	Chipbreaker	Designation	Coated							Coated cermet		Cermet		Uncoated		Dimension (mm)			
			T9215	T9225	AH725	GH730	SH7025	SH725	SH730	GT9530	GT720	NS9530	NS520	TH10		RE	IC	S	D1
Precision finishing	01	TPGT090202-01								●		●				0.2	5.56	2.38	2.5
		TPGT090204-01								●		●	●	●		0.4	5.56	2.38	2.5
		TPGT110202-01								●		●				0.2	6.35	2.38	2.8
		TPGT110204-01								●		●	●	●		0.4	6.35	2.38	2.8
		TPGT110208-01										●				0.8	6.35	2.38	2.8
		TPGT130302-01									●	●				0.2	7.94	3.18	3.4
		TPGT130304-01								●		●	●	●		0.4	7.94	3.18	3.4
		TPGT130308-01										●	●			0.8	7.94	3.18	3.4
		TPGT16T304-01								●		●	●	●		0.4	9.525	3.97	4.4
		TPGT16T308-01									●	●	●			0.8	9.525	3.97	4.4
Finishing (sharp edge)	JS	TPGT070101F-JS					●	●								<0.1	4.37	1.59	2.58
		TPGT070102F-JS					●	●								<0.2	4.37	1.59	2.58
		TPGT070104F-JS					●	●								<0.4	4.37	1.59	2.58
Finishing	JS	TPGT070101-JS							●							<0.1	4.37	1.59	2.58
		TPGT070102-JS							●							<0.2	4.37	1.59	2.58
		TPGT070104-JS							●							<0.4	4.37	1.59	2.58
	PSF	TPMT090202-PSF			●							●				0.2	5.56	2.38	2.5
		TPMT090204-PSF	●	●	●					●		●				0.4	5.56	2.38	2.5
		TPMT110202-PSF			●					●		●				0.2	6.35	2.38	2.8
		TPMT110204-PSF	●	●	●					●		●				0.4	6.35	2.38	2.8
		TPMT110302-PSF			●							●				0.2	6.35	3.18	3.4
		TPMT110304-PSF	●	●	●					●		●				0.4	6.35	3.18	3.4
		TPMT130304-PSF	●	●	●											0.4	7.94	3.18	3.4
		TPMT16T304-PSF	●	●	●											0.4	9.525	3.97	4.4
	PF	TPMT110204-PF				●				●		●				0.4	6.35	2.38	2.8
		TPMT110208-PF								●		●				0.8	6.35	2.38	2.8
		TPMT110302-PF				●						●				0.2	6.35	3.18	3.4
		TPMT110304-PF				●				●		●				0.4	6.35	3.18	3.4
		TPMT130304-PF								●		●				0.4	7.94	3.18	3.4
		TPMT130308-PF										●				0.8	7.94	3.18	3.4
		TPMT16T304-PF								●		●				0.4	9.525	3.97	4.4

*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Boring bar tool → K178 -
Cartridge → K181 -
Top-borer tool → K213

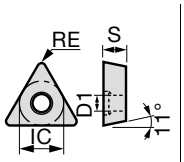
● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP

Triangular with hole Positive 11°



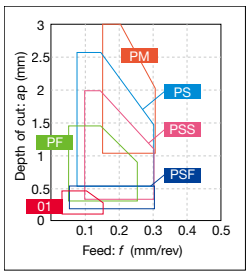
P	Steel	●ɔ	ɔ✠	ɔ		ɔ✠	●	●ɔ	●ɔ	●ɔ			●ɔ				●ɔ					●	ɔ			
M	Stainless	●ɔ		●	ɔ	●ɔ	●	●ɔ	●ɔ	●ɔ												●	ɔ			
K	Cast iron	●ɔ					●						●ɔ				●ɔ					●				
N	Non-ferrous																					●				
S	Superalloy				ɔ		●			●ɔ																
H	Hard material																									

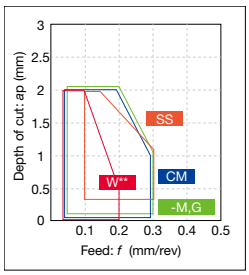


Application	Chipbreaker	Designation	Coated									Coated cermet		Cermet		Uncoated			Dimension (mm)			
			T9215	T9225	T6215	AH8015	AH6225	GH110	SH7025	SH725	SH730	GT9530		NS9530		TH10	UX30		RE	IC	S	D1
Finishing	TSF	TPMT110204-TSF	●	●															0.4	6.35	2.38	2.8
		TPMT1102**08**-TSF	●	●															0.8	6.35	2.38	2.8
		TPMT110302-TSF	●	●	●	●	●							●					0.2	6.35	3.18	3.4
		TPMT1103**04**-TSF	●	●	●	●	●							●					0.4	6.35	3.18	3.4
		TPMT1103**08**-TSF	●	●	●	●	●							●					0.8	6.35	3.18	3.4
		TPMT16T304-TSF	●	●															0.4	9.525	3.97	4.4
		TPMT16T3**08**-TSF	●	●															0.8	9.525	3.97	4.4
Finishing (sharp edge)	W08	TPGT070100FR-W08								●									0.03	4.37	1.59	2.58
		TPGT0701**00**FL-W08							●	●									0.03	4.37	1.59	2.58
		TPGT0701**01**FR-W08								●									0.1	4.37	1.59	2.58
		TPGT0701**01**FL-W08							●	●									0.1	4.37	1.59	2.58
		TPGT0701**02**FR-W08							●	●									0.2	4.37	1.59	2.58
		TPGT0701**02**FL-W08							●	●									0.2	4.37	1.59	2.58
		TPGT0701**04**FR-W08							●	●									0.4	4.37	1.59	2.58
		TPGT0701**04**FL-W08							●	●									0.4	4.37	1.59	2.58
Finishing	W08	TPGT070100R-W08									●					●			0.03	4.37	1.59	2.58
		TPGT0701**00**L-W08									●					●			0.03	4.37	1.59	2.58
		TPGT0701**01**R-W08									●					●			0.1	4.37	1.59	2.58
		TPGT0701**01**L-W08									●					●			0.1	4.37	1.59	2.58
		TPGT0701**02**R-W08									●					●			0.2	4.37	1.59	2.58
		TPGT0701**02**L-W08									●					●			0.2	4.37	1.59	2.58
		TPGT0701**04**R-W08									●					●			0.4	4.37	1.59	2.58
		TPGT0701**04**L-W08									●					●			0.4	4.37	1.59	2.58
		TPGT080200L-W08										●		●					0.03	4.76	2.38	2.3
		TPGT0802**02**L-W08						●				●		●		●	●		0.2	4.76	2.38	2.3
		TPGT0802**04**L-W08						●				●		●		●	●		0.4	4.76	2.38	2.3
	W10	TPGH080202L-W10										●		●					0.2	4.76	2.38	2.3
		TPGH0802**04**L-W10										●		●					0.4	4.76	2.38	2.3
		TPGH090204L-W10										●		●					0.4	5.56	2.38	3

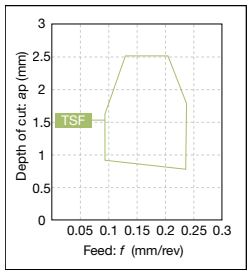
● : Line up

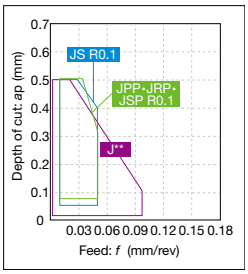
Chip control range





*-M,G: Without chipbreaker





*Chip control range with typical R0.1

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Boring bar tool → K199 -
Cartridge → K181 -
Top-borer tool → K203 -

Insert POSITIVE TYPE

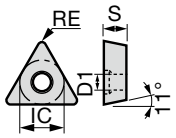
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

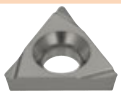
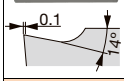
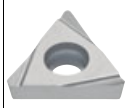
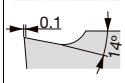
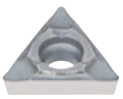
TP



Triangular with hole Positive 11°

		GH110	GH330	GT9530	NS9530	TH10	UX30
P	Steel	●	●◐	●◐	●◐	●	◐
M	Stainless	●	●◐			●	◐
K	Cast iron	●	●◐	●◐	●◐	●	
N	Non-ferrous					●	
S	Superalloy	●					
H	Hard material						



Application	Chipbreaker	Designation	Coated GH110	Coated GH330	Coated cermet GT9530	Cermet NS9530	Uncoated TH10	Uncoated UX30	Dimension (mm) RE	IC	S	D1
Finishing	W13	TPGH110204L-W13			●	●			0.4	6.35	2.38	3.4
		TPGH110302L-W13			●	●			0.2	6.35	3.18	3.4
		TPGH110304L-W13			●	●			0.4	6.35	3.18	3.4
	W15	TPGT090202R-W15				●			0.2	5.56	2.38	2.5
		TPGT090202L-W15			●	●	●		0.2	5.56	2.38	2.5
		TPGT090204R-W15				●			0.4	5.56	2.38	2.5
		TPGT090204L-W15	●	●	●	●	●	●	0.4	5.56	2.38	2.5
		TPGT110202R-W15				●			0.2	6.35	2.38	2.8
		TPGT110202L-W15			●	●	●		0.2	6.35	2.38	2.8
		TPGT110204L-W15	●	●	●	●	●	●	0.4	6.35	2.38	2.8
		TPGT110208R-W15				●			0.8	6.35	2.38	2.8
		TPGT110208L-W15						●	0.8	6.35	2.38	2.8
		TPGT110302L-W15				●			0.2	6.35	3.18	3.4
		TPGT110304R-W15				●			0.4	6.35	3.18	3.4
		TPGT110304L-W15				●			0.4	6.35	3.18	3.4
		TPGT110308L-W15				●			0.8	6.35	3.18	3.4
		TPGT130302R-W15				●			0.2	7.94	3.18	3.4
		TPGT130302L-W15			●	●	●		0.2	7.94	3.18	3.4
		TPGT130304R-W15	●			●			0.4	7.94	3.18	3.4
		TPGT130304L-W15	●	●	●	●	●	●	0.4	7.94	3.18	3.4
		TPGT130308L-W15				●	●		0.8	7.94	3.18	3.4
		TPGT16T302R-W15				●			0.2	9.525	3.97	4.4
		TPGT16T302L-W15			●	●	●		0.2	9.525	3.97	4.4
		TPGT16T304R-W15				●	●		0.4	9.525	3.97	4.4
		TPGT16T304L-W15	●	●	●	●	●	●	0.4	9.525	3.97	4.4
		TPGT16T308L-W15				●	●	●	0.8	9.525	3.97	4.4
Finishing to medium cutting	SS	TPGT110202-SS				●			0.2	6.35	2.38	2.8
		TPGT110204-SS		●		●			0.4	6.35	2.38	2.8
		TPGT130302-SS				●			0.2	7.94	3.18	3.4
		TPGT130304-SS		●		●			0.4	7.94	3.18	3.4
		TPGT16T304-SS		●		●			0.4	9.525	3.97	4.4

● : Line up

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Top-borer tool → K203
Cartridge → K181 -

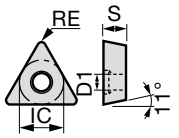
● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP

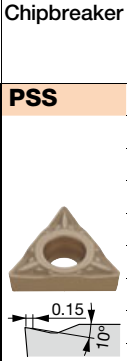
Triangular with hole Positive 11°

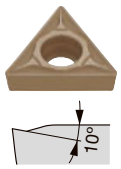


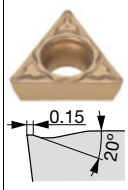
P	Steel	●◐ ◐✣ ◐ ✣ ◐
M	Stainless	●◐ ● ● ◐ ●◐ ✣ ◐ ●◐ ◐
K	Cast iron	●◐ ◐ ●◐ ◐ ●◐ ◐
N	Non-ferrous	
S	Superalloy	● ◐ ●◐
H	Hard material	



Application	Chipbreaker	Designation	Coated										Coated cermet		Cermet			Dimension (mm)			
			T9215	T9225	T6215	AH8005	AH8015	AH6225	AH6235	AH725	AH120	GH730	GT9530	AT9530	NS9530			RE	IC	S	D1
Finishing to medium cutting	PSS	TPMT090204-PSS	●	●	●			●	●	●			●		●			0.4	5.56	2.38	2.5
		TPMT090208-PSS	●	●	●			●	●	●			●		●			0.8	5.56	2.38	2.5
		TPMT110204-PSS	●	●	●			●	●	●			●		●			0.4	6.35	2.38	2.8
		TPMT110208-PSS	●	●	●			●	●	●			●		●			0.8	6.35	2.38	2.8
		TPMT110304-PSS	●	●	●			●	●	●								0.4	6.35	3.18	3.4
		TPMT110308-PSS	●	●	●			●	●	●								0.8	6.35	3.18	3.4
		TPMT130304-PSS	●	●	●			●	●	●								0.4	7.94	3.18	3.4
		TPMT130308-PSS	●	●	●			●	●	●			●		●			0.8	7.94	3.18	3.4
		TPMT16T304-PSS	●	●	●			●	●	●			●		●			0.4	9.525	3.97	4.4
		TPMT16T308-PSS	●	●	●			●	●	●			●		●			0.8	9.525	3.97	4.4
	PS	TPMT090202-PS	●	●	●			●	●	●		●	●	●	●			0.2	5.56	2.38	2.5
		TPMT090204-PS	●	●	●			●	●	●		●	●	●	●			0.4	5.56	2.38	2.5
		TPMT090208-PS	●	●	●			●	●	●		●	●	●	●			0.8	5.56	2.38	2.5
		TPMT110202-PS	●	●	●			●	●	●		●	●	●	●			0.2	6.35	2.38	2.8
		TPMT110204-PS	●	●	●			●	●	●	●	●	●	●	●			0.4	6.35	2.38	2.8
		TPMT110208-PS	●	●	●			●	●	●	●	●	●	●	●			0.8	6.35	2.38	2.8
		TPMT110302 -PS	●	●	●		●	●							●			0.2	6.35	3.18	3.4
		TPMT110304-PS	●	●	●		●	●	●	●		●	●	●	●			0.4	6.35	3.18	3.4
		TPMT110308-PS	●	●	●	●	●	●	●	●		●	●	●	●			0.8	6.35	3.18	3.4
		TPMT130302-PS	●	●						●			●	●	●			0.2	7.94	3.18	3.4
		TPMT130304-PS	●	●	●			●	●	●			●	●	●			0.4	7.94	3.18	3.4
		TPMT130308-PS	●	●	●			●	●	●			●	●	●			0.8	7.94	3.18	3.4
		TPMT16T304-PS	●	●	●			●	●	●			●	●	●			0.4	9.525	3.97	4.4
		TPMT16T308-PS	●	●	●			●	●	●			●	●	●			0.8	9.525	3.97	4.4
	TM	TPMT110204-TM	●	●														0.4	6.35	2.38	2.8
		TPMT110208-TM	●	●														0.8	6.35	2.38	2.8
		TPMT110302-TM	●	●	●		●	●							●			0.2	6.35	3.18	3.4
		TPMT110304-TM	●	●	●		●	●							●			0.4	6.35	3.18	3.4
		TPMT110308-TM	●	●	●		●	●							●			0.8	6.35	3.18	3.4
		TPMT16T304-TM	●	●														0.4	9.525	3.97	4.4
		TPMT16T308-TM	●	●														0.8	9.525	3.97	4.4

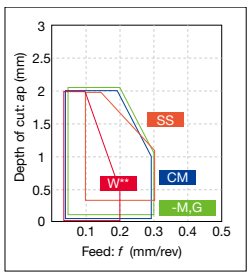


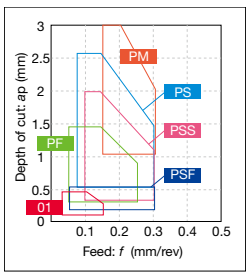


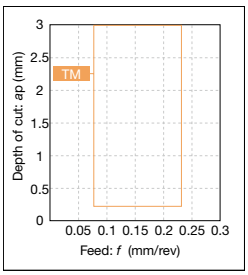


● : Line up

Chip control range







*-M,G: Without chipbreaker

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Boring bar tool → K199 -
Cartridge → K181 -
Top-borer tool → K203

Insert POSITIVE TYPE

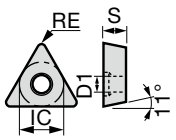
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP



Triangular with hole Positive 11°

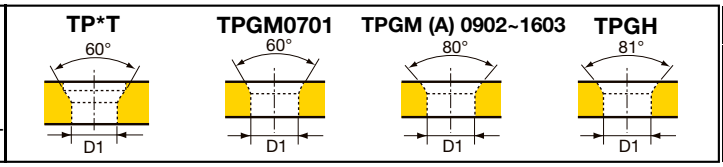
		T9225	T505	T515	T5115	GT9530	NS9530	TH10	UX30
P	Steel	ɔ✣				●ɔ	●ɔ	●	ɔ
M	Stainless							●	ɔ
K	Cast iron		●	●ɔ	ɔ	●ɔ	●ɔ	●	
N	Non-ferrous							●	
S	Superalloy								
H	Hard material								



Application	Chipbreaker	Designation	Coated				Coated cermet	Cermet	Uncoated		Dimension (mm)			
			T9225	T505	T515	T5115	GT9530	NS9530	TH10	UX30	RE	IC	S	D1
Finishing to medium cutting	CM	TPMT090204-CM				●					0.4	5.56	2.38	2.5
		TPMT090208-CM				●					0.8	5.56	2.38	2.5
		TPMT110204-CM				●					0.4	6.35	2.38	2.8
		TPMT110208-CM				●					0.8	6.35	2.38	2.8
		TPMT110304-CM				●					0.4	6.35	3.18	3.4
		TPMT110308-CM				●					0.8	6.35	3.18	3.4
		TPMT130304-CM				●					0.4	7.94	3.18	3.4
		TPMT130308-CM				●					0.8	7.94	3.18	3.4
		TPMT16T304-CM		●	●	●					0.4	9.525	3.97	4.4
		TPMT16T308-CM		●	●	●					0.8	9.525	3.97	4.4
		TPMT16T312-CM		●	●	●					1.2	9.525	3.97	4.4
	H11	TPGH110302L-H11					●	●			0.2	6.35	3.18	3.4
		TPGH110304L-H11					●	●			0.4	6.35	3.18	3.4
	23	TPMT090202-23						●			0.2	5.56	2.38	2.5
		TPMT090204-23	●					●			0.4	5.56	2.38	2.5
		TPMT110204-23	●					●			0.4	6.35	2.38	2.8
		TPMT130304-23	●					●			0.4	7.94	3.18	3.4
		TPMT130308-23	●					●			0.8	7.94	3.18	3.4
		TPMT16T304-23						●			0.4	9.525	3.97	4.4
		TPMT16T308-23	●					●			0.8	9.525	3.97	4.4
Finishing to medium cutting	-	TPGM070102R						●			0.2	4.37	1.59	2.7
		TPGM070102L						●	●		0.2	4.37	1.59	2.7
		TPGM070104R						●			0.4	4.37	1.59	2.7
		TPGM070104L						●	●		0.4	4.37	1.59	2.7
		TPGM090202R						●			0.2	5.56	2.38	3.2
		TPGM090202L						●			0.2	5.56	2.38	3.2
		TPGM090204L						●			0.4	5.56	2.38	3.2
	(Tungaloy standard hole specification) ISO non-compliant	TPGM110202R						●			0.2	6.35	2.38	3
		TPGM110202L						●		●	0.2	6.35	2.38	3
		TPGM110204R						●			0.4	6.35	2.38	3
		TPGM110204L						●		●	0.4	6.35	2.38	3
	TPGM...R/L	TPGM110302R						●			0.2	6.35	3.18	3
		TPGM110302L						●			0.2	6.35	3.18	3
		TPGM110302L-2							●		0.2	6.35	3.18	3
		TPGM110304R						●			0.4	6.35	3.18	3
		TPGM110304L						●		●	0.4	6.35	3.18	3
		TPGM110304L-2							●		0.4	6.35	3.18	3
		TPGM160302L						●			0.2	9.525	3.18	4
		TPGM160304R						●			0.4	9.525	3.18	4
		TPGM160304L						●		●	0.4	9.525	3.18	4
		TPGM160304L-2							●		0.4	9.525	3.18	4

● : Line up

Mounting hole specification



D1 (mm)	0701**	0802**	0902**	1102**	1103**	1303**	1603**	16T3**
TP*T(W)	-	2.3	2.5	2.8	3.4	3.4	-	4.4
TPGM(A)	2.7	-	3.2	3.0	3.0	-	4.0	-
TPGH	-	2.3	3.0	3.4	3.4	-	4.5	-

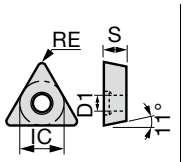
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP



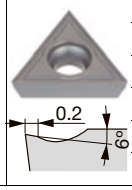
Triangular with hole Positive 11°

		T9215	T9225	T6215	T5115	AH6225	AH6235	AH725	AH120	GH730	GH110	GT9530	NS9530	TH10	UX30
P	Steel	●ɔ	ɔ✣	ɔ		ɔ✣	✣	ɔ	●ɔ	ɔ	●	●ɔ	●ɔ	●	ɔ
M	Stainless	●ɔ		●		●ɔ	✣	ɔ	●ɔ	ɔ	●			●	ɔ
K	Cast iron	●ɔ			ɔ			ɔ	●ɔ	ɔ	●	●ɔ	●ɔ	●	
N	Non-ferrous													●	
S	Superalloy							●	●ɔ		●				
H	Hard material														



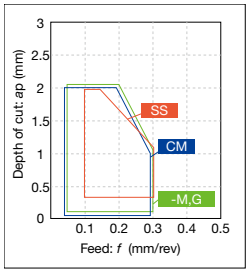
Application	Chipbreaker	Designation	RE	IC	S	D1
Finishing to medium cutting	-	TPMW110204	0.4	6.35	2.38	2.8
		TPMW110208	0.8	6.35	2.38	2.8
		TPMW130304	0.4	7.94	3.18	3.4
		TPMW130308	0.8	7.94	3.18	3.4
		TPMW16T304	0.4	9.525	3.97	4.4
		TPMW16T308	0.8	9.525	3.97	4.4
	-	TPGA090204	0.4	5.56	2.38	3.2
	(Tungaloy standard hole specification) ISO non-compliant	TPGA110202	0.2	6.35	2.38	3
		TPGA110204	0.4	6.35	2.38	3
		TPGA110302	0.2	6.35	3.18	3
		TPGA110304	0.4	6.35	3.18	3
		TPGA160304	0.4	9.525	3.18	4
		TPGA160308	0.8	9.525	3.18	4
	-	TPGW090202	0.2	5.56	2.38	2.5
		TPGW090204	0.4	5.56	2.38	2.5
		TPGW110202	0.2	6.35	2.38	2.8
		TPGW110204	0.4	6.35	2.38	2.8
		TPGW110304	0.4	6.35	3.18	3.4
		TPGW130304	0.4	7.94	3.18	3.4
		TPGW16T304	0.4	9.525	3.97	4.4
		TPGW16T308	0.8	9.525	3.97	4.4
Medium cutting	PM	TPMT090204-PM	0.4	5.56	2.38	2.5
		TPMT090208-PM	0.8	5.56	2.38	2.5
		TPMT110204-PM	0.4	6.35	2.38	2.8
		TPMT110208-PM	0.8	6.35	2.38	2.8
		TPMT110304-PM	0.4	6.35	3.18	3.4
		TPMT110308-PM	0.8	6.35	3.18	3.4
		TPMT130304-PM	0.4	7.94	3.18	3.4
		TPMT130308-PM	0.8	7.94	3.18	3.4
		TPMT16T304-PM	0.4	9.525	3.97	4.4
		TPMT16T308-PM	0.8	9.525	3.97	4.4
		TPMT16T312-PM	1.2	9.525	3.97	4.4
	24	TPMT090204-24	0.4	5.56	2.38	2.5
		TPMT110204-24	0.4	6.35	2.38	2.8
		TPMT110208-24	0.8	6.35	2.38	2.8
		TPMT130304-24	0.4	7.94	3.18	3.4
		TPMT130308-24	0.8	7.94	3.18	3.4
		TPMT16T304-24	0.4	9.525	3.97	4.4
		TPMT16T308-24	0.8	9.525	3.97	4.4

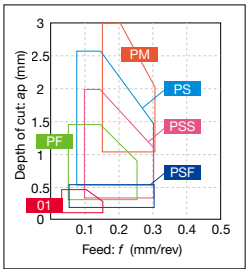




● : Line up

Chip control range





*-M,G: Without chipbreaker

Reference pages: Internal toolholder → D046 -
Cartridge → K181 -
Boring bar tool → K199 -

Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



Triangular without hole Positive 11°

| | | |

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



Triangular without hole Positive 11°

| | | |

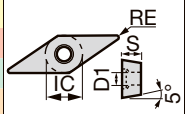
Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

VB

Rhombic, 35° with hole
Positive 5°

		T9215	T9225	AH8015	AH6225	AH725	SH7025	SH725	SH730	GT9530	AT9530	NS9530	KS05F
P	Steel	●ɔ	ɔ✠		ɔ✠	ɔ	●ɔ	●ɔ	●ɔ	●ɔ	●ɔ	●ɔ	
M	Stainless	●ɔ		ɔ	●ɔ	ɔ	●ɔ	●ɔ	●ɔ				
K	Cast iron	●ɔ				ɔ				●ɔ	●ɔ	●ɔ	●
N	Non-ferrous												●
S	Superalloy			ɔ		●		●ɔ					●
H	Hard material												



Application	Chipbreaker	Designation	Coated								Coated cermet		Cermet	Uncoated	Dimension (mm)			
			T9215	T9225	AH8015	AH6225	AH725	SH7025	SH725	SH730	GT9530	AT9530	NS9530	KS05F	RE	IC	S	D1
Precision finishing (sharp edge)	JP	VBGT110300FN-JP						●	●				●		<0.05	6.35	3.18	2.8
		VBGT110301FN-JP						●	●				●		<0.1	6.35	3.18	2.8
		VBGT110302FN-JP						●	●				●		<0.2	6.35	3.18	2.8
	JP	VBGT110300MF-JP												●	<0.05	6.35	3.18	2.8
		VBGT110301MF-JP												●	<0.1	6.35	3.18	2.8
		VBGT110302MF-JP												●	<0.2	6.35	3.18	2.8
Finishing (sharp edge)	JS	VBGT110300FN-JS						●	●	●			●		<0.05	6.35	3.18	2.8
		VBGT110301FN-JS						●	●	●			●		<0.1	6.35	3.18	2.8
		VBGT110302FN-JS						●	●	●			●		<0.2	6.35	3.18	2.8
		VBGT110304FN-JS						●	●	●			●		<0.4	6.35	3.18	2.8
Finishing	JS	VBGT110301N-JS					●					●			0.1	6.35	3.18	2.8
		VBGT110302N-JS					●					●			0.2	6.35	3.18	2.8
		VBGT110304N-JS					●					●			0.4	6.35	3.18	2.8
	JS	VBGT110301M-JS			●	●									<0.1	6.35	3.18	2.8
		VBGT110302M-JS			●	●									<0.2	6.35	3.18	2.8
		VBGT110304M-JS			●	●									<0.4	6.35	3.18	2.8
Finishing (sharp edge)	JS	VBGT110300MF-JS												●	<0.05	6.35	3.18	2.8
		VBGT110301MF-JS												●	<0.1	6.35	3.18	2.8
		VBGT110302MF-JS												●	<0.2	6.35	3.18	2.8
		VBGT110304MF-JS												●	<0.4	6.35	3.18	2.8
Finishing	PSF	VBMT110302-PSF					●				●		●		0.2	6.35	3.18	2.8
		VBMT110304-PSF	●	●			●				●		●		0.4	6.35	3.18	2.8
		VBMT160402-PSF					●				●		●		0.2	9.525	4.76	4.4
		VBMT160404-PSF	●	●			●				●		●		0.4	9.525	4.76	4.4
	PF	VBMT110302-PF									●		●		0.2	6.35	3.18	2.8
		VBMT110304-PF									●		●		0.4	6.35	3.18	2.8
		VBMT110308-PF		●							●		●		0.8	6.35	3.18	2.8
		VBMT160404-PF									●		●		0.4	9.525	4.76	4.4
		VBMT160408-PF		●							●		●		0.8	9.525	4.76	4.4

*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Reference pages: Internal toolholder → D059 - J-Series toolholder → G062 -

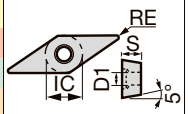
● : Continuous cutting
ɕ : Light interrupted cutting
✣ : Heavy interrupted cutting

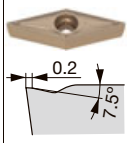
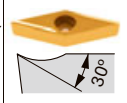
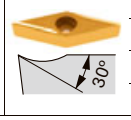
VB

Rhombic, 35° with hole Positive 5°



P	Steel	●ɕ	●ɕ✣	ɕ		ɕ✣	●ɕ	●ɕ	●ɕ						●ɕ					●ɕ				
M	Stainless	●ɕ		●	ɕ	●ɕ	●ɕ	●ɕ	●ɕ											●				
K	Cast iron	●ɕ													●ɕ					●ɕ				
N	Non-ferrous																			●				
S	Superalloy				ɕ			●ɕ																
H	Hard material																							

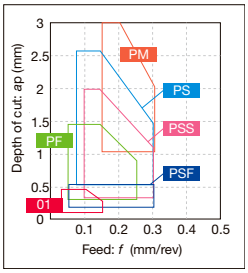


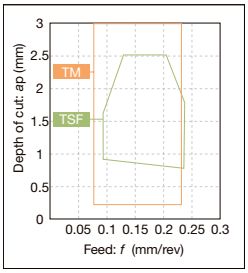
Application	Chipbreaker	Designation	Coated									Coated cermet				Cermet				Uncoated				Dimension (mm)			
			T9215	T9225	T6215	AH8015	AH6225	SH7025	SH725	SH730	J740	J9530				NS9530				TH10				RE	IC	S	D1
Finishing	TSF	VBMT110302-TSF	●	●	●	●	●									●								0.2	6.35	3.18	2.8
		VBMT110304-TSF	●	●	●	●	●									●								0.4	6.35	3.18	2.8
		VBMT110308-TSF	●	●	●	●	●									●								0.8	6.35	3.18	2.8
		VBMT160402-TSF	●	●	●	●	●									●								0.2	9.525	4.76	4.4
		VBMT160404-TSF	●	●	●	●	●									●								0.4	9.525	4.76	4.4
		VBMT160408-TSF	●	●	●	●	●									●								0.8	9.525	4.76	4.4
For external turning on Swiss lathes (sharp edge)	J10	VBGT110300FR-J10						●	●		●									●				0.03	6.35	3.18	2.8
		VBGT110300FL-J10							●		●									●				0.03	6.35	3.18	2.8
		VBGT110301FR-J10						●	●		●					●				●				0.1	6.35	3.18	2.8
		VBGT110301FL-J10							●		●					●				●				0.1	6.35	3.18	2.8
		VBGT110302FR-J10						●	●		●					●				●				0.2	6.35	3.18	2.8
		VBGT110302FL-J10						●	●		●					●				●				0.2	6.35	3.18	2.8
		VBGT110304FR-J10						●	●		●					●				●				0.4	6.35	3.18	2.8
		VBGT110304FL-J10						●	●		●					●				●				0.4	6.35	3.18	2.8
Finishing	J10	VBGT110302R-J10										●												0.2	6.35	3.18	2.8
		VBGT110302L-J10										●												0.2	6.35	3.18	2.8
		VBGT110304R-J10										●												0.4	6.35	3.18	2.8
		VBGT110304L-J10										●												0.4	6.35	3.18	2.8

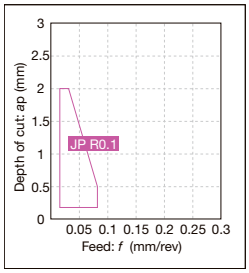
*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

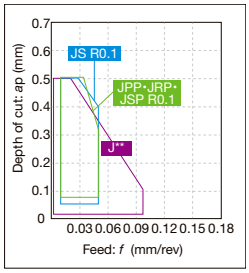
● : Line up

Chip control range









*Chip control range with typical R0.1

Reference pages: Internal toolholder → D059 - J-Series toolholder → G062 -

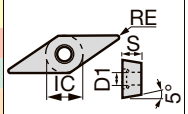
Insert POSITIVE TYPE

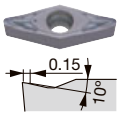
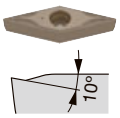
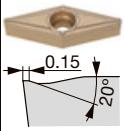
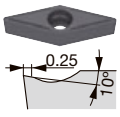
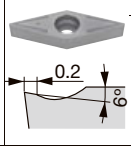
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

VB

Rhombic, 35°
with hole
Positive 5°

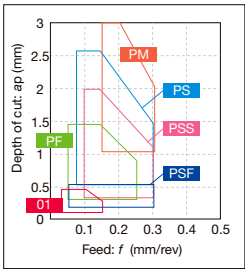
P	Steel	●ɔ	ɔ✣	ɔ						ɔ✣	✣	ɔ	●ɔ			●ɔ	●ɔ			●ɔ									
M	Stainless	●ɔ		●				●	ɔ	●ɔ	✣	ɔ	●ɔ																
K	Cast iron	●ɔ			●	●ɔ	ɔ					ɔ	●ɔ			●ɔ	●ɔ			●ɔ									
N	Non-ferrous																												
S	Superalloy							●	ɔ			●	●ɔ																
H	Hard material																												

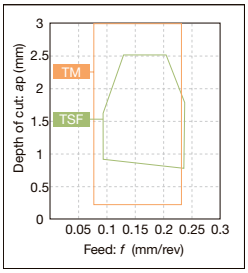


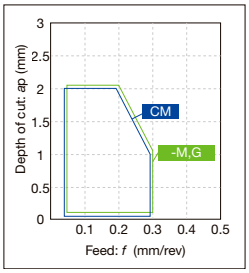
Application	Chipbreaker	Designation	Coated												Coated cermet		Cermet		Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH8005	AH8015	AH6225	AH6235	AH725	AH120	GT9530	AT9530	NS9530		RE	IC	S	D1
Finishing to medium cutting	PSS	VBMT110304-PSS	●	●	●						●	●	●		●		●		0.4	6.35	3.18	2.8
		VBMT110308-PSS	●	●	●						●	●	●		●		●		0.8	6.35	3.18	2.8
		VBMT160404-PSS	●	●	●						●	●	●		●		●		0.4	9.525	4.76	4.4
		VBMT160408-PSS	●	●	●						●	●	●		●		●		0.8	9.525	4.76	4.4
		VBMT160412-PSS	●	●									●						1.2	9.525	4.76	4.4
	PS	VBMT110302-PS	●	●	●				●	●	●	●	●		●	●	●		0.2	6.35	3.18	2.8
		VBMT110304-PS	●	●	●				●	●	●	●	●	●	●	●	●		0.4	6.35	3.18	2.8
		VBMT110308-PS	●	●	●				●	●	●	●	●	●	●	●	●		0.8	6.35	3.18	2.8
		VBMT160402-PS	●	●	●				●	●	●	●	●		●	●	●		0.2	9.525	4.76	4.4
		VBMT160404-PS	●	●	●				●	●	●	●	●	●	●	●	●		0.4	9.525	4.76	4.4
		VBMT160408-PS	●	●	●				●	●	●	●	●	●	●	●	●		0.8	9.525	4.76	4.4
	TM	VBMT110302-TM	●	●	●					●	●						●		0.2	6.35	3.18	2.8
		VBMT110304-TM	●	●	●					●	●						●		0.4	6.35	3.18	2.8
		VBMT110308-TM	●	●	●					●	●						●		0.8	6.35	3.18	2.8
		VBMT160402-TM	●	●	●					●	●						●		0.2	9.525	4.76	4.4
		VBMT160404-TM	●	●	●					●	●						●		0.4	9.525	4.76	4.4
		VBMT160408-TM	●	●	●					●	●						●		0.8	9.525	4.76	4.4
	CM	VBMT110304-CM						●											0.4	6.35	3.18	2.8
		VBMT110308-CM						●											0.8	6.35	3.18	2.8
		VBMT160404-CM				●	●	●											0.4	9.525	4.76	4.4
		VBMT160408-CM				●	●	●											0.8	9.525	4.76	4.4
		VBMT160412-CM				●	●	●											1.2	9.525	4.76	4.4
Medium cutting	24	VBMT160404-24	●	●													●					
		VBMT160408-24	●	●													●					

● : Line up

Chip control range







*-M,G: Without chipbreaker

Reference pages: Internal toolholder → D059 - J-Series toolholder → G062 -

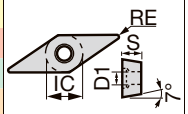
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

VC

Rhombic, 35° with hole Positive 7°



P	Steel	●ɔ ɔ✣ ɔ ✣ ɔ ●ɔ
M	Stainless	●ɔ ● ɔ ● ɔ ɔ✣ ✣ ɔ ●ɔ
K	Cast iron	●ɔ ● ●ɔ ɔ ɔ ●ɔ ●ɔ ●ɔ
N	Non-ferrous	
S	Superalloy	● ɔ ɔ ● ●ɔ
H	Hard material	



Application	Chipbreaker	Designation	Coated													Coated cermet		Cermet		Dimension (mm)			
			T9215	T9225	T6215	T505	T515	T5115	AH8005	AH8015	AH6225	AH6235	AH905	AH725	AH120	GT9530	AT9530	NS9530		RE	IC	S	D1
Finishing	PSF	VCMT080202-PSF												●		●		●		0.2	4.76	2.38	2.3
		VCMT080204-PSF	●	●										●		●		●		0.4	4.76	2.38	2.3
		VCMT110302-PSF												●						0.2	6.35	3.18	2.8
		VCMT110304-PSF	●	●										●						0.4	6.35	3.18	2.8
		VCMT160404-PSF	●	●					●	●			●	●		●		●		0.4	9.525	4.76	4.4
		VCMT160408-PSF	●	●					●	●			●	●		●		●		0.8	9.525	4.76	4.4
	PF	VCMT080202-PF														●		●		0.2	4.76	2.38	2.3
		VCMT080204-PF														●		●		0.4	4.76	2.38	2.3
		VCMT160404-PF														●		●		0.4	9.525	4.76	4.4
		VCMT160408-PF														●		●		0.8	9.525	4.76	4.4
	TSF	VCMT110302-TSF	●	●	●					●	●							●		0.2	6.35	3.18	2.8
		VCMT110304-TSF	●	●	●					●	●							●		0.4	6.35	3.18	2.8
		VCMT110308-TSF	●	●	●					●	●							●		0.8	6.35	3.18	2.8
		VCMT160402-TSF	●	●	●					●	●							●		0.2	9.525	4.76	4.4
		VCMT160404-TSF	●	●	●					●	●							●		0.4	9.525	4.76	4.4
		VCMT160408-TSF	●	●	●					●	●							●		0.8	9.525	4.76	4.4
Finishing to medium cutting	PSS	VCMT110304-PSS	●	●	●						●	●		●		●		●		0.4	6.35	3.18	2.8
		VCMT110308-PSS	●	●	●						●	●		●		●		●		0.8	6.35	3.18	2.8
		VCMT160404-PSS	●	●	●				●	●	●	●	●	●		●		●		0.4	9.525	4.76	4.4
		VCMT160408-PSS	●	●	●				●	●	●	●	●	●		●		●		0.8	9.525	4.76	4.4
	PS	VCMT110302-PS	●	●	●				●	●	●	●		●		●	●	●		0.2	6.35	3.18	2.8
		VCMT110304-PS	●	●	●				●	●	●	●		●		●	●	●		0.4	6.35	3.18	2.8
		VCMT110308-PS	●	●	●				●	●	●	●		●		●	●	●		0.8	6.35	3.18	2.8
		VCMT160402-PS	●	●	●					●	●							●		0.2	9.525	4.76	4.4
		VCMT160404-PS	●	●	●				●	●	●	●	●	●	●	●	●	●		0.4	9.525	4.76	4.4
		VCMT160408-PS	●	●	●				●	●	●	●	●	●	●	●	●	●		0.8	9.525	4.76	4.4
	TM	VCMT110302-TM	●	●	●					●	●							●		0.2	6.35	3.18	2.8
		VCMT110304-TM	●	●	●					●	●							●		0.4	6.35	3.18	2.8
		VCMT110308-TM	●	●	●					●	●							●		0.8	6.35	3.18	2.8
		VCMT160402-TM	●	●	●					●	●							●		0.2	9.525	4.76	4.4
		VCMT160404-TM	●	●	●					●	●							●		0.4	9.525	4.76	4.4
		VCMT160408-TM	●	●	●					●	●							●		0.8	9.525	4.76	4.4
	CM	VCMT080204-CM						●												0.4	4.76	2.38	2.3
		VCMT160404-CM				●	●	●												0.4	9.525	4.76	4.4
		VCMT160408-CM				●	●	●												0.8	9.525	4.76	4.4
		VCMT160412-CM						●												1.2	9.525	4.76	4.4

● : Line up

Reference pages: External toolholder → C048 - Internal toolholder → D039 - TungCap → K015 -

Insert POSITIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

VC



Rhombic, 35° with hole Positive 7°

| | | |

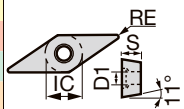
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

VP

Rhombic, 35° with hole Positive 11°



P	Steel	●◐ ●◐
M	Stainless	●◐ ●◐
K	Cast iron	
N	Non-ferrous	
S	Superalloy	●◐
H	Hard material	

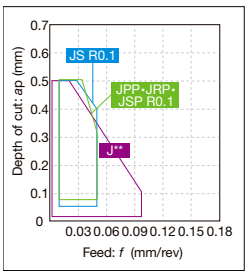


Application	Chipbreaker	Designation	Coated SH725	Coated SH730	RE	IC	S	D1
Finishing (sharp edge)	JPP	VPET0802008MFR-JPP	●	●	<0.08*	4.76	2.38	2.3
		VPET0802008MFL-JPP	●		<0.08*	4.76	2.38	2.3
		VPET080201MFR-JPP	●	●	<0.1*	4.76	2.38	2.3
		VPET080201MFL-JPP	●	●	<0.1*	4.76	2.38	2.3
		VPET0802018MFR-JPP	●		<0.18*	4.76	2.38	2.3
		VPET0802018MFL-JPP	●		<0.18*	4.76	2.38	2.3
		VPET080202MFR-JPP	●	●	<0.2*	4.76	2.38	2.3
		VPET080202MFL-JPP	●	●	<0.2*	4.76	2.38	2.3
		VPET1103008MFR-JPP	●	●	<0.08*	6.35	3.18	2.8
		VPET110301MFR-JPP	●	●	<0.1*	6.35	3.18	2.8
		VPET110301MFL-JPP	●		<0.1*	6.35	3.18	2.8
		VPET1103018MFR-JPP	●	●	<0.18*	6.35	3.18	2.8
		VPET110302MFR-JPP	●	●	<0.2*	6.35	3.18	2.8
		VPET110302MFL-JPP	●	●	<0.2*	6.35	3.18	2.8
	JRP	VPET0802008MFR-JRP	●	●	<0.08*	4.76	2.38	2.3
		VPET080201MFR-JRP	●	●	<0.1*	4.76	2.38	2.3
		VPET080201MFL-JRP	●	●	<0.1*	4.76	2.38	2.3
		VPET0802018MFR-JRP	●		<0.18*	4.76	2.38	2.3
		VPET0802018MFL-JRP	●		<0.18*	4.76	2.38	2.3
		VPET080202MFR-JRP	●	●	<0.2*	4.76	2.38	2.3
		VPET080202MFL-JRP	●	●	<0.2*	4.76	2.38	2.3
		VPET1103008MFR-JRP	●	●	<0.08*	6.35	3.18	2.8
		VPET1103008MFL-JRP		●	<0.08*	6.35	3.18	2.8
		VPET110301MFR-JRP	●	●	<0.1*	6.35	3.18	2.8
		VPET110301MFL-JRP	●	●	<0.1*	6.35	3.18	2.8
		VPET1103018MFR-JRP	●	●	<0.18*	6.35	3.18	2.8
		VPET1103018MFL-JRP	●		<0.18*	6.35	3.18	2.8
		VPET110302MFR-JRP	●	●	<0.2*	6.35	3.18	2.8
		VPET110302MFL-JRP	●	●	<0.2*	6.35	3.18	2.8
	JSP	VPET0802008MFN-JSP	●	●	<0.08*	4.76	2.38	2.3
		VPET080201MFN-JSP	●	●	<0.1*	4.76	2.38	2.3
		VPET0802018MFN-JSP	●	●	<0.18*	4.76	2.38	2.3
		VPET080202MFN-JSP	●	●	<0.2*	4.76	2.38	2.3
		VPET1103008MFN-JSP	●	●	<0.08*	6.35	3.18	2.8
		VPET110301MFN-JSP	●	●	<0.1*	6.35	3.18	2.8
		VPET1103018MFN-JSP	●	●	<0.18*	6.35	3.18	2.8
		VPET110302MFN-JSP	●	●	<0.2*	6.35	3.18	2.8

*Corner radius (RE) with a sign of inequality (<) means minus tolerance.

● : Line up

Chip control range



*Chip control range with typical R0.1

Reference pages: J-Series toolholder → G044 -

Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

VP



Rhombic, 35° with hole Positive 11°

| | | |

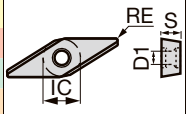
Insert POSITIVE TYPE / DOUBLE SIDE

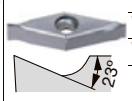
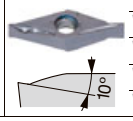
VX



Rhombic, 35° with hole

P		●ⓒ
M		●ⓒ
K		
N		
S		
H		



Application	Chipbreaker	Designation	Coated SH725	RE	IC	S	D1
Finishing (sharp edge)	JRP	VXGU09T201MFRE-JRP**	●	<0.1*	5.56	2.47	2.5
		VXGU09T201MFLE-JRP**	●	<0.1*	5.56	2.47	2.5
		VXGU09T202MFRE-JRP**	●	<0.2*	5.56	2.47	2.5
		VXGU09T202MFLE-JRP**	●	<0.2*	5.56	2.47	2.5
Finishing to medium cutting (sharp edge)	JS	VXGU09T201MFR-JS(1)	●	<0.1*	5.56	2.47	2.5
		VXGU09T201MFL-JS(1)	●	<0.1*	5.56	2.47	2.5
		VXGU09T202MFR-JS(1)	●	<0.2*	5.56	2.47	2.5
		VXGU09T202MFL-JS(1)	●	<0.2*	5.56	2.47	2.5
		VXGU09T204MFR-JS(1)	●	<0.4*	5.56	2.47	2.5
		VXGU09T204MFL-JS(1)	●	<0.4*	5.56	2.47	2.5

*Corner radius (RE) with a sign of inequality (<) means minus tolerance.
** For external turning applications
(1)Due to chipbreaker profile, max ap for face or ID turning is 1 mm

● : Line up

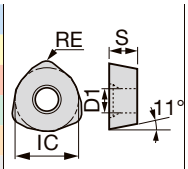
Insert POSITIVE TYPE

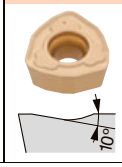
WP



Trigon, 80° with hole Positive 11°

P	Steel	●ⓒ ⓒ✠ ●ⓒ
M	Stainless	●ⓒ ●ⓒ
K	Cast iron	●ⓒ ●ⓒ
N	Non-ferrous	
S	Superalloy	●ⓒ
H	Hard material	



Application	Chipbreaker	Designation	Coated T9215	T9225	AH120	RE	IC	S	D1
Heavy cutting	ML	WPMT090725ZPR-ML	●	●	●	2.5	15	7	5.5
		WPMT090725ZPL-ML	●	●	●	2.5	15	7	5.5

● : Line up

Reference pages: VXGU...: External toolholder → G065 - WPMT...: External toolholder → C068

Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

WB



Trigon, 80° with hole Positive 5°

| | | |

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

WX



Trigon, 80°
with hole

| | | |

Insert POSITIVE TYPE / DOUBLE SIDE

● : Continuous cutting
ɔ : Light interrupted cutting
✠ : Heavy interrupted cutting

WX



Trigon, 80°
with hole

| | | |

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

YW



Rhombic, 25° with hole Positive 7°

| | | |

Insert POSITIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

JXR

Reverse turning

| | | |

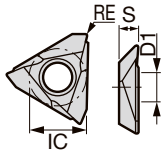
● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

JTB*



Back turning

P	Steel	●ɔ	●ɔ					●ɔ					●ɔ					●																
M	Stainless	●ɔ	●ɔ															●																
K	Cast iron							●ɔ					●ɔ					●																
N	Non-ferrous																	●																
S	Superalloy																																	
H	Hard material																																	



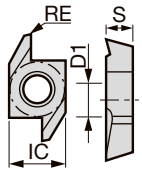
Application	Chipbreaker	Designation	Coated			Coated cermet	Cermet	Uncoated			Dimension (mm)			
			SH7025	SH725	J740	J9530	NS9530	TH10			RE	IC	S	D1
Back turning	-	JTBR3000F	●	●	●			●			0.03	9.5	3.18	4.4
		JTBL3000F		●	●			●			0.03	9.5	3.18	4.4
		JTBR3005F	●	●	●			●			0.05	9.5	3.18	4.4
		JTBL3005F		●	●			●			0.05	9.5	3.18	4.4
		JTBR3005			●	●					0.05	9.5	3.18	4.4
		JTBL3005			●						0.05	9.5	3.18	4.4
		JTBR3010F	●	●	●		●	●			0.10	9.5	3.18	4.4
		JTBL3010F		●	●		●	●			0.10	9.5	3.18	4.4
		JTBR3010			●	●					0.10	9.5	3.18	4.4
		JTBL3010			●						0.10	9.5	3.18	4.4
		JTBR3015F	●	●	●						0.15	9.5	3.18	4.4
		JTBL3015F		●							0.15	9.5	3.18	4.4

J10E*



Back turning

P	Steel	●ɔ	●ɔ					●ɔ					●ɔ					●																
M	Stainless	●ɔ	●ɔ															●																
K	Cast iron							●ɔ					●ɔ					●																
N	Non-ferrous																	●																
S	Superalloy																																	
H	Hard material																																	



Application	Chipbreaker	Designation	Coated			Coated cermet	Cermet	Uncoated			Dimension (mm)			
			SH7025	SH725	J740	J9530	NS9530	TH10			RE	IC	S	D1
Back turning	-	J10ER005BF	●	●	●		●	●			0.05	6.35	3.18	3.0
		J10EL005BF	●	●	●			●			0.05	6.35	3.18	3.0
		J10ER005B			●	●					0.05	6.35	3.18	3.0
		J10EL005B			●						0.05	6.35	3.18	3.0
		J10ER010BF	●	●	●		●	●			0.10	6.35	3.18	3.0
		J10EL010BF	●	●	●			●			0.10	6.35	3.18	3.0
		J10ER010B			●	●					0.10	6.35	3.18	3.0
		J10EL010B			●						0.10	6.35	3.18	3.0
		J10EL015BF	●	●							0.15	6.35	3.18	3.0
		J10ER015BF	●	●							0.15	6.35	3.18	3.0

● : Line up

Reference pages: JTB...: J-Series toolholder → G083 J10E...: J-Series toolholder → G089

Insert POSITIVE TYPE

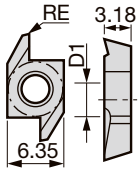
● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

10E*



Back turning

P	Steel	●
M	Stainless	●
K	Cast iron	●
N	Non-ferrous	●
S	Superalloy	
H	Hard material	



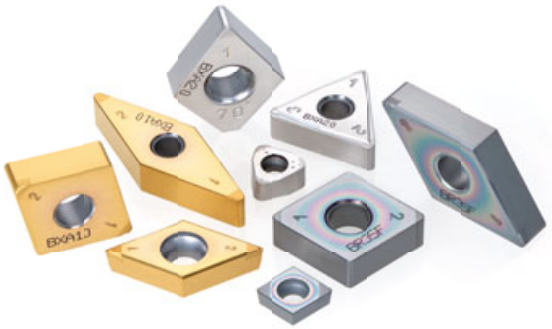
Application	Chipbreaker	Designation	Uncoated TH10	Dimension (mm) RE	IC	S	D1
Back turning	-	**10ER100B**	●	0.03	6.35	3.18	3.0
		**10EL100B**	●	0.03	6.35	3.18	3.0
		10ER150B	●	0.03	6.35	3.18	3.0
		10EL150B	●	0.03	6.35	3.18	3.0
		10ER300	●	-	6.35	3.18	3.0
		10EL300	●	-	6.35	3.18	3.0

● : Line up

MEMO

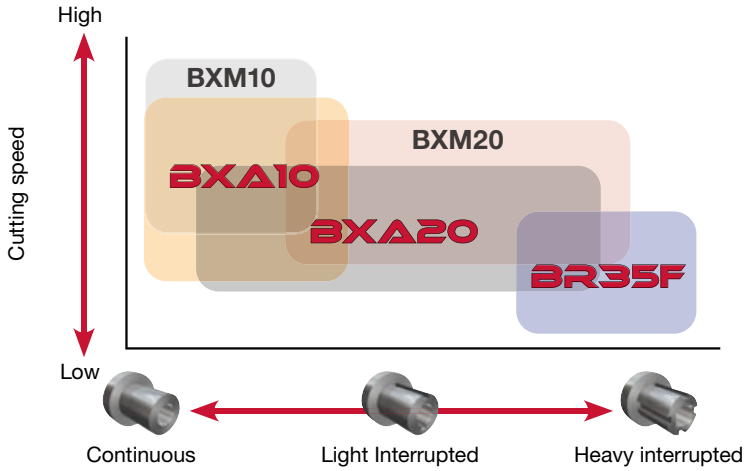
BXA10/BXA20/BR35F

Coated CBN series for a wide range of hard part turning



■ Application areas

The most suitable grade can be selected for your application requirements



BXA10



- First choice for continuous to light interrupted cuts
- For *Vc* = 230 m/min or less

BXA20



- Versatile grade from continuous to heavy interrupted cuts
- For *Vc* = 180 m/min or less

BR35F



- First choice for heavy interrupted cuts
- For *Vc* = 150 m/min or less

BXM10

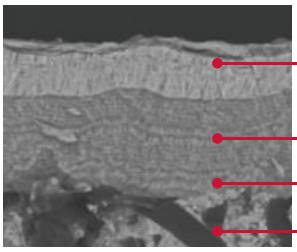
- Complementary grade for continuous to light interrupted cuts
- For extremely high cutting speeds of *Vc* = 300 m/min

BXM20

- Complementary versatile grade for continuous to heavy interrupted cuts
- For high cutting speeds of *Vc* = 200 m/min

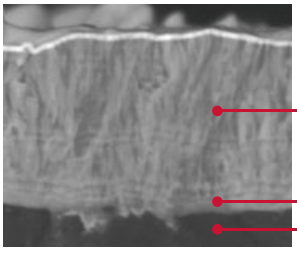
■ Grade properties

BXA10



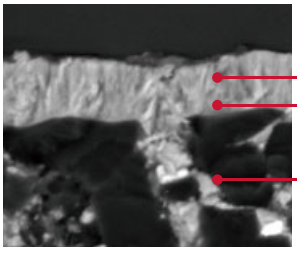
- TiCN coating with high thermal stability and wear resistance
- Multilayer TiAlN coating with good adhesion and resistance to delamination and chipping
- Strong coating-substrate adhesion prevents delamination
- Dedicated CBN substrate with excellent flank wear and crater wear resistance

BXA20



- Thick multilayer TiAlN coating with superior wear and chipping resistance
- Strong coating-substrate adhesion prevents delamination
- Dedicated CBN substrate with excellent crater wear and fracture resistance

BR35F



- Multilayer AlCrN coating with excellent fracture resistance
- Strong coating-substrate adhesion prevents delamination
- Dedicated CBN substrate with excellent chipping and fracture resistance

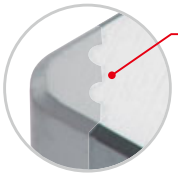
WavyJoint



New brazing technology for increased machining efficiency

A maximum depth of cut up to 0.8 mm.
Reduces the number of passes to increase productivity.

Innovative WavyJoint brazing technology
Prevents the CBN tips from debrazing, eliminating abrupt insert fractures during demanding dry machining, while securing stable and predictable hard turning operations.

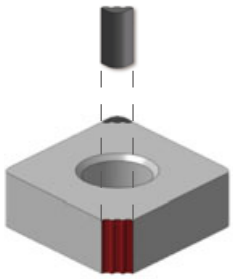


The "wavy" contact surface enhances the brazing strength



Double sided inserts

WavyJoint

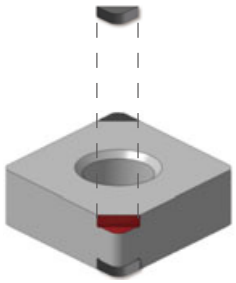


Vs.

CBN Tip Size: 200% larger for improved wear resistance of the cutting edge

Brazing Area: 160% larger for enhanced brazing strength

Standard



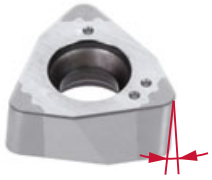
MINIFORCE TURN

Double-sided positive insert with CBN tips

MiniForce-Turn now offers WavyJoint CBN inserts that provide additional strength and security in aggressive cutting conditions.

■ **WXGQ0403... insert**

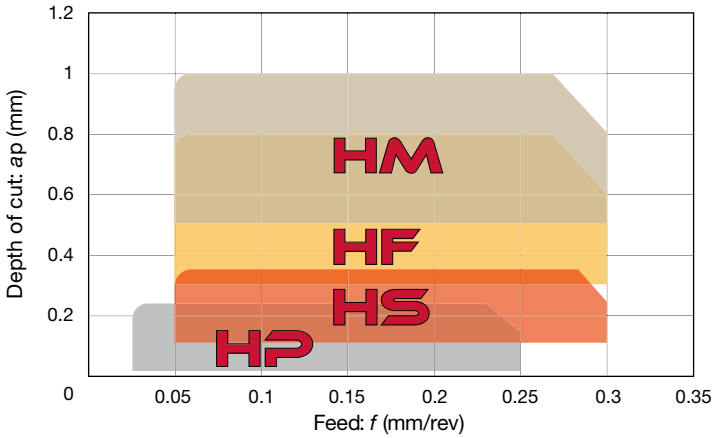
Double-sided positive inserts



6-edged insert with dovetail design



CBN inserts with chipbreaker ideal for carburized layer removal and finishing hardened steel

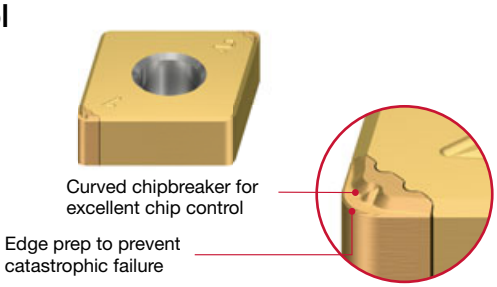




HS chipbreaker

Optimized chipbreaker design for excellent chip control during hard turning at aggressive conditions

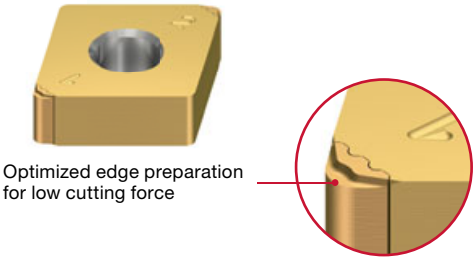
- Designed for high feed machining.
- Provides excellent chip control for a wide range of D.O.C. and feed rates.
- Edge preparation is designed to prevent catastrophic failure.



HP chipbreaker

Designed for finish machining of hardened parts with close tolerances

- Optimized chipbreaker geometry significantly reduces cutting force imposed on the cutting edge, ensuring long tool life.
- The edge preparation is designed to generate low cutting force, providing chatter-free machining and close tolerances.
- The built-in wiper yields excellent surface quality and good chip control.



HF and HM chipbreaker

- Suited for hard turning applications requiring great D.O.C. such as carburized layer removal.
- Effective chip breaking is possible for a wide range of hard materials.
- **BXA20** and **BXM20** CBN grade inserts are available for aggressive cutting depths.

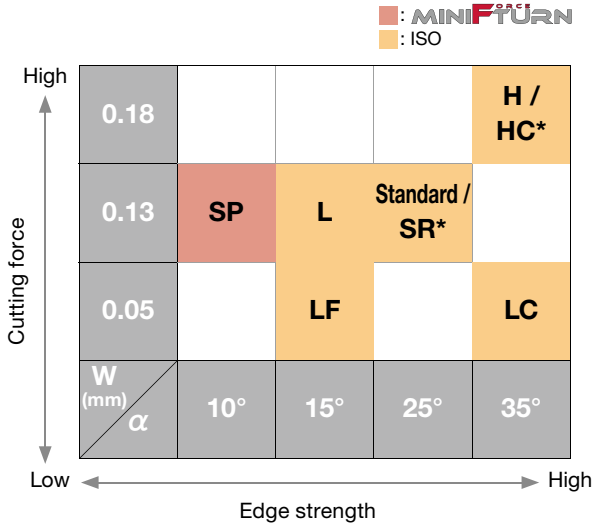
■ Edge preparations

Various styles of edge preparations are available according to the application needs

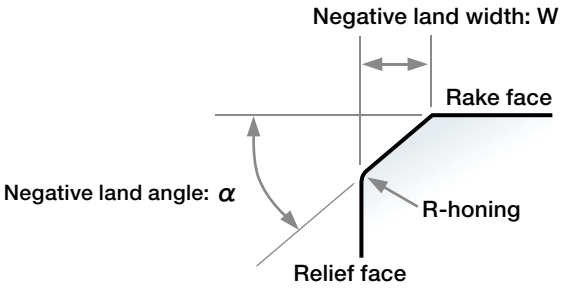
BXA10 and BXA20 grade ISO inserts are available in five different styles of edge preps: L, LF, LC, standard and -H; BR35F grade ISO inserts are offered in two styles of edge preps: SR and HC.

*For the new BR35F grade ISO inserts, "SR" is assigned for the edge prep symbol for S01325, instead of "Standard" as previously assigned. Likewise, "HC" for S01835, instead of conventional "H".

MiniForce-Turn inserts are available in the SP style edge prep (S01310).



*Edge prep symbol for BR35F grade inserts only



S	0	1	3	2	5
Edge prep. ID	Negative land width W			Negative land angle α	

S ··· Chamfered + R-honing

Non-Ferrous Application Series

Complete turning solutions for non-ferrous materials



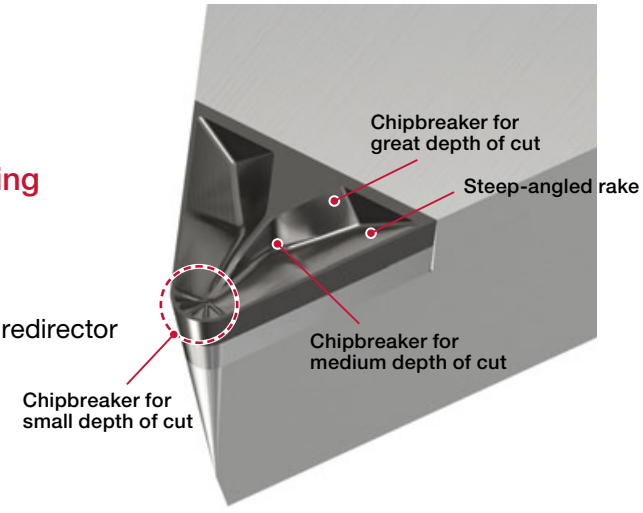
PCD inserts with 3D chipbreaker

NS chipbreaker

No more chip nesting in aluminum alloy machining

Unique 3D chipbreaker

- Versatile geometry allows excellent chip control
- One insert handles from rough to finish operations
- Optimal rake angle design effectively directs chips to the redirector



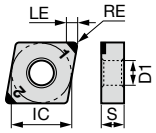
CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN



80°Rhombic with hole



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

		BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX815	BX930
K	Cast iron														●◐		●
S	Superalloy														●◐	●	
H	Hard material	●	●◐	✣	●	●◐	✣	●	●◐	●	●	●◐	✣				
	Sintered metal													●◐	◐✣		

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Finak wear	Problem: Crater wear	Problem: Chipping
Precision finishing	2QP-CNGA120402-LF	0.2	2.3	2			○			
	2QP-CNGA120402-L		2.3	2				○		
	2QP-CNGA120404F	0.4	2.3	2			○			
	2QP-CNGA120404-E		2.3	2		○				
	2QP-CNGA120404-LT		2.3	2						○
	2QP-CNGA120404-LF		2.3	2			○			
	4QS-CNGA120404-LF		1.6	4			○			
	2QP-CNGA120404-L		2.3	2				○		
	2QP-CNGA120404WL		2.3	2	○	○				
	4QS-CNGA120404WL		1.6	4	○	○				
	2QP-CNMA120404W		2.3	2	○	○				
	4QP-CNMA120404W		2.3	4	○	○				
	2QP-CNGA120408F	0.8	2.2	2			○			
	2QP-CNGA120408-E		2.2	2						
	2QP-CNGA120408-LT		2.2	2						
	2QP-CNGA120408-LF		2.2	2			○			
	4QS-CNGA120408-LF		1.5	4			○			
	2QP-CNGA120408-L		2.2	2				○		
	2QP-CNGA120408WL		2.2	2	○	○				
	4QS-CNGA120408WL		1.8	4	○	○				
	2QP-CNMA120408W		2.2	2	○	○				
	4QP-CNMA120408W		2.2	4	○	○				
	2QP-CNGA120412-E	1.2	2.4	2						
	2QP-CNGA120412-LT		2.4	2						
	2QP-CNGA120412-LF		2.4	2			○			
	4QS-CNGA120412-LF		1.7	4			○			
	2QP-CNGA120412-L		2.4	2				○		
	2QP-CNGA120412WL		2.4	2	○	○				
	4QS-CNGA120412WL		2.1	4	○	○				
	2QP-CNMA120412W		2.4	2	○	○				
	4QP-CNMA120412W		2.4	4	○	○				
	2QP-CNGA120416-E	1.6	3.3	2						
	2QP-CNGA120416-LT		3.3	2						
	2QP-CNGA120420-E	2	3.2	2						
	2QP-CNGA120420-LT		3.2	2						
Finishing	2QP-CNGA120402	0.2	2.3	2		○				
	2QP-CNGA120402-LC		2.3	2					○	
	2QP-CNGA120404	0.4	2.3	2		○				
	T2QP-CNGA120404		2.3	2		○				
	2QP-CNGA120404SR		2.3	2		○				
	4QS-CNGA120404		1.6	4		○				
	4QS-CNGA120404SR		1.6	4		○				
	4QP-CNGA120404		2.3	4		○				
	2QP-CNGA120404-LC		2.3	2					○	
	4QS-CNGA120404-LC		1.6	4					○	

T at the beginning of the designation means 10 pieces per package.

● : Line up

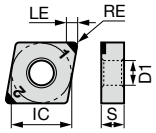
Reference pages: External toolholder → C015 - | Internal toolholder → D025 -
J-Series toolholder → G050 | TungCap → K008 -
PINZBOHR® → K178 - | Cartridge → K181 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN



80°Rhombic with hole



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

		BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
K	Cast iron														◐	●
S	Superalloy														◐	
H	Hard material	●	◐	✠	●	◐	✠	●	◐	●	●	◐	✠			
	Sintered metal													◐	✠	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
Finishing	2QP-CNGA120408	0.8	2.2	2		○					●	●		●	●				●	●	●	●	●	●	●
	T2QP-CNGA120408		2.2	2		○															●				
	2QP-CNGA120408SR		2.2	2		○							●												
	4QS-CNGA120408		1.5	4		○					●	●													
	4QS-CNGA120408SR		1.5	4		○							●												
	4QP-CNGA120408		2.2	4		○										●	●	●							
	2QP-CNGA120408-LC	0.8	2.2	2					○		●	●													
	4QS-CNGA120408-LC		1.5	4					○		●	●													
	2QP-CNGA120412	1.2	2.4	2		○					●	●		●	●				●	●	●	●	●	●	●
	2QP-CNGA120412SR		2.4	2		○							●												
	4QS-CNGA120412		1.7	4		○					●	●													
	4QS-CNGA120412SR		1.7	4		○							●												
	4QP-CNGA120412		2.4	4		○										●	●	●							
	2QP-CNGA120412-LC		2.4	2					○		●	●													
	4QS-CNGA120412-LC		1.7	4					○		●	●													
	2QP-CNGA120416	1.6	3.3	2		○					●	●													
	2QP-CNGA120416SR		3.3	2		○							●												
	2QP-CNGA120420	2	3.2	2		○					●	●													
	2QP-CNGA120420SR		3.2	2		○							●												
	2QP-CNGA120424	2.4	3.1	2		○					●	●													
	2QP-CNGA120424SR		3.1	2		○							●												
Medium cutting	2QP-CNGA120404-H	0.4	2.3	2						○	●	●			●						●	●			
	2QP-CNGA120404HC		2.3	2						○			●												
	4QS-CNGA120404-H		1.6	4						○	●	●													
	4QS-CNGA120404HC		1.6	4						○			●												
	4QP-CNGA120404-H		2.3	4						○								●							
	2QP-CNGA120408-H	0.8	2.2	2						○	●	●			●						●	●			
	2QP-CNGA120408HC		2.2	2						○			●												
	4QS-CNGA120408-H		1.5	4						○	●	●													
	4QS-CNGA120408HC		1.5	4						○			●												
	4QP-CNGA120408-H		2.2	4						○								●							
	2QP-CNGA120412-H	1.2	2.4	2						○	●	●			●						●	●			
	2QP-CNGA120412HC		2.4	2						○			●												
	4QS-CNGA120412-H		1.7	4						○	●	●													
	4QS-CNGA120412HC		1.7	4						○			●												
	4QP-CNGA120412-H		2.4	4						○								●							
	2QP-CNGA120416HC	1.6	3.3	2						○			●												
	2QP-CNGA120420HC	2	3.2	2						○			●												
	2QP-CNGA120424HC	2.4	3.1	2						○			●												

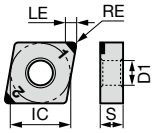
● : Line up

Reference pages:
External toolholder → C015 -
J-Series toolholder → G050
PINZBOHR® → K178 -
Internal toolholder → D025 -
TungCap → K008 -
Cartridge → K181 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN with chipbreaker



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm



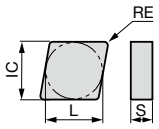
80°Rhombic with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA40
K	Cast iron	●	●◐	✣	●	●◐	●◐
S	Superalloy						
H	Hard material						
	Sintered metal						

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA40
Precision finishing	2QP-CNGM120404-HP	0.4	2.3	2		○					●	●	●	●		
	4QS-CNGG120404-HP		1.6	4		○					●	●	●			
	2QP-CNGM120404-HS		2.3	2		○					●	●	●			
	4QS-CNGG120404-HS		1.6	4		○					●	●	●			
	2QP-CNGM120408-HP	0.8	2.2	2		○					●	●	●	●		
	4QS-CNGG120408-HP		1.5	4		○					●	●	●			
	2QP-CNGM120408WL-HP		2.2	2	○	○					●	●		●		
	4QS-CNGG120408WL-HP		1.8	4	○	○					●	●				
	2QP-CNGM120408-HS		2.2	2		○					●	●	●			
	4QS-CNGG120408-HS		1.8	4		○					●	●	●			
	2QP-CNGM120408WL-HS		2.2	2	○	○					●	●				
	2QP-CNGM120412-HP	1.2	2.4	2		○					●	●	●	●		
	2QP-CNGM120412-HS		2.4	2		○					●	●	●			
	4QS-CNGG120412-HS		2.2	4		○					●	●	●			
	2QP-CNGM120412WL-HS		2.4	2	○	○					●	●				
Medium cutting	2QP-CNGM120408-HF	0.8	2.2	2		○						●			●	
	4QS-CNGG120408-HF		1.8	4		○						●				
	4QP-CNGG120408-HF		2.2	4		○										●
	2QP-CNGM120408-HM		2.2	2		○						●			●	
	4QS-CNGG120408-HM		1.5	4		○						●				
	4QP-CNGG120408-HM		2.2	4		○										●
	2QP-CNGM120412-HF	1.2	2.4	2		○						●			●	
	4QS-CNGG120412-HF		2.2	4		○						●				
	4QP-CNGG120412-HF		2.4	4		○										●
	2QP-CNGM120412-HM		2.4	2		○						●			●	
	4QS-CNGG120412-HM		1.7	4		○						●				
	4QP-CNGG120412-HM		2.4	4		○										●

● : Line up

CN Solid insert



IC : 9.525 mm
S : 3.18 mm



80° Rhombic without hole

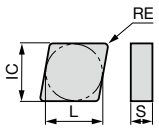
		BXC90
K	Cast iron	✣
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-CNGN090308	0.8		4		○					●
	S-CNGN090312	1.2		4		○					●

● : Line up

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

CN Solid insert



IC : 12.7 mm
S : 4.76 mm

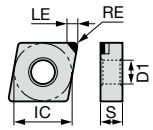
80° Rhombic without hole

K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-CNGN120408	0.8		4		○					●
	S-CNGN120412	1.2		4		○					●

● : Line up

CN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

80°Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ⓒ
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Medium cutting	CNGA120402-QBN	0.2	4.1	1		○					●
	CNGA120404-QBN	0.4	4	1		○					●
	CNGA120408-QBN	0.8	3.9	1		○					●
	CNGA120412-QBN	1.2	3.9	1		○					●

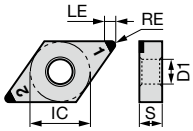
● : Line up

Reference pages: External toolholder → C015 - | Internal toolholder → D025 -
J-Series toolholder → G050 | TungCap → K008 -
PINZBOHR® → K178 - | Cartridge → K181 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
ᑕ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

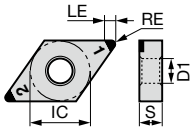
55° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	● ●ᑕ
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	2QP-DNGA110404	0.4	2.5	2		○					●	●
	2QP-DNGA110408	0.8	2.1	2		○					●	●
	2QP-DNGA110412	1.2	2	2		○					●	●

● : Line up

DN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

55° Rhombic with hole

K	Cast iron	●ᑕ ●
S	Superalloy	●ᑕ ●
H	Hard material	● ●ᑕ ✣ ● ●ᑕ ✣ ● ●ᑕ ● ● ●ᑕ ✣
	Sintered metal	●ᑕ ᑕ✣

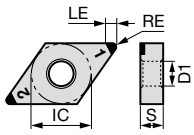
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX815	BX930
Precision finishing	2QP-DNGA150402-LF	0.2	2.7	2			○				●	●														
	4QS-DNGA150402-LF		2.2	4			○				●	●														
	2QP-DNGA150402-L		2.7	2				○			●	●														
	2QP-DNGA150404-E	0.4	2.5	2		○																			●	
	2QP-DNGA150404-LT		2.5	2						○															●	
	2QP-DNGA150404-LF		2.5	2			○				●	●														
	4QS-DNGA150404-LF		2	4			○				●	●														
	2QP-DNGA150404-L		2.5	2				○			●	●		●	●					●						
	2QP-DNGA150404WJ		2.5	2	○	○						●		●	●											
	2QP-DNGA150408-E	0.8	2.1	2																					●	
	2QP-DNGA150408-LT		2.1	2																					●	
	2QP-DNGA150408-LF		2.1	2			○				●	●														
	4QS-DNGA150408-LF		1.6	4			○				●	●														
	2QP-DNGA150408-L		2.1	2				○			●	●		●	●					●						
	2QP-DNGA150408WJ		2.1	2	○	○						●		●	●											
	2QP-DNGA150412-E	1.2	2	2																					●	
	2QP-DNGA150412-LT		2	2																					●	
	2QP-DNGA150412-LF		2	2			○				●	●														
	4QS-DNGA150412-LF		1.6	4			○				●	●														
	2QP-DNGA150412-L		2	2				○			●	●			●					●						
Finishing	2QP-DNGA150402	0.2	2.7	2		○					●	●														
	4QS-DNGA150402		2.2	4		○					●	●														
	2QP-DNGA150402-LC		2.7	2					○		●	●														
	4QS-DNGA150402-LC		2.2	4					○		●	●														
	2QP-DNGA150404	0.4	2.5	2		○					●	●		●	●				●	●	●	●	●	●		●
	4QP-DNGA150404		2.5	4		○										●	●	●								
	2QP-DNGA150404SR		2.5	2		○							●													
	4QS-DNGA150404		2	4		○					●	●														
	4QS-DNGA150404SR		2	4		○							●													
	2QP-DNGA150404-LC		2.5	2					○		●	●														
	4QS-DNGA150404-LC		2	4					○		●	●														

Please see page L025 about the toolholders recommended for wiper inserts of the designation with WJ at the end.

● : Line up

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

DN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm



55° Rhombic with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
K	Cast iron														◐	●
S	Superalloy														◐	
H	Hard material	●	◐	✠	●	◐	✠	●	◐	●	●	◐	✠			
	Sintered metal													◐	✠	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
Finishing	2QP-DNGA150408	0.8	2.1	2		○					●	●		●	●				●	●	●	●	●	●	●
	2QP-DNGA150408SR		2.1	2		○							●												
	4QS-DNGA150408		1.6	4		○					●	●													
	4QS-DNGA150408SR		1.6	4		○							●												
	4QP-DNGA150408		2.1	4		○										●	●	●							
	2QP-DNGA150408-LC		2.1	2					○		●	●													
	4QS-DNGA150408-LC		1.6	4					○		●	●													
	2QP-DNGA150412	1.2	2	2		○					●	●		●	●				●	●	●	●		●	●
	2QP-DNGA150412SR		2	2		○							●												
	4QS-DNGA150412		1.6	4		○					●	●													
	4QS-DNGA150412SR		1.6	4		○							●												
	4QP-DNGA150412		2	4		○										●	●	●							
	2QP-DNGA150412-LC		2	2					○		●	●													
	4QS-DNGA150412-LC		1.6	4					○		●	●													
	2QP-DNGA150416	1.6	3.4	2		○					●	●													
	2QP-DNGA150416SR		3.4	2		○							●												
	2QP-DNGA150420	2	3	2		○					●	●													
	2QP-DNGA150420SR		3	2		○							●												
	2QP-DNGA150424	2.4	2.6	2		○					●	●													
	2QP-DNGA150424SR		2.6	2		○							●												
Medium cutting	2QP-DNGA150404-H	0.4	2.5	2						○	●	●			●						●	●			
	2QP-DNGA150404HC		2.5	2						○			●												
	4QS-DNGA150404-H		2	4						○	●	●													
	4QS-DNGA150404HC		2	4						○			●												
	4QP-DNGA150404-H		2.5	4						○								●							
	2QP-DNGA150408-H	0.8	2.1	2						○	●	●			●					●	●				
	2QP-DNGA150408HC		2.1	2						○			●												
	4QS-DNGA150408-H		1.6	4						○	●	●													
	4QS-DNGA150408HC		1.6	4						○			●												
	4QP-DNGA150408-H		2.1	4						○								●							
	2QP-DNGA150412-H	1.2	2	2						○	●	●			●						●	●			
	2QP-DNGA150412HC		2	2						○			●												
	4QS-DNGA150412-H		1.6	4						○	●	●													
	4QS-DNGA150412HC		1.6	4						○			●												
	4QP-DNGA150412-H		2	4						○								●							
	2QP-DNGA150416HC	1.6	3.4	2						○			●												
	2QP-DNGA150420HC	2	3	2						○			●												
	2QP-DNGA150424HC	2.4	2.6	2						○			●												

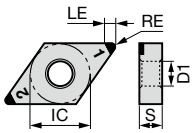
● : Line up

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

DN with chipbreaker



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

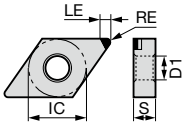
55° Rhombic with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA40
K	Cast iron						
S	Superalloy						
H	Hard material	●	●◐	✣	●	●◐	●◐
	Sintered metal						

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA40
Precision finishing	2QP-DNGM150404-HP	0.4	2.5	2		○					●	●	●	●		
	4QS-DNGG150404-HP		2	4		○					●	●	●			
	2QP-DNGM150404-HS		2.5	2		○					●	●	●			
	4QS-DNGG150404-HS		2	4		○					●	●	●			
	2QP-DNGM150408-HP	0.8	2.1	2		○					●	●	●	●		
	4QS-DNGG150408-HP		1.6	4		○					●	●	●			
	2QP-DNGM150408-HS		2.1	2		○					●	●	●			
	4QS-DNGG150408-HS		1.6	4		○					●	●	●			
	2QP-DNGM150412-HP	1.2	2	2		○					●	●	●			
	2QP-DNGM150412-HS		2	2		○					●	●	●			
	4QS-DNGG150412-HS		1.6	4		○					●	●	●			
Medium cutting	2QP-DNGM150408-HF	0.8	2.1	2		○						●			●	
	4QS-DNGG150408-HF		2	4		○						●				
	4QP-DNGG150408-HF		2.1	4		○										●
	2QP-DNGM150408-HM		2.1	2		○									●	
	4QS-DNGG150408-HM		1.6	4		○						●				
	4QP-DNGG150408-HM		2.1	4		○										●
	2QP-DNGM150412-HF	1.2	2	2		○						●			●	
	4QS-DNGG150412-HF		2.6	4		○						●				
	4QP-DNGG150412-HF		2	4		○										●
	2QP-DNGM150412-HM		2	2		○									●	
	4QP-DNGG150412-HM		2	4		○										●

● : Line up

DN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

55° Rhombic with hole

		BX360
K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

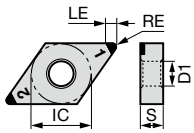
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	DNGA150402-QBN	0.2	4.3	1		○					●
	DNGA150404-QBN	0.4	4.4	1		○					●
	DNGA150408-QBN	0.8	3.8	1		○					●
	DNGA150412-QBN	1.2	3.4	1		○					●

● : Line up

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

DN



IC : 12.7 mm
D1 : 5.16 mm
S : 6.35 mm

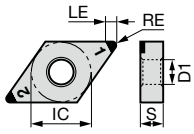
55° Rhombic with hole

K	Cast iron					
S	Superalloy					
H	Hard material	●	●◐	✠	●	●◐
	Sintered metal					

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20
Precision finishing	2QP-DNGA150604-LF	0.4	2.5	2			○				●	●			
	2QP-DNGA150604-L		2.5	2				○			●	●			
	2QP-DNGA150608-LF	0.8	2.1	2			○				●	●			
	2QP-DNGA150608-L		2.1	2				○			●	●			
	2QP-DNGA150612-LF	1.2	2	2			○				●	●			
	2QP-DNGA150612-L		2	2				○			●	●			
Finishing	2QP-DNGA150604	0.4	2.5	2		○					●	●		●	●
	2QP-DNGA150604SR		2.5	2		○							●		
	2QP-DNGA150604-LC		2.5	2					○		●	●			
	2QP-DNGA150608	0.8	2.1	2		○					●	●		●	●
	2QP-DNGA150608SR		2.1	2		○							●		
	2QP-DNGA150608-LC		2.1	2					○		●	●			
	2QP-DNGA150612	1.2	2	2		○					●	●		●	●
	2QP-DNGA150612SR		2	2		○							●		
	2QP-DNGA150612-LC		2	2					○		●	●			
Medium cutting	2QP-DNGA150604-H	0.4	2.5	2						○	●	●			
	2QP-DNGA150604HC		2.5	2						○			●		
	2QP-DNGA150608-H	0.8	2.1	2						○	●	●			
	2QP-DNGA150608HC		2.1	2						○			●		
	2QP-DNGA150612-H	1.2	2	2						○	●	●			
	2QP-DNGA150612HC		2	2						○			●		

● : Line up

DN with chipbreaker



IC : 12.7 mm
D1 : 5.16 mm
S : 6.35 mm

55° Rhombic with hole

K	Cast iron					
S	Superalloy					
H	Hard material	●	●◐	✠	●	
	Sintered metal					

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10
Precision finishing	2QP-DNGM150608-HP	0.8	2.1	2		○					●	●	●	●
	2QP-DNGM150608-HS		2.1	2		○					●	●	●	

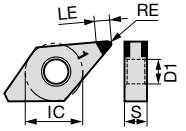
● : Line up

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

FN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

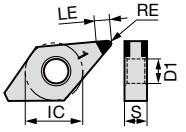
45° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ɔ
	Sintered metal	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA20
Precision finishing	2QP-FNGA150404-LF	0.4	2.6	2			○				●
	2QP-FNGA150404-L		2.6	2				○			●
	2QP-FNGA150408-LF	0.8	3	2			○				●
	2QP-FNGA150408-L		3	2				○			●
	2QP-FNGA150412-LF	1.2	3.3	2			○				●
	2QP-FNGA150412-L		3.3	2				○			●
Finishing	2QP-FNGA150402	0.2	2.8	2		○					●
	2QP-FNGA150404	0.4	2.6	2		○					●
	2QP-FNGA150404-LC		2.6	2					○		●
	2QP-FNGA150408	0.8	3	2		○					●
	2QP-FNGA150408-LC		3	2					○		●
	2QP-FNGA150412	1.2	3.3	2		○					●
	2QP-FNGA150412-LC		3.3	2					○		●
Medium cutting	2QP-FNGA150404-H	0.4	2.6	2						○	●
	2QP-FNGA150408-H	0.8	3	2						○	●
	2QP-FNGA150412-H	1.2	3.3	2						○	●

● : Line up

FN with chipbreaker



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

45° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ɔ
	Sintered metal	

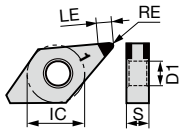
Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA20
Precision finishing	2QP-FNGG150404-HP	0.4	2.6	2		○					●
	2QP-FNGG150408-HP	0.8	3	2		○					●
	2QP-FNGG150412-HP	1.2	3.3	2		○					●

● : Line up

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

FN



IC : 12.7 mm
D1 : 5.16 mm
S : 6.35 mm

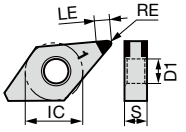
45° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA20
Precision finishing	**2QP-FNGA150604-LF**	0.4	2.6	2			○				●
	2QP-FNGA150604-L		2.6	2				○			●
	2QP-FNGA150608-LF	0.8	3	2			○				●
	2QP-FNGA150608-L		3	2				○			●
	2QP-FNGA150612-LF	1.2	3.3	2			○				●
	2QP-FNGA150612-L		3.3	2				○			●
Finishing	2QP-FNGA150604	0.4	2.6	2		○					●
	2QP-FNGA150604-LC		2.6	2					○		●
	2QP-FNGA150608	0.8	3	2		○					●
	2QP-FNGA150608-LC		3	2					○		●
	2QP-FNGA150612	1.2	3.3	2		○					●
	2QP-FNGA150612-LC		3.3	2					○		●
Medium cutting	2QP-FNGA150604-H	0.4	2.6	2						○	●
	2QP-FNGA150608-H	0.8	3	2						○	●
	2QP-FNGA150612-H	1.2	3.3	2						○	●

● : Line up

FN with chipbreaker



IC : 12.7 mm
D1 : 5.16 mm
S : 6.35 mm

45° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA20
Precision finishing	**2QP-FNGG150604-HP**	0.4	2.6	2		○					●
	2QP-FNGG150608-HP	0.8	3	2		○					●
	2QP-FNGG150612-HP	1.2	3.3	2		○					●

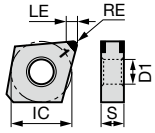
● : Line up

Reference pages: External toolholder → C034 - Internal toolholder → D069 -
J-Series toolholder → G068 TungCap → C034 -, K012 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✣ : Heavy interrupted cutting

GN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm



70° Rhombic with hole

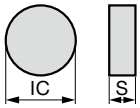
| | | |

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

RN Solid insert



Round, without hole



IC : 9.525 mm
S : 3.18 mm

K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

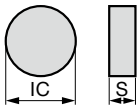
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-RNGN090300			-		○					●

● : Line up

RN Solid insert



Round, without hole



IC : 12.7 mm
S : 4.76 mm

K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

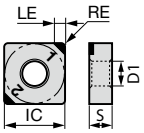
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-RNGN120400			-		○					●

● : Line up

CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

SN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

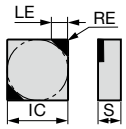
Square with hole

		BXA10	BXA20	BR35F	BXM20	BXC50	BXA40	BX310	BX330	BX360	BX380	BX480	BX930
K	Cast iron											◐	●
S	Superalloy											◐	
H	Hard material	●	◐	✣	◐	✣	◐	●	●	◐	✣		
	Sintered metal											◐	✣

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM20	BXC50	BXA40	BX310	BX330	BX360	BX380	BX480	BX930
Precision finishing	2QP-SNGA120404-L	0.4	2.4	2				○										●				
	2QP-SNGA12040**8-LF**	0.8	2.4	2			○				●	●										
	2QP-SNGA12040**8-L**		2.4	2				○			●	●		●				●				
	2QP-SNGA12041**2-LF**	1.2	2.4	2			○				●	●										
	2QP-SNGA12041**2-L**		2.4	2				○			●	●		●				●				
Finishing	2QP-SNGA120**404**	0.4	2.4	2		○					●	●		●			●	●	●	●	●	●
	4QS-SNGA120404		1.8	4		○					●	●										
	4QP-SNGA120404		2.4	4		○									●	●						
	2QP-SNGA120408	0.8	2.4	2		○					●	●		●			●	●	●	●	●	●
	2QP-SNGA12040**8SR**		2.4	2		○							●									
	4QS-SNGA120408		1.8	4		○					●	●										
	4QS-SNGA12040**8SR**		1.8	4		○							●									
	4QP-SNGA120408		2.4	4		○									●	●						
	2QP-SNGA120412	1.2	2.4	2		○					●	●		●			●	●	●	●	●	●
	2QP-SNGA12041**2SR**		2.4	2		○							●									
	4QS-SNGA120412		1.8	4		○					●	●										
	4QS-SNGA12041**2SR**		1.8	4		○							●									
	4QP-SNGA120412		2.4	4		○									●	●						
Medium cutting	2QP-SNGA120404-H	0.4	2.4	2						○									●	●		
	2QP-SNGA12040**8-H**	0.8	2.4	2						○		●		●					●	●		
	4QP-SNGA120408-H		2.4	4						○						●						
	2QP-SNGA120412-H	1.2	2.4	2						○		●		●					●	●		
	4QP-SNGA120412-H		2.4	4						○						●						

● : Line up

SN



IC : 9.525 mm
S : 3.18 mm

Square without hole

		BX910
K	Cast iron	●
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX910
Finishing	2QP-SNGN090308	0.8	2.4	2		○					●
	2QP-SNGN09031**2**	1.2	2.4	2		○					●

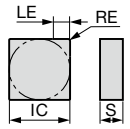
● : Line up

Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

SN Solid insert

Square without hole



IC : 9.525 mm
S : 3.18 mm

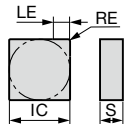
K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-SNGN090308	0.8		8		○					●
	S-SNGN090312	1.2		8		○					●

● : Line up

SN Solid insert

Square without hole



IC : 12.7 mm
S : 3.18 mm

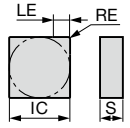
K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-SNGN120308	0.8		8		○					●
	S-SNGN120312	1.2		8		○					●

● : Line up

SN Solid insert

Square without hole



IC : 12.7 mm
S : 4.76 mm

K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-SNGN120408	0.8		8		○					●
	S-SNGN120412	1.2		8		○					●

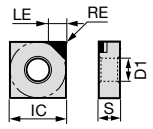
● : Line up

Reference pages: External toolholder → C101 - Internal toolholder → D043 -
Cartridge → K181 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

SN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

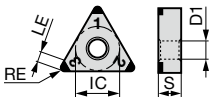
Square with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	SNGA120402-QBN	0.2	4.1	1		○					●
	SNGA120404-QBN	0.4	4.1	1		○					●
	SNGA120408-QBN	0.8	4.1	1		○					●
	SNGA120412-QBN	1.2	4.1	1		○					●

● : Line up

TN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

Triangular with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

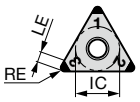
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX815	BX930
Precision finishing	3QP-TNGA160402-LF	0.2	2.3	3			○				●	●														
	3QP-TNGA160402-L		2.3	3				○			●	●														
	3QP-TNGA160404F	0.4	2.2	3			○																●			
	3QP-TNGA160404-LF		2.2	3			○				●	●														
	6QS-TNGA160404-LF		1.9	6			○				●	●														
	3QP-TNGA160404-L		2.2	3				○			●	●		●	●					●						
	3QP-TNGA160404WG		2.4	3	○	○					●	●			●											
	3QP-TNGA160408F	0.8	1.9	3			○																●			
	3QP-TNGA160408-E		1.9	3		○																			●	
	3QP-TNGA160408-LT		1.9	3						○															●	
	3QP-TNGA160408-LF		1.9	3			○				●	●														
	6QS-TNGA160408-LF		1.6	6			○				●	●														
	3QP-TNGA160408-L		1.9	3				○			●	●		●	●					●						
	3QP-TNGA160408WG		2.2	3	○	○					●	●		●	●											
	3QP-TNGA160412-LF	1.2	2.4	3			○				●	●														
	6QS-TNGA160412-LF		1.8	6			○				●	●														
	3QP-TNGA160412-L		2.4	3				○			●	●		●	●					●						
Finishing	3QP-TNGA160402	0.2	2.3	3		○					●	●														
	3QP-TNGA160402-LC		2.3	3					○		●	●														
	3QP-TNGA160404	0.4	2.2	3		○					●	●		●	●				●	●	●	●	●	●		●
	T3QP-TNGA160404		2.2	3		○															●					
	3QP-TNGA160404SR		2.2	3		○							●													
	6QS-TNGA160404		1.9	6		○					●	●														
	6QS-TNGA160404SR		1.9	6		○							●													
	6QP-TNGA160404		2.2	6		○										●	●	●								
	3QP-TNGA160404-LC		2.2	3					○		●	●														
	6QS-TNGA160404-LC		1.9	6					○		●	●														

T at the beginning of the designation means 10 pieces per package.
Please see page L025 about the toolholders recommended for wiper inserts of the designation with WG at the end.

● : Line up

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

TN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

Triangular with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
K	Cast iron														◐	●
S	Superalloy														◐	
H	Hard material	●	◐	✣	●	◐	✣	●	◐	●	●	◐	✣			
	Sintered metal													◐	✣	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
Finishing	3QP-TNGA160408	0.8	1.9	3		○					●	●		●	●				●	●	●	●	●	●	●
	T3QP-TNGA160408		1.9	3		○															●				
	3QP-TNGA160408SR		1.9	3		○							●												
	6QS-TNGA160408		1.6	6		○					●	●													
	6QS-TNGA160408SR		1.6	6		○							●												
	6QP-TNGA160408		1.9	6		○										●	●	●							
	3QP-TNGA160408-LC		1.9	3					○		●	●													
	6QS-TNGA160408-LC		1.9	6					○		●	●													
	3QP-TNGA160412	1.2	2.4	3		○					●	●		●	●				●	●	●	●	●	●	●
	3QP-TNGA160412SR		2.4	3		○							●												
	6QS-TNGA160412		1.8	6		○					●	●													
	6QS-TNGA160412SR		1.8	6		○							●												
	6QP-TNGA160412		2.4	6		○										●	●	●							
	3QP-TNGA160412-LC		2.4	3					○		●	●													
	6QS-TNGA160412-LC		1.8	6					○		●	●													
	3QP-TNGA160416	1.6	3.3	3		○					●	●													
	3QP-TNGA160416SR		3.3	3		○							●												
	3QP-TNGA160420	2	3	3		○					●	●													
	3QP-TNGA160420SR		3	3		○							●												
	3QP-TNGA160424	2.4	2.7	3		○					●	●													
	3QP-TNGA160424SR		2.7	3		○							●												
Medium cutting	3QP-TNGA160404-H	0.4	2.2	3						○	●	●			●						●	●			
	3QP-TNGA160404HC		2.2	3						○			●												
	6QS-TNGA160404-H		1.9	6						○	●	●													
	6QS-TNGA160404HC		1.9	6						○			●												
	6QP-TNGA160404-H		2.2	6						○								●							
	3QP-TNGA160408-H	0.8	1.9	3						○	●	●			●						●	●			
	3QP-TNGA160408HC		1.9	3						○			●												
	6QS-TNGA160408-H		1.6	6						○	●	●													
	6QS-TNGA160408HC		1.6	6						○			●												
	6QP-TNGA160408-H		1.9	6						○								●							
	3QP-TNGA160412-H	1.2	2.4	3						○	●	●			●						●	●			
	3QP-TNGA160412HC		2.4	3						○			●												
	6QS-TNGA160412-H		1.8	6						○	●	●													
	6QS-TNGA160412HC		1.8	6						○			●												
	6QP-TNGA160412-H		2.4	6						○								●							
	3QP-TNGA160416HC	1.6	3.3	3						○			●												
	3QP-TNGA160420HC	2	3	3						○			●												
	3QP-TNGA160424HC	2.4	2.7	3						○			●												

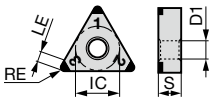
● : Line up

Reference pages: SN: External toolholder → C101 -, Internal toolholder → D043 -, Cartridge → K181 -
TN: External toolholder → C032 -, Internal toolholder → D049 -, Cartridge → K181 -

CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN with chipbreaker



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

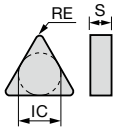
Triangular with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA40
K	Cast iron	●	●◐	✠	●	●◐	●◐
S	Superalloy						
H	Hard material						
	Sintered metal						

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA40
Precision finishing	3QP-TNGM160404-HP	0.4	2.2	3		○					●	●	●	●		
	6QS-TNGG160404-HP		1.9	6		○					●	●	●			
	3QP-TNGM160404-HS		2.2	3		○					●	●	●			
	6QS-TNGG160404-HS		1.9	6		○					●	●	●			
	3QP-TNGM160408-HP	0.8	1.9	3		○					●	●	●	●		
	6QS-TNGG160408-HP		1.6	6		○					●	●	●			
	3QP-TNGM160408-HS		1.9	3		○					●	●	●			
	6QS-TNGG160408-HS		1.6	6		○					●	●	●			
	3QP-TNGM160412-HP	1.2	2.4	3		○					●	●	●			
	6QS-TNGG160412-HP		1.8	6		○					●	●	●			
	3QP-TNGM160412-HS		2.4	3		○					●	●	●			
	6QS-TNGG160412-HS		1.8	6		○					●	●	●			
Medium cutting	3QP-TNGM160408-HF	0.8	1.9	3		○						●			●	
	6QS-TNGG160408-HF		2.1	4		○						●				
	6QP-TNGG160408-HF		1.9	6		○										●
	3QP-TNGM160408-HM		1.9	3		○									●	
	6QS-TNGG160408-HM		1.6	6		○						●				
	6QP-TNGG160408-HM		1.9	6		○										●
	3QP-TNGM160412-HF	1.2	2.4	3		○						●			●	
	6QS-TNGG160412-HF		2.5	4		○						●				
	6QP-TNGG160412-HF		2.4	6		○										●
	3QP-TNGM160412-HM		2.4	3		○									●	
	6QP-TNGG160412-HM		2.4	6		○										●

● : Line up

TN Solid insert



IC : 6.35 mm
S : 3.18 mm

Triangular without hole

		BXC90
K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

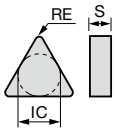
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXC90
Medium cutting	S-TNGN110308	0.8		6		○					●
	S-TNGN110312	1.2		6		○					●

● : Line up

Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TN Solid insert



IC : 9.525 mm
S : 4.76 mm

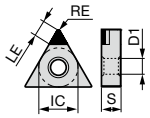
Triangular without hole

K	Cast iron	✠
S	Superalloy	
H	Hard material	
	Sintered metal	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXC90
Medium cutting	**S-TNGN160408**	0.8		6		○					●
	S-TNGN1604**12**	1.2		6		○					●

● : Line up

TN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

Triangular with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BX360
Finishing	**TNGA160402-QBN**	0.2	4.4	1		○					●
	TNGA1604**04-QBN**	0.4	4.2	1		○					●
	TNGA1604**08-QBN**	0.8	4	1		○					●
	TNGA1604**12-QBN**	1.2	3.7	1		○					●

● : Line up

Reference pages: External toolholder → C032 - Internal toolholder → D049 -
J-Series toolholder → G051 - Cartridge → K181 -

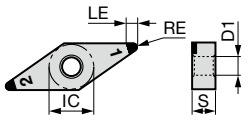
CBN Insert NEGATIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

VN



35° Rhombic with hole



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

		BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
K	Cast iron														●◐	●
S	Superalloy														●◐	
H	Hard material	●	●◐	✣	●	●◐	✣	●	●◐	●	●	●◐	✣			
	Sintered metal													●◐	◐✣	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX470	BX480	BX930
Precision finishing	2QP-VNGA160402-LF	0.2	3.5	2			○				●	●													
	4QS-VNGA160402-LF		3	4			○				●	●													
	2QP-VNGA160402-L		3.5	2				○			●	●													
	2QP-VNGA160404-LF	0.4	3.1	2			○				●	●													
	4QS-VNGA160404-LF		2.6	4			○				●	●													
	2QP-VNGA160404-L		3.1	2				○			●	●		●	●					●					
	2QP-VNGA160408-LF	0.8	2.2	2			○				●	●													
	4QS-VNGA160408-LF		1.7	4			○				●	●													
	2QP-VNGA160408-L		2.2	2				○			●	●		●	●					●					
	2QP-VNGA160412-LF	1.2	3	2			○				●	●													
	4QS-VNGA160412-LF		1.7	4			○				●	●													
	2QP-VNGA160412-L		3	2				○			●	●													
Finishing	2QP-VNGA160402	0.2	3.5	2		○					●	●													
	4QS-VNGA160402		3	4		○					●	●													
	2QP-VNGA160402-LC		3.5	2					○		●	●													
	4QS-VNGA160402-LC		3	4					○		●	●													
	2QP-VNGA160404	0.4	3.1	2		○					●	●		●	●				●	●	●	●	●	●	●
	2QP-VNGA160404SR		3.1	2		○							●												
	4QS-VNGA160404		2.6	4		○					●	●													
	4QS-VNGA160404SR		2.6	4		○							●												
	4QP-VNGA160404		3.1	4		○										●	●	●							
	2QP-VNGA160404-LC		3.1	2					○		●	●													
	4QS-VNGA160404-LC		2.6	4					○		●	●													
	2QP-VNGA160408	0.8	2.2	2		○					●	●		●	●				●	●	●	●	●	●	●
	2QP-VNGA160408SR		2.2	2		○							●												
	4QS-VNGA160408		1.7	4		○					●	●													
	4QS-VNGA160408SR		1.7	4		○							●												
	4QP-VNGA160408		2.2	4		○										●	●	●							
	2QP-VNGA160408-LC		2.2	2					○		●	●													
	4QS-VNGA160408-LC		1.7	4					○		●	●													
	2QP-VNGA160412	1.2	3	2		○					●	●			●										
	4QS-VNGA160412		1.7	4		○					●	●													
	4QP-VNGA160412		3	4		○											●	●							
	2QP-VNGA160412-LC		3	2					○		●	●													
	4QS-VNGA160412-LC		1.7	4					○		●	●													
Medium cutting	2QP-VNGA160404-H	0.4	3.1	2						○	●	●			●						●	●			
	2QP-VNGA160404HC		3.1	2						○			●												
	4QS-VNGA160404-H		2.6	4						○	●	●													
	4QS-VNGA160404HC		2.6	4						○			●												
	4QP-VNGA160404-H		3.1	4						○								●							
	2QP-VNGA160408-H	0.8	2.2	2						○	●	●			●						●	●			
	2QP-VNGA160408HC		2.2	2						○			●												
	4QS-VNGA160408-H		1.7	4						○	●	●													
	4QS-VNGA160408HC		1.7	4						○			●												
	4QP-VNGA160408-H		2.2	4						○								●							
	2QP-VNGA160412-H	1.2	3	2						○	●	●													
	4QS-VNGA160412-H		1.7	4						○	●	●													

● : Line up

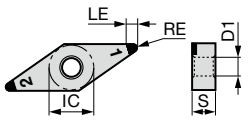
Reference pages: External toolholder → C041 - Internal toolholder → D074 -
TungCap → C042 -, K014 -

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

VN with chipbreaker



35° Rhombic with hole



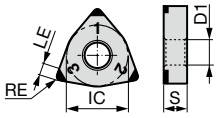
IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

K	Cast iron																														
S	Superalloy																														
H	Hard material	●	●◐	●	●◐	●◐																									
	Sintered metal																														

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BXM10	BXM20	BXA40
Precision finishing	2QP-VNGM160404-HP	0.4	3.1	2		○					●	●			
	4QS-VNGG160404-HP		2.6	4		○					●	●			
	2QP-VNGM160404-HS		3.1	2		○					●	●			
	4QS-VNGG160404-HS		2.6	4		○					●	●			
	2QP-VNGM160408-HP	0.8	2.2	2		○					●	●	●		
	4QS-VNGG160408-HP		1.7	4		○					●	●			
	2QP-VNGM160408-HS		2.2	2		○					●	●			
	4QS-VNGG160408-HS		1.7	4		○					●	●			
Medium cutting	2QP-VNGM160408-HF	0.8	2.2	2		○								●	
	4QP-VNGG160408-HF		2.2	4		○									●
	2QP-VNGM160408-HM		2.2	2		○								●	
	4QS-VNGG160408-HM		1.7	4		○						●			
	4QP-VNGG160408-HM		2.2	4		○									●

● : Line up

WN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

80° Trigon with hole



K	Cast iron																												●◐	●	
S	Superalloy																												●◐		
H	Hard material	●	●◐	●	●◐	✣	●	●◐	●	●	●◐	✣																			
	Sintered metal																												◐✣		

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BXM10	BXM20	BXC50	BXA30	BXA40	BX310	BX330	BX360	BX380	BX480	BX930
Precision finishing	3QP-WNGA080408-LF	0.8	2.2	3			○				●	●											
	6QS-WNGA080408-LF		1.5	6			○				●	●											
	3QP-WNGA080408-L		2.2	3				○			●	●											
	3QP-WNGA080408WL		2.2	3	○	○					●	●	●	●									
	6QS-WNGA080408WL		1.8	6	○	○					●	●											
Finishing	3QP-WNGA080404	0.4	2.3	3		○					●	●											
	6QS-WNGA080404		1.6	6		○					●	●											
	6QP-WNGA080404		2.3	6		○									●								
	3QP-WNGA080408	0.8	2.2	3		○					●	●	●	●				●	●	●	●	●	●
	6QS-WNGA080408		1.5	6		○					●	●											
	6QP-WNGA080408		2.2	6		○									●	●	●						
	3QP-WNGA080412	1.2	2.4	3		○					●	●									●		
	6QS-WNGA080412		1.7	6		○					●	●											
Medium cutting	3QP-WNGA080408-H	0.8	2.2	3						○	●	●											
	6QS-WNGA080408-H		1.5	6						○	●	●											

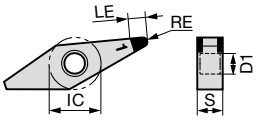
● : Line up

Reference pages: VN: External toolholder → C041 -, Internal toolholder → D074 -, TungCap → C042 -, K014 -
WN: External toolholder → C024 -, Internal toolholder → D031 -, TungCap → C024 -, K010 -

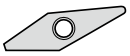
CBN Insert NEGATIVE TYPE

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

YN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm



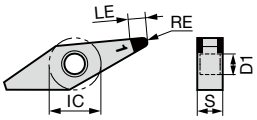
25° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ᑕ
	Sintered metal	

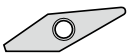
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA20
Precision finishing	2QP-YNGA160404-LF	0.4	3.1	2			○				●
	2QP-YNGA160404-L		3.1	2				○			●
	2QP-YNGA160408-LF	0.8	3	2			○				●
	2QP-YNGA160408-L		3	2				○			●
Finishing	2QP-YNGA160402	0.2	3.5	2		○					●
	2QP-YNGA160404	0.4	3.1	2		○					●
	2QP-YNGA160404-LC		3.1	2					○		●
	2QP-YNGA160408	0.8	3	2		○					●
	2QP-YNGA160408-LC		3	2					○		●

● : Line up

YN with chipbreaker



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm



25° Rhombic with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ᑕ
	Sintered metal	

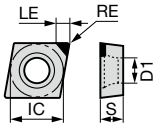
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA20
Precision finishing	2QP-YNGG160404-HP	0.4	3.1	2		○					●
	2QP-YNGG160408-HP	0.8	3	2		○					●

● : Line up

Reference pages: External toolholder → C041 - Internal toolholder → D074 -
TungCap → C042 -, K014 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



IC : 3.57 mm
D1 : 1.9 mm
S : 1.39 mm

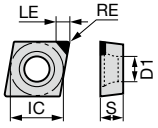


80°Rhombic with hole, Positive 7°

K	Cast iron	
S	Superalloy	
H	Hard material	●
	Sintered metal	●◐

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX310	BX470
Precision finishing	**1QP-CCGW03X102**	0.2	1.4	1		○					●	●
	1QP-CCGW03X1**04**	0.4	1.3	1		○					●	●

● : Line up



IC : 4.37 mm
D1 : 2.3 mm
S : 1.79 mm

CC



80°Rhombic with hole, Positive 7°

K	Cast iron	
S	Superalloy	
H	Hard material	●
	Sintered metal	●◐

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX310	BX470
Precision finishing	**1QP-CCGW04T102**	0.2	1.9	1		○					●	●
	1QP-CCGW04T1**04**	0.4	1.8	1		○					●	●

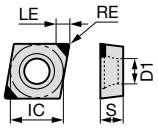
● : Line up

Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

CBN Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

CC



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



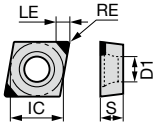
80°Rhombic with hole, Positive 7°

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX930
K	Cast iron											●ɔ	●	
S	Superalloy											●ɔ		
H	Hard material	●	●ɔ	✣	●	●ɔ	●	●ɔ	●	●	●ɔ			
	Sintered metal											●ɔ	ɔ✣	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX930
Precision finishing	2QP-CCGW060202-LF	0.2	2.3	2			○				●	●											
	2QP-CCGW060202-L		2.3	2				○			●	●											
	2QP-CCGW060204-LF	0.4	2.3	2			○				●	●											
	2QP-CCGW060204-L		2.3	2				○			●	●											
	2QP-CCGW060208-LF	0.8	2.2	2			○				●	●											
	2QP-CCGW060208-L		2.2	2				○			●	●											
Finishing	2QP-CCGW060202	0.2	2.3	2		○					●	●		●	●	●	●						
	2QP-CCMW060202		2.3	2		○												●	●	●			
	2QP-CCGW060202-LC		2.3	2					○		●	●											
	2QP-CCGW060204	0.4	2.3	2		○					●	●		●	●	●	●				●	●	
	2QP-CCGW060204SR		2.3	2		○							●										
	2QP-CCMW060204		2.3	2		○												●	●	●			●
	Q-CCMW060204		2.5	1		○													●				
	2QP-CCGW060204-LC		2.3	2					○		●	●											
	2QP-CCGW060208	0.8	2.2	2		○					●	●											
	2QP-CCGW060208SR		2.2	2		○							●										
	2QP-CCMW060208		2.2	2		○													●				
	2QP-CCGW060208-LC		2.2	2					○		●	●											

● : Line up

CC with chipbreaker



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



80°Rhombic with hole, Positive 7°

		BXA10	BXA20	BR35F	BXM10
K	Cast iron				
S	Superalloy				
H	Hard material	●	●ɔ	✣	●
	Sintered metal				

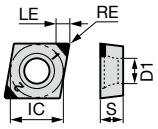
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10
Precision finishing	2QP-CCGT060204-HP	0.4	2.3	2		○					●	●	●	●
	2QP-CCGT060204-HS		2.2	2		○					●	●	●	

● : Line up

Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



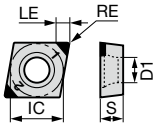
80°Rhombic with hole, Positive 7°

K	Cast iron																		ⓒ	●					
S	Superalloy																		ⓒ						
H	Hard material	●	●ⓒ	✠	●	●ⓒ	●	●ⓒ	●	●	●ⓒ														
	Sintered metal																		ⓒ	✠					

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX930
Precision finishing	2QP-CCGW09T302-LF	0.2	2.3	2			○				●	●											
	2QP-CCGW09T302-L		2.3	2				○			●	●											
	2QP-CCGW09T304-LF	0.4	2.3	2			○				●	●											
	2QP-CCGW09T304-L		2.3	2				○			●	●											
	2QP-CCGW09T304WL		2.3	2	○	○					●	●											
	2QP-CCGW09T308-LF	0.8	2.2	2			○				●	●											
	2QP-CCGW09T308-L		2.2	2				○			●	●											
	2QP-CCGW09T308WL		2.2	2	○	○					●	●											
Finishing	2QP-CCGW09T302	0.2	2.3	2		○					●	●											
	2QP-CCGW09T302-LC		2.3	2					○		●	●											
	2QP-CCGW09T304	0.4	2.3	2		○					●	●		●	●	●	●				●	●	
	2QP-CCGW09T304SR		2.3	2		○							●										
	2QP-CCMW09T304		2.3	2		○												●	●	●			●
	Q-CCMW09T304		2.5	1		○													●				
	2QP-CCGW09T304-LC		2.3	2					○		●	●											
	2QP-CCGW09T308	0.8	2.2	2		○					●	●		●	●	●	●				●		
	2QP-CCMW09T308SR		2.2	2		○							●										
	2QP-CCMW09T308		2.2	2		○												●	●	●			
	2QP-CCGW09T308-LC		2.2	2					○		●	●											
Medium cutting	2QP-CCGW09T302-H	0.2	2.3	2						○		●											
	2QP-CCGW09T304-H	0.4	2.3	2						○		●											
	2QP-CCGW09T304HC		2.3	2						○			●										
	2QP-CCGW09T308-H	0.8	2.2	2						○		●											
	2QP-CCGW09T308HC		2.2	2						○			●										

● : Line up

CC with chipbreaker



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



80°Rhombic with hole, Positive 7°

K	Cast iron																								
S	Superalloy																								
H	Hard material	●	●ⓒ	✠	●																				
	Sintered metal																								

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10
Precision finishing	2QP-CCGT09T304-HP	0.4	2.3	2		○					●	●	●	●
	2QP-CCGT09T304-HS		2.2	2		○					●	●	●	
	2QP-CCGT09T304WL-HP		2.2	2	○	○					●			●
	2QP-CCGT09T304WL-HS		2.2	2	○	○					●	●		
	2QP-CCGT09T308-HP	0.8	2.2	2		○					●	●	●	●
	2QP-CCGT09T308-HS		2.2	2		○					●	●	●	
	2QP-CCGT09T308WL-HP		2.2	2	○	○					●			●
	2QP-CCGT09T308WL-HS		2.2	2	○	○					●	●		

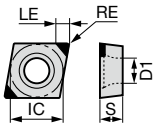
● : Line up

Reference pages: External toolholder → C030 - Internal toolholder → D014 -
J-Series toolholder → G040 - PINZBOHR® → K178 -

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

CP



IC : 7.94 mm
D1 : 3.4 mm
S : 2.38 mm

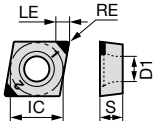
80° Rhombic with hole, Positive 11°

		BXA10	BXA20	BR35F	BXM10	BXM20
K	Cast iron					
S	Superalloy					
H	Hard material	●	●◐	✠	●	●◐
	Sintered metal					

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20
Finishing	2QP-CPGW080202	0.2	2.3	2		○					●	●			
	2QP-CPGW080204	0.4	2.3	2		○					●	●			
	2QP-CPGW080208	0.8	2.2	2		○					●	●			

● : Line up

CP



IC : 9.525 mm
D1 : 4.4 mm
S : 3.18 mm

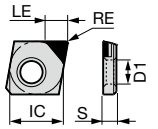
80° Rhombic with hole, Positive 11°

		BXA10	BXA20
K	Cast iron		
S	Superalloy		
H	Hard material	●	●◐
	Sintered metal		

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	2QP-CPGW090302	0.2	2.3	2		○					●	●
	2QP-CPGW090304	0.4	2.3	2		○					●	●
	2QP-CPGW090308	0.8	2.2	2		○					●	●

● : Line up

CP



IC : 9.525 mm
D1 : 4 mm
S : 2.38 mm

80° Rhombic with hole, Positive 11°

		BX360
K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	CPGA090204-QBN	0.4	4	1		○					●
	CPGA090208-QBN	0.8	3.8	1		○					●

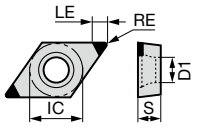
Tungaloy's standard hole specifi cation (ISO non-compliant)

● : Line up

Reference pages: Internal toolholder → D018 - Cartridge → K181 -
Boring bar tool → K199

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

DC



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



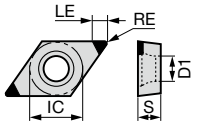
55° Rhombic with hole, Positive 7°

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX930
K	Cast iron												●ⓒ	●
S	Superalloy												●ⓒ	
H	Hard material	●	●ⓒ	✠	●	●ⓒ	●	●ⓒ	●	●	●ⓒ			
	Sintered metal											●ⓒ	ⓒ✠	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping
Finishing	2QP-DCGW070202-LF	0.2	2.7	2			○			
	2QP-DCGW070202-L		2.7	2				○		
	2QP-DCGW070204-LF	0.4	2.5	2			○			
	2QP-DCGW070204-L		2.5	2				○		
	2QP-DCGW070208-LF	0.8	2.1	2			○			
	2QP-DCGW070208-L		2.1	2				○		
Medium cutting	2QP-DCGW070202	0.2	2.7	2		○				
	2QP-DCGW070202SR		2.7	2		○				
	2QP-DCMW070202		2.7	2		○				
	2QP-DCGW070202-LC		2.7	2					○	
	2QP-DCGW070204	0.4	2.5	2		○				
	2QP-DCGW070204SR		2.5	2		○				
	2QP-DCMW070204		2.5	2		○				
	Q-DCMW070204		2.1	1		○				
	2QP-DCGW070204-LC		2.5	2					○	
	2QP-DCGW070208	0.8	2.1	2		○				
	2QP-DCGW070208SR		2.1	2		○				
	2QP-DCGW070208-LC		2.1	2					○	

● : Line up

DC with chipbreaker



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



55° Rhombic with hole, Positive 7°

		BXA10	BXA20	BR35F	BXM10
K	Cast iron				
S	Superalloy				
H	Hard material	●	●ⓒ	✠	●
	Sintered metal				

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping
Precision finishing	2QP-DCGT070204-HP	0.4	2.5	2		○				
	2QP-DCGT070204-HS		2.5	2		○				

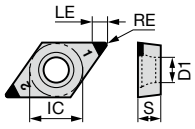
● : Line up

Reference pages: External toolholder → C046 - Internal toolholder → D056 -
J-Series toolholder → G052 -

CBN Insert POSITIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

DC



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



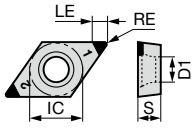
55° Rhombic with hole, Positive 7°

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX815	BX930
K	Cast iron											●ⓒ		●	
S	Superalloy											●ⓒ	●		
H	Hard material	●	●ⓒ	✠	●	●ⓒ	●	●ⓒ	●	●	●ⓒ				
	Sintered metal											●ⓒ	ⓒ✠		

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX815	BX930
Precision finishing	2QP-DCGW11T302F	0.2	2.7	2			○														●			
	2QP-DCGW11T302-LF		2.7	2			○				●	●												
	2QP-DCGW11T302-L		2.7	2				○			●	●												
	2QP-DCGW11T304F	0.4	2.5	2			○														●			
	2QP-DCGW11T304-E		2.5	2		○																	●	
	2QP-DCGW11T304-LT		2.5	2						○													●	
	2QP-DCGW11T304-LF		2.5	2			○				●	●												
	2QP-DCGW11T304-L		2.5	2				○			●	●												
	2QP-DCGW11T308-LF	0.8	2.1	2			○				●	●												
	2QP-DCGW11T308-L		2.1	2				○			●	●												
Finishing	2QP-DCGW11T301	0.1	2.8	2		○					●	●												
	2QP-DCGW11T302	0.2	2.7	2		○					●	●		●	●	●	●							
	2QP-DCGW11T302SR		2.7	2		○							●											
	2QP-DCMW11T302		2.7	2		○												●	●	●				
	2QP-DCGW11T302-LC		2.7	2					○		●	●												
	2QP-DCGW11T304	0.4	2.5	2		○					●	●		●	●	●	●				●	●		
	2QP-DCGW11T304SR		2.5	2		○							●											
	2QP-DCMW11T304		2.5	2		○												●	●	●				●
	Q-DCMW11T304		2.1	1		○													●					
	2QP-DCGW11T304-LC		2.5	2					○		●	●												
	2QP-DCGW11T308	0.8	2.1	2		○					●	●		●	●	●	●				●			
	2QP-DCGW11T308SR		2.1	2		○							●											
	2QP-DCMW11T308		2.1	2		○												●	●	●				
	2QP-DCGW11T308-LC		2.1	2					○		●	●												
Medium cutting	2QP-DCGW11T302-H	0.2	2.7	2						○		●												
	2QP-DCGW11T304-H	0.4	2.5	2						○		●												
	2QP-DCGW11T304HC		2.5	2						○			●											
	2QP-DCGW11T308-H	0.8	2.1	2						○		●												
	2QP-DCGW11T308HC		2.1	2						○			●											

● : Line up

DC with chipbreaker



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



55° Rhombic with hole, Positive 7°

		BXA10	BXA20	BR35F	BXM10
K	Cast iron				
S	Superalloy				
H	Hard material	●	●ⓒ	✠	●
	Sintered metal				

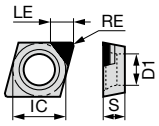
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10
Precision finishing	2QP-DCGT11T304-HP	0.4	2.5	2		○					●	●	●	●
	2QP-DCGT11T304-HS		2.5	2		○					●	●	●	
	2QP-DCGT11T308-HP	0.8	2.1	2		○					●	●	●	●
	2QP-DCGT11T308-HS		2.1	2		○					●	●	●	

● : Line up

Reference pages: External toolholder → C046 - Internal toolholder → D056 - J-Series toolholder → G052 -

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

EP



IC : 3.57 mm
D1 : 1.9 mm
S : 1.39 mm



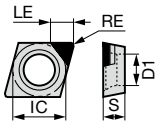
75° Rhombic, Positive 11° with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX310	BX470
Finishing	**1QP-EPGW03X102**	0.2	1.4	1		○					●	●
Finishing	1QP-EPGW03X1**04**	0.4	1.3	1		○					●	●

● : Line up

EP



IC : 3.97 mm
D1 : 2.3 mm
S : 1.59 mm



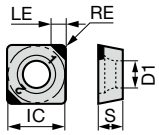
75° Rhombic, Positive 11° with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX310	BX470
Finishing	**1QP-EPGW040102**	0.2	1.7	1		○					●	●
Finishing	1QP-EPGW0401**04**	0.4	1.6	1		○					●	●

● : Line up

SP



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



Square Positive 11° with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX910
Finishing	**2QP-SPGW09T308**	0.8	2.4	2		○					●
Finishing	2QP-SPGW09T3**12**	1.2	2.4	2		○					●

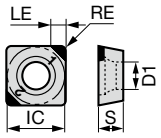
● : Line up

Reference pages: EP: Internal toolholder → D034 -, Boring bar tool → K201 -, Top-borer tool → K202
SP: Internal toolholder → D041 -, Cartridge → K181 -

CBN Insert POSITIVE TYPE

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

SP



IC : 12.7 mm
D1 : 5.5 mm
S : 4.76 mm

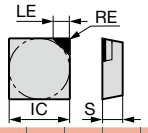
Square Positive 11° with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX910
Finishing	2QP-SPGW120408	0.8	2.4	2		○					●
Finishing	2QP-SPGW120412	1.2	2.4	2		○					●
Finishing	2QP-SPGW120416	1.6	2.4	2		○					●

● : Line up

SP



IC : 12.7 mm
S : 3.18 mm

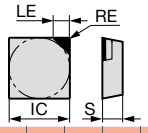
Square Positive 11° without hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX330	BX360	BX910	BX930
Finishing	2QP-SPMN090304	0.4	2.4	2		○					●	●		●
Finishing	Q-SPGN090304		2.8	1		○					●			
Finishing	2QP-SPGN090308	0.8	2.4	2		○							●	
Finishing	2QP-SPMN090308		2.4	2		○					●	●		●
Finishing	Q-SPGN090308		2.8	1		○					●			
Finishing	2QP-SPGN090312	1.2	2.4	2		○							●	

● : Line up

SP



IC : 9.525 mm
S : 3.18 mm

Square Positive 11° without hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

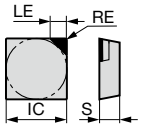
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	SPGN090304-QBN	0.4	4.1	1		○					●
Finishing	SPGN090308-QBN	0.8	4.1	1		○					●
Finishing	SPGN090312-QBN	1.2	4.1	1		○					●

● : Line up

Reference pages: Internal toolholder → D041 - Cartridge → K181 -

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

SP



IC : 12.7 mm
S : 3.18 mm

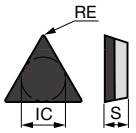
Square Positive 11° without hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**SPGN120308-QBN**	0.4	4.1	1		○					●
Finishing	SPGN1203**12-QBN**	0.8	4.1	1		○					●

● : Line up

TB



IC : 3.97 mm
S : 1.59 mm

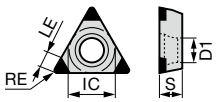
Triangular Positive 5° without hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TBGN060104-15-QBN**	0.4	-	3		○					●
Finishing	TBGN0601**08-15-QBN**	0.8	-	3		○					●

● : Line up

TC



IC : 5.56 mm
D1 : 2.5 mm
S : 2.38 mm

Triangular Positive 7° with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	**3QP-TCGW090202**	0.2	2.3	3		○					●	●
Finishing	3QP-TCGW0902**04**	0.4	2.2	3		○					●	●
Finishing	3QP-TCGW0902**08**	0.8	1.9	3		○					●	●

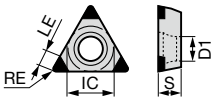
● : Line up

Reference pages: SP: Internal toolholder → D042, Cartridge → K181 -
TC: External toolholder → C054, Internal toolholder → D045
J-Series toolholder → G074 -, PINZBOHR® → K178 -

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TC



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm

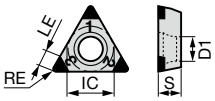
Triangular Positive 7° with hole

K	Cast iron	
S	Superalloy	
H	Hard material	● ◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	3QP-TCGW110202	0.2	2.3	3		○					●	●
Finishing	3QP-TCGW110204	0.4	2.2	3		○					●	●
Finishing	3QP-TCGW110208	0.8	1.9	3		○					●	●

● : Line up

TC



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm

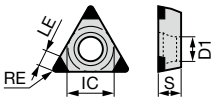
Triangular Positive 7° with hole

K	Cast iron	
S	Superalloy	
H	Hard material	● ◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	3QP-TCGW16T302	0.2	2.3	3		○					●	●
Finishing	3QP-TCGW16T304	0.4	2.2	3		○					●	●
Finishing	3QP-TCGW16T308	0.8	1.9	3		○					●	●

● : Line up

TP



IC : 4.76 mm
D1 : 2.3 mm
S : 2.38 mm

Triangular Positive 11° with hole

K	Cast iron	●
S	Superalloy	
H	Hard material	● ◐ ● ◐ ● ◐ ● ● ◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
Finishing	3QP-TPGW080202	0.2	2.3	3		○					●	●								
Finishing	3QP-TPGW080204	0.4	2.2	3		○					●	●	●	●	●	●				
Finishing	3QP-TPMW080204	0.4	2.2	3		○											●	●	●	●
Finishing	Q-TPMW080204	0.4	2.2	1		○												●		
Finishing	3QP-TPGW080208	0.8	1.9	3		○					●	●								

● : Line up

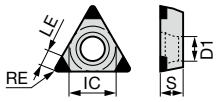
Reference pages: TC: External toolholder → C054, Internal toolholder → D045
J-Series toolholder → G074 -, PINZBOHR® → K178 -
TP: Internal toolholder → D046 -, Cartridge → K181 -
Boring bar tool → K199 -, Top-borer tool → K203

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



Triangular Positive 11° with hole



IC : 5.56 mm
D1 : 2.5 mm
S : 2.38 mm

		BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
K	Cast iron										●
S	Superalloy										
H	Hard material	●	●ⓒ	●	●ⓒ	●	●ⓒ	●	●	●ⓒ	
	Sintered metal										

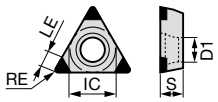
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
Finishing	3QP-TPGW090202	0.2	2.3	3		○					●	●		●	●	●				
	3QP-TPMW090202		2.3	3		○												●	●	●
	Q-TPMW090202		2.4	1		○												●		
	3QP-TPGW090204	0.4	2.2	3		○					●	●	●	●	●	●				
	3QP-TPMW090204		2.2	3		○											●	●	●	●
	Q-TPMW090204		2.3	1		○												●		
	3QP-TPGW090208	0.8	1.9	3		○					●	●								

● : Line up

TP



Triangular Positive 11° with hole



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm

		BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX930
K	Cast iron											●
S	Superalloy											
H	Hard material	●	●ⓒ	●	●ⓒ	●	●ⓒ	●	●	●ⓒ		
	Sintered metal										●ⓒ	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX930
Finishing	3QP-TPGW110202	0.2	2.3	3		○					●	●		●	●	●					
	3QP-TPMW110202		2.3	3		○											●	●	●		●
	Q-TPMW110202		2.4	1		○												●			
	3QP-TPGW110204	0.4	2.2	3		○					●	●	●	●	●	●				●	
	3QP-TPMW110204		2,2	3		○											●	●	●		●
	Q-TPMW110204		2,2	1		○												●			
	3QP-TPGW110208	0.8	1.9	3		○					●	●								●	

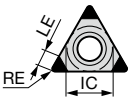
● : Line up

Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



IC : 6.35 mm
D1 : 3.4 mm
S : 3.18 mm

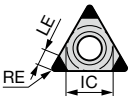
Triangular Positive 11° with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX910	BX930
K	Cast iron												◐	●	●
S	Superalloy												◐		
H	Hard material	●	◐	✠	●	◐	●	◐	●	●	◐				
	Sintered metal											◐	✠		

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX470	BX480	BX910	BX930
Precision finishing	3QP-TPGW110302-LF	0.2	2.3	3			○				●	●												
	3QP-TPGW110302-L		2.3	3				○			●	●												
	3QP-TPGW110304F	0.4	2,2	3			○														●			
	3QP-TPGW110304-LF		2.2	3			○				●	●												
	3QP-TPGW110304-L		2.2	3				○			●	●												
	3QP-TPGW110308F	0.8	1.9	3			○														●			
	3QP-TPGW110308-LF		1.9	3			○				●	●												
	3QP-TPGW110308-L		1.9	3				○			●	●												
Finishing	3QP-TPGW110302	0.2	2.3	3		○					●	●			●	●	●					●		
	3QP-TPMW110302		2.3	3		○												●	●	●				●
	3QP-TPGW110302-LC		2.3	3					○		●	●												
	3QP-TPGW110304	0.4	2.2	3		○					●	●		●	●	●	●				●	●		
	3QP-TPGW110304SR		2.2	3		○							●											
	3QP-TPMW110304		2.2	3		○												●	●	●				●
	Q-TPMW110304		2.2	1		○													●					
	3QP-TPGW110304-LC		2.2	3					○		●	●												
	3QP-TPGW110308	0.8	1.9	3		○					●	●		●	●	●	●				●	●	●	
	3QP-TPGW110308SR		1.9	3		○							●											
	3QP-TPMW110308		1.9	3		○												●	●	●				●
	Q-TPMW110308		1.9	1		○													●					
	3QP-TPGW110308-LC		1.9	3					○		●	●												
Medium cutting	3QP-TPGW110302-H	0.2	2.3	3						○		●												
	3QP-TPGW110304-H	0.4	2.2	3						○		●												
	3QP-TPGW110304HC		2.2	3						○			●											
	3QP-TPGW110308-H	0.8	1.9	3						○		●												
	3QP-TPGW110308HC		1.9	3						○			●											

● : Line up

TP with chipbreaker



IC : 6.35 mm
D1 : 3.4 mm
S : 3.18 mm

Triangular Positive 11° with hole

		BXA10	BXA20	BR35F	BXM10
K	Cast iron				
S	Superalloy				
H	Hard material	●	◐	✠	●
	Sintered metal				

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F	BXM10
Precision finishing	3QP-TPGT110304-HP	0.4	2.2	3		○					●	●	●	●
	3QP-TPGT110304-HS		2.1	3		○					●	●	●	
	3QP-TPGT110308-HP	0.8	1.9	3		○					●	●	●	●
	3QP-TPGT110308-HS		1.8	3		○					●	●	●	

● : Line up

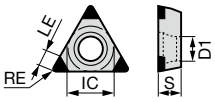
Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

● : Continuous cutting
ⓒ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP



Triangular Positive 11° with hole



IC : 7.94 mm
D1 : 3.4 mm
S : 3.18 mm

		BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX480	BX930
K	Cast iron										●ⓒ	●
S	Superalloy										●ⓒ	
H	Hard material	●	●ⓒ	●	●ⓒ	●	●ⓒ	●	●	●ⓒ		
	Sintered metal										ⓒ✣	

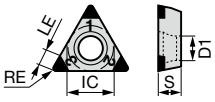
Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX480	BX930
Finishing	3QP-TPGW130302	0.2	2.3	3		○					●	●		●	●	●				●	
	3QP-TPMW130302		2.3	3		○											●	●	●		●
	Q-TPMW130302		2.4	1		○												●			
	3QP-TPGW130304	0.4	2.2	3		○					●	●	●	●	●	●				●	
	3QP-TPMW130304		2.2	3		○											●	●	●		●
	Q-TPMW130304		2.3	1		○												●			
	3QP-TPGW130308	0.8	1.9	3		○					●	●									

● : Line up

TP



Triangular Positive 11° with hole



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm

		BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX480	BX930
K	Cast iron										●ⓒ	●
S	Superalloy										●ⓒ	
H	Hard material	●	●ⓒ	●	●ⓒ	●	●ⓒ	●	●	●ⓒ		
	Sintered metal										ⓒ✣	

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX480	BX930
Finishing	3QP-TPGW16T302	0.2	2.3	3		○					●	●									
	3QP-TPGW16T304	0.4	2.2	3		○					●	●	●	●	●	●				●	
	3QP-TPMW16T304		2.2	3		○											●	●	●		●
	Q-TPGW16T304		2.3	1		○												●			
	3QP-TPGW16T308	0.8	1.9	3		○					●	●	●	●	●	●					
	3QP-TPMW16T308		1.9	3		○											●				

● : Line up

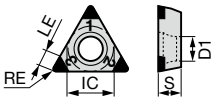
Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP

Triangular Positive 11° with hole



IC : 9.525 mm
D1 : 4.4 mm
S : 4.76 mm

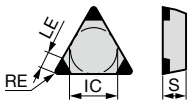
		BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
K	Cast iron									●	
S	Superalloy										
H	Hard material	●	●◐	●	●◐	●	●◐	●	●	●◐	
	Sintered metal										

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
Finishing	3QP-TPGW160402	0.2	2.3	3		○					●	●								
	3QP-TPGW160404	0.4	2.2	3		○					●	●	●	●	●	●				
	3QP-TPMW160404		2.2	3		○											●	●	●	●
	Q-TPMW160404		2.3	1		○												●		
	3QP-TPGW160408	0.8	1.9	3		○					●	●		●	●	●				
	3QP-TPMW160408		1.9	3		○											●	●	●	●
	Q-TPMW160408		2	1		○												●		
Medium cutting	3QP-TPGW160402-H	0.2	2.3	3						○	●	●								
	3QP-TPGW160404-H	0.4	2.2	3						○	●	●								
	3QP-TPGW160408-H	0.8	1.9	3						○	●	●								

● : Line up

TP

Triangular Positive 11° without hole



IC : 6.35 mm
S : 3.18 mm

		BX330	BX360	BX480	BX910	BX930
K	Cast iron			●◐	●	●
S	Superalloy			●◐		
H	Hard material	●	●◐			
	Sintered metal			◐✣		

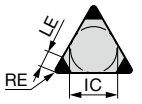
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX330	BX360	BX480	BX910	BX930
Finishing	3QP-TPGN110302	0.2	2.3	3		○							●		
	3QP-TPMN110302		2.3	3		○					●	●			●
	3QP-TPGN110304	0.4	2.2	3		○							●		
	3QP-TPMN110304		2.2	3		○					●	●			●
	Q-TPGN110304		2.2	1		○					●				
	3QP-TPGN110308	0.8	1.9	3		○							●	●	
	3QP-TPMN110308		1.9	3		○					●	●			●
	Q-TPGN110308		2.2	1		○					●				
	3QP-TPGN110312	1.2	2.4	3		○								●	

● : Line up

Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP



IC : 9.525 mm
S : 3.18 mm

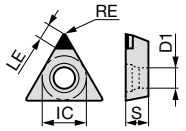
Triangular Positive 11° without hole

		BX330	BX360	BX480	BX930
K	Cast iron			●◐	●
S	Superalloy			●◐	
H	Hard material	●	●◐		
	Sintered metal			◐✣	

Application	Designation	RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX330	BX360	BX480	BX930
Finishing	3QP-TPGN160304	0.4	2.2	3		○							●	
	3QP-TPMN160304		2.2	3		○					●	●		●
	Q-TPGN160304		2.3	1		○					●			
	3QP-TPGN160308	0.8	1.9	3		○							●	
	3QP-TPMN160308		1.9	3		○					●	●		●
	Q-TPGN160308		1.9	1		○					●			

● : Line up

TP



IC : 5.56 mm
D1 : 2.5 mm
S : 2.38 mm

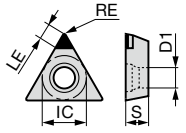
Triangular Positive 11° with hole

		BX360
K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	TPGW090202-QBN	0.2	3.3	1		○					●
	TPGW090204-QBN	0.4	3.2	1		○					●

● : Line up

TP



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm

Triangular Positive 11° with hole

		BX360
K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	TPGW110202-QBN	0.2	3.9	1		○					●
	TPGW110204-QBN	0.4	3.7	1		○					●

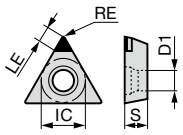
● : Line up

Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

CBN Insert POSITIVE TYPE

● : Continuous cutting
ɔ : Light interrupted cutting
✣ : Heavy interrupted cutting

TP



IC : 7.94 mm
D1 : 3.4 mm
S : 3.18 mm

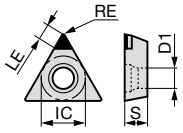
Triangular Positive 11° with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ɔ
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGW130302-QBN**	0.2	3.9	1		○					●
Finishing	TPGW1303**04-QBN**	0.4	3.7	1		○					●

● : Line up

TP



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm

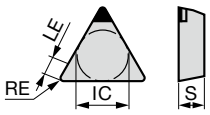
Triangular Positive 11° with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ɔ
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGW16T302-QBN**	0.2	4.4	1		○					●
Finishing	TPGW16T3**04-QBN**	0.4	4.2	1		○					●
Finishing	TPGW16T3**08-QBN**	0.8	4	1		○					●

● : Line up

TP



IC : 6.35 mm
S : 3.18 mm

Triangular Positive 11° without hole

K	Cast iron	
S	Superalloy	
H	Hard material	●ɔ
	Sintered metal	

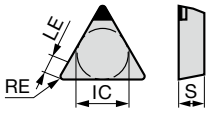
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGN110304-QBN**	0.4	3.7	1		○					●
Finishing	TPGN1103**08-QBN**	0.8	3.5	1		○					●

● : Line up

Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



IC : 9.525 mm
S : 3.18 mm

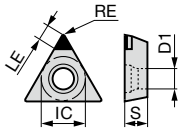
Triangular Positive 11° without hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGN160304-QBN**	0.4	4.2	1		○					●
Finishing	TPGN1603**08-QBN**	0.8	4	1		○					●

● : Line up

TP



IC : 5.56 mm
D1 : 3.2 mm
S : 2.38 mm

Triangular Positive 11° with hole

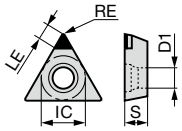
K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGA090202-QBN**	0.2	3.1	1		○					●
Finishing	TPGA0902**04-QBN**	0.4	2.9	1		○					●

Tungaloy's standard hole specifi cation (ISO non-compliant)

● : Line up

TP



IC : 6.35 mm
D1 : 3 mm
S : 2.38 mm

Triangular Positive 11° with hole

K	Cast iron
S	Superalloy
H	Hard material
	Sintered metal

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGA110202-QBN**	0.2	3.9	1		○					●
Finishing	TPGA1102**04-QBN**	0.4	3.7	1		○					●

Tungaloy's standard hole specifi cation (ISO non-compliant)

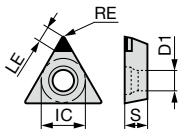
● : Line up

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Boring bar tool → K199 -
Cartridge → K181 -
Top-borer tool → K203

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



IC : 6.35 mm
D1 : 3.18 mm
S : 3 mm



Triangular Positive 11° with hole

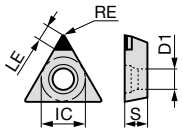
K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGA110302-QBN**	0.2	3.9	1		○					●
	TPGA1103**04-QBN**	0.4	3.7	1		○					●

Tungaloy's standard hole specifi cation (ISO non-compliant)

● : Line up

TP



IC : 9.525 mm
D1 : 4 mm
S : 3.18 mm



Triangular Positive 11° with hole

K	Cast iron	
S	Superalloy	
H	Hard material	●◐
	Sintered metal	

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BX360
Finishing	**TPGA160302-QBN**	0.2	4.4	1		○					●
	TPGA1603**04-QBN**	0.4	4.2	1		○					●
	TPGA1603**08-QBN**	0.8	4	1		○					●

Tungaloy's standard hole specifi cation (ISO non-compliant)

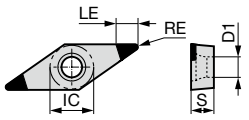
● : Line up

C
D
E
F
G
R
S
T
V
W
Y
OTHERS

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Boring bar tool → K199 -
Cartridge → K181 -
Top-borer tool → K203

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

VB



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



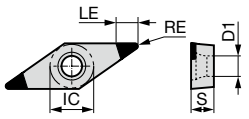
35° Rhombic Positive 5° with hole

		BXA10	BXA20
K	Cast iron		
S	Superalloy		
H	Hard material	●	◐
	Sintered metal		

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	2QP-VBGW110202	0.2	3.5	2		○					●	●
	2QP-VBGW110204	0.4	3.1	2		○					●	●
	2QP-VBGW110208	0.8	2.2	2		○					●	●

● : Line up

VB



IC : 6.35 mm
D1 : 2.8 mm
S : 3.18 mm



35° Rhombic Positive 5° with hole

		BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
K	Cast iron											●
S	Superalloy											
H	Hard material	●	◐	✣	●	◐	●	◐	●	●	◐	
	Sintered metal											

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360	BX930
Precision finishing	2QP-VBGW110302-LF	0.2	3.5	2			○				●	●									
	2QP-VBGW110302-L		3.5	2				○			●	●									
	2QP-VBGW110304-LF	0.4	3.1	2			○				●	●									
	2QP-VBGW110304-L		3.1	2				○			●	●									
	2QP-VBGW110308-LF	0.8	2.2	2			○				●	●									
	2QP-VBGW110308-L		2.2	2				○			●	●									
Finishing	2QP-VBGW110301	0.1	3.7	2		○					●	●									
	2QP-VBGW110302	0.2	3.5	2		○					●	●									
	2QP-VBGW110302-LC		3.5	2					○		●	●									
	2QP-VBGW110304	0.4	3.1	2		○					●	●		●	●	●	●				
	2QP-VBGW110304SR		3.1	2		○							●								
	2QP-VBMW110304		3.1	2		○												●	●	●	●
	2QP-VBGW110304-LC		3.1	2					○		●	●									
	2QP-VBGW110308	0.8	2.2	2		○					●	●		●	●	●	●				
	2QP-VBGW110308SR		2.2	2		○							●								
	2QP-VBMW110308		2.2	2		○												●	●	●	●
	2QP-VBGW110308-LC		2.2	2					○		●	●									

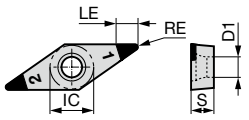
● : Line up

Reference pages: Internal toolholder → D059 - J-Series toolholder → G062 -

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

VB with chipbreaker



IC : 6.35 mm
D1 : 2.8 mm
S : 3.18 mm



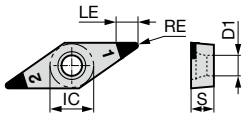
35° Rhombic Positive 5° with hole

K	Cast iron																															
S	Superalloy																															
H	Hard material	●	◐	●																												
	Sintered metal																															

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BXM10
Precision finishing	2QP-VBGT110304-HP	0.4	3	2		○					●	●	●
	2QP-VBGT110304-HS		3	2		○					●	●	
	2QP-VBGT110308-HP	0.8	2.2	2		○					●	●	●
	2QP-VBGT110308-HS		2.2	2		○					●	●	

● : Line up

VB



IC : 9.525 mm
D1 : 4.4 mm
S : 4.76 mm



35° Rhombic Positive 5° with hole

K	Cast iron																															
S	Superalloy																															
H	Hard material	●	◐	✠	●	◐	●	◐	●	●	◐																					
	Sintered metal																															

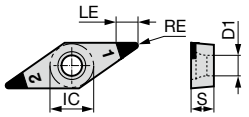
Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F	BXM10	BXM20	BXA30	BXA40	BX310	BX330	BX360
Precision finishing	2QP-VBGW160402-LF	0.2	3.5	2			○				●	●								
	2QP-VBGW160402-L		3.5	2				○			●	●								
	2QP-VBGW160404-LF	0.4	3.1	2			○				●	●								
	2QP-VBGW160404-L		3.1	2				○			●	●								
	2QP-VBGW160408-LF	0.8	2.2	2			○				●	●								
	2QP-VBGW160408-L		2.2	2				○			●	●								
Finishing	2QP-VBGW160402	0.2	3.5	2		○					●	●								
	2QP-VBGW160402-LC		3.5	2					○		●	●								
	2QP-VBGW160404	0.4	3.1	2		○					●	●		●	●	●	●			
	2QP-VBGW160404SR		3.1	2		○							●							
	2QP-VBMW160404		3.1	2		○												●	●	●
	2QP-VBGW160404-LC		3.1	2					○		●	●								
	2QP-VBGW160408	0.8	2.2	2		○					●	●		●	●	●	●			
	2QP-VBGW160408SR		2.2	2		○							●							
	2QP-VBMW160408		2.2	2		○												●	●	●
	2QP-VBGW160408-LC		2.2	2					○		●	●								
	2QP-VBGW160412	1.2	3	2		○					●	●								
Medium cutting	2QP-VBGW160402-H	0.2	3.5	2						○		●								
	2QP-VBGW160404-H	0.4	3.1	2						○		●								
	2QP-VBGW160404HC		3.1	2						○			●							
	2QP-VBGW160408-H	0.8	2.2	2						○		●								
	2QP-VBGW160408HC		2.2	2						○			●							

● : Line up

Reference pages: VB: Internal toolholder → D059 -, J-Series toolholder → G062 -
VC: External toolholder → C048 -, Internal toolholder → D039 -, TungCap → K015 -

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

VB with chipbreaker



IC : 9.525 mm
D1 : 4.4 mm
S : 4.76 mm



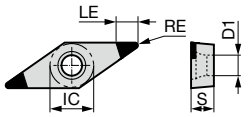
35° Rhombic Positive 5° with hole

	K Cast iron	S Superalloy	H Hard material	Sintered metal
BXA10	●			
BXA20	●	◐		
BXM10	●			

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BXM10
Precision finishing	2QP-VBGT160404-HP	0.4	3	2		○					●	●	●
	2QP-VBGT160404-HS		3	2		○					●	●	
	2QP-VBGT160408-HP	0.8	2.2	2		○					●	●	●
	2QP-VBGT160408-HS		2.2	2		○					●	●	

● : Line up

VC



IC : 4.76 mm
D1 : 2.3 mm
S : 2.38 mm



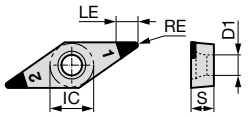
35° Rhombic Positive 7° with hole

	K Cast iron	S Superalloy	H Hard material	Sintered metal
BXA10	●			
BXA20	●	◐		

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20
Finishing	2QP-VCGW080202	0.2	3.5	2		○					●	●
	2QP-VCGW080204	0.4	3.1	2		○					●	●
	2QP-VCGW080208	0.8	2.2	2		○					●	●

● : Line up

VC



IC : 9.525 mm
D1 : 4.4 mm
S : 4.76 mm



35° Rhombic Positive 7° with hole

	K Cast iron	S Superalloy	H Hard material	Sintered metal
BXA10	●			
BXA20	●	◐		
BXM10	●			
BXM20	◐			
BXA40	●			
BX330	●			
BX360	◐			
BX815		●		
BX930			●	

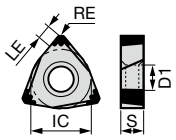
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Wiper	Standard	Problem: Burr	Problem: Flnak wear	Problem: Crater wear	Problem: Chipping	BXA10	BXA20	BXM10	BXM20	BXA40	BX330	BX360	BX815	BX930
Precision finishing	2QP-VCGW160408-E	0.8	2.2	2		○												●	
	2QP-VCGW160408-LT		2.2	2						○								●	
	2QP-VCGW160412-E	1.2	3	2		○												●	
	2QP-VCGW160412-LT		3	2						○								●	
Finishing	2QP-VCGW160402	0.2	3.5	2		○					●	●							
	2QP-VCGW160404	0.4	3.1	2		○					●	●	●	●	●				
	2QP-VCMW160404		3.1	2		○										●	●		●
	2QP-VCGW160408	0.8	2.2	2		○					●	●							
Medium cutting	2QP-VCGW160402-H	0.2	3.5	2						○	●	●							
	2QP-VCGW160404-H	0.4	3.1	2						○	●	●							
	2QP-VCGW160408-H	0.8	2.2	2						○	●	●							

● : Line up

CBN Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✣ : Heavy interrupted cutting

WX



IC : 6.35 mm
D1 : 2.7 mm
S : 3.18 mm

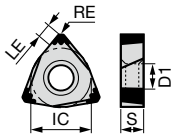
80° Trigon with hole

K	Cast iron																														
S	Superalloy																														
H	Hard material	●	◐	✣																											
	Sintered metal																														

Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F
Finishing	6QS-WXGQ040302SPR	0.2	1.8	6		○					●	●	●
	6QS-WXGQ040302SPL		1.8	6		○					●	●	●
	6QS-WXGQ040304SPR	0.4	1.8	6		○					●	●	●
	6QS-WXGQ040304SPL		1.8	6		○					●	●	●
	6QS-WXGQ040308SPR	0.8	1.7	6		○					●	●	●
	6QS-WXGQ040308SPL		1.7	6		○					●	●	●

● : Line up

WX with chipbreaker



IC : 6.35 mm
D1 : 2.7 mm
S : 3.18 mm

80° Trigon with hole

K	Cast iron																														
S	Superalloy																														
H	Hard material	●	◐	✣																											
	Sintered metal																														

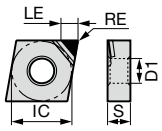
Application	Designation	Dimension (mm) RE	LE	No. of corners	Wiper	Standard	Problem: Burr	Flnak wear	Crater wear	Chipping	BXA10	BXA20	BR35F
Precision finishing	6QS-WXGU040304R-HP	0.4	1.8	6		○					●	●	●
	6QS-WXGU040304L-HP		1.8	6		○					●	●	●
	6QS-WXGU040308R-HP	0.8	1.7	6		○					●	●	●
	6QS-WXGU040308L-HP		1.7	6		○					●	●	●

● : Line up

Reference pages: External toolholder → C029 - Internal toolholder → D023
J-Series toolholder → G045 -

● : Continuous cutting
ⓒ : Light interrupted cutting
✣ : Heavy interrupted cutting

CN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

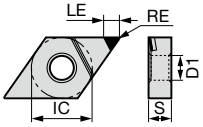


80°Rhombic with hole

	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	N Non-ferrous ●ⓒ DX110	●ⓒ DX120	●ⓒ DX140
Finishing	1QP-CNMM120402	0.2	2.8	1	○	●		
	CNMM120402-DIA		3.5	1	○		●	
	1QP-CNMM120404	0.4	2.8	1	○	●		
	CNMM120404-DIA		3.5	1	○		●	
	CNGA120404-DIA		3.5	1				●
	CNGA120408-DIA	0.8	2.8	1				●

● : Line up

DN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm

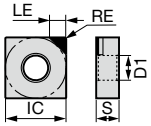


55° Rhombic with hole

	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	N Non-ferrous ●ⓒ DX120	●ⓒ DX140	●ⓒ DX160
Finishing	DNMM150402-DIA	0.2	3.3	1	○	●		
	DNMM150404-DIA	0.4	3.1	1	○	●		
	DNGA150404-DIA		3.1	1			●	●
	DNGA150408-DIA	0.8	2.8	1			●	

● : Line up

SN



IC : 12.7 mm
D1 : 5.16 mm
S : 4.76 mm



Square with hole

	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	N Non-ferrous ●ⓒ DX140
Finishing	SNGA120404-DIA	0.4	3.6	1		●
	SNGA120408-DIA	0.8	3.6	1		●

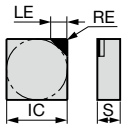
● : Line up

Reference pages: CN: External toolholder → C015 -, Internal toolholder → D025 -
J-Series toolholder → G050, TungCap → K008 -
PINZBOHR® → K178 -, Cartridge → K181 -
DN: External toolholder → C034 -, Internal toolholder → D069 -
J-Series toolholder → G068, TungCap → C034 -, K012 -
SN: External toolholder → C101 -, Internal toolholder → D043 -
Cartridge → K181 -

PCD Insert NEGATIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

SN



IC : 12.7 mm
S : 4.76 mm

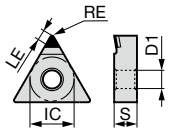
Square without hole

N Non-ferrous ●ⓒ

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140
Finishing	SNGN120408-DIA	0.8	3.6	1		●

● : Line up

TN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

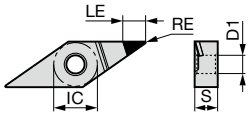
Triangular with hole

N Non-ferrous ●ⓒ ●ⓒ ●ⓒ ●ⓒ

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110	DX120	DX140	DX160
Finishing	1QP-TNMM160402	0.2	2.7	1	○	●			
	TNMM160402-DIA		3.3	1	○		●		
	1QP-TNMM160404	0.4	2.6	1	○	●			
	TNMM160404-DIA		3.2	1	○		●		
	TNGA160404-DIA		3.2	1				●	●
	TNGA160408-DIA	0.8	2.9	1				●	●

● : Line up

VN



IC : 9.525 mm
D1 : 3.81 mm
S : 4.76 mm

35° Rhombic with hole

N Non-ferrous ●ⓒ

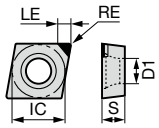
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX120
Finishing	VNMM160402-DIA	0.2	4.8	1	○	●
	VNMM160404-DIA	0.4	4.4	1	○	●
	VNMM160408-DIA	0.8	3.6	1	○	●

● : Line up

Reference pages: SN: External toolholder → C101 -, Internal toolholder → D043 -, Cartridge → K181 -
TN: External toolholder → C032 -, Internal toolholder → D049 -, Cartridge → K181 -
VN: External toolholder → C041 -, Internal toolholder → D074 -, TungCap → C042 -, K014 -

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

CC



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



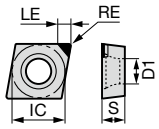
80°Rhombic Positive 7° with hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110 ●◐	DX120 ●◐	DX140 ●◐
Finishing	CCGW060200-DIA	0.05	2.4	1				●
	CCMT060202-DIA	0.2	2.4	1	○		●	
	CCGW060202-DIA		2.4	1				●
	1QP-CCGT060204-NS	0.4	3.1	1	○	●		
	1QP-CCMT060204		2.4	1	○	●		
	CCMT060204-DIA		2.4	1	○		●	
	CCGW060204-DIA		2.4	1				●

● : Line up

CC



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



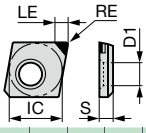
80°Rhombic Positive 7° with hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110 ●◐	DX120 ●◐	DX140 ●◐	DX160 ●◐
Finishing	CCMT09T302-DIA	0.2	2.4	1	○		●		
	CCGW09T302-DIA		3.5	1				●	
	1QP-CCGT09T304-NS	0.4	3.1	1	○	●			
	1QP-CCMT09T304		2.4	1	○	●			
	CCMT09T304-DIA		2.4	1	○		●		
	CCGW09T304-DIA		3.5	1				●	●
	1QP-CCGT09T308-NS	0.8	3	1	○	●			
	CCGW09T308-DIA		3.4	1				●	

● : Line up

CP



IC : 9.525 mm
D1 : 4 mm
S : 2.38 mm



80° Rhombic Positive 11° with hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140 ●◐
Finishing	CPGA090202-DIA	0.2	2.4	1		●
	CPGA090204-DIA	0.4	2.4	1		●

Tungaloy's standard hole specifi cation (ISO non-compliant)

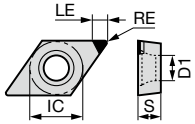
● : Line up

Reference pages: CC: External toolholder → C030 -, Internal toolholder → D014 -
J-Series toolholder → G040 -, PINZBOHR® → K178 -

PCD Insert POSITIVE TYPE

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

DC



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm



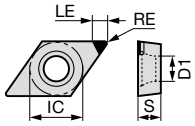
55° Rhombic Positive 7° with hole

N Non-ferrous ●◐ ●◐ ●◐

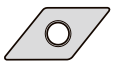
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110	DX120	DX140
Finishing	DCGW070200-DIA	0.05	2.4	1				●
	DCMT070202-DIA	0.2	2.3	1	○		●	
	DCGW070202-DIA		2.3	1			●	●
	1QP-DCGT070204-NS	0.4	3	1	○	●		
	DCMT070204-DIA		2.1	1	○		●	
	DCGW070204-DIA		2.1	1				●

● : Line up

DC



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



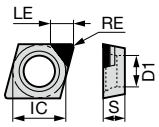
55° Rhombic Positive 7° with hole

N Non-ferrous ●◐ ●◐ ●◐

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110	DX120	DX140
Finishing	DCMT11T302-DIA	0.2	3.2	1	○		●	
	DCGW11T302-DIA		3.2	1				●
	1QP-DCGT11T304-NS	0.4	3	1	○	●		
	DCMT11T304-DIA		3	1	○		●	
	DCGW11T304-DIA		3	1				●
	1QP-DCGT11T308-NS	0.8	3	1	○	●		
	DCGW11T308-DIA		2.7	1				●

● : Line up

EP



IC : 3.97 mm
D1 : 2.3 mm
S : 1.59 mm



75° Rhombic Positive 11° with hole

N Non-ferrous ●◐

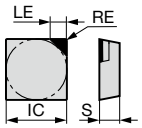
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140
Finishing	EPGW040102-DIA	0.2	2	1		●
	EPGW040104-DIA	0.4	1.9	1		●

● : Line up

Reference pages: DC: External toolholder → C046 -, Internal toolholder → D056 -, J-Series toolholder → G052 -
EP : Internal toolholder → D034 -, Boring bar tool → K201 -, Top-borer tool → K202

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

SP



IC : 9.525 mm
S : 3.18 mm

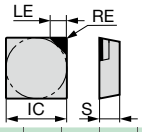
Square Positive 11° without hole

N Non-ferrous ●◐

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140
Finishing	**SPGN090308-DIA**	0.8	3.6	1		●

● : Line up

SP



IC : 12.7 mm
S : 3.18 mm

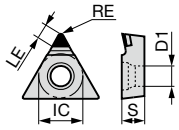
Square Positive 11° without hole

N Non-ferrous ●◐ ●◐

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140	DX160
Finishing	**SPGN120302-DIA**	0.2	3.6	1		●	
	SPGN12030**4-DIA**	0.4	3.6	1		●	
	SPGN12030**8-DIA**	0.8	3.6	1		●	●

● : Line up

TC



IC : 4.76 mm
D1 : 2.7 mm
S : 2.38 mm

Triangular Positive 7° with hole

N Non-ferrous ●◐

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX120
Finishing	**TCMT080202-DIA**	0.2	2.2	1	○	●
	TCMT0802**04-DIA**	0.4	2	1	○	●

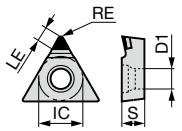
● : Line up

Reference pages: SP: Internal toolholder → D041 -, Cartridge → K181 -
TC: External toolholder → C054, Internal toolholder → D045
J-Series toolholder → G074 -, PINZBOHR® → K178 -

PCD Insert POSITIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

TC



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm

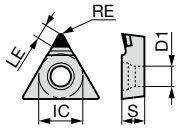
Triangular Positive 7° with hole

N Non-ferrous ●ⓒ

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX120
Finishing	TCMT110202-DIA	0.2	2.4	1	○	●
Finishing	TCMT110204-DIA	0.4	2.2	1	○	●

● : Line up

TC



IC : 6.35 mm
D1 : 2.8 mm
S : 3.18 mm

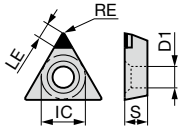
Triangular Positive 7° with hole

N Non-ferrous ●ⓒ ●ⓒ

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110	DX120
Finishing	TCMT110302-DIA	0.2	2.4	1	○		●
Finishing	1QP-TCMT110304	0.4	2.2	1	○	●	
Finishing	TCMT110304-DIA		2.2	1	○		●

● : Line up

TP



IC : 5.56 mm
D1 : 2.5 mm
S : 2.38 mm

Triangular Positive 11° with hole

N Non-ferrous ●ⓒ

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140
Finishing	TPGA090202-DIA	0.2	2.4	1		●
Finishing	TPGA090204-DIA	0.4	2.2	1		●

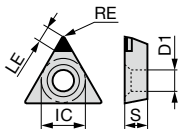
Tungaloy's standard hole specifi cation (ISO non-compliant)

● : Line up

Reference pages: TC: External toolholder → C054, Internal toolholder → D045
J-Series toolholder → G074 -, PINZBOHR® → K178 -
TP: Mounting hole specification → B146, Internal toolholder → D046 -, Cartridge → K181 -
Boring bar tool → K199 -, Top-borer tool → K203

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm

Triangular Positive 11° with hole

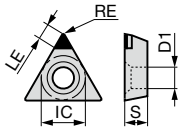
N Non-ferrous ●ⓒ

Application	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	DX140
Finishing	**TPGA110202-DIA**	0.2	2.4	1		●
	TPGA1102**04-DIA**	0.4	2.2	1		●

Tungaloy's standard hole specifi cation (ISO non-compliant)

● : Line up

TP



IC : 6.35 mm
D1 : 3 mm
S : 3.18 mm

Triangular Positive 11° with hole

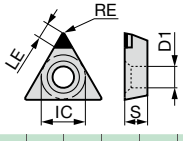
N Non-ferrous ●ⓒ

Application	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	DX140
Finishing	**TPGA110302-DIA**	0.2	2.4	1		●
	TPGA1103**04-DIA**	0.4	2.2	1		●
	TPGA1103**08-DIA**	0.8	2.9	1		●

Tungaloy's standard hole specifi cation (ISO non-compliant)

● : Line up

TP



IC : 9.525 mm
D1 : 4 mm
S : 3.18 mm

Triangular Positive 11° with hole

N Non-ferrous ●ⓒ

Application	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	DX140
Finishing	**TPGA160302-DIA**	0.2	3.3	1		●
	TPGA1603**04-DIA**	0.4	3.2	1		●
	TPGA1603**08-DIA**	0.8	2.9	1		●

Tungaloy's standard hole specifi cation (ISO non-compliant)

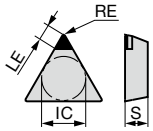
● : Line up

Reference pages: Mounting hole specification → B146
Internal toolholder → D046 -
Boring bar tool → K199 -
Cartridge → K181 -
Top-borer tool → K203

PCD Insert POSITIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



IC : 5.56 mm
S : 2.38 mm

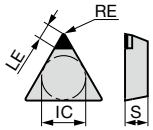
Triangular Positive 11° without hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	DX140
Finishing	TPGN090204-DIA	0.4	2.2	1		●

● : Line up

TP



IC : 6.35 mm
S : 3.18 mm

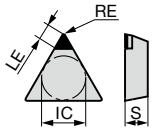
Triangular Positive 11° without hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	DX120	DX140
Finishing	TPGN110304-DIA	0.4	3.2	1		●	●
	TPGN110308-DIA	0.8	2.9	1			●

● : Line up

TP



IC : 9.525 mm
S : 3.18 mm

Triangular Positive 11° without hole

N Non-ferrous

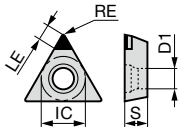
Application	Designation	Dimension (mm) RE	LE	No. of corners	Chipbreaker	DX120	DX140
Finishing	TPGN160302-DIA	0.2	3.3	1			●
	TPGN160304-DIA	0.4	3.2	1		●	●
	TPGN160308-DIA	0.8	2.9	1			●

● : Line up

Reference pages: Internal toolholder → D047 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

● : Continuous cutting
◐ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



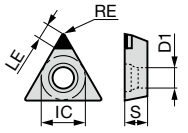
IC : 4.76 mm
D1 : 2.3 mm
S : 2.38 mm

Triangular Positive 11° with hole

		N Non-ferrous	●◐
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140
Finishing	**TPGW080202-DIA**	0.2	2.4	1		●
Finishing	TPGW0802**04-DIA**	0.4	2.3	1		●

● : Line up

TP



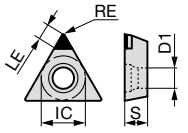
IC : 5.56 mm
D1 : 2.5 mm
S : 2.38 mm

Triangular Positive 11° with hole

		N Non-ferrous	●◐	●◐
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX120	DX140
Finishing	**TPGW090202-DIA**	0.2	2.4	1		●	●
Finishing	TPGW0902**04-DIA**	0.4	2.2	1			●

● : Line up

TP



IC : 6.35 mm
D1 : 2.8 mm
S : 2.38 mm

Triangular Positive 11° with hole

		N Non-ferrous	●◐	●◐
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX120	DX140
Finishing	**TPGW110202-DIA**	0.2	2.4	1		●	●
Finishing	TPGW1102**04-DIA**	0.4	2.2	1			●

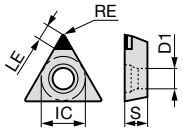
● : Line up

Reference pages: Internal toolholder → D046 - Cartridge → K181 -
Boring bar tool → K199 - Top-borer tool → K203

PCD Insert POSITIVE TYPE

● : Continuous cutting
ⓒ : Light interrupted cutting
✠ : Heavy interrupted cutting

TP



IC : 7.94 mm
D1 : 3.4 mm
S : 3.18 mm



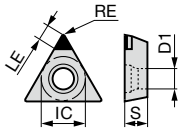
Triangular Positive 11° with hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX120	DX140
Finishing	TPGW130302-DIA	0.2	3.3	1		●	●
Finishing	TPGW130304-DIA	0.4	3.2	1			●

● : Line up

TP



IC : 9.525 mm
D1 : 4.4 mm
S : 3.97 mm



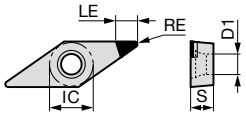
Triangular Positive 11° with hole

N Non-ferrous

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX140
Finishing	TPGW16T302-DIA	0.2	3.3	1		●
Finishing	TPGW16T304-DIA	0.4	3.2	1		●
Finishing	TPGW16T308-DIA	0.8	2.9	1		●

● : Line up

VC



IC : 9.525 mm
D1 : 4.4 mm
S : 4.76 mm



35° Rhombic Positive 7° with hole

N Non-ferrous

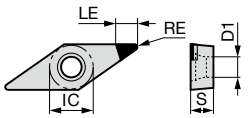
Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110	DX120	DX140
Finishing	VCMT160402-DIA	0.2	4.8	1	○		●	
Finishing	VCGW160402-DIA		4.8	1				●
Finishing	1QP-VCGT160404-NS	0.4	3	1	○	●		
Finishing	VCMT160404-DIA		4.4	1	○		●	
Finishing	VCGW160404-DIA		4.4	1				●
Finishing	1QP-VCGT160408-NS	0.8	3	1	○	●		

● : Line up

Reference pages: TP: Internal toolholder → D046 -, Cartridge → K181 -
Boring bar tool → K199 -, Top-borer tool → K203
VC: External toolholder → C048 -, Internal toolholder → D039 -, TungCap → K015 -

● : Continuous cutting
ᑕ : Light interrupted cutting
✠ : Heavy interrupted cutting

VB



IC : 9.525 mm
D1 : 4.4 mm
S : 4.76 mm

35° Rhombic Positive 5° with hole

N Non-ferrous ●ᑕ

Application	Designation	Dimension (mm) RE	Dimension (mm) LE	No. of corners	Chipbreaker	DX110
Finishing	**1QP-VBGT160404-NS**	0.4	3	1	○	●
Finishing	1QP-VBGT1604**08-NS**	0.8	3	1	○	●

● : Line up

Reference pages: Internal toolholder → D059 - J-Series toolholder → G062 -

●CVD Coated Grades for Turning

ISO		Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Sandvik	Kyocera	Moldino	NTK	Kennametal	Seco Tools	Walter	Iscar	TaeguTec	Ceratizit
Classification	Symbol													
P	P01	**T9205**	UE6105		GC4305	CA510	HG8010		KCP05B KCP05 KCPK05	TP0501	WPP05S	IC8150 IC9150	TT8105 TT8105B	CTCK110
	P10	**T9205** **T9215**	UE6105 UE6110 MC6015 MC6115	AC8015P AC8020P	GC4305 GC4315 GC4415	CA515	HG8010 GM8020	CP7	KCP10B KCP10	TP0501 TP1501	WPP10S WPP10G WPV10	IC8150 IC9150	TT8115 TT8115B	CTC3110 CTCK120 CTCP115-P
	P20	**T9215** **T9225**	MC6015 MC6025 MC6115 MC6125	AC8015P AC8020P AC8025P	GC4315 GC4325 GC4415 GC4425	CA515 CA525 CA025P	HG8025 GM8020 GM25	CP7	KCP25B KCP25	TP1501 TP2501	WPP20S WPP20G WPV20	IC8150 IC9150 IC8250 IC9250	TT8125 TT8125B TT5100	CTCP115 CTCP115-P CTCP125 CTCP125-P
	P30	**T9225** **T9235**	MC6025 MC6035 MC6125	AC8025P AC8035P AC6030M	GC4325 GC4335 GC4425	CA530 CA025P	HG8025 GM8035 GM25		KCP30B KCP30	TP2501 TP3501	WPP30S WPP30G	IC8350 IC9350	TT8125 TT8125B TT5100 TT8135 TT8135B	CTCP125 CTCP125-P CTCP135-P
	P40	**T9235** **T6215**	MC6035	AC8035P AC6030M	GC4335	CA530	GM8035 GX30		KCP40B KCP40	TP3501		IC8350 IC9350	TT8135 TT8135B TT7100	
M	M10	**T6215**	MC7015	AC6020M	GC2015	CA6515			KCM15B KCM15	TM1501		IC9250	TT9215	CTCM120
	M20	**T6215**	MC7015 MC7025	AC6020M	GC2015 GC2025 GC2220	CA6525	HG8025 GM25		KCM25B KCM25	TM1501 TM2501		IC9350	TT9215 TT9225	CTCM120 CTCM130
	M30	**T6215**	MC7025 US735	AC6030M	GC2025 GC2035	CA6525	GM8035 GM25 GX30		KCM35B KCM35	TM2501 TM3501		IC9350	TT9225 TT9235	CTCM130
	M40		US735		GC2035		GX30			TM4000			TT9235	
K	K01	**T505** **T5105**	MC5005 MC5105 UC5105	AC405K	GC3005 GC3205	CA4505 CA310	HX3505	CP1	KCK05B KCK05	TK0501		IC5005	TT7005	
	K10	**T505** **T515** **T5105** **T5115**	MC5015 MC5115 MH515 UC5115	AC4010K AC415K	GC3210 GC3215	CA4515 CA315	HX3515 HG8010	CP1	KCK15B KCK15	TK0501	WKK10S WKV10 WAK10	IC9150 IC5005 IC5010	TT7005 TT7015	CTC3110 CTCK110
	K20	**T515** **T5115** **T5125**	MC5015 MC5125 UC5115	AC4015K AC420K	GC3225	CA320	HX3515 GM8020	CP1	KCK20B KCK20	TK1501	WKK20S WKV20 WAK20	IC9150 IC5010	TT7015 TT7025 TT7310	CTCK120 CTCP115
	K30	**T5125**		AC8025P			HG8025				WAK30	IC4050 IC8150	TT7025	CTCP125

Note: The above table is selected from a publication. We have not obtained approval from each company.

●PVD Coated Grade for Turning

ISO		Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Sandvik	Kyocera	Moldino	NTK	Kennametal	Seco Tools	Walter	Iscar	TaeguTec	Ceratizit
Classification	Symbol													
P	P01					PR1705								
	P10	**AH8005**	VP10RT MS6015	AC1030U AC530U ACZ150	GC1105	PR1705 PR930 PR1725	IP2000	VM1 DT4 DM4	KC5010 KCU10	TS2000 CP200		IC807 IC907 IC808 IC908 IC1007	TT4410 TT7010	CTPX710 CTPX715
	P20	**AH120** **AH725** **SH725** **AH730** **J740** **AH8015** **AH6225**	VP15TF VP20MF VP10RT VP20RT UP20M MS6015	AC1030U AC530U	GC1125	PR1725 PR930 PR1225 PR1025	IP2000	VM1 DT4 DM4 TM4 QM3	KC5025 KCU25 KCS10 KCU10 KC5010	TS2500 CP200		IC807 IC907 IC808 IC908 IC830 IC1010	TT9030 TT4410	CTPX710 CTPX715 CTPM125
	P30	**AH120** **AH725** **AH7025** **SH725** **SH730** **J740** **AH8015** **AH6225**	VP15TF VP20MF VP20RT UP20M MS7025	AC1030U	GC1125	PR1725 PR1225 PR1535 PR1025	IP3000	QM3 TM4	KC5025 KCU25 KCU25	CP500 CP600		IC928 IC528 IC228 IC830 IC1010 IC1030	TT9030 TT8020 TT8010 TT9080 TT7220	CTPM125
	P40	**AH120** **AH725** **AH6225**	MS7025			PR1535	IP3000	QM3		CP500 CP600		IC228 IC528 IC1030	TT8020 TT8010 TT4430 TT9020	CTPM125
M	M01										WSM01	IC806 IC1007		
	M10	**AH8005** **AH6225**	VP10RT	AC5005S ACZ150	GC1105 GC1115	PR930 PR1725	IP100S IP050S	VM1 DT4 DM4 ZM3	KC5010 KCU10 KCS10B KCS10	TS2000 TS2500 CP200	WSM10 WSM10S WSM01	IC807 IC907 IC808 IC908 IC1010	"TT4410 TT5080"	CTPM125 CTPX710 CTPX715
	M20	**AH8015** **AH120** **AH7025** **AH725** **SH725** **SH730** **AH6225**	VP10RT VP15TF VP20MF VP20RT UP20M MS7025 MS9025	AC5015S	GC1115 GC1125	PR930 PR1225 PR1725 PR1025	IP100S IP050S	VM1 DT4 DM4 ST4 TM4 ZM3 QM3	KC5025 KCU25 KCS10 KCU10 KC5010	TS2500 CP200 CP500 CP600	WSM20S	IC808 IC908 IC830 IC1030	TT9030 TT8010 TT4410 TT5080 TT9080	CTPM125 CWN15
	M30	**AH120** **AH725** **SH725** **SH730** **J740** **AH6235**	VP15TF VP20MF VP20RT UP20M MP7035 MS7025 MS9025	AC6040M AC1030U AC5025S AC530U	"GC1125 GC2035"	PR1225 PR1535 PR1725 PR1025	IP100S	DT4 DM4 QM3 ST4 TM4 ZM3	KC5025 KCU25	CP500 CP600	WSM30S	IC528 IC228 IC830 IC1030	TT8020 TT4430 TT8010 TT8080 TT7220	CTPM125
	M40	**AH6235**	MP7035	AC6040M	GC2035	PR1535		ST4 QM3 TM4		CP600		IC228 IC528	TT8010 TT8020	
K	K01	**AH110**												
	K10	**GH110** **AH110**	VP10RT	ACZ150					KC5010 KCU10 KCS10B KCS10	TS2000 CP200		IC807 IC907	TT9030 TT7010 TT6080	CTPX715
	K20	**AH120** **AH7025** **AH8015** **AH6225**	VP10RT VP20RT VP15TF	AC1030U					KC5025 KCU25	TS2500 CP200 TS2000		IC807 IC907 IC808 IC908 IC1007 IC1010	"TT9030 TT7010 TT6080 TT9080	CTPX715
	K30	**AH120** **GH130**	VP15TF VP20RT							CP500		IC807 IC907 IC808 IC908	TT9030	CTPX715
S	S01	**AH8005**	VP05RT MP9005	AC5005S AC5015S ACZ150		PR005S	JP9105		KCS10B		WSM10S	IC804 IC806	TT3010	
	S10	**AH8005** **AH8015** **AH6225**	VP10RT MP9015	AC5005S AC5015S	GC1105	PR015S PR005S	JP9105 JP9115	QM3 ZM3	KC5025 KCU25 KCS10B KCS10 KC5010 KCU10	TS2000 TS2500 CP200 CP500	WSM10S WSM01 WNN10	IC806 IC1007 IC1010	TT3010 TT3020 TT5080	CTPX710 CTPX715
	S20	**AH8015** **AH7025** **AH6225**	MP9015 VP20RT MP9025 MS9025	AC5015S AC5025S	GC1115 GC1125	PR015S PR1535	JP9115		KC5025 KCU25 KCS10B	TS2000 TS2500 CP200 CP500 CP600	WSM20S	IC807 IC907 IC808 IC908 IC806 IC1010	TT3020 TT4430 TT9030 TT9080	CTPX710 CTPX715
	S30	**AH7025** **AH6235**	VP20RT MP9025 MS9025	AC5025S	GC1125	PR1535				CP600	WSM30S	IC830 IC928	TT4430 TT8020 TT9030	

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●Cermet for Turning

ISO		Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Sandvik	Kyocera	Moldino	NTK	Kennametal	Seco Tools	Walter	Iscar	TaeguTec	Ceratizit
Classification	Symbol													
P	P01	**NS520**	AP25N VP25N	T1000A		TN610 PV710						IC20N IC520N	PV3010	CTEP10 TCM407
	P10	**AT9530** **GT9530** **J9530**	AP25N VP25N NX2525	T1500Z T1500A	CT5015 GC1525	TN610 TN620 PV710 PV720 CCX			KT315 KTP10	TP1020	WCE10	IC20N IC30N IC520N IC530N	PV3010 CT3000	CTEP10 TCM10 TCM407
	P20	**AT9530** **GT9530** **NS9530** **J9530**	AP25N VP25N VP45N NX2525 NX3035 MP3025	T1500A T1500Z T2500A T2500Z	GC1525	TN620 PV720	CZ25			TP1020 TP1030	WCE10	IC20N IC30N IC520N IC530N	PV3010 CT3000	TCM10
	P30	**NS9530**	VP45N NX3035 MP3025	T2500Z T3000Z		PV730	CZ25					IC530N		
M	M10	**NS520**	AP25N VP25N NX2525	T1000A	GC1525	TN620 TN610 PV720 PV710			KT315 KTP10	TP1030		IC20N IC30N IC520N IC530N	PV3010 CT3000	CTEP10 TCM10 TCM407
	M20	**AT9530** **GT9530** **NS9530** **J9530**	AP25N VP25N NX2525	T1500A		TN620 PV720 PV730	CZ25					IC30N IC530N	PV3010 CT3000	
	M30	**NS9530**		T3000Z			CZ25							
K	K01	**NS520**	AP25N VP25N	T1000A		PV7005							PV3010	CTEP10 TCM10 TCM407
	K10	**AT9530** **GT9530** **NS9530** **J9530**	AP25N VP25N NX2525		CT5015	TN60 CCX	CZ25		KT315 KTP10				PV3010 CT3000	TCM10
	K20	**NS9530**	AP25N VP25N NX2525				CZ25						PV3010 CT3000	

Note: The above table is selected from a publication. We have not obtained approval from each company.

●Cemented Carbide for Turning

ISO		Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Sandvik	Kyocera	Moldino	NTK	Kennametal	Seco Tools	Walter	Iscar	TaeguTec	Ceratizit
Classifi-cation	Symbol													
P	P01													
	P10	**TH10**		ST10P										S26T
	P20	**KS20**		ST20E								IC50M	P20	S26T S40T
	P30	**KS15F** **UX30**	UTi20T	A30								IC28 IC50M	P30	S40T
	P40		UTi20T									IC28		
M	M10	**TH10**		EH510					K313 KU10 K68	890		IC20		
	M20	**KS20**	UTi20T	EH520					K313 KU10 K68	HX 883		IC20		CTW7120 H210T U17T
	M30	**UX30**	UTi20T	A30								IC28		
	M40											IC28		S40T
K	K01	**TH03**	HTi05											CTWK601
	K10	**TH10**	HTi10	G10E	H13A	KW10	WH10		K313 KU10 K68	890		IC20	K10	H210T H10T U17T
	K20	**KS15F** **KS20**	UTi20T	G10E	H13A	KW10				890 HX 883		IC20	K20	CTW7120 H210T H10T U17T
	K30		UTi20T		H13A					883				TSM30
	K40													
N	N01	**KS05F**			H10	GW05						IC04		
	N10	**TH10**	HTi10	H1	H10	GW05 KW10	WH10	KM1	K313 KU10 K68	890 HX KX	WK1	IC20 IC28	K10	H210T H10T U17T
	N20	**KS15F**		H1	H13A			KM1		890 HX KX 883	WK1	IC20 IC28	K20	CTW7120 H210T H10T U17T
	N30									883				
S	S01		MT9005 RT9005		H10A	SW05						IC20		
	S10	**KS05F** **TH10**	MT9015 RT9010	EH510	H10F	SW10 KW10	WH10	KM1	K313 KU10 K68	890 883	WK1 WS10	IC20	K10	H210T H10T
	S20	**KS15F** **KS20**	MT9015 RT9010	EH520	H13A H10F	SW25		KM1		890 883	WK1 WS10	IC20 IC28	K20	CTW7120 H210T H10T
	S30									883				
H	H01											IC20		
	H10	**TH10**			H13A		WH10					IC20	K10	
	H20									890 HX 883				

Note: The above table is selected from a publication. We have not obtained approval from each company.

●CBN and PCD for Turning

ISO		Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Sandvik	Kyocera	Moldino	Dijet	NTK	Seco Tools	Kennametal	Iscar	Ingersoll	TaeguTec	Widia	Walter	Ceratizit
Classifi-cation	Symbol																
K	K01	**BX930 BX910 BX870**	MB710 MB730 MB5015	NCB100 BN500 BNC500	CB50	KBN475 KBN60M			B52		KB1630 KB1345	IB10K		TB7015	WBH10C	WCB80	CTB S10U
	K10	**BX470 BX480**	MB730 MB5015 MB4020	BN7000 BN500	CB7525 CB50	KBN65M KBN65B		JBN795	B23 B30 B52	CBN200 CBN300 CBN400C	KB1640 KB1345	IB05S IB10S	TB730	TB730	WBK40U	WCB80 WCB50	CTB S10U
	K20	**BXC90 BX90S**	MB4020 MB4120 MBS140	BNC8115 BNS8125	CB7925	KBN900 KBN70M			B23 B30 B52	CBN300 CBN500	KB5630	IB90A IB90 IB25KD		TB7020	WBK45U	WCB80	CTB S20C
	K30	**BXC90 BX90S**	MBS140 BC5030	BNS8125		KBN900			B16	CBN500	KB9640	IB90A IB25KD	KB90A	KB90A			
S	S01	**BX815**	MB730	NCB100 BN7000				JBN795	JP2	CBN170		IB05S IB10S		KB90			CTB S10U
	S10	**BX480**	MB4020 MB4120	BN7500 BN7115	CB7050	KBN65B KBN65M			B23 B30	CBN200	KB1630	IB05S IB10S		KB90A	WBK45U	WCB80	CTB S20C
H	H01	**BXM10 BX310**	BC8105 BC8110 MBC010 MB810 MB8110	BNC2010 BNC2115 BN1000 BN2000 BNX10 BN1000	CB7105	KBN510 KBN05M KBN10M			B52 B5K	CBN010 CBN100 CBN160C CBN050C	KB1610 KB5610"	IB05H IB10HC	TB610	TB610	WBH10C	WCB30	CTB H15C CTB H15U
	H10	**BXA10 BXM10 BX330 BX530**	BC8210 MB020 MB8025 MB8110 MB825	BNC2020 BNC2115 BN2000	CB7015 CB7115 CB7025	KBN525 KBN05M KBN10M		JBN245	B36 B52 B6K	CBN150 CBN200 CBN300 CBN060K CBN160C CBN400C	KB9610 KB1610 KB5610	IB50 IB55 IB10H IB10HC IB20H IB25HA		TB2015	WBH10C WBH10P WBH10U	WCB30 WCB50	CTB H15C CTB H15U
	H20	**BXM20 BXA20 BX360**	BC8220 MBC020 MB8025 MB8120	BNC200 BNC2020 BNC2125 BNX20	CB7015 CB7125 CB50	KBN525 KBN05M KBN10M KBN25M KBN020		JBN300	B22 B36 B40 B6K	CBN200 CBN300 CBN160C CBN400C CH2540	KB5625 KB1625	IB20H IB20HC IB25HA IB25HC	TB650 TB2030	TB650	WBH25P	WCB50 WCB80	CTB H20C CTB H21U
	H30	**BR35F BXC50 BX380**	BC8130 MB8130 MB835	BNC300 BN350 BNX25		KBN30M KBN35M KBN900		JBN300	B22 B40	CH3515	KB1630 KB9640	IB25HC IB90	TB670	TB670	WBH40C		CTB H40C CTB H40U
N	N01	**DX160 DX180**	MD205	DA90	CD05	KPD230		JDA30 JDA735	PD1		KD1405	ID5					CTD PU20
	N10	**DX140**	MD205 MD220	DA150	CD10	KPD010 KPD230		JDA715	PD1	PCD05 PCD10	KD100 KD1400 KD1425	ID5	IN90D	TD810	WDN25U	WCD10	CTD PU20
	N20	**DX120**	MD220 MD230	DA2200 DA1000	CD10	KPD010		JDA715	PD2	PCD05 PCD20	KD1425		IN90D	KP300	WDN25U	WCD10	CTD PD20
	N30	**DX110**	MD2030 MD230	DA2200 DA1000		PKD001		JDA10		OVD20 PCD30 PCD30M				TD830		WCD10	

Note: The above table is selected from a publication. We have not obtained approval from each company.

●Ceramic for Turning

ISO		Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Sandvik	Kyocera	Moldino	Dijet	NTK	Seco Tools	Kennametal	Iscar	Ingersoll	TaeguTec	Widia	Walter	Ceratizit
Classifi-cation	Symbol																
K	K01	**TZ120 LX21**		NB90S	CC620	KA30 A65 KT66 PT600M			HC1 HW2		KY1310 KY1615	IN110		AW120 AB30	CW2015		CTN3105 CTS3105
	K10	**CX710 FX105**			CC6190 CC650	A65 KT66 A66N PT600M			HC2 HC5 HC6		KY1310 KY1615	IN23 IS6	IN70N	AB30 AS10	CW2015 CW5025	WSN10	CTN3105 CTM3110 CTI3105 CTN3110 CTS3105
	K20	**FX105 CX710**			CC6190	KS6000 KS6050			SP2 SP9 SX8 SX9		KY1320 KY3400 KY3500 KY4300	IS8	IN70N	SC10	CW5025	WSN10	CTM3110 CTN3110
S	S01	**TS200**							JX1	CS100	KY1525 KY2100	IS25		TC3020			
	S10	**TW43 TS300 FX510**		WX120	CC670 CC6060 CC6065	KS6030 KS6040			WA1 WA5 SX9	CW100 CS300	KY1540 KYS30 KY2100 KY4300	IW7 IS35		TC430 TC3030	CW3020	WWS20	
H	H01	**LX10 LX11**		NB100C	CC6050 CC650	PT600M			HC2 HC5 HC6		KY4300	IN420 IN22		AB2010	CW2015		CTS3105
	H10				CC6050 CC670 CC6190	A66N PT600M			HC7 WA1		KY4400	IN23		AB2010 AB20 AB30	CW2015		CTS3105

Note: The above table is selected from a publication. We have not obtained approval from each company.

●Negative insert type

ISO Classification	Cutting Mode	Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Kyocera	Sandvik	Moldino	Kennametal	Seco Tools	Iscar	TaeguTec	Walter	Ceratizit
P	Precision finishing	**01** **TF**	PK FH	FA	GP	PF	FE	FS, LF	FF1	SF, PP, TF	FA		
	Finishing and light cutting	**TS, TSF** **PS, ZF** **NS** **AS** **TQ**	FP FY LP SH SA SY	SU FL SE, SX	XP, PP XQ, HQ, CJ, XS	PF LC MF R/L-K XF	BE, BH AB, CT CE	FF, FN	MF2	F3P NF, SF	FG VF, EA FC MC ML, MP	NF3 NS6	CF, TF
	Finishing and light cutting (With Wiper)	**AFW, FW** **ASW, SW**	SW MW	LUW SEW GUW	WP WQ WF	WL, WF WMX WM, WR		FW MW RW	W-FF2 W-MF1 W-M3 W-M6	WF WG	WS WT	NF NM	TFQ TMQ
	Medium cutting	**TM, AM** **PM, DM** **ZM, NM** **All-round, TA**	MA MH , MP	GU GE , UX	HS , PT , GT CS , PS	PM , QM XM , XRM	AH AE , AY , B	MN	MF5 M3	M3P , M3M PP , TF , GN	PC , MT MC , MG	NMT , NM4	TMF , TMM M50
	Medium to heavy cutting	**TH** **THS**	RP, GH	MU, ME HG	PH All-round	HM, PR MR	RE	RN, RP MR	M5 MR7	NR MR	RT	MM5, NM6 NM9	TM TRM
	Heavy cutting	**TU** **TRS** **TUS**	HM, HX HL, HR HZ, HV	HG, HP HU, HW HF	PX	PR, MR HR, QR	TE, UE HX, HE H	RM RH	R RR	R3P NM	HT, HD RX, RH HY, HZ	NR6 NRF NRR	TRR, TR R28, R58 R88
M	Finishing and light cutting	**SF** **SS**	GM, LM	EX, EG SU, EF	GU MQ	MF, XF	MP BH, AB	FP, FF	FF1 MF1 MF3	TF, VL	EA, SF, SU FG	NF4 NMS	CF, F30, M34 F32, TF
	Medium cutting	**SM, SA** **S, TA** **SDM**	MM, MA MS	GU HM	MU	MM, QM XM	PV, SE DE	MP, P	MF4 M3	M3M, PP	EM, ET	NM4	TMF, M42 M30, M52
	Heavy cutting	**SH, TH** **TU**	GH, RM HL	EM, MU	MS TK	MR HM, PR	AH, AE	UP, RP	M5 MR3	MR, MH		NR4 NRT, NRS	TM, M60 TRM, TMR, TRR R80
K	Finishing	**CF**	LK, MA	UZ	C	KF, XF	Y, AH	FN, MT		GN	FG		CF
	Medium cutting	**CM** **All-round**	MK GK	GZ	ZS All-round	KM, QM XM, XMR	RE VA	RP, UN	M4 M5		MT MG	NM5	M50
	Heavy cutting	**CH** **Flat-top**	RK **Flat-top**	**Flat-top**	GC **Flat-top**	KR **Flat-top**	RE,V	MA **Flat-top**	MR9 **Flat-top**		RT	**Flat-top**	TMR , TR R28 R58 , R88
N	Cutting of non-ferrous metals	**P** **28**		AX	AH, A3	MF		MS GR		PP			F32
S	Finishing	**HRF**	FJ, LS MJ	EF EX	SQ, SX	SF	VI	FS MS	MF1			NFT NF4	
	Medium cutting	**HRM** **HMM** **SA, 28** **SDM**	MS RS, GJ	EG MU EM	SQ, SX	SMR	VI	UP RP	MF4 M1	PP	SM	NMS NM4, NRS, NR4	M34, M52

Note: Above charts are based on published data and not authorized by each manufacturer.

●Positive insert type

ISO Classification	Cutting Mode	Tungaloy	Mitsubishi Carbide	Sumitomo Electric	Kyocera	Sandvik	Moldino	NTK	Kennametal	Seco Tools	Iscar	TaeguTec	Walter	Ceratizit
P	Precision finishing	**01**	FV	FC	CF, CK		JQ		GM	FF1 F1	SF		PF2	F32
	Finishing and light cutting	**PSF, PF, SS** **PS, PSS** **TS, TSF** **TSW, SW** **W08~20**	FP, FV, SV LP SVX SW, MW	FP, LU FK, SC SU LUW, SDW	GQ GP XP PP, VF WP	R/L-K PF UF WF, WK, WM	JQ JE		11, LF VF, FP FW, MW	MF2	PF SM, 14, 17 19, XL R/L RF, LF	FA FG GF	PF5 PF4 PS5 PF, PM	SF SMF SMW, 25Q
	Medium cutting	**PM** **TM** **All-round** **RS**	MP MV No sign	SU, MU SC	All-round HQ, XQ GK	PM UM, PR UR	JE		MP MF	M3 M5	DT, HQ	MT MT	PM5	SM
	High-feed, small depth of cut cutting	**61**									No sign 14	No sign		
M	Finishing	**PSF, SS**	FM, SV	FC		R/L-K UF, MF			11, VF	FF1 MF2		FG		
	Finishing to Medium cutting	**PSS** **PS**	LM SV	SI, GU LB, SU	MQ	MM UM			LF, FP	M3			PF4	SF, SMF
	Medium cutting	**PM**	MM	MU	HQ	MR UR			MF, MP	M5			PM5	F23, F43 SM
K	Cutting of cast irons	**CM** **Flat-top**	MK **Flat-top**	FC, MU **Flat-top**	KF KM UM, KR	**Flat-top**			11, VF, FP MP, MF **Flat-top**	M5 **Flat-top**	19	MT **Flat-top**	PS5, PM5 **Flat-top**	SF 25P 27, 29
N	Cutting of non-ferrous metals	**AL** **P** **Ground**	AZ R/L-F R/L	AG AY AW LD, GD	AH	AL			HP, LF	AL	AS	FL	PF2 PM2	23P 25P 27, 29
S	Finishing	**PSF**	FJ	FC	MQ	MF, UF, R/L-K			HP	F1				SF
	Finishing to Medium cutting	**PSS** **PS**	LS.MS	SU, GU		MM SM			LF, FP	MF2				F23
	Medium cutting	**All-round**		SI		UM, MR, UR						FG	PF2, PF4	SM, 25P, 29
P M N S	Turning on small lathes	**JP, 01** **W08, W15, W20** **J08** **JS, JSS** **JRP, JSR, JPP** **J10, TS, JTS** **TSW** **SS**	R/L-SR R/L-SN R/L-SS FS-P, F LS-P SW, MW SRF SMG	W, SD FX, FY LU, FP, FK, SU FC, SI, SC LUW, SDW	CF, SKS R/L-F, R/L-FSF ER/L-U FR/L-U R/L-U FR/L-U, R/L-USF MF, R/F-FSF SK, GF CK, GQ	F, M UM	No sign	AMX AZ7 YL, AM3 U CL	LF		SM F2M	GF, GW SL SA SM SH	PM5	

Note: Above charts are based on published data and not authorized by each manufacturer.

MEMO

External Toolholder



External Toolholder - Content structure

- Indexable toolholders are listed by cutting edge shape.
- Toolholders in the catalog are our standard items.

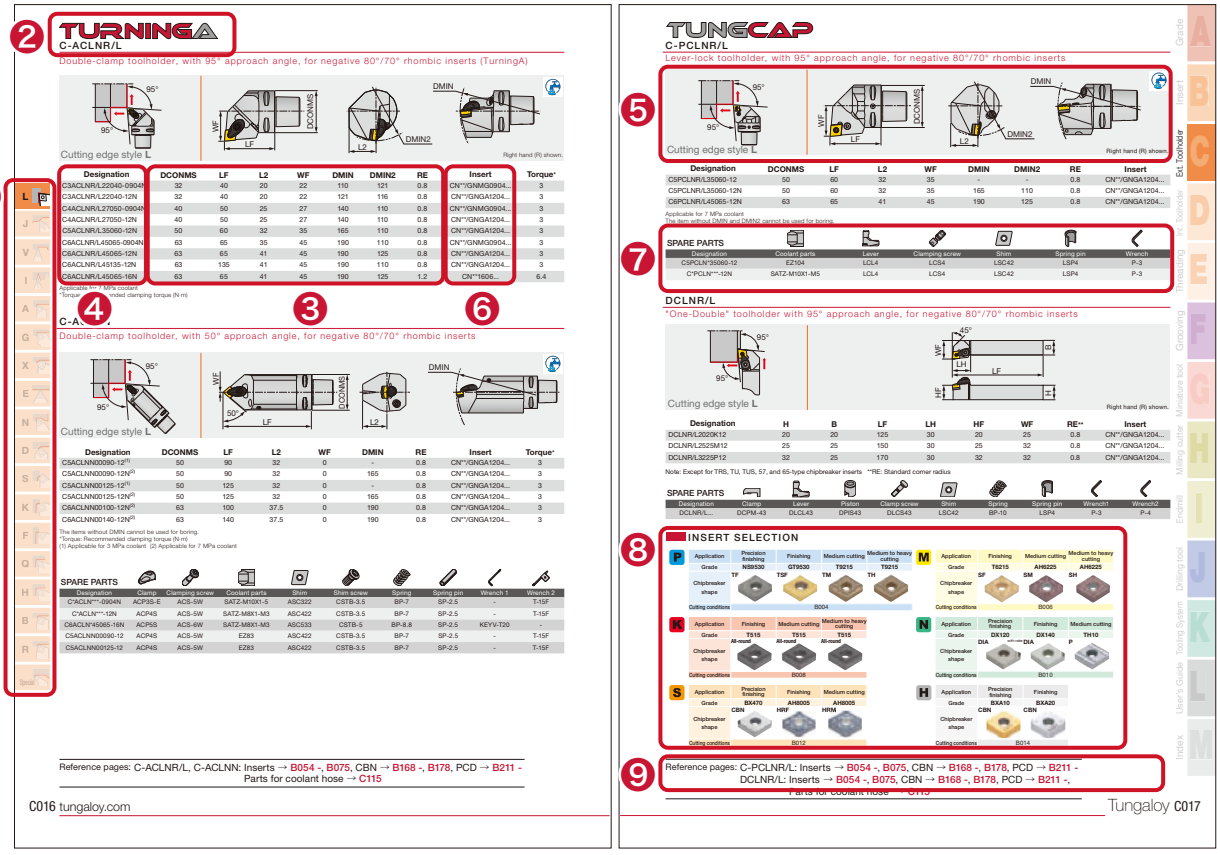
How to use the page

Method① Select the cutting edge shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (❹) in the dimension table (❸). Applicable inserts are shown in (❻) and (❽).

Method② Select the cutting edge on **C003** and check the details on the product page.

Method③ Select the series name of a toolholder on **C003** and check the details on each page.

Method④ Select an item from Quick Guide on **C004 - C010**.



❶: Cutting edge shape
❷: Series name of indexable external toolholders
❸: Dimension table
❹: Toolholder designation
e.g. right-hand, 25x25 square shank

→ **ACLN R 2525 M0904-A**

❺: Dimension drawing (conforming to ISO13399)
❻: Applicable insert
❼: Spare parts
❽: Basic selection
❾: Reference pages

When ordering
- Please specify the designation and quantity.
e.g. **ACLNR2525M12-**A ... 1 (one external toolholder per package)

* Inserts are not included. Please order those separately.

Main products

L 95° C015
J 93° C032
V 72.5° C050
I 76.5° C053
A 91° C054
G 91° C057
X 20° C065
E 60° C069
N 63° C070
D 45° C074
S 45° C080
K 75° C084
F 91° C087
Q 107.5° C091
H 100° C098
B 75° C100
R 75° C104
Special C105



ADDMULTITURN
Ultimate solution for multi-directional turning
C011



TURNTENFEED
Innovative tool realizing both high productivity and economy
C013, C067



ISOECOTURN
Small-sized “Eco” insert series for maximized profits
C014



MINIFORCETURN
Economical double-sided inserts with excellent sharpness
C029, C045 C047, C113 -, C118



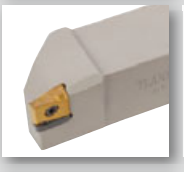
TURNINGA
Highly rigid clamping system with excellent repeatability
C004 -



TUNGTJETURN
Toolholders for high pressure coolant supply
C019 -, C026, C031 C037 -, C043 -, C059, C095



DIMPLEFX
Ceramic insert with dimple for highly efficient cast iron machining
C008



TURNTEC
Inserts and toolholders for roughing large depths of cut with high productivity
C054, C090, C103



Y-PRO SERIES
Inserts with 25° corner angle for profiling
C049, C053, C098 -



TURNFEED
Tool series for super high-feed cutting
C068



FIXRTURN
Highly productive round insert with 6 indexes
C064, C078

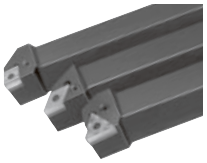
External Toolholder - Quick Guide (Square shanks)

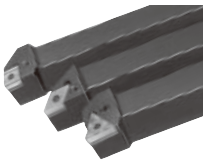
Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm) 20x20	25x25	32x25	32x32	40x40	Coolant supply: External supply	Coolant supply: TUNGTJET (Through-coolant)	Page
ADDMULTITURN 	Front turning: 95° Back turning: 21.5°	**ATXOR/L**	6C-TOMG** 	○	○		○		✓		C065
	Front turning: 117.5° Back turning: 27.5°	**ATXOR/L**	6V-TOMG** 	○	○		○		✓		C065
	Front turning: 95° Back turning: 21.5°	**STXCR/L-CHP-MC**	3C-TCMT** 		○					✓	C066
TURNTFEED 	48.5°	**PPXOR/L**-HD**	POMG** 		○		○		✓		C067
	22.5°	**PPXOR/L**-HF**			○		○		✓		C067
Double clamp A TURNINGA 	L 95°	**ACLNR/L**12**	CN**12 80°	○	○	○			✓		C015
		ACLNR/L12-CHP-MC**	GNGA12 70°	○	○					✓	C019
		ACLNR/L0904**	CN**09 80° GNMG09 70°	○	○				✓		C015
	L 95°	**AWLNR/L**08**	WN**08 80°	○	○	○			✓		C024
		AWLNR/L08-CHP-MC**		○	○					✓	C027
		AWLNR/L06**	WN**06 80°	○	○				✓		C024
	J 93°	**ATJNR/L**16**	TN**16 60°	○	○				✓		C032
	G 91°	**ATGNR/L**16**		○	○				✓		C057
	F 91°	**ATFNR/L**16**		○	○				✓		C088
	Q 105°	**ATQNR/L**16**		○	○				✓		C091
	J 93°	**ADJNR/L**15**	DN**15 55°	○	○	○			✓		C034
		ADJNR/L15-CHP-MC**	FNGA15 45°	○	○					✓	C038
		ADJNR/L1104**	DN**11 55° FNMG11 45°	○	○				✓		C034
	P 62.5° *	**ADPNN**15**	DN**15 55°	○	○				✓		C108
	Q 107.5°	**ADQNR/L**15**	FNGA15 45°	○	○				✓		C092
		ADQNR/L11**	DN**11 55° FNMG11 45°	○	○				✓		C092

*: Tungaloy's symbol

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm) 20x20	25x25	32x25	32x32	40x40		Coolant supply: External supply	Coolant supply: TUNGTJET (Through-coolant)	Page
Double clamp A TURNINGA 	J 93° 	**AVJNR/L**16**	VN**16 35°	○	○					✓		C041
	V 72.5° 	**AVVNN**16**	YN**16 25°	○	○					✓		C050
	Q 117.5° 	**AVQNR/L**16**		○	○					✓		C094
	J 93° 	**AVJNR/L**1204**	VN**1204 35°	○	○					✓		C041
	V 72.5° 	**AVVNN**1204**		○	○					✓		C050
	Q 122.5° 	**AVQNR/L**1204**		○	○					✓		C094
	B 75° 	**ASBNR/L12**	SN**12 90°	○	○					✓		C101
	D 45° 	**ASDNN12**		○	○					✓		C074
	S 45° 	**ASSNR/L12**		○	○					✓		C080
	K 75° 	**ASKNR/L12**		○	○					✓		C084
		**ARGNR/L**	RN**		○					✓		C060
One Double D 	L 95° 	**DCLNR/L12**	CN**12 80° GNGA12 70°	○	○	○				✓		C017
	L 95° 	**DWLNR/L08**	WN**08 80°	○	○	○				✓		C025
	J 93° 	**DDJNR/L15**	DN**15 55° FNGA15 45°	○	○	○				✓		C035
	Q 105° 	**DDQNR/L15**		○	○	○				✓		C093
	G 91° 	**DTGNR/L16**	TN**16 60°	○	○					✓		C058
	F 91° 	**DTFNR/L16**		○	○					✓		C088
	B 75° 	**DSBNR/L12**	SN**12 90°	○	○					✓		C102
	D 45° 	**DSDNN12**		○	○					✓		C074
	S 45° 	**DSSNR/L12**		○	○					✓		C080
	K 75° 	**DSKNR/L12**		○	○					✓		C084
		**DRGNR/L12**	RN**		○					✓		C060

External Toolholder - Quick Guide (Square shanks)

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm) 16x16	20x20	25x25	32x25	32x32		Coolant supply: External supply	Coolant supply: TUNGTJET (Through-coolant)	Page
Lever lock P 	L 95° 	**PCLNR/L**12** **PCL2NR**12**	CN**12 80°	○	○	○	○			✓		C018
		PCLNR/L12-CHP** **PCLNR/L**12-CHP-MC**	GNGA12 70°		○	○					✓	C019, C020
		PCLNR/L0904**	CN**09 80°		○	○				✓		C018
		PCLNR/L09-CHP-MC**	GNMG09 70°		○						✓	C020
		**PCLNR/L**09-CHP-N**			○	○					✓	C020
	B 75° 	**PCBNR/L**12**	CN**12 80°			○				✓		C100
	F 91° 	**PCFNR/L**12**	CN**12 80° GNGA12 70°		○	○				✓		C087
	L 95° 	**PWLNR/L**08-CHP** **PWLNR/L**08-CHP-MC**	WN**08 80°		○	○					✓	C026, C027
		PWLNR/L0604**	WN**06 80°		○	○				✓		C026
		**PWLNR/L**0604-CHP**			○	○					✓	C026
	L 95° 	**PTL2NR/L**16**	TN**16 60°		○					✓		C030
	J 93° 	**PTJNR/L**1104**	TN**11 60°			○				✓		C032
	G 91° 	**PTGNR/L**16**	TN**16 60°	○	○	○				✓		C058
		PTGNR/L16-CHP**			○	○					✓	C059
		PTGNR/L1104**	TN**11 60°		○	○				✓		C058
		**PTGNR/L**1104-CHP**			○	○					✓	C059
	F 91° 	**PTFNR/L**16**	TN**16 60°	○	○	○				✓		C089
		PTFNR/L1104**	TN**11 60°		○	○				✓		C089

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm) 16x16	20x20	25x25	32x25	32x32		Coolant supply: External supply	Coolant supply: TUNGTJET (Through-coolant)	Page
Lever lock P 	J 93° 	**PDJNR/L**15**	DN**15 55° / FNGA15 45°		○	○	○			✓		C036
		PDJNR/L15-CHP**			○	○					✓	C037
		PDJNR/L1104**	DN**11 55° / FNMG11 45°	○	○	○				✓		C036
		**PDJNR/L**1104-CHP**			○	○					✓	C037
	P 62.5° * 	**PDPNN**15**	DN**15 55° / FNGA15 45°			○				✓		C108
	Q 107.5° 	**PDQNR/L15**				○				✓		C093
	J 93° 	**PVJNR/L**16-CHP**	VN**16 35° / YN**16 25°		○	○					✓	C043
		PVJNR/L1204**	VN**12 35°	○	○	○				✓		C042
		**PVJNR/L**1204-CHP**			○	○					✓	C043
	Q 107.5° 	**PVQNR/L**1204**	VN**12 35°		○	○				✓		C094
		**PVQNR/L**16-CHP**	VN**16 35° / YN**16 25°		○	○					✓	C095
	V 72.5° 	**PVVNN**1204**	VN**12 35°		○	○				✓		C050
	B 75° 	**PSBNR/L12**	SN**12 90°		○	○				✓		C102
	D 45° 	**PSDNN12**			○	○				✓		C075
	S 45° 	**PSSNR/L12**			○	○	○			✓		C075
	K 75° 	**PSKNR/L12**			○	○				✓		C085
		**PRGNR/L**	RN**		○	○				✓		C060
		PRGCR/L	RCM*12			○	○	○		✓		C062
		PRDCN12				○	○			✓		C076

*: Tungaloy's symbol

External Toolholder - Quick Guide (Square shanks)

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm) 10x10	16x16	20x20	25x25	32x25	32x32	40x40	Coolant supply: External supply	Coolant supply: TUNGTJET (Through-coolant)	Page
Screw-on S 	L 95°	**SCLCR/L**	CC**12 80°			○					✓		C030
	L 95°	**JSWLXR/L JSWL2XR/L**	WX** 80°	○	○	○	○				✓		C029
	A 91°	**STACR/L**	TC**16 60°		○						✓		C054
	J 93°	**SDJCR/L11**	DC**11 55°		○	○	○				✓		C046
		JSDJXR/L JSDJ2XR/L	DX**07 55°	○	○	○	○				✓		C045
	N 62.5°	**SDNCN11**	DC**11 55°		○	○	○				✓		C073
	Q 107.5°	**SDQCR/L11**				○	○				✓		C096
	J 93°	**SVJCR/L**	VC**16 35°		○	○	○				✓		C048
		JSVJXR/L JSVJ2XR/L	VX**09 35°	○	○	○	○				✓		C047
	V 72.5°	**SVVCN**	VC**16 35°			○	○				✓		C052
	Q 117.5°	**SVQCR/L**				○	○				✓		C097
	J 93°	**SYJBR/L16**	YWMT16 25°			○	○				✓		C049
	Q 122.5°	**SYQBR/L16**				○	○				✓		C098
	H 100°	**SYHBR/L16**				○	○				✓		C099
	I 76.5°	**SYIBN16**				○	○				✓		C053
		SRACR/L	RCM*	○			○				✓		C056
		SRGCR/L		○			○				✓		C063, C064
		SRDCN				○	○				✓		C077, C078
Double clamp for dimple ceramic insert C DIMPLEFX 	L 45°	**CCLNR/L-RD**	CN** 80°				○	○			✓		C022
	J 93°	**CDJNR/L-RD**	DN** 55°				○	○			✓		C040
	N 63°	**CDNNN-RD**					○				✓		C072
	V72.5°	**CVVNN-RD**	VN** 35°				○				✓		C051
	S 45°	**CSSNR/L-RD**	SNGD 90°				○				✓		C082
	S 45°	**CHSNR/L-RD**	HNGD 90°				○				✓		C083
TURNTEC 	A 93°	**TLANR/L16**	LNMX16			○	○		○	○	✓		C054
	F 93°	**TLFNR/L16**	LNMX16				○		○		✓		C090

External Toolholder - Quick Guide

TUNGCAP

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Size C3	Size C4	Size C5	Size C6	Coolant supply: Through-coolant	Coolant supply: TUNGTJET (Through-coolant)	Page
ADDYTURN AXIS 	E	**C6STECN-Y-CHP**	3C-TCMT**				○	✓		C069
	N	**C6SDNCN-Y-CHP**	2D-DCMT**				○	✓		C070
Double clamp A	L 95°	**C*ACLNR/L12**	CN**12 80°	○	○	○	○	✓		C016
	L 95°	**C*ACLNN12**	GNGA12 70°			○	○	✓		C016
	M	**C6ACMNN0904**	CN**09 80°				○	✓		C105
	L 95°	**C*ACLNR/L**0904**	GNMG09 70°	○	○		○	✓		C016
Lever lock P	L 95°	**C*PCLNR/L12**	CN**12 80°			○	○	✓		C017
		C*PCLNR/L12-CHP**	GNGA12 70°		○	○	○		✓	C019
	M	**C6PCMNN**12-CHP**					○		✓	C106
	L 95°	**C*PCLNR/L**0904-CHP**	CN**09 80° GNMG09 70°		○		○		✓	C021
Double clamp A	L 95°	**C*AWLNR/L08**	WN**08 80°		○		○	✓		C024
		C*AWLNR/L06	WN**06 80°		○			✓		C024
Lever lock P	L 95°	**C*PWLNR/L**08-CHP**	WN**08 80°		○		○		✓	C028
		C*PWLNR/L06-CHP**	WN**06 80°		○				✓	C028

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Size C3	Size C4	Size C5	Size C6	Coolant supply: Through-coolant	Coolant supply: TUNGTJET (Through-coolant)	Page
Double clamp A	J 93°	**C*ADJNR/L15**	DN**15 55°		○	○	○	✓		C034
	N 62.5°	**C*ADNNN15**				○	○	✓		C071
	Q 107.5°	**C*ADQNR/L15**	FNGA15 45°	○	○			✓		C092
	U 93°	**C*ADUNR/L**			○			✓		C109
	J 93°	**C*ADJNR/L1104**	DN**11 55° FNMG11 45°	○	○		○	✓		C034
Lever lock P	J 93°	**C*PDJNR/L15**	DN**15 55°			○	○	✓		C038
		C*PDJNR/L15-CHP**	FNGA15 45°		○	○	○		✓	C039
		C*PDJNR/L1104-CHP**	DN**11 55°		○		○		✓	C039
	M	**C6PDMNL1104-CHP**	FNMG11 45°				○		✓	C107
Screw-on S	J 93°	**C*SDJCR/L-CHP**	DC**11 55°	○					✓	C046
Double clamp A	J 93°	**C4ATJNR/L**	TN**16 60°		○			✓		C032
Lever lock P	J 93°	**C4PTJNR/L**			○			✓		C033
Double clamp A	J 93°	**C*AVJNR/L12**	VN**12 35°		○		○	✓		C042
	Q 117.5°	**C*AVQNR/L16**	VN**16 35° YN**16 25°		○			✓		C094
Lever lock P	J 93°	**C*PVJNR/L**-CHP**	VN**16 35° YN**16 25°		○		○		✓	C044
		C*PVJNR/L1204-CHP**	VN**12 35°		○		○		✓	C044
Screw-on S	J 93°	**C*SVJCR/L**	VC**16 35°			○	○	✓		C048
	V 72.5°	**C*SVVCN**				○	○	✓		C052

ADDMULTI TURN



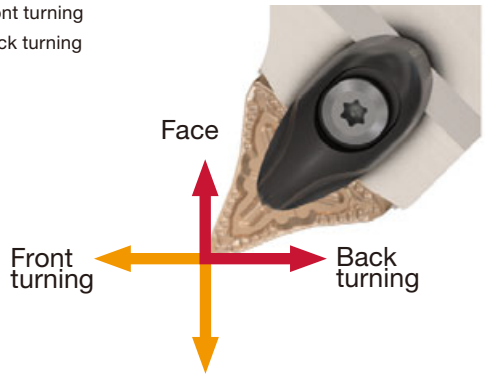
Ultra high productivity of Front Turning, Back Turning, Profiling, and Face Turning with **ONE SINGLE TOOL**

Double-sided 6-corner insert with 80° or 35° corner angle for versatile applications

- Back (pull) turning: High feed designed cutting edge improves productivity about 200% higher than existing ISO tools with no need for special programming.
- Front (push) turning: Same machining process is available using the same cutting edge angle as standard ISO tools.

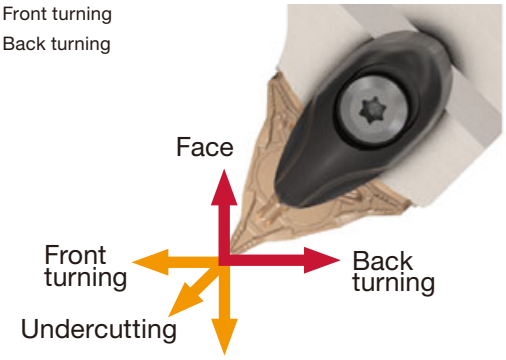
6C-TOMG

Front turning
Back turning



6V-TOMG

Front turning
Back turning

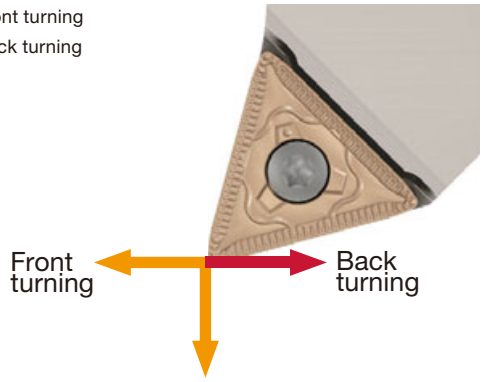


Single-sided 3-corner insert for super high productivity

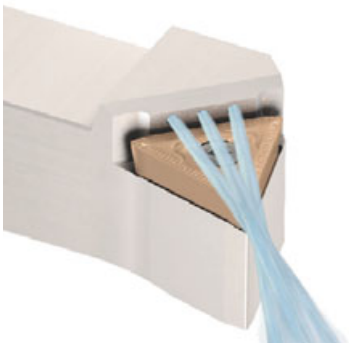
- Back (pull) turning: High feed designed cutting edge improves productivity 300 - 400% higher than standard ISO tools.
- Front (push) turning: Applicable to great D.O.C.

3C-TCMT

Front turning
Back turning



Internal coolant toolholder prevents chip jamming and maximizes performance during back turning operations



Reference pages: C065, C066, C116

ADDY AXIS TURN

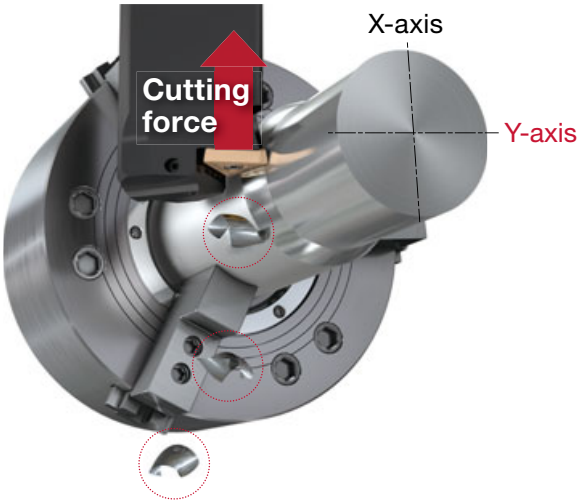


LEADING IN THE NEW DIRECTION

Y-axis turning tool with PSC connection for multitasking machines

■ Y-axis machining benefits

- The cutting force vector is directed in the longitudinal axis of the tool, resulting in higher stability and minimized vibration
- No chip entanglements, chips are directed down and away from the workpiece and toolholder



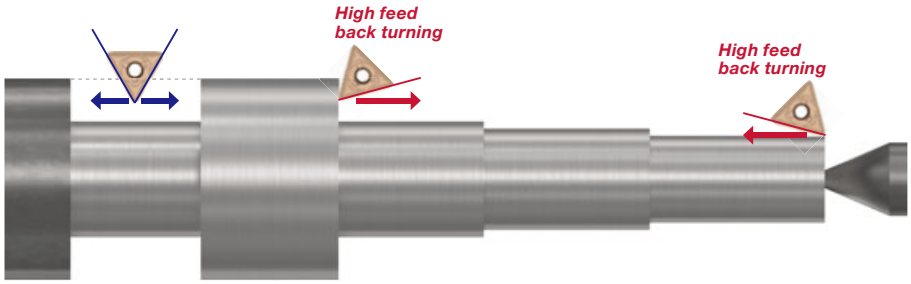
■ Tooling image of Y-axis orientation and applying high feed back turning

Medium cutting



3C-TCMT

Insert: 3C-TCMT29X608-TM
(Single-sided, 3 corners)



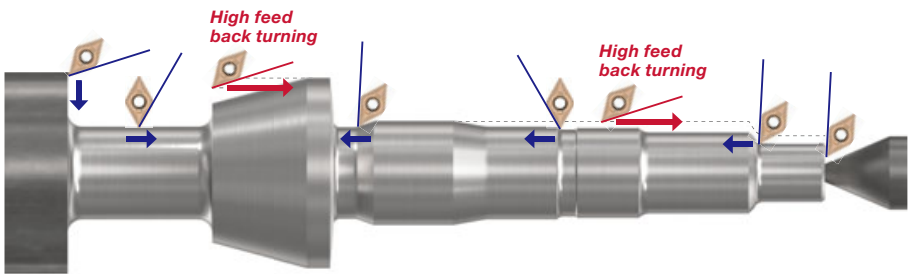
- Thanks to its high-feed geometry, **AddY-axisTurn** insert provides high productivity
- Y-axis tool orientation allows both sides of the cutting edge to be used, providing stable and long tool life

Finishing - Profiling



2D-DCMT

Insert: 2D-DCMT13T404-ZF
(Single-sided, 2 corners)



- **AddY-axisTurn** allows a precision workpiece completion with a single tool setup
- No interference with the tailstock
- Eliminates chip entanglement, promoting fully automated manufacturing

Reference pages: C069, C070, C116

TURNTEN FEED



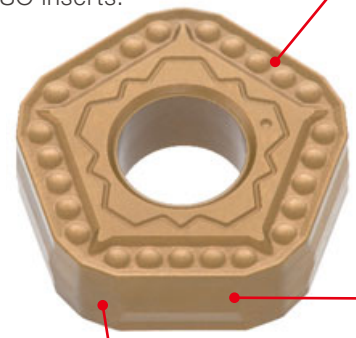


Economical, 10-cornered insert ensures **high machining efficiency**

- Available in 2 types of holders: HD type for large depths of cut and HF type for high feed turnin
- Maximum 7 mm depth of cut, or maximum 2.0 mm feed per rev is attainable!

Economical 10-cornered, double-sided, M-class insert

Achieves outstanding cost efficiency over standard ISO inserts.

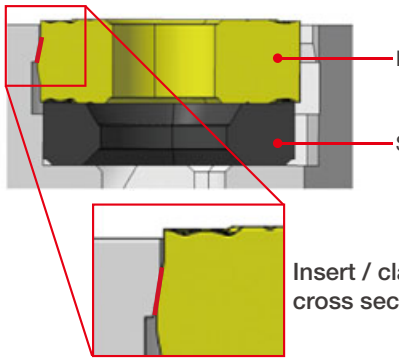


New – MNW style chipbreaker

Features protrusions on the rake face to facilitate smooth chip control, while achieving high crater wear resistance.

Dovetail clamping

Ensures secure insert retention while promoting smooth chip flow thanks to the integration of lever lock and dovetail clamping methods.



Insert / clamp contact cross section

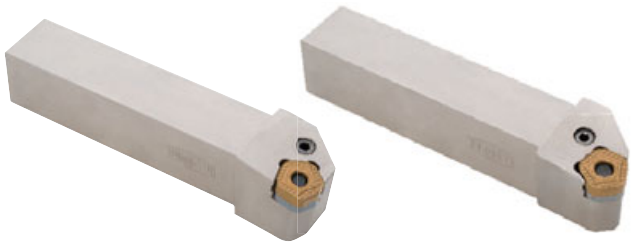
Flat Wiper

Built in the cutting edge to achieve superior machining surface at higher feed rates!

Holder selections

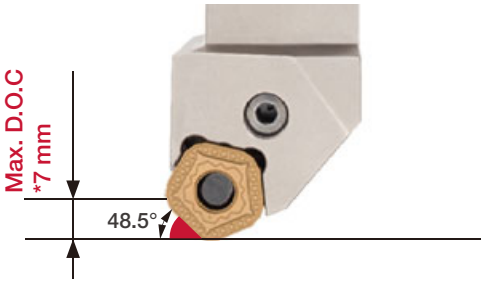
Available in 2 types:
- HD holder for large depths of cut
- HF holder for high feed turning

Inserts are interchangeable between these two holders.

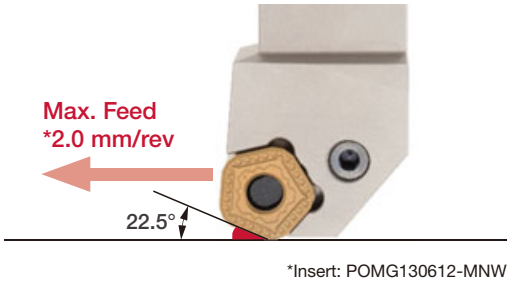


Features of Holders

HD holder
For High Depth of Cut



HF holder
For High Feed



*Insert: POMG130612-MNW

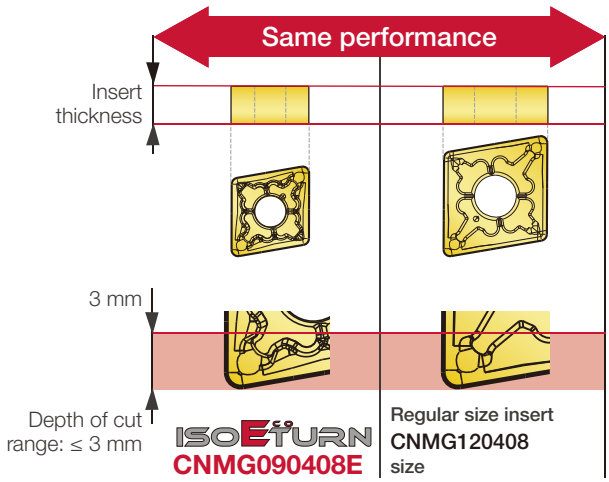
Reference pages: C067, C117

ISO-EcoTurn Small size inserts, for an economical advantage



Uncompromising insert performance

Comparison of ISO-EcoTurn and regular size inserts

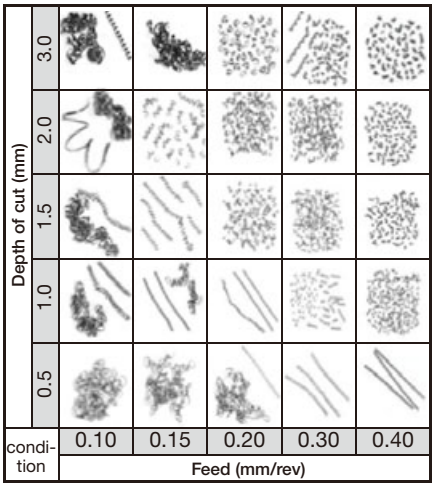


ISO-EcoTurn inserts feature the identical thickness and chipbreaker geometry as Tungaloy's regular size inserts.
These properties provide cutting performance equal to that of the regular size inserts, including chip control at a depth of cut up to 3 mm.

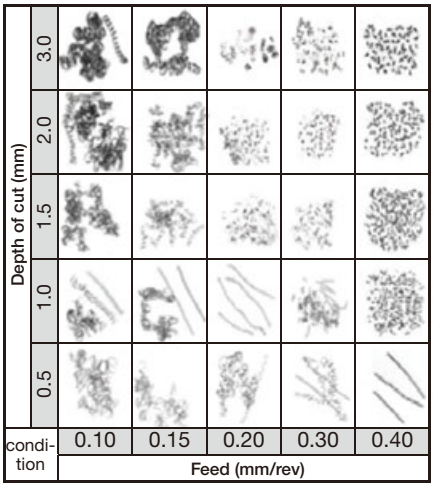
Chip control

ISO-EcoTurn inserts incorporate an identical chipbreaker geometry as regular size inserts providing the same chip removal at a depth of cut up to 3 mm.

ISO-EcoTurn
CNMG090408E-TM



Regular size
CNMG120408-TM

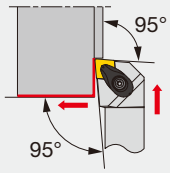


Workpiece : S45C
Cutting speed : *Vc* = 200 m/min
Coolant : Wet

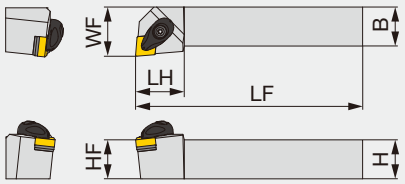
Reference pages: C015, C020, C024, C026, C032, C034, C041, C042, C050, C058, C092, C094

ACLNR/L

Double-clamp toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ACLNR/L2020K0904-A	20	20	125	25	20	25	0.8	CN**/GNMG0904...	3
ACLNR/L2020H12-A	20	20	100	26	20	25	0.8	CN**/GNGA1204...	3
ACLNR/L2020K12-A	20	20	125	26	20	25	0.8	CN**/GNGA1204...	3
ACLNR/L2525M0904-A	25	25	150	25	25	32	0.8	CN**/GNMG0904...	3
ACLNR/L2525K12-A	25	25	125	30	25	32	0.8	CN**/GNGA1204...	3
ACLNR/L2525M12-A	25	25	150	30	25	32	0.8	CN**/GNGA1204...	3
ACLNR/L2525M16-A	25	25	150	31	25	32	1.2	CN**1606...	6.4
ACLNR/L3225P12-A	32	25	170	30	32	32	0.8	CN**/GNGA1204...	3
ACLNR/L3225P16-A	32	25	170	31	32	32	1.2	CN**1606...	6.4
ACLNR/L3232P16-A	32	32	170	31	32	40	1.2	CN**1606...	6.4
ACLNR/L3232P19-A	32	32	170	40	32	40	1.2	CN**1906...	6.4
ACLNR/L4040S19-A	40	40	250	40	40	50	1.2	CN**1906...	6.4

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench1	Wrench2
ACLNR/L**0904-A	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASC322	CSTB-3.5	T-15F	-
ACLNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASC422	CSTB-3.5	T-15F	-
ACLNR/L**16-A	ACP5S	ACS-6W	BP-8.8	SP-2.5	ASC533	CSTB-5	-	KEYV-T20
ACLNR/L**19-A	ACP6S	ACS-6W	BP-8.8	SP-2.5	ASC634	CSTB-5	-	KEYV-T20

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

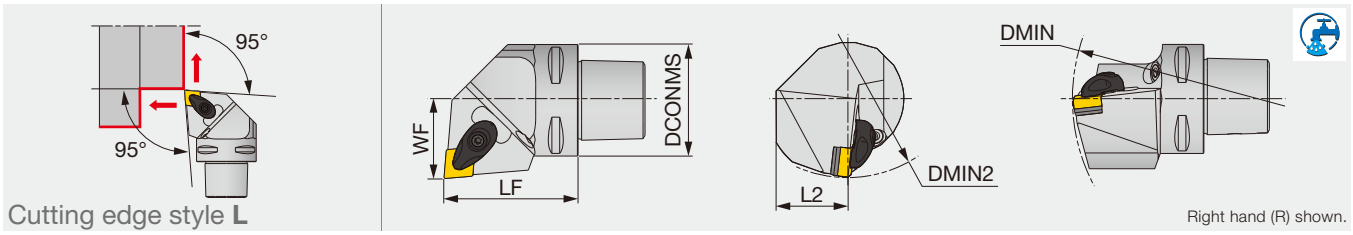
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: ACLNR/L: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -

C-ACLNR/L

Double-clamp toolholder, with 95° approach angle, for negative 80°/70° rhombic inserts (TurningA)

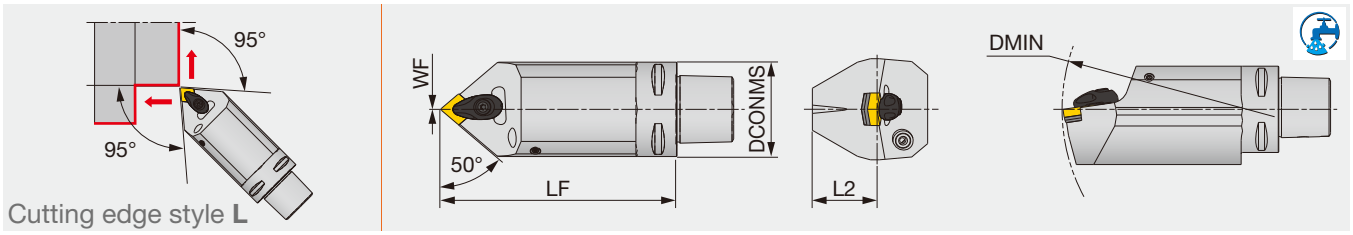


Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert	Torque*
C3ACLNR/L22040-0904N	32	40	20	22	110	121	0.8	CN**/GNMG0904...	3
C3ACLNR/L22040-12N	32	40	20	22	121	116	0.8	CN**/GNGA1204...	3
C4ACLNR/L27050-0904N	40	50	25	27	140	110	0.8	CN**/GNMG0904...	3
C4ACLNR/L27050-12N	40	50	25	27	140	110	0.8	CN**/GNGA1204...	3
C5ACLNR/L35060-12N	50	60	32	35	165	110	0.8	CN**/GNGA1204...	3
C6ACLNR/L45065-0904N	63	65	35	45	190	110	0.8	CN**/GNMG0904...	3
C6ACLNR/L45065-12N	63	65	41	45	190	125	0.8	CN**/GNGA1204...	3
C6ACLNR/L45135-12N	63	135	41	45	190	110	0.8	CN**/GNGA1204...	3
C6ACLNR/L45065-16N	63	65	41	45	190	125	1.2	CN**1606...	6.4

Applicable for 7 MPa coolant
*Torque: Recommended clamping torque (N·m)

C-ACLNN

Double-clamp toolholder, with 50° approach angle, for negative 80°/70° rhombic inserts



Designation	DCONMS	LF	L2	WF	DMIN	RE	Insert	Torque*
C5ACLNN00090-12(1)	50	90	32	0	-	0.8	CN**/GNGA1204...	3
C5ACLNN00090-12N(2)	50	90	32	0	165	0.8	CN**/GNGA1204...	3
C5ACLNN00125-12(1)	50	125	32	0	-	0.8	CN**/GNGA1204...	3
C5ACLNN00125-12N(2)	50	125	32	0	165	0.8	CN**/GNGA1204...	3
C6ACLNN00100-12N(2)	63	100	37.5	0	190	0.8	CN**/GNGA1204...	3
C6ACLNN00140-12N(2)	63	140	37.5	0	190	0.8	CN**/GNGA1204...	3

The items without DMIN cannot be used for boring.
*Torque: Recommended clamping torque (N·m)
(1) Applicable for 3 MPa coolant (2) Applicable for 7 MPa coolant

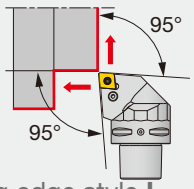
SPARE PARTS

Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench 1	Wrench 2
C*ACLN***-0904N	ACP3S-E	ACS-5W	SATZ-M10X1-5	ASC322	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C*ACLN***-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C6ACLN*45065-16N	ACP5S	ACS-6W	SATZ-M8X1-M3	ASC533	CSTB-5	BP-8.8	SP-2.5	KEYV-T20	-
C5ACLNN00090-12	ACP4S	ACS-5W	EZ83	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C5ACLNN00125-12	ACP4S	ACS-5W	EZ83	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F

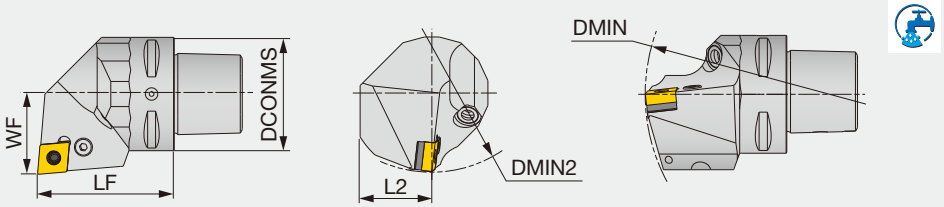
Reference pages: C-ACLNR/L, C-ACLNN: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -
Parts for coolant hose → C115

C-PCLNR/L

Lever-lock toolholder, with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C5PCLNR/L35060-12	50	60	32	35	-	-	0.8	CN**/GNGA1204...
C5PCLNR/L35060-12N	50	60	32	35	165	110	0.8	CN**/GNGA1204...
C6PCLNR/L45065-12N	63	65	41	45	190	125	0.8	CN**/GNGA1204...

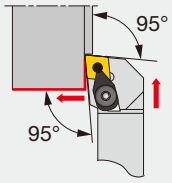
Applicable for 7 MPa coolant
The item without DMIN and DMIN2 cannot be used for boring.

SPARE PARTS

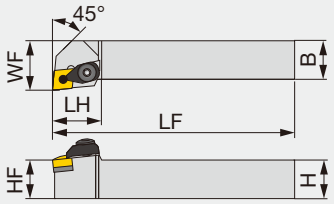
Designation	Coolant parts	Lever	Clamping screw	Shim	Spring pin	Wrench
C5PCLN*35060-12	EZ104	LCL4	LCS4	LSC42	LSP4	P-3
C*PCLN***-12N	SATZ-M10X1-M5	LCL4	LCS4	LSC42	LSP4	P-3

DCLNR/L

"One-Double" toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DCLNR/L2020K12	20	20	125	30	20	25	0.8	CN**/GNGA1204...
DCLNR/L2525M12	25	25	150	30	25	32	0.8	CN**/GNGA1204...
DCLNR/L3225P12	32	25	170	30	32	32	0.8	CN**/GNGA1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts **RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench1	Wrench2
DCLNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSC42	BP-10	LSP4	P-3	P-4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

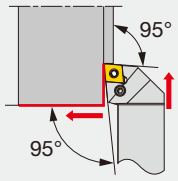
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

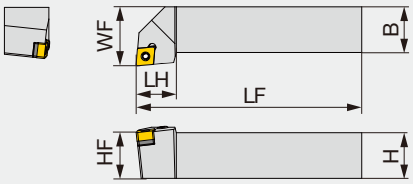
Reference pages: C-PCLNR/L: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -
DCLNR/L: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -,
Parts for coolant hose → C115

PCLNR/L

Lever-lock toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR/L1616H09	16	16	100	20	16	20	0.8	CN**0903...	2
PCLNR/L1616	16	16	100	26	16	20	0.8	CN**/GNGA1204...	3
PCLNR/L1616H12E	16	16	100	26	16	20	0.8	CN**/GNGA1204...	3
PCLNR/L2020K09	20	20	125	20	20	25	0.8	CN**0903...	2
PCLNR/L2020K0904	20	20	125	20	20	25	0.8	CN**/GNMG0904...	2
PCLNR/L2020	20	20	125	28	20	25	0.8	CN**/GNGA1204...	3
PCLNR/L2020K12E	20	20	125	28	20	25	0.8	CN**/GNGA1204...	3
PCLNR/L2525M09	25	25	150	20	25	32	0.8	CN**0903...	2
PCLNR/L2525M0904	25	25	150	25	25	32	0.8	CN**/GNMG0904...	2
PCLNR/L2525M4	25	25	150	28	25	32	0.8	CN**/GNGA1204...	3
PCLNR/L2525M12E	25	25	150	28	25	32	0.8	CN**/GNGA1204...	3
PCLNR/L2525M16E	25	25	150	31	25	25	1.2	CN**1606...	3
PCLNR/L3225P4	32	25	170	28	32	32	0.8	CN**/GNGA1204...	3
PCLNR/L3232	32	32	170	40	32	40	1.2	CN**1906...	5
PCLNR/L3225P12E	32	25	170	28	32	32	0.8	CN**/GNGA1204...	3
PCLNR/L3225P16E	32	25	150	31	32	32	1.2	CN**1606...	3
PCLNR3232P16E	32	32	170	31	32	40	1.2	CN**1606...	3
PCLNR/L3232P19E	32	32	170	40	32	40	1.2	CN**1906...	5

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCLNR/L**09	ELSC32	LCS3	P-2.5	LSP3L	LCL33
PCLNR/L1616	LSC42	LCS4CA	P-3	LSP4	LCL4
PCLNR/L1616H12E	ELSC42	LCS4CA	P-3	LSP4S	LCL43S
PCLNR/L**0904	LSC317	LCS3	P-2.5	LSP3	LCL33
PCLNR/L2020	LSC42	LCS4	P-3	LSP4	LCL4
PCLNR/L2020K12E, **2525M12E, **3225P12E	ELSC42	LCS4	P-3	LSP4S	LCL43M
PCLNR/L2525M4, **3225P4	LSC42	LCS4	P-3	LSP4	LCL4
PCLNR/L**16E	ELSC53	LCS5	P-3	LSP6C	LCL54
PCLNR/L3232	LSC63	LCS6	P-4	LSP6	LCL6
PCLNR/L3232P19E	ELSC63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

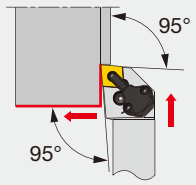
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PCLNR/L: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -

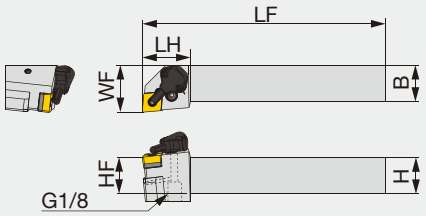
PCLNR/L-CHP

Tube connection

Lever lock toolholders – 95° approach angle.
For negative 80°/70° rhombic insert. High-pressure coolant capability.



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR/L2020K0904-CHP	20	20	125	33	20	32	0.8	CN**/GNMG0904...	2
PCLNR/L2020K12-CHP	20	20	125	33	20	32	0.8	CN**/GNGA1204...	3
PCLNR/L2525M0904-CHP	25	25	150	33	25	32	0.8	CN**/GNMG0904...	2
PCLNR/L2525M12-CHP	25	25	150	33	25	32	0.8	CN**/GNGA1204...	3

*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PCLNR/L**0904-CHP	LSC317	LCS3	P-2.5	LSP3	LCL33
PCLNR/L**12-CHP	LSC42	LCS4	P-3	LSP4	LCL4

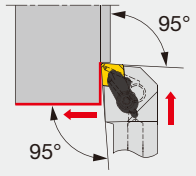
SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PCLNR/L**0904-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PCLNR/L**12-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

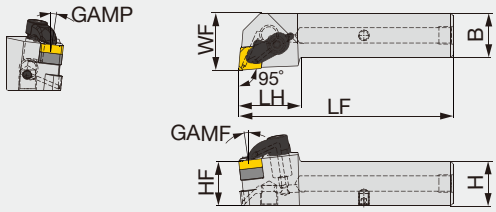
ACLNR/L-CHP-MC

Direct connection | Tube connection

Double clamping tool holders-95°approach angle
For negative 80°/70° rhombic insert. High-pressure coolant capability with tube and direct connections



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque*
ACLNR/L2020X-12-CHP-MC	20	20	105	35	20	25	6°	6°	CN**/GNGA1204...	4
ACLNR/L2525X-12-CHP-MC	25	25	120	35	25	32	6°	6°	CN**/GNGA1204...	4

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant

SPARE PARTS

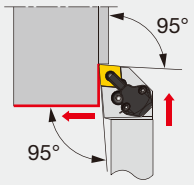
Designation	Clamp set	Shim	Shim screw	screw for tube connection	Coolant plug	O-ring	Wrench 1
ACLNL**X-12-CHP-MC	LCGL-4JCSET	RCT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20
ACLNR**X-12-CHP-MC	LCGR-4JCSET	RCT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20

Reference pages: PCLNR/L-CHP, ACLNR/L-CHP-MC:
Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -, Parts for coolant hose → C115

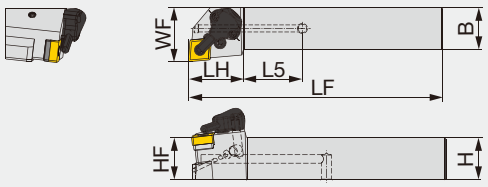
PCLNR/L2020X-CHP-MC

Direct connection

Lever lock toolholders – 95° approach angle.
For negative 80°/70° rhombic insert. High-pressure coolant capability with bottom direct connection



Cutting edge style **L**



Designation	H	B	LF	LH	HF	L5	WF	Insert	Torque*
PCLNR/L2020X09-CHP-MC	20	20	97	27	20	29	25	CN**/GNMG0904...	2
PCLNR/L2020X12-CHP-MC	20	20	97	27	25	29	25	CN**/GNGA1204...	3

*Torque: Recommended torque (N·m) for clamping

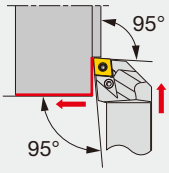
SPARE PARTS

Designation	Shim	Spring	Lever	Spring	Spring pin	Wrench	Coolant unit	Wrench	Coolant plug	Wrench
PCLNR/L2020X09-CHP-MC	TCN323	SP3	LR3	SR117-2014	PN3-4	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	-
PCLNR/L2020X12-CHP-MC	TCN443	SP4	LR4DH	SR117-2010	PN3-4L	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	HW3.0

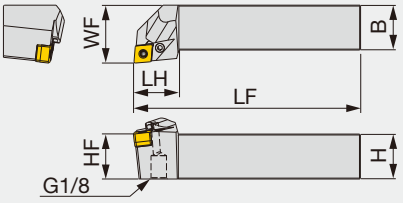
ISOECO TURN
PCLNR/L-CHP-N

Tube connection

Lever-lock toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Air hole	Insert	Torque*
PCLNR/L2020H0904-CHP-N	20	20	100	25	20	25	0.8	With	CN**/GNMG0904...	2
PCLNR/L2525K0904-CHP-N	25	25	125	25	25	32	0.8	With	CN**/GNMG0904...	2

*Torque: Recommended torque (N·m) for clamping
**RE: The holder measurements are true with this insert radius
Applicable for 14 MPa pressure coolant

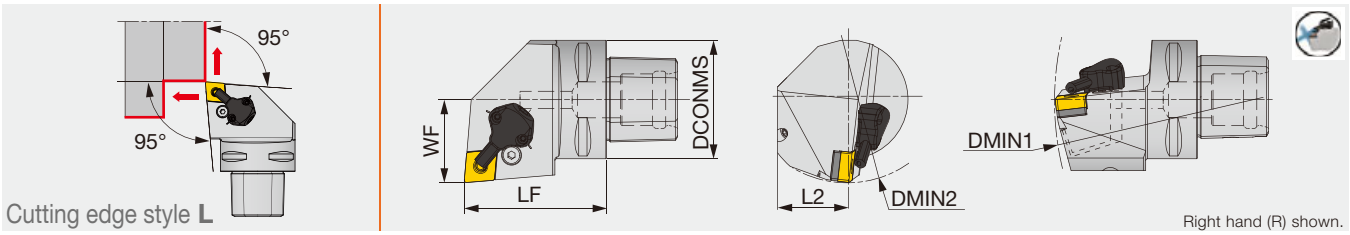
SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCLNR/L**0904-CHP-N	LSC317	LCS3	P-2.5	LSP3	LCL33

Reference pages: PCLNR/L2020X-CHP-MC, PCLNR/L-CHP-N:
Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -, Parts for coolant hose → C115

TUNGCAP
C-PCLNR/L-CHP

Lever lock toolholders with TungCap connection – 95° approach angle.
For negative 80°/70° rhombic insert. High-pressure coolant capability.



Designation	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque*
C4PCLNR/L27050-0904-CHP	40	50	25	27	140	110	0.8	CN**/GNMG0904...	2
C4PCLNR/L27050-12-CHP	40	50	25	27	140	110	0.8	CN**/GNGA1204...	3
C5PCLNR/L35060-12-CHP	50	60	32	35	165	110	0.8	CN**/GNGA1204...	3
C6PCLNR/L45065-0904-CHP	63	65	41	45	195	125	0.8	CN**/GNMG0904...	2
C6PCLNR/L45065-12-CHP	63	65	41	45	195	125	0.8	CN**/GNGA1204...	3

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PCLNR/L**0904-CHP	LSC317	LCS3	P-2.5	LSP3	LCL33
C*PCLNR/L**-12-CHP	LSC42	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PCLNR/L**0904-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N
C*PCLNR/L**-12-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

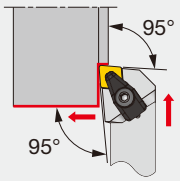
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

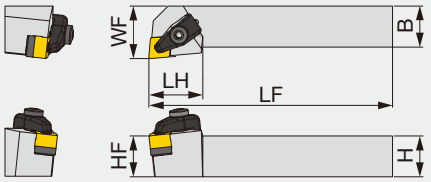
Reference pages: C-PCLNR/L-CHP: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -
Parts for coolant hose → C115

CCLNR/L-RD

Double-clamp toolholder with 95° approach angle, for negative 80° rhombic ceramic inserts with dimple



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CCLNR/L2525M1207-RD	25	25	150	33	25	32	1.2	CN*D1207...	4
CCLNR3225P1207-RD	32	25	170	33	32	32	1.2	CN*D1207...	4

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CCLNR/L**-RD	CCP4-A	CCS4-A	CC44-A	BH5-10-A	BP-5-A	P-3	P-4

INSERT SELECTION

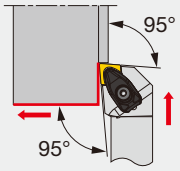
K

Application	Finishing to medium cutting
Grade	FX105
Chipbreaker shape	- 
Cutting conditions	C118

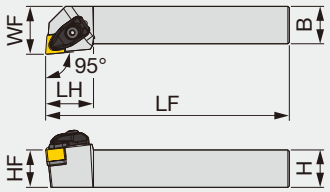
Reference pages: CCLNR/L-RD: Inserts → B065,
Standard cutting conditions → C115

TCLNR/L-F

Toolholder with carbide clamping plate, with 95° approach angle, for negative 80° rhombic ceramic inserts without hole



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
TCLNR/L2525M1204-F	25	25	150	32	25	32	0.8	CNGN1204...
TCLNR/L2525M1207-F	25	25	150	32	25	32	0.8	CNGN1207...

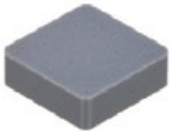
**RE: Standard corner radius

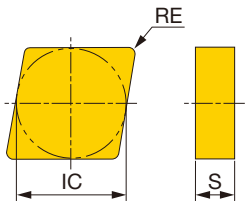
SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
TCLNR/L2525M1204-F	DCLS-4F	DLS-4A	TSC-44	BH-40050-A	DSP-4A	T-15F	P-3
TCLNR/L2525M1207-F	DCLS-4F	DLS-4A	TSC-42	BH-40050-A	DSP-4A	T-15F	P-3

INSERT

CNGN-E/T1





P	Steel		
M	Stainless		
K	Cast iron		
N	Non-ferrous		
S	Superalloys	★	★
H	Hard materials		

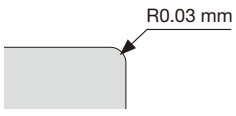
★ : First choice

Designation	Edge prep.*	Ceramic TS200	Ceramic TS300	RE	IC	S
CNGN120408-E	E		●	0.8	12.7	4.76
CNGN120412-E	E		●	1.2	12.7	4.76
CNGN120412-T1	T1	●		1.2	12.7	4.76
CNGN120708-E	E		●	0.8	12.7	7.94
CNGN120712-E	E	●	●	1.2	12.7	7.94
CNGN120716-T1	T1	●		1.6	12.7	7.94

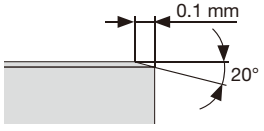
* Types of cutting edge preparations

● : Line up

E: Low cutting force

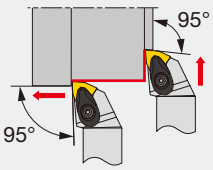


T1: Strong cutting edge

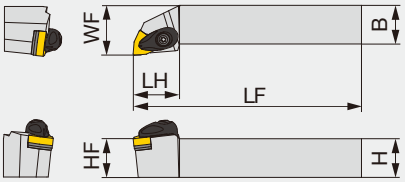


AWLNR/L

Double-clamp toolholder with 95° approach angle, for negative 80° trigon inserts



Cutting edge style **L**



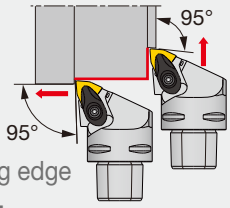
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AWLNR/L2020K0604-A	20	20	125	27	20	25	0.8	WN**0604...	3
AWLNR/L2020H08-A	20	20	100	30	20	25	0.8	WN**0804...	3
AWLNR/L2020K08-A	20	20	125	30	20	25	0.8	WN**0804...	3
AWLNR/L2525M0604-A	25	25	150	27	25	32	0.8	WN**0604...	3
AWLNR/L2525K08-A	25	25	125	30	25	32	0.8	WN**0804...	3
AWLNR/L2525M08-A	25	25	150	30	25	32	0.8	WN**0804...	3
AWLNR/L3225P08-A	32	25	170	30	32	32	0.8	WN**0804...	3

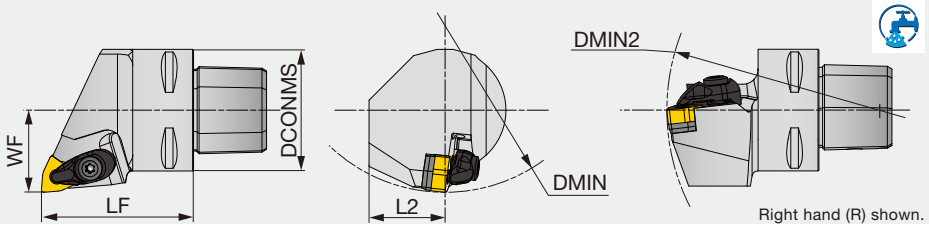
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

C-AWLNR/L

Double-clamp toolholder, with 95° approach angle, for negative 80° trigon inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C4AWLNR/L27050-0604N	40	50	25	27	140	110	0.8	WN**0604...
C4AWLNR/L27050-08N	40	50	25	27	-	-	0.8	WN**0804...
C6AWLNR/L45065-08N	63	65	35	45	190	110	0.8	WN**0804...

Applicable for 7 MPa coolant

The items without DMIN and DMIN2 cannot be used for boring.

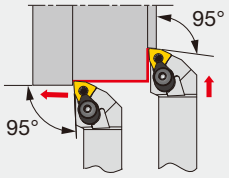
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench	Coolant parts
AWLNR/L**0604-A C4AWLNR/L**-0604N	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F	-
AWLNR/L**08-A C4AWLNR/L**-08N	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F	-
C6AWLNR/L**-08N	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F	SATZ-M8X1-M3

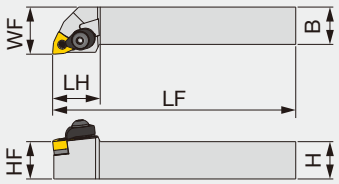
Reference pages: AWLNR/L, C-AWLNR/L: Inserts → B102 -, CBN → B187
Parts for coolant hose → C115

DWLNR/L

One-Double toolholder with 95° approach angle, for negative 80° trigon inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DWLNR/L2020K06	20	20	125	25.5	20	25	0.8	WN**0604...
DWLNR/L2020K08	20	20	125	31	20	25	0.8	WN**0804...
DWLNR/L2525M06	25	25	150	26	25	32	0.8	WN**0604...
DWLNR/L2525M08	25	25	150	31	25	32	0.8	WN**0804...
DWLNR/L3225P08	32	25	170	30	32	32	0.8	WN**0804...

Note: Except for 57-type chipbreaker inserts
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench1	Wrench2
DWLNR/L**06	DCPM-33	LCL33	DPIS33	DLCS33	LSW312	BP-9	LSP3	P-2.5	P-3
DWLNR/L**08	DCPM-43	DLCL43	DPIS43	DLCS43	LSW42	BP-10	LSP4	P-3	P-4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

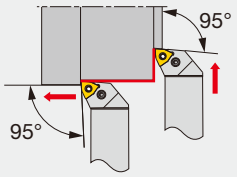
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B014	

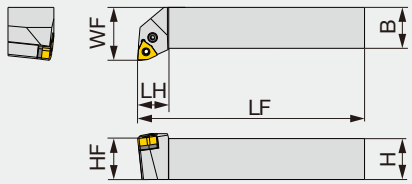
Reference pages: DWLNR/L: Inserts → B102 -, CBN → B187
Parts for coolant hose → C115

PWLNR/L-Eco

Lever-lock toolholder with 95° approach angle, for negative 80° trigon inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PWLNR/L2020K0604	20	20	125	15	20	25	0.8	WN**0604...	2
PWLNR/L2525M0604	25	25	150	19	25	32	0.8	WN**0604...	2

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

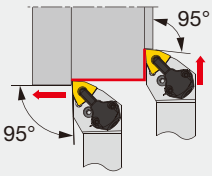
SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PWLNR/L**0604	LSW312	LCS3	P-2.5	LSP3	LCL3

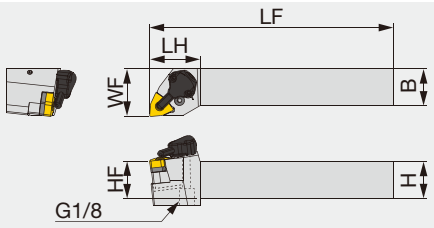
PWLNR/L-CHP

Tube connection

Lever lock toolholders – 95° approach angle.
For negative 80° trigon insert. High-pressure coolant capability.



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PWLNR/L2020K0604-CHP	20	20	125	34	20	32	0.8	WN**0604...	2
PWLNR/L2020K08-CHP	20	20	125	34	20	32	0.8	WN**0804...	3
PWLNR/L2525M0604-CHP	25	25	150	34	25	32	0.8	WN**0604...	2
PWLNR/L2525M08-CHP	25	25	150	34	25	32	0.8	WN**0804...	3

*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PWLNR/L**0604-CHP	LSW312	LCS3	P-2.5	LSP3	LCL3
PWLNR/L**08-CHP	LSW42	LCS4	P-2.5	LSP4	LCL4

SPARE PARTS

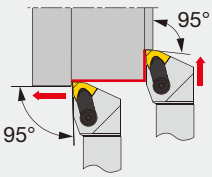
Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PWLNR/L**0604-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PWLNR/L**08-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

Reference pages: PWLNR/L-Eco: Inserts → B102 -
PWLNR/L-CHP: Inserts → B102 -, CBN → B187
Parts for coolant hose → C115

AWLNR/L-CHP-MC

Direct connection | Tube connection

Double clamping tool holders-95°approach angle
For negative 80°trigon insert. High-pressure coolant capability with tube and direct connections



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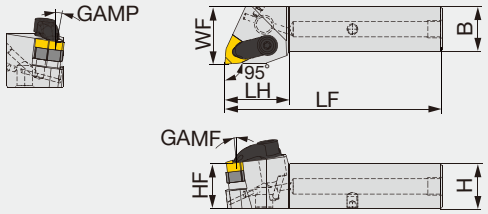


Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque*
AWLNR/L2020X-08-CHP-MC	20	20	106	36	20	25	6°	6°	WN**0804...	4
AWLNR/L2525X-08-CHP-MC	25	25	121	36	25	32	6°	6°	WN**0804...	4

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant

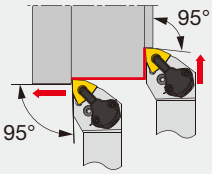
SPARE PARTS

Designation	Clamp set	Shim	Shim screw	screw for tube connection	Coolant plug	O-ring	Wrench 1
AWLNL**X-08-CHP-MC	LCGL-4JCSET	RWT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20
AWLNR**X-08-CHP-MC	LCGR-4JCSET	RWT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20

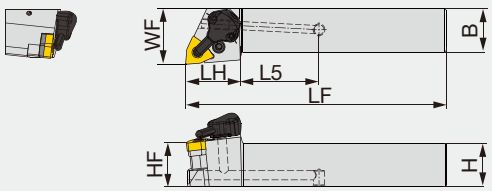
PWLNR/L2020X-CHP-MC

Direct connection

Lever lock toolholders – 95° approach angle.
For negative 80° trigon insert. High-pressure coolant capability with bottom direct connection



Cutting edge style **L**



Designation	H	B	LF	LH	HF	L5	WF	Insert	Torque*
PWLNR/L2020X06-CHP-MC	20	20	97	27	20	29	25	WN**0604...	2
PWLNR/L2020X08-CHP-MC	20	20	97	27	20	29	25	WN**0804...	3

*Torque: Recommended torque (N·m) for clamping
Applicable for 30 MPa pressure coolant

SPARE PARTS

Designation	Shim	Spring	Lever	Spring	Spring pin	Wrench	Coolant unit	Wrench	Coolant plug	Wrench
PWLNR/L2020X06-CHP-MC	TWN3	SP3	LR3	SR117-2014	PN3-4	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	-
PWLNR/L2020X08-CHP-MC	TWN443	SP4	LR4DH	SR117-2010	PN3-4L	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	HW3.0

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

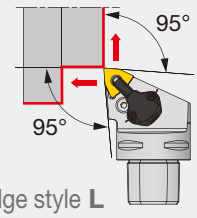
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B014	

Reference pages: AWLNR/L-CHP-MC, PWLNR/L2020X-CHP-MC:
Inserts → B102 -, CBN → B187
Parts for coolant hose → C115

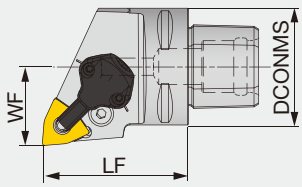
TUNGCAP

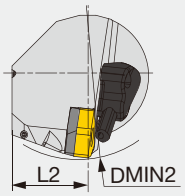
C-PWLNR/L-CHP

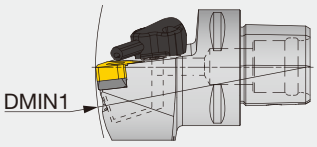
Lever lock toolholders with TungCap connection – 95° approach angle.
For negative 80° trigon insert. High-pressure coolant capability.



Cutting edge style **L**







Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque*
C4PWLNR/L27050-0604-CHP	40	50	25	27	140	110	0.8	WN**0604...	2
C4PWLNR/L27050-08-CHP	40	50	25	27	140	110	0.8	WN**0804...	3
C6PWLNR/L45065-08-CHP	63	65	41	45	190	110	0.8	WN**0804...	3

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PWLNR/L**0604-CHP	LSW312	LCS3	P-2.5	LSP3	LCL3
C*PWLNR/L**-08-CHP	LSW42BL	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PWLNR/L**0604-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N
C*PWLNR/L**-08-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

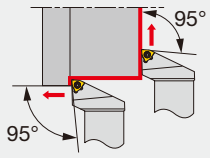
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B012	

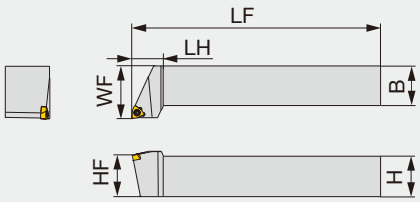
Reference pages: C-PWLNR/L-CHP: Inserts → B102 -, CBN → B187
Parts for coolant hose → C115

JSWLXR/L

Screw-on toolholder with 95° approach angle, for negative 80° trigon inserts



Cutting edge style **L**



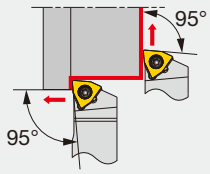
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSWLXR/L2020K04	20	20	125	15	20	25	0.4	WXGU0403**L/R...	0.9
JSWLXR/L2525M04	25	25	150	19	25	32	0.4	WXGU0403**L/R...	0.9

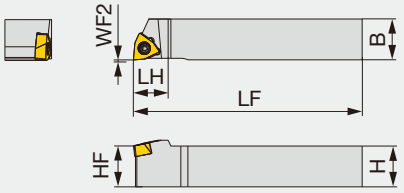
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

JSWL2XR/L

Screw-on toolholder with 95° approach angle, for WXGU inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSWL2XR/L1010X04	10	10	120	11	10	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1212F04	12	12	85	11	12	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1212X04	12	12	120	11	12	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1616X04	16	16	120	13	16	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L2020H04	20	20	100	13	20	0	0.2	WXGU0403**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS




Designation	Clamping screw	Wrench
JSWLXR/L... JSWL2XR/L...	SR34-514	T-7F

INSERT SELECTION

Swiss lathes

P	Application	Finishing	Medium cutting
	Grade	SH725	AH725
	Chipbreaker shape	JSS 	JTS 
	Cutting conditions	C118	

M	Application	Finishing	Medium cutting
	Grade	SH725	AH725
	Chipbreaker shape	JSS 	JTS 
	Cutting conditions	C118	

Small CNC lathes

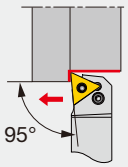
P	Application	Finishing	Medium cutting
	Grade	AH725	AH725
	Chipbreaker shape	SS 	TS 
	Cutting conditions	C118	

M	Application	Finishing	Medium cutting
	Grade	AH8015	AH8015
	Chipbreaker shape	SS 	TS 
	Cutting conditions	C118	

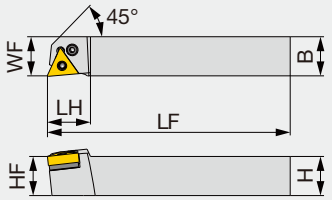
Reference pages: JSWLXR/L, JSWL2XR/L: Inserts → B157 -
Standard cutting conditions → C118

PTL2NR/L

Lever-lock toolholder with 95° approach angle, for negative 60° triangular inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTL2NR/L2020H16	20	20	100	22	20	20	0.4	TN**1604...	2

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PTL2NR/L...	LST317 D30	LCS3	P-2.5	LSP3	LCL3

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

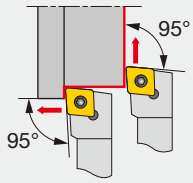
Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

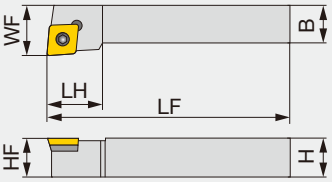
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

SCLCR/L

Screw-on toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SCLCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...
SCLCR/L2020K12	20	20	125	20	20	25	0.8	CC**1204...

**RE: Standard corner radius

SPARE PARTS

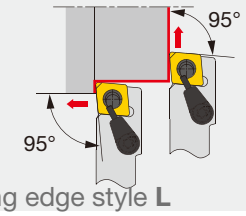
Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
SCLCR/L1616H09	CSTB-3.5L	DTS5-3.5	SSC32	P-3.5	T-15F
SCLCR/L2020K12	CSTB-4F	DTS6-4	SSC4T3	P-4	T-15F

Reference pages: PTL2NR/L: Inserts → B087 -, CBN → B182 -, PCD → B212
SCLCR/L: Inserts → B112 -, CBN → B189 -, PCD → B213

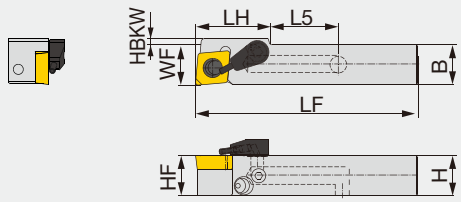
PCLCR/L1616X09S-CHP-MC

Direct connection

Lever lock toolholders – 95° approach angle.
For positive 80° rhombic insert. High-pressure coolant capability with bottom direct connection



Cutting edge style **L**



Designation	H	B	LF	LH	L5	HF	WF	HBKW	Insert
PCLCR/L1616X09S-CHP-MC	16	16	71	23	17	16	16.2	-	CC**09T3...

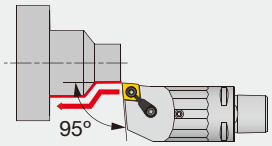
Applicable for 14 MPa pressure coolant

SPARE PARTS

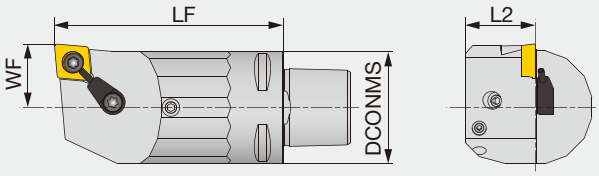
Designation	Lever	Pin	Clamping screw	Wrench	Coolant plug	Coolant unit
PCLCR/L1616X09S-CHP-MC	SLLV-3	SLPI-3	SR10400150	HW2.5/5	SR5/16UNFTL360	S-CU-CHP

TUNGCAP
C-SCLCL-CHP

Screw-on toolholder, with 95° approach angle, for positive 80° rhombic inserts, with high pressure coolant capability



Cutting edge style **L**



Left hand (L) shown.

Designation	DCONMS	LF	L2	WF	RE	Insert
C3SCLCL18040-09-CHP	32	40	20	18	0.8	CC**09T3...
C3SCLCL18065-09-CHP	32	65	20	18	0.8	CC**09T3...

Applicable for 14 MPa coolant
Cannot be used for boring

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
C3SCLCL...	CSTB-4S	S-CU-CHP	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	NS9530	T9215	T9215
Chipbreaker shape	01	PSS	PS	PM
Cutting conditions	B016			

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH6225	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

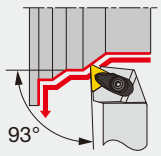
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

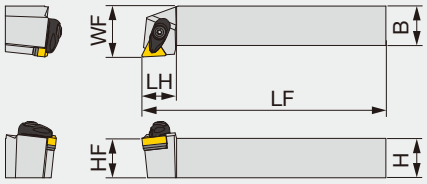
Reference pages: PCLCR/L1616X09S-CHP-MC, C-SCLCL-CHP:
Inserts → B112 -, CBN → B189 -, PCD → B213
Parts for coolant hose → C115

ATJNR/L

Double-clamp toolholder with 93° approach angle, for negative 60° triangular inserts



Cutting edge style **J**



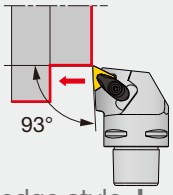
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATJNR/L2020K16-A	20	20	125	22	20	25	0.8	TN**1604...	3
ATJNR/L2525M16-A	25	25	150	22	25	32	0.8	TN**1604...	3

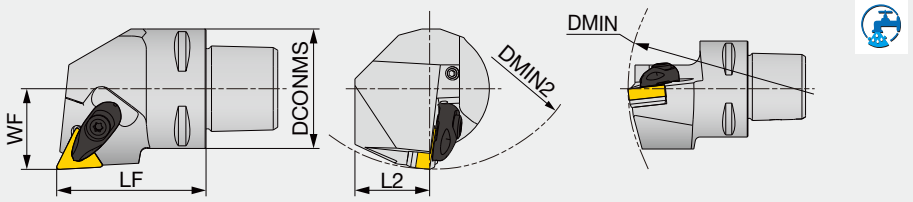
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

C-ATJNR/L

Double-clamp toolholder, with 93° approach angle, for negative 60° triangular inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C4ATJNR/L27050-16N	40	50	25	27	140	110	0.8	TN**1604...

Applicable for 7 MPa coolant

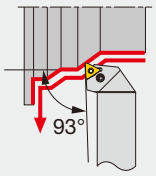
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATJNR/L**16-A C4ATJNR/L**-16N	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F

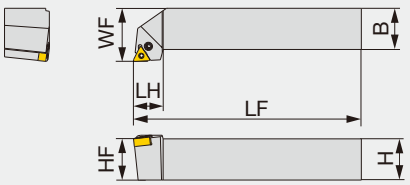
ISOEcoTURN

PTJNR/L-Eco

Lever-lock toolholder with 93° approach angle, for negative triangular inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTJNR/L2525M1104	25	25	150	18	25	32	0.8	TN**1104...	2

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

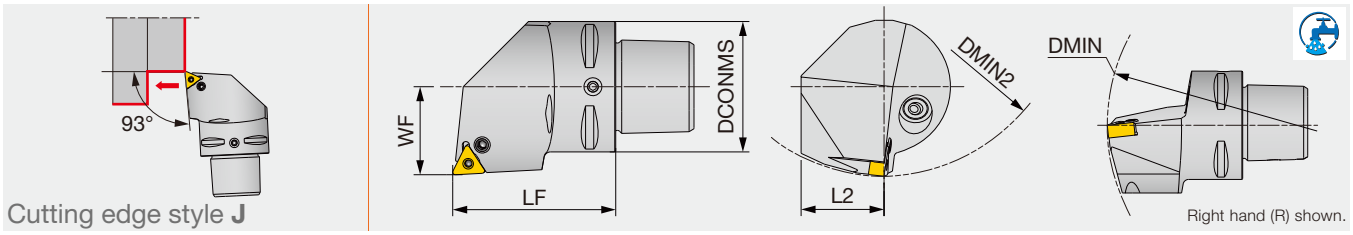
Designation	Clamping screw	Wrench	Lever
PTJNR/L2525M1104	LCS23A	P-2.5	LCL23

Reference pages: ATJNR/L, C-ATJNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212
PTJNR/L-Eco: Inserts → B087 -

TUNGCAP

C-PTJNR/L

Lever-lock external turning toolholder (P type)



Cutting edge style **J**

Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE**	Insert
C4PTJNR/L27050-1104N	40	50	25	27	140	110	0.8	TN**1104...

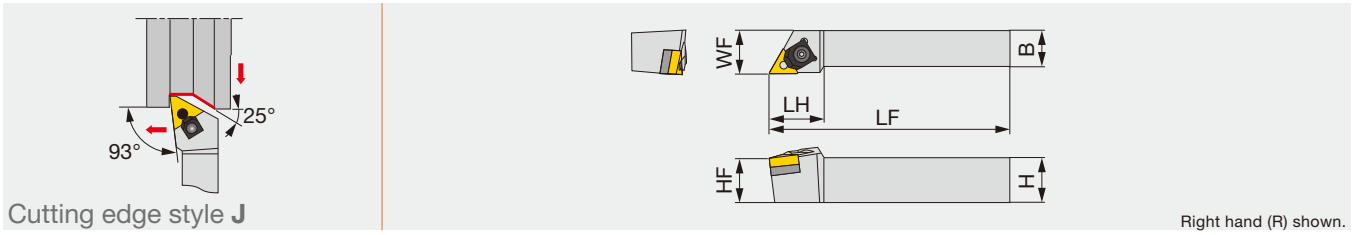
**RE: The holder measurements are true with this insert radius
Applicable for 7 MPa coolant

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Coolant parts
C4PTJNR/L27050-1104N	LCS23A	P-2.5	LCL23	SATZ-M8X1-M3

WTJNR/L

Wedge-on toolholder with 93° approach angle, for negative 60° triangular inserts



Cutting edge style **J**

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
WTJNR2020	20	20	125	31	20	25	0.8	TN**1604...
WTJNR/L2525M3	25	25	150	31	25	32	0.8	TN**1604...

**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	E-ring	Nut	Pin	Clamping screw	Shim	Wrench
WTJNR2020	WCW3	5103-25	WCN3S	WCP3S	WCS3	WST33	P-3
WTJNR/L2525M3	WCW3	5103-25	WCN3	WCP3S	WCS3	WST33	P-3

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

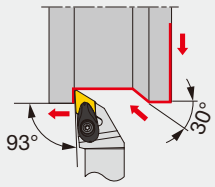
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

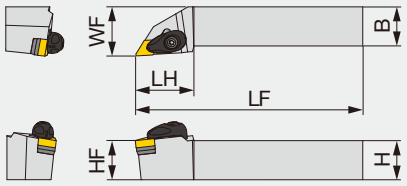
Reference pages: C-PTJNR/L: Inserts → B087 -
WTJNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

ADJNR/L

Double-clamp toolholder with 93° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **J**



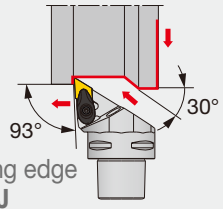
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ADJNR/L2020K1104-A	20	20	125	30	20	25	0.8	DN**/FNMG1104...	3
ADJNR/L2020K15-A	20	20	125	36	20	25	0.8	DN**/FNGA1504...	3
ADJNR/L2020K1506-A	20	20	125	36	20	25	0.8	DN**/FNGA1506...	3
ADJNR/L2525M1104-A	25	25	150	30	25	32	0.8	DN**/FNMG1104...	3
ADJNR/L2525M15-A	25	25	150	36	25	32	0.8	DN**/FNGA1504...	3
ADJNR/L2525M1506-A	25	25	150	36	25	32	0.8	DN**/FNGA1506...	3
ADJNR/L3225P15-A	32	25	170	36	32	32	0.8	DN**/FNGA1504...	3

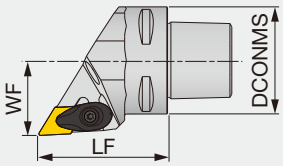
*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

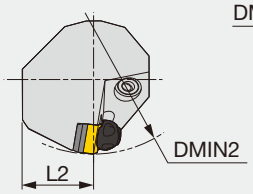
C-ADJNR/L

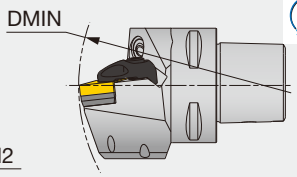
Double-clamp toolholder, with 93° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **J**







Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C3ADJNR/L22050-1104N	32	50	20	22	121	85	0.8	DN**/FNMG1104...
C4ADJNR/L27050-1104N	40	50	25	27	145	110	0.8	DN**/FNMG1104...
C4ADJNR/L27050-15N	40	50	25	27	145	110	0.8	DN**/FNGA1504...
C5ADJNR/L35060-15N	50	60	32	35	165	110	0.8	DN**/FNGA1504...
C6ADJNR/L45065-1104N	63	65	35	45	190	110	0.8	DN**/FNMG1104...
C6ADJNR/L45065-15N	63	65	41	45	190	110	0.8	DN**/FNGA1504...
C6ADJNR/L45135-15N	63	135	41	45	190	110	0.8	DN**/FNGA1504...

Applicable for 7 MPa coolant

Option: ASD423 (Shim for DN**1506**)

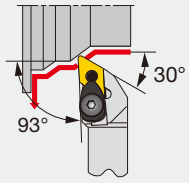
SPARE PARTS

Designation	Clamp	Clamp screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench
ADJNR/L**1104-A	ACP3S-E	ACS-5W	-	ASD322	CSTB-3.5	BP-7	SP-2.5	T-15F
ADJNR/L**15-A	ACP4S	ACS-5W	-	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
ADJNR/L**1506-A	ACP4S	ACS-5W	-	ASD423	CSTB-3.5	BP-7	SP-2.5	T-15F
C4ADJN*27050-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADJN*35060-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADJN*45065-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADJN*45135-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

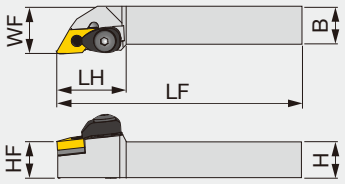
Reference pages: ADJNR/L, C-ADJNR/L: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211

DDJNR/L

One-Double toolholder with 93° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DDJNR/L2020K15	20	20	125	38	20	25	0.8	DN**/FNGA1504...
DDJNR/L2020K1506	20	20	125	38	20	25	0.8	DN**/FNGA1506...
DDJNR/L2525M15	25	25	150	38	25	32	0.8	DN**/FNGA1504...
DDJNR/L2525M1506	25	25	150	38	25	32	0.8	DN**/FNGA1506...
DDJNR/L3225P15	32	25	170	38	32	32	0.8	DN**/FNGA1504...
DDJNR/L3225P1506	32	25	170	38	32	32	0.8	DN**/FNGA1506...

Note: Except for 57-type chipbreaker inserts
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench1	Wrench2
DDJNR/L**15	DCPM-43	DLCL43	DPIS43	DLCS43	LSD42	BP-10	LSP4	P-3	P-4
DDJNR/L**1506	DCPM-43	DLCL43	DPIS44	DLCS43	LSD42	BP-10	LSP4	P-3	P-4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

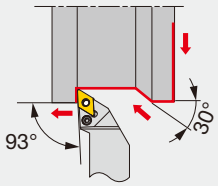
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

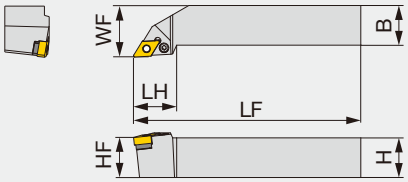
Reference pages: DDJNR/L: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211

PDJNR/L

Lever-lock toolholder with 93° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR/L1616H1104	16	16	100	27	16	20	0.8	DN**/FNMG1104...	2
PDJNR/L1616H11	16	16	100	27	16	20	0.8	DN**/FNMG1104...	2
PDJNR/L2020K1104	20	20	125	27	20	25	0.8	DN**/FNMG1104...	2
PDJNR/L2020K11	20	20	125	27	20	25	0.8	DN**/FNMG1104...	2
PDJNR/L2020	20	20	125	34	20	25	0.8	DN**/FNGA1504...	3
PDJNR2020K15E	20	20	125	36	20	25	0.8	DN**/FNGA1506...	3
PDJNR/L2520	25	20	150	34	25	25	0.8	DN**/FNGA1504...	3
PDJNR/L2525M1104	25	25	150	27	25	32	0.8	DN**/FNMG1104...	2
PDJNR/L2525M11	25	25	150	27	25	32	0.8	DN**/FNMG1104...	2
PDJNR/L2525	25	25	150	34	25	32	0.8	DN**/FNGA1504...	3
PDJNR/L2525M15E	25	25	150	36	25	32	0.8	DN**/FNGA1506...	3
PDJNR/L3225	32	25	170	32	32	32	0.8	DN**/FNGA1504...	3
PDJNR3225P15E	32	25	170	36	32	34	0.8	DN**/FNGA1506...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PDJNR/L*****11/1104	ELSD32	LCS3	P-2.5	LSP3	LCL33L
PDJNR/L2020	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR2020K15E	ELSD42	ELCS4	P-3	LSP4S	LCL44
PDJNR/L2520	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR/L2525	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR/L2525M15E	ELSD42	ELCS4	P-3	LSP4S	LCL44
PDJNR/L3225	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR3225P15E	ELSD42	ELCS4	P-3	LSP4S	LCL44

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

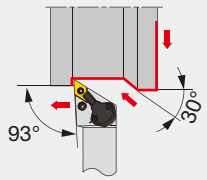
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PDJNR/L: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211

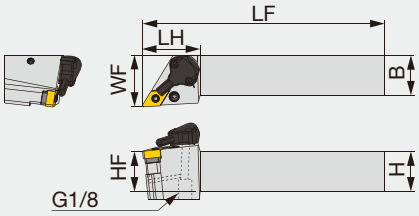
PDJNR/L-CHP

Tube connection

Lever lock toolholders – 93° approach angle.
For negative 55°/45° rhombic insert. High-pressure coolant capability.



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR/L2020K1104-CHP	20	20	125	36	20	32	0.8	DN**/FNMG1104...	2
PDJNR/L2020K15-CHP	20	20	125	36	20	32	0.8	DN**/FNGA1504...	3
PDJNR/L2525M1104-CHP	25	25	150	36	25	32	0.8	DN**/FNMG1104...	2
PDJNR/L2525M15-CHP	25	25	150	36	25	32	0.8	DN**/FNGA1504...	3

*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PDJNR/L**1104-CHP	ELSD32	LCS3	P-2.5	LSP3	LCL33L
PDJNR/L**15-CHP	LSD43A	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PDJNR/L**1104-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PDJNR/L**15-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA (with rake)	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

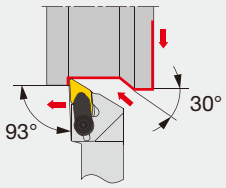
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PDJNR/L-CHP: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211
Parts for coolant hose→ C115

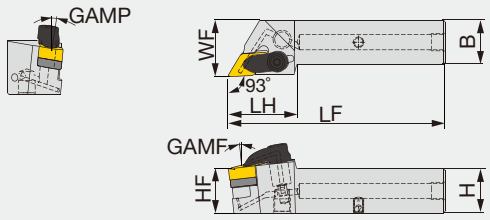
ADJNR/L-CHP-MC

Direct connection | Tube connection

Double clamping tool holders-93°approach angle
For negative 55°/45°rhombic insert. High-pressure coolant capability with tube and direct connections



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque*
ADJNR/L2020X-15-CHP-MC	20	20	110	40	20	25	6°	6°	DN**/FNGA1506...	4
ADJNR/L2525X-15-CHP-MC	25	25	125	40	25	32	6°	6°	DN**/FNGA1506...	4

*Torque: Recommended torque (N·m) for clamping
Used shim RDT443, in case using insert DN1504...
Applicable for 14 MPa pressure coolant

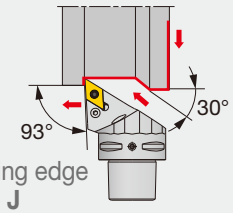
SPARE PARTS

Designation	Clamp set	Shim	Shim screw	screw for tube connection	Coolant plug	O-ring	Wrench 1
ADJNL***X-15-CHP-MC	LCGL-4JCSET	RDT433	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20
ADJNR***X-15-CHP-MC	LCGR-4JCSET	RDT433	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20

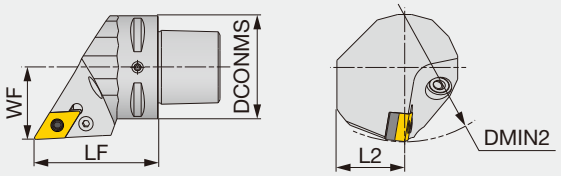
TUNGCAP

C-PDJNR/L

Lever-lock toolholder, with 93° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C5PDJNR/L35060-15N	50	60	32	35	165	110	0.8	DN**/FNGA1504(06)...
C6PDJNR/L45065-15N	63	65	41	45	195	95	0.8	DN**/FNGA1504(06)...

Applicable for 7 MPa coolant

SPARE PARTS

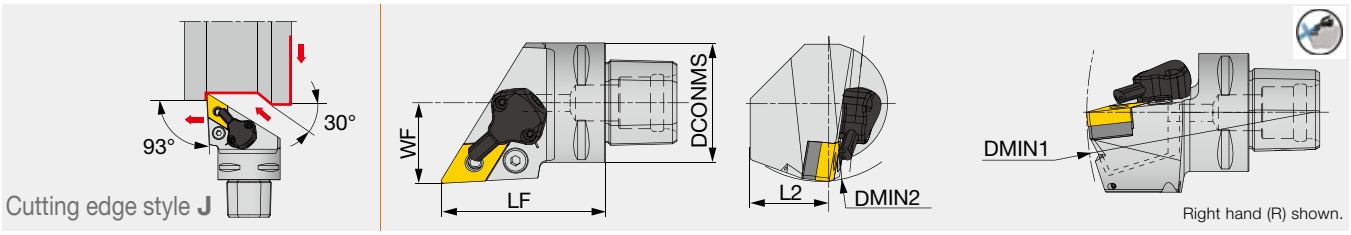
Designation	Coolant parts	Shim	Lever	Clamping screw	Spring pin	Wrench
C5PDJN*35060-15N	SATZ-M10X1-M5	LSD43A	LCL4	LCS4	LSP4	P-3
C6PDJN*45065-15N	SATZ-M10X1-M5	LSD43A	LCL4	LCS4	LSP4S	P-3

Option: LSD42A (Shim for DN**1506**), LSP4S (Spring pin for DN**1506**)

Reference pages: ADJNR/L-CHP-MC: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211
C-PDJNR/L: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211
Parts for coolant hose→ C115

TUNGCAP
C-PDJNR/L-CHP

Lever lock toolholders with TungCap connection – 93° approach angle.
For negative 55°/45° rhombic insert. High-pressure coolant capability.



Designation	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque*
C4PDJNR/L27055-1104-CHP	40	55	27	27	145	110	0.8	DN**/FNMG1104...	2
C4PDJNR/L27055-15-CHP	40	55	27	27	145	110	0.8	DN**/FNGA1504(06)...	3
C5PDJNR/L35060-15-CHP	50	60	32	35	165	110	0.8	DN**/FNGA1504(06)...	3
C6PDJNR/L45065-1104-CHP	63	65	35	45	195	95	0.8	DN**/FNMG1104...	2
C6PDJNR/L45065-15-CHP	63	65	35	45	195	95	0.8	DN**/FNGA1504(06)...	3

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PDJNR/L**1104-CHP	ELSD32	LCS3	P-2.5	LSP3	LCL33L
C*PDJNR/L**-15-CHP	LSD43A	LCS4	P-3	LSP4	LCL4

Option: LSD42A (Shim for DN**1506...), LSP4S (Spring pin for DN**1506...)

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PDJNR/L**1104-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N
C*PDJNR/L**-15-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA (with rake)	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

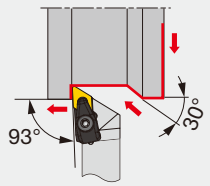
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

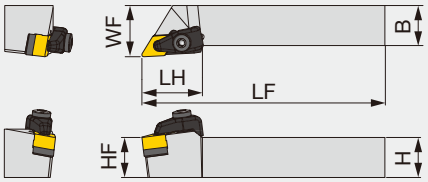
Reference pages: C-PDJNR/L-CHP: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211
Parts for coolant hose→ C115

DIMPLEFX
CDJNR/L-RD

Double-clamp toolholder with 93° approach angle, for negative 55° rhombic ceramic inserts with dimple



Cutting edge style **J**



Right hand (R) shown.

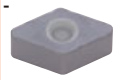
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CDJNR/L2525M1507-RD	25	25	150	38	25	32	1.2	DN*D1507...	4
CDJNR3225P1507-RD	32	25	170	38	32	32	1.2	DN*D1507...	4

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CDJNR/L**-RD	CCP4-A	CCS4-A	CD44-A	BH5-10-A	BP-5-A	P-3	P-4

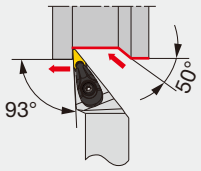
INSERT SELECTION

Application	Finishing to medium cutting
Grade	FX105
Chipbreaker shape	- 
Cutting conditions	C118

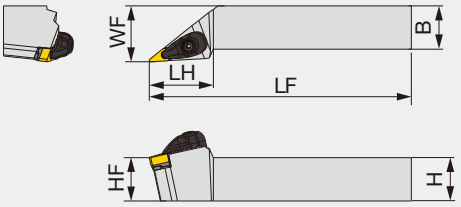
Reference pages: CDJNR/L-RD: Inserts → B074
Standard cutting conditions → C118

AVJNR/L

Double-clamp toolholder with 93° approach angle, for negative 35°/25° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AVJNR/L2020K1204-A	20	20	125	37	20	25	0.8	VN**1204...	3
AVJNR/L2020K16-A	20	20	125	43	20	25	0.8	VN**/YN**1604...	3
AVJNR/L2525M1204-A	25	25	150	37	25	32	0.8	VN**1204...	3
AVJNR/L2525M16-A	25	25	150	46	25	32	0.8	VN**/YN**1604...	3

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AVJNR/L**1204-A	ACP3L-E	ACS-5W	BP-7	SP-2.5	ASV222	CSTB-3.0	T-15F
AVJNR/L**16-A	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Chipbreaker shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

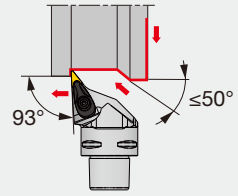
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: AVJNR/L: Inserts → B098 -, B110, CBN → B186 -, PCD → B188
Parts for coolant hose → C115

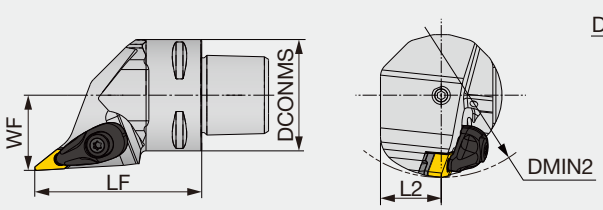
TUNGCAP

C-AVJNR/L

Double-clamp toolholder, with 93° approach angle, for negative 35° rhombic inserts (TurningA)



Cutting edge style **J**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE**	Insert
C4AVJNR/L27060-1204N	40	60	20	27	140	55	0.8	VN**1204...
C6AVJNR/L45065-1204N	63	65	31.5	45	190	81	0.8	VN**1204...

**RE: The holder measurements are true with this insert radius
Applicable for 7 MPa coolant

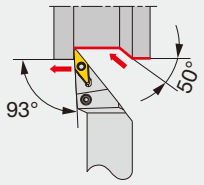
SPARE PARTS

Designation	Clamp	Clamp screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench 1	Wrench 2
C4AVJNR/L...	ACP3L-E	ACS-5W	-	ASV222	CSTB-3	BP-7	SP-2.5	T-9F	T-15F
C6AVJNR/L...	ACP3L-E	ACS-5W	SATZ-M10X1-M5	ASV222	CSTB-3	BP-7	SP-2.5	T-9F	T-15F

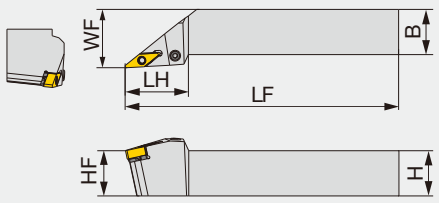
ISOECOTURN

PVJNR/L-Eco

Lever-lock toolholder with 93° approach angle, for negative 35° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVJNR/L1616H1204	16	16	100	35	16	20	0.8	VN**1204...	2
PVJNR/L2020K1204	20	20	125	35	20	25	0.8	VN**1204...	2
PVJNR/L2525M1204	25	25	150	35	25	32	0.8	VN**1204...	2

*Torque: Recommended torque (N·m) for clamping
**RE: The holder measurements are true with this insert radius

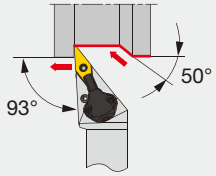
SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PVJNR/L**1204	LSV212	LCS3V	P-2.5	LSP3	LCL3V

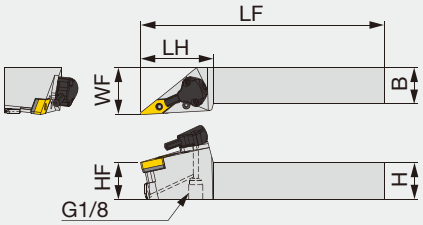
Reference pages: AVJNR/L: Inserts → B098 -, Parts for coolant hose → C115
PVJNR/L-Eco: Inserts → B098 -

PVJNR/L-CHP

Lever lock toolholders – 93° approach angle.
For negative 35°/25° rhombic insert. High-pressure coolant capability.



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVJNR/L2020K1204-CHP	20	20	125	50	20	32	0.8	VN**1204...	2
PVJNR/L2020K16-CHP	20	20	125	50	20	32	0.8	VN**/YN**1604...	2
PVJNR/L2525M1204-CHP	25	25	150	50	25	32	0.8	VN**1204...	2
PVJNR/L2525M16-CHP	25	25	150	50	25	32	0.8	VN**/YN**1604...	2

*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PVJNR/L**1204-CHP	LSV212	LCS3V	P-2.5	LSP3	LCL3V
PVJNR/L**16-CHP	LSV317	LCS3V	P-2.5	LSP3	LCL3V

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PVJNR/L**1204-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PVJNR/L**16-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Chipbreaker shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

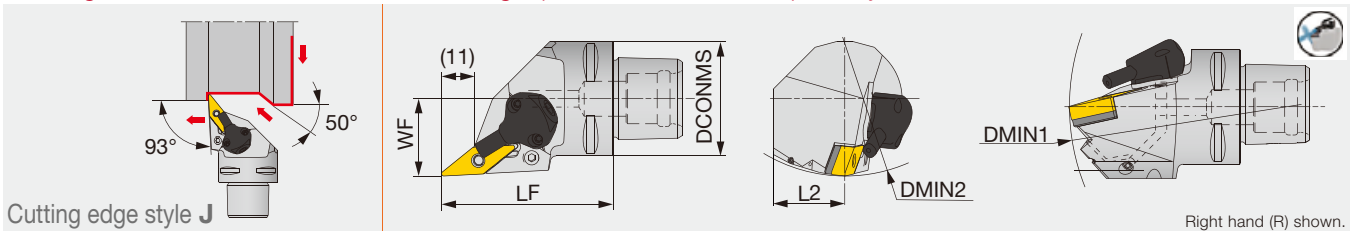
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PVJNR/L-CHP: Inserts → B098 -, B110, CBN → B186 -, PCD → B188
Parts for coolant hose → C115

TUNGCAP
C-PVJNR/L-CHP

Lever lock toolholders with TungCap connection – 93° approach angle.
For negative 35°/25° rhombic insert. High-pressure coolant capability.



Designation	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque*
C4PVJNR/L27060-1204-CHP	40	60	20	27	140	90	0.8	VN**1204...	2
C4PVJNR/L27060-16-CHP	40	60	20	27	140	110	0.8	VN**/YN**1604...	2
C6PVJNR/L45065-1204-CHP	63	65	31.5	45	190	81	0.8	VN**1204...	2
C6PVJNR/L45065-16-CHP	63	65	31.5	45	190	81	0.8	VN**/YN**1604...	2

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PVJNR/L**-1204-CHP	LSV212	LCS3V	P-2.5	LSP3	LCL3V
C*PVJNR/L...16-CHP	LSV317	LCS3V	P-2.5	LSP3	LCL3V

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PVJNR/L**-1204-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N
C*PVJNR/L...16-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Chipbreaker shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

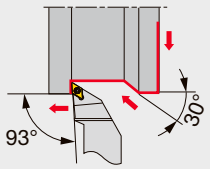
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

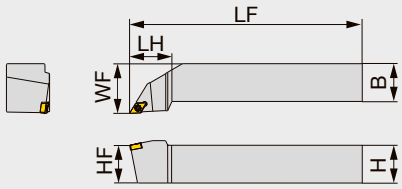
Reference pages: C-PVJNR/L-CHP: Inserts → B098 -, B110, CBN → B186 -, PCD → B188
Parts for coolant hose → C115

JSDJXR/L

Screw-on toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **J**



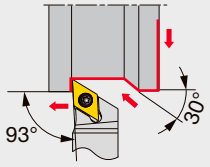
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDJXR/L2020K07	20	20	125	27	20	25	0.4	DX*U0703**L/R...	0.9
JSDJXR/L2525M07	25	25	150	27	25	32	0.4	DX*U0703**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

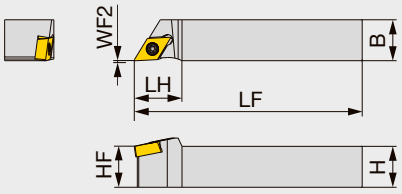
JSDJ2XR/L

Screw-on toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L2020H07	20	20	100	18	20	0	0.2	DX*U0703**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS




Designation	Clamping screw	Wrench
JSDJXR/L.... JSDJ2XR/L...	SR34-514	T-7F

INSERT SELECTION

Swiss lathes

P	Application	Finishing	Medium cutting
	Grade	SH725	AH725
	Chipbreaker shape	JSS 	JTS 
	Cutting conditions	C118	

M	Application	Finishing	Medium cutting
	Grade	SH725	AH725
	Chipbreaker shape	JSS 	JTS 
	Cutting conditions	C118	

Small CNC lathes

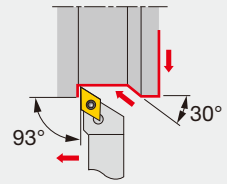
P	Application	Finishing	Medium cutting
	Grade	AH725	AH725
	Chipbreaker shape	SS 	TS 
	Cutting conditions	C118	

M	Application	Finishing	Medium cutting
	Grade	AH8015	AH8015
	Chipbreaker shape	SS 	TS 
	Cutting conditions	C118	

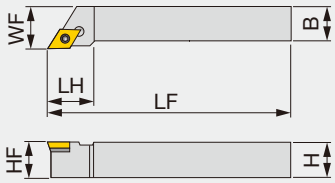
Reference pages: JSDJXR/L, JSDJ2XR/L: Inserts → B128 -
Standard cutting conditions → C118

SDJCR/L

Screw-on toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SDJCR1616H11	16	16	100	20	16	20	0.8	DC**11T3...
SDJCR/L2020K11	20	20	125	20.5	20	25	0.8	DC**11T3...
SDJCR/L2525M11	25	25	150	21.5	25	32	0.8	DC**11T3...

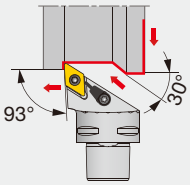
**RE: Standard corner radius

SPARE PARTS

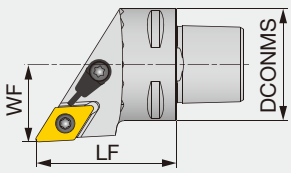
Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
SDJCR/L...	CSTB-3.5L	DTS5-3.5	SSD32	P-3.5	T-15F

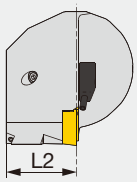
TUNGCAP C-SDJCR/L-CHP

Screw-on toolholder, with 93° approach angle, for positive 55° rhombic inserts, with high pressure coolant capability



Cutting edge style **J**





Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	RE	Insert
C3SDJCR/L22040-11-CHP	32	40	20	22	0.8	DC**11T3...

Applicable for 14 MPa coolant
Cannot be used for boring

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
C3SDJCR/L22040-11-CHP	CSTB-4S	S-CU-CHP	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH6225	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

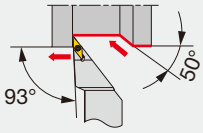
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

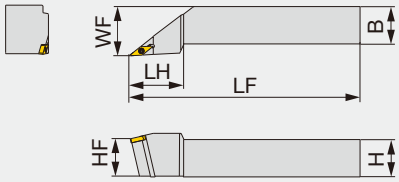
Reference pages: SDJCR/L: Inserts → B121 -, CBN → B194, PCD → B214
C-SDJCR/L-CHP: Inserts → B121 -, CBN → B194, PCD → B214, Parts for coolant hose → C115

JSVJXR/L

Screw-on toolholder with 93° approach angle, for VXGU inserts



Cutting edge style **J**



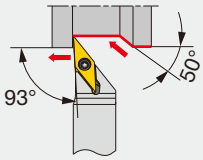
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJXR/L2020K09	20	20	125	35	20	25	0.4	VXGU09T2**L/R...	0.9
JSVJXR/L2525M09	25	25	150	35	25	32	0.4	VXGU09T2**L/R...	0.9

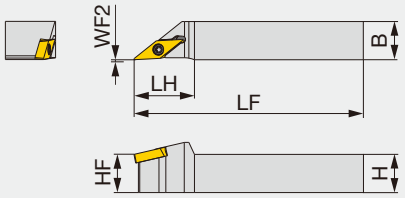
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

JSVJ2XR/L

Screw-on toolholder with 93° approach angle, for VXGU inserts



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSVJ2XR/L1010X09	10	10	120	17	10	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L1212F09	12	12	85	19	12	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L1212X09	12	12	120	19	12	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L1616X09	16	16	120	19	16	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L2020H09	20	20	100	19	20	0	0.2	VXGU09T2**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS




Designation	Clamping screw	Wrench
JSVJXR/L... JSVJ2XR/L...	SR34-508	T-7F

INSERT SELECTION

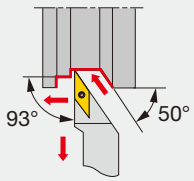
P	Application	Finishing
	Grade	SH725
	Chipbreaker shape	JRP 
	Cutting conditions	C118

M	Application	Finishing
	Grade	SH725
	Chipbreaker shape	JRP 
	Cutting conditions	C118

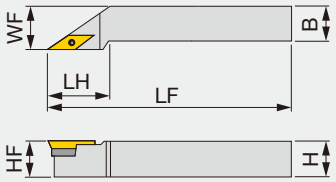
Reference pages: JSVJXR/L, JSVJ2XR/L: Inserts→ B155
Standard cutting conditions → C118

SVJCR/L

Screw-on toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

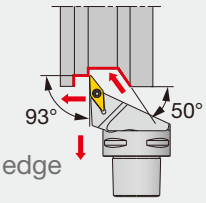
Designation	H	B	LF	LH	HF	WF	RE**	Insert
SVJCR/L1616H16	16	16	100	32	16	20	0.8	VC**1604...
SVJCR/L2020K16	20	20	125	32	20	25	0.8	VC**1604...
SVJCR/L2525M16	25	25	150	40	25	32	0.8	VC**1604...

**RE: Standard corner radius

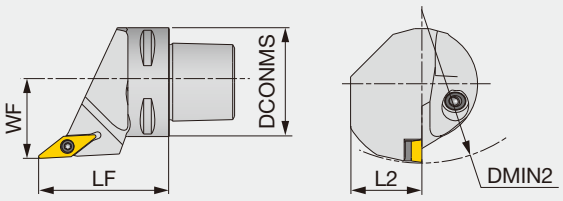
TUNGCAP

C-SVJCR/L

Screw-on toolholder, with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C3SVJCR/L22040-11N(2)	32	40	20	22	-	-	0.4	VC**1103...
C5SVJCL35060-16(1)	50	60	32	35	-	-	0.8	VC**1604...
C5SVJCR/L35060-16N(2)	50	60	32	35	170	160	0.8	VC**1604...
C6SVJCR/L45065-16(1)	63	65	41	45	-	-	0.8	VC**1604...
C6SVJCR/L45065-16N(2)	63	65	41	45	170	190	0.8	VC**1604...

The items without DMIN and DMIN2 cannot be used for boring.
(1) Applicable for 3 MPa coolant (2) Applicable for 7 MPa coolant

SPARE PARTS

Designation	Clamping screw	Coolant parts	Shim	Shim screw	Wrench 1	Wrench 2
SVJCR/L...	CSTB-3.5L	-	SSV32	DTS5-3.5	P-3.5	T-15F
C3SVJC*22040-11N	CSTB-2.5	SATZ-M8X1-M3	-	-	-	T-8F
C5SVJC*35060-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVJC*35060-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVJC*45065-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVJC*45065-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F

Reference pages: SVJCR/L, C-SVJCR/L: Inserts → B152 -, CBN → B209, PCD → B220

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Chipbreaker shape	PSS 	PS 
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS 	PS 
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM 
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA 	with rake DIA 	AL 
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS 	PS 
Cutting conditions	B024	

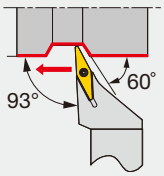
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN 	CBN 
Cutting conditions	B026	

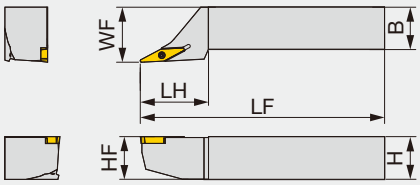
Y-PRO SERIES

SYJBR/L

Screw-on toolholder with 93° approach angle, for positive 25° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SYJBR/L2020K16	20	20	125	35	20	25	0.8	YWMT16T3...
SYJBR/L2525M16	25	25	150	40	25	32	0.8	YWMT16T3...

**RE: Standard corner radius

SPARE PARTS




Designation	Clamping screw	Wrench
SYJBR/L...	CSTB-2.5L080	T-8F

INSERT SELECTION

P

Application	Finishing to medium cutting
Grade	T9225
Breaker Shape	ZM 
Cutting conditions	B016

M

Application	Finishing to medium cutting
Grade	AH8015
Breaker Shape	ZM 
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	GT9530
Breaker Shape	ZM 
Cutting conditions	B020

S

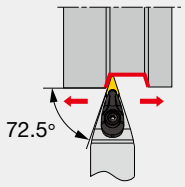
Application	Finishing to medium cutting
Grade	AH8015
Breaker Shape	ZM 
Cutting conditions	B024

Reference pages: SYJBR/L: Inserts → B159

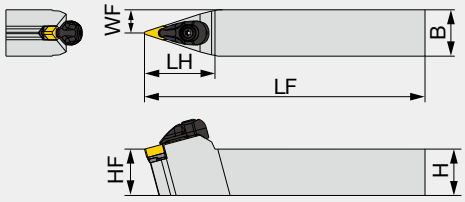
TURNING

AVVNN

Double-clamp toolholder with 72.5° approach angle, for negative 35°/25° rhombic inserts



Cutting edge style **V**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AVVNN2020K1204-A	20	20	125	38	20	10	0.8	VN**1204...	3
AVVNN2020K16-A	20	20	125	46	20	10	0.8	VN**/YN**1604...	3
AVVNN2525M1204-A	25	25	150	38	25	12.5	0.8	VN**1204...	3
AVVNN2525M16-A	25	25	150	46	25	12.5	0.8	VN**/YN**1604...	3

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

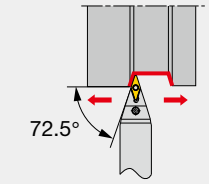
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AVVNN**1204-A	ACP3L-E	ACS-5W	BP-7	SP-2.5	ASV222	CSTB-3.0	T-15F
AVVNN**16-A	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

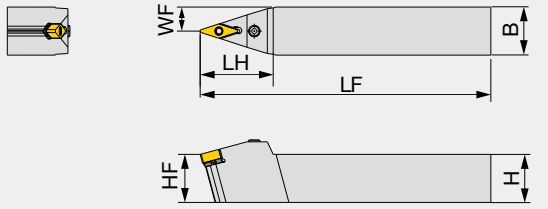
ISOEco TURN

PVVNN-Eco

Lever-lock toolholder with 72.5° approach angle, for negative 35° rhombic inserts



Cutting edge style **V**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVVNN2020K1204	20	20	125	38	20	10	0.8	VN**1204...	2
PVVNN2525M1204	25	25	150	38	25	12.5	0.8	VN**1204...	2

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PVVNN**1204	LSV212	LCS3V	P-2.5	LSP3	LCL3V

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Chipbreaker shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

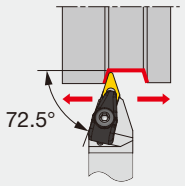
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

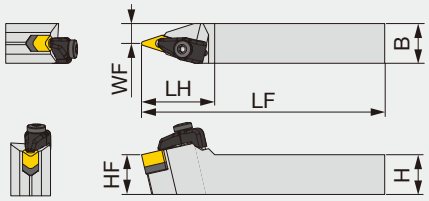
Reference pages: AVVNN: Inserts → B098 -, B110, CBN → B186 -, PCD → B188
PVVNN-Eco: Inserts → B098 -

DIMPLEFX
CVVNN-RD

Double-clamp toolholder with 72.5° approach angle, for negative 35° rhombic ceramic inserts with dimple



Cutting edge style **V**



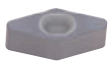
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CVVNN2525M1607-RD	25	25	150	46	25	12.5	1.2	VN*D160712	4

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CVVNN2525M1607-RD	CCP4-A	CCS4-A	CV34-A	BH-4-10-A	BP-5-A	P-3	P-4

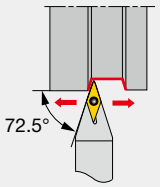
INSERT SELECTION

K	Application	Finishing to medium cutting
	Grade	**FX105**
	Chipbreaker shape	- 
	Cutting conditions	C118

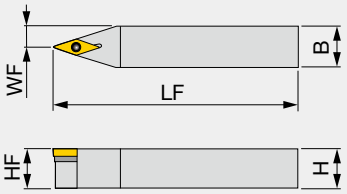
Reference pages: CVVNN-RD: Inserts→ B101
Standard cutting conditions → C118

SVVCN

Screw-on toolholder with 72.5° approach angle, for positive 35° rhombic inserts



Cutting edge style **V**



Designation	H	B	LF	HF	WF	RE**	Insert
SVVCN2020K16	20	20	125	20	10	0.8	VC**1604...
SVVCN2525M16	25	25	150	25	12.5	0.8	VC**1604...

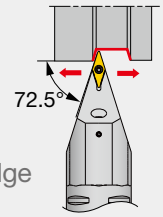
**RE: Standard corner radius

SPARE PARTS

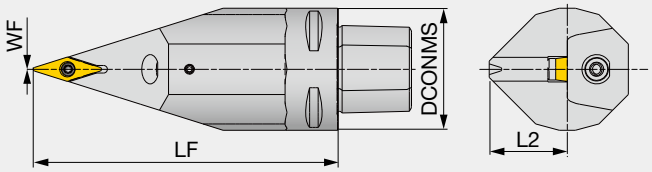
Designation	Clamping screw	Shim	Shim screw	Wrench 1	Wrench 2
SVVCN...	CSTB-3.5L	SSV32	DTS5-3.5	P-3.5	T-15F

C-SVVCN

Screw-on toolholder, with 72.5° approach angle, for positive 35° rhombic inserts



Cutting edge style **V**



Designation	DCONMS	LF	L2	WF	RE	Insert
C5SVVCN00090-16(1)	50	90	32	0	0.8	VC**1604...
C5SVVCN00090-16N(2)	50	90	32	0	0.8	VC**1604...
C5SVVCN00125-16(1)	50	125	32	0	0.8	VC**1604...
C5SVVCN00125-16N(2)	50	125	32	0	0.8	VC**1604...
C6SVVCN00100-16N(2)	63	100	37.5	0	0.8	VC**1604...
C6SVVCN00140-16N(2)	63	140	37.5	0	0.8	VC**1604...

(1) Applicable for 3 MPa coolant (2) Applicable for 7 MPa coolant

SPARE PARTS

Designation	Clamping screw	Coolant parts	Shim	Shim screw	Wrench 1	Wrench 2
C5SVVCN00090-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00090-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00125-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00125-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00100-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00140-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F

Reference pages: SVVCN, C-SVVCN: Inserts → B152 -, CBN → B209, PCD → B220

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Chipbreaker shape	PSS 	PS 
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS 	PS 
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM 
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA with rake 	DIA 	AL 
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS 	PS 
Cutting conditions	B024	

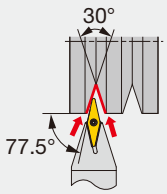
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN 	CBN 
Cutting conditions	B026	

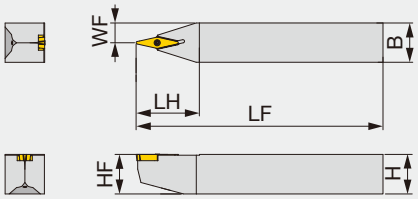
Y-PRO SERIES

SYIBN

Screw-on toolholder with 77.5° approach angle, for positive 25° rhombic inserts



Cutting edge style I



Designation	H	B	LF	LH	HF	WF	RE**	Insert
SYIBN2020K16	20	20	125	32	20	10	0.8	YWMT16T3...
SYIBN2525M16	25	25	150	40	25	12.5	0.8	YWMT16T3...

**RE : Standard corner radius

SPARE PARTS




Designation	Clamping screw	Wrench
SYIBN...	CSTB-2.5L080	T-8F

INSERT SELECTION

P

Application	Finishing to medium cutting
Grade	T9225
Breaker Shape	ZM 
Cutting conditions	B016

M

Application	Finishing to medium cutting
Grade	AH8015
Breaker Shape	ZM 
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	GT9530
Breaker Shape	ZM 
Cutting conditions	B020

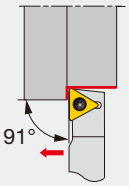
S

Application	Finishing to medium cutting
Grade	AH8015
Breaker Shape	ZM 
Cutting conditions	B024

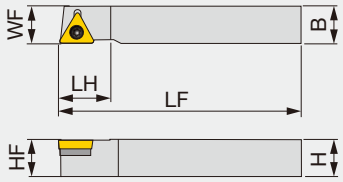
Reference pages: SYIBN: Inserts → BB159

STACR/L

Screw-on toolholder with 91° approach angle, for positive 60° triangular inserts



Cutting edge style **A**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
STACR/L1616H16	16	16	100	22.5	16	16	0.8	TC**16T3...

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
STACR/L...	CSTB-3.5L	DTS5-3.5	SST32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	T9215	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH725	AH6225	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Breaker Shape	AL (with rake)
Cutting conditions	B022

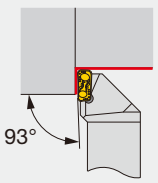
S

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH725	AH6225	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B024		

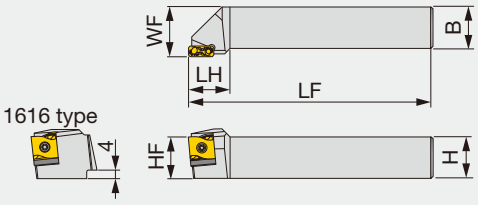
TURNTEC

TLANR/L

Screw-on toolholder for roughing with 93° approach angle, for negative tangential inserts



Cutting edge style **A**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
TLANR/L1616H12	16	16	100	20	16	20	LNMX1204**R/L...
TLANR/L1616M12S	16	16	150	20	16	20	LNMX1204**R/L...
TLANR/L2020K12	20	20	125	20	20	25	LNMX1204**R/L...
TLANR/L2020K16	20	20	125	25	20	25	LNMX1606**R/L...
TLANR/L2525M12	25	25	150	20	25	30	LNMX1204**R/L...
TLANR/L2525M16	25	25	150	25	25	30	LNMX1606**R/L...
TLANR/L3232P16	32	32	170	35	32	37	LNMX1606**R/L...
TLANR/L3232P24	32	32	170	35	32	38	LNMX2410**R/L...
TLANR/L4040R16	40	40	200	35	40	47	LNMX1606**R/L...
TLANR/L4040R24	40	40	200	40	40	47	LNMX2410**R/L...
TLANR/L5050S24	50	50	250	40	50	57	LNMX2410**R/L...

Reference pages: TLANR/L: Standard cutting conditions → C119

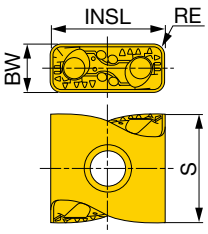
SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Spring	Wrench 1	Wrench 2
TLANR1616H12, TLANR1616M12S TLANR2020K12, TLANR2525M12	CSTB-3.5L115-S	CSTF-2L055-S	TSL12R	-	KEYV-T10	T-6F-S
TLANL1616H12, TLANL1616M12S TLANL2020K12, TLANL2525M12	CSTB-3.5L115-S	CSTF-2L055-S	TSL12L	-	KEYV-T10	T-6F-S
TLANR2020K16, TLANR2525M16 TLANR3232P16, TLANR4040R16	CSTB-4L115-S	-	TSL16R	PSP-16	KEYV-T15	-
TLANL2020K16, TLANL2525M16 TLANL3232P16, TLANL4040R16	CSTB-4L115-S	-	TSL16L	PSP-16	KEYV-T15	-
TLANR3232P24, TLANR4040R24 TLANR5050S24	CSTB-5L163-S	-	TSL24R	PSP-16	KEYV-T20	-
TLANL3232P24, TLANL4040R24 TLANL5050S24	CSTB-5L163-S	-	TSL24L	PSP-16	KEYV-T20	-

INSERT

LNMX12/16/24





P	Steel	★	★	★	
M	Stainless	☆		☆	
K	Cast iron	☆	☆	☆	
N	Non-ferrous				
S	Superalloys				
H	Hard materials				

★ : First choice
☆ : Second choice

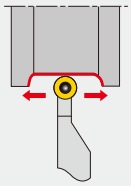
Designation	HAND	RE	Coated			BW	INSL	S
			T9115	T9125	AH725			
LNMX120408R-TDR	R	0.8	●	●		4.8	12	11.6
LNMX120408L-TDR	L	0.8	●	●		4.8	12	11.6
LNMX120412R-TDR	R	1.2	●	●		4.8	12	11.6
LNMX120412L-TDR	L	1.2	●	●		4.8	12	11.6
LNMX160608R-TDR	R	0.8	●	●		6.4	16.2	13.5
LNMX160608L-TDR	L	0.8	●	●		6.4	16.2	13.5
LNMX160612R-TDR	R	1.2	●	●		6.4	16.2	13.5
LNMX160612L-TDR	L	1.2	●	●		6.4	16.2	13.5
LNMX160616R-TDR	R	1.6	●	●		6.4	16.2	13.5
LNMX160616L-TDR	L	1.6	●	●		6.4	16.2	13.5
LNMX241016R-TDR	R	1.6	●	●		9.4	24	20.5
LNMX241016L-TDR	L	1.6	●	●		9.4	24	20.5
LNMX241024R-TDR	R	2.4	●	●		9.4	24	20.5
LNMX241024L-TDR	L	2.4	●	●		9.4	24	20.5
LNMX160608R-MDR	R	0.8	●		●	6.4	16.2	13.5
LNMX160608L-MDR	L	0.8	●		●	6.4	16.2	13.5
LNMX160612R-MDR	R	1.2	●		●	6.4	16.2	13.5
LNMX160612L-MDR	L	1.2	●		●	6.4	16.2	13.5
LNMX160608R-TWR	R	0.8	●			6.4	16.2	13.5
LNMX160608L-TWR	L	0.8	●	●		6.4	16.2	13.5
LNMX160612R-TWR	R	1.2	●	●		6.4	16.2	13.5
LNMX160612L-TWR	L	1.2	●	●		6.4	16.2	13.5

● : Line up

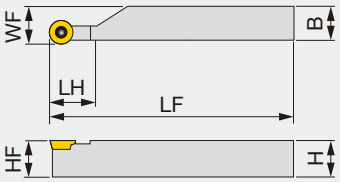
Reference pages: Standard cutting conditions → C119

SRACR/L

Screw-on toolholder with 91° approach angle, for positive round inserts



Cutting edge style **A**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
SRACR1010H05	10	10	100	10	10	10.3	RCMT0502...
SRACR/L1212H05	12	12	100	10	12	12.3	RCMT0502...
SRACR/L1212H06	12	12	100	12	12	12.4	RC*T0602...
SRACR1616H05	16	16	100	10	16	16.3	RCMT0502...
SRACR/L1616H06	16	16	100	12	16	16.4	RC*T0602...
SRACR/L1616H08	16	16	100	16	16	16.5	RC*T0803...
SRACR/L2020K05	20	20	125	10	20	20.3	RCMT0502...
SRACR/L2020K06	20	20	125	12	20	20.4	RC*T0602...
SRACR/L2020K08	20	20	125	16	20	20.5	RC*T0803...
SRACR/L2525M05	25	25	150	10	25	25.3	RCMT0502...
SRACR/L2525M06	25	25	150	12	25	25.4	RC*T0602...
SRACR/L2525M08	25	25	150	16	25	25.5	RC*T0803...

SPARE PARTS




Designation	Clamping screw	Wrench
SRACR/L1*1*H05	CSTB-2.2R	T-7F
SRACR/L1212H06	CSTB-2.5	T-8F
SRACR1616H05	CSTB-2.2R	T-7F
SRACR/L1616H06	CSTB-2.5	T-8F
SRACR/L1616H08	CSTB-3	T-9F
SRACR/L2020K05	CSTB-2.2R	T-7F
SRACR/L2020K06	CSTB-2.5	T-8F
SRACR/L2020K08	CSTB-3	T-9F
SRACR/L2525M05	CSTB-2.2R	T-7F
SRACR/L2525M06	CSTB-2.5	T-8F
SRACR/L2525M08	CSTB-3	T-9F

INSERT SELECTION

P

Application	Finishing to medium cutting	heavy cutting
Grade	T9215	T9215
Chipbreaker shape	RS 	61 
Cutting conditions	B016	

M

Application	heavy cutting
Grade	T9215
Chipbreaker shape	61 
Cutting conditions	B018

K

Application	heavy cutting
Grade	T9215
Chipbreaker shape	61 
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker shape	AL 
Cutting conditions	B022

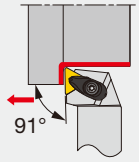
S

Application	Finishing to medium cutting	heavy cutting
Grade	AH8015	AH8015
Chipbreaker shape	RS 	61 
Cutting conditions	B024	

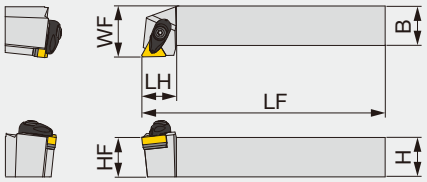
Reference pages: SRACR/L: Inserts → B130 -

ATGNR/L

Double-clamp toolholder with 91° approach angle, for negative 60° triangular inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATGNR/L2020K16-A	20	20	125	22	20	25	0.8	TN**1604...	3
ATGNR/L2525M16-A	25	25	150	22	25	32	0.8	TN**1604...	3
ATGNR/L2525M22-A	25	25	150	26	25	32	0.8	TN**2204...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATGNR/L**16-A	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F
ATGNR/L**22-A	ACP4S	ACS-5W	BP-7	SP-2.5	AST422	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

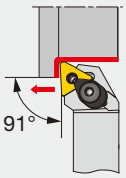
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

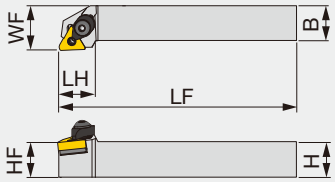
Reference pages: ATGNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

DTGNR/L

"One-Double" toolholder with 91° approach angle, for negative 60° triangular inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DTGNR/L2020K16	20	20	125	21	20	25	0.8	TN**1604...
DTGNR/L2525M16	25	25	150	21	25	32	0.8	TN**1604...
DTGNR/L2525M22	25	25	150	28	25	32	0.8	TN**2204...

Note: Except for 57-type chipbreaker inserts
**RE: Standard corner radius

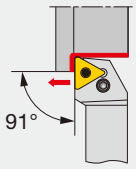
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DTGNR/L**16	DCPM-33	LCL33	DPIS33	DLCS33	LST317	BP-9	LSP3	P-2.5	P-3
DTGNR/L**22	DCPM-43	DLCL43	DPIS43	DLCS43	LST42	BP-10	LSP4	P-3	P-4

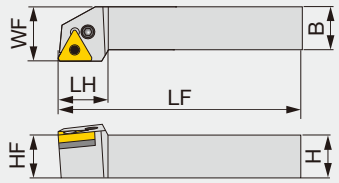
ISOTURN

PTGNR/L

Lever-lock toolholder with 91° approach angle, for negative triangular inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTGNR/L1616	16	16	100	22	16	20	0.8	TN**1604...	2
PTGNR/L2020K1104	20	20	125	20	20	25	0.8	TN**1104...	2
PTGNR/L2020	20	20	125	22	20	25	0.8	TN**1604...	2
PTGNR/L2525M1104	25	25	150	20	25	32	0.8	TN**1104...	2
PTGNR/L2525M3	25	25	150	22	25	32	0.8	TN**1604...	2
PTGNR/L2525M4	25	25	150	28	25	32	0.8	TN**2204...	3
PTGNR3225P4	32	25	170	28	32	32	0.8	TN**2204...	3

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

SPARE PARTS

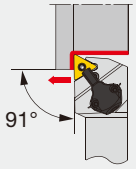
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PTGNR/L1616, 2020	LST317	LCS3	P-2.5	LSP3	LCL3
PTGNR/L**1104	-	LCS23A	P-2.5	-	LCL23
PTGNR/L2525M3	LST317	LCS3	P-2.5	LSP3	LCL3
PTGNR/L2525M4	LST42	LCS4	P-3	LSP4	LCL4
PTGNR3225P4	LST42	LCS4	P-3	LSP4	LCL4

Reference pages: DTGNR/L, PTGNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

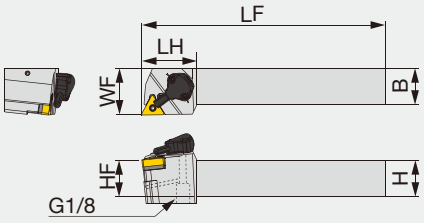
PTGNR/L-CHP

Tube connection

Lever lock toolholders – 91° approach angle.
For negative triangle insert. High-pressure coolant capability.



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE **	Insert	Torque*
PTGNR/L2020K1104-CHP	20	20	125	38	20	32	0.8	TN**1104...	2
PTGNR/L2020K16-CHP	20	20	125	38	20	32	0.8	TN**1604...	2
PTGNR/L2525M1104-CHP	25	25	150	38	25	32	0.8	TN**1104...	2
PTGNR/L2525M16-CHP	25	25	150	38	25	32	0.8	TN**1604...	2

*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PTGNR/L**1104-CHP	-	LCS23A	P-2.5	LSP3	LCL23
PTGNR/L**16-CHP	LST317	LCS3	P-2.5	LSP3	LCL3

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PTGNR/L**1104-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PTGNR/L**16-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

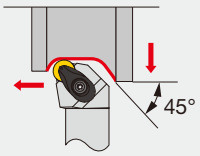
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

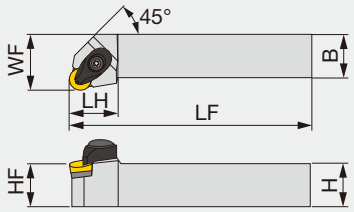
Reference pages: PTGNR/L-CHP: Inserts→B087 -, CBN → B182 -, PCD → B212
Parts for coolant hose → C115

ARGNR/L

Double-clamp toolholder with 91° approach angle, for negative round inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ARGNR/L2525M12-A	25	25	150	28	25	32	6.35	RN**120400	3

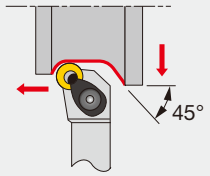
*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

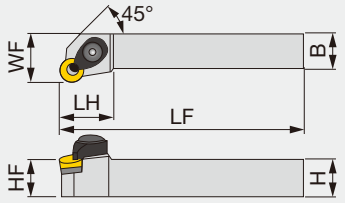
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ARGNR/L...	ACP4S	ACS-5W	BP-7	SP-2.5	ASR420	CSTB-3.5	T-15F

DRGNR/L

"One-Double" toolholder with 91° approach angle, for negative round inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DRGNR/L2525M12	25	25	150	28	25	32	6.35	RN**120400

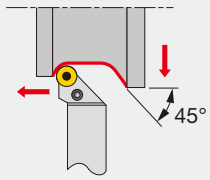
**RE: Standard corner radius

SPARE PARTS

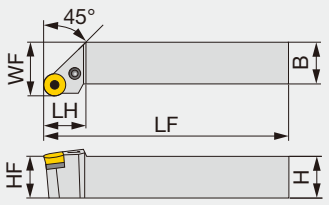
Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DRGNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSR42	BP-10	LSP4	P-3	P-4

PRGNR/L

Lever-lock toolholder with 91° approach angle, for negative round inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
PRGNR/L2020	20	20	125	19	20	25	4.76	RNMG090300-61
PRGNR/L2525M4	25	25	150	25	25	32	6.35	RN**120400

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PRGNR/L2020	LSR32	LCS3	P-2.5	LSP3	LCL3
PRGNR/L2525M4	LSR42	LCS4	P-3	LSP4	LCL4

Reference pages: ARGNR/L, DRGNR/L, PRGNR/L: Inserts → B076

INSERT SELECTION

P	Applicadtion	Heavy cutting
	Grade	T9215
	Chipbreaker Shape	61 
	Cutting conditions	B004

M	Applicadtion	Heavy cutting
	Grade	T9215
	Chipbreaker Shape	61 
	Cutting conditions	B006

K	Applicadtion	Heavy cutting
	Grade	T9215
	Chipbreaker Shape	61 
	Cutting conditions	B008

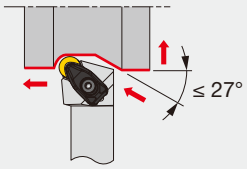
N	Applicadtion	Heavy cutting
	Grade	TH10
	Chipbreaker Shape	61 
	Cutting conditions	B010

S	Applicadtion	Heavy cutting
	Grade	TH10
	Chipbreaker Shape	61 
	Cutting conditions	B012

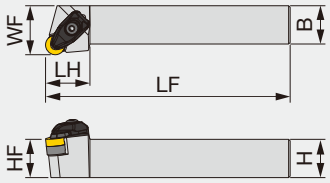
H	Applicadtion	Finishing to medium cutting
	Grade	LX11
	Chipbreaker Shape	- 
	Cutting conditions	B014

TRGNR/L-F

Toolholder with carbide clamping plate, with 90° approach angle, for negative round ceramic inserts without hole



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
TRGNR/L2525M1207-F	25	25	150	29	25	32	6.35	RNGN1207...

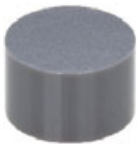
**RE: Standard corner radius

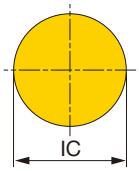
SPARE PARTS

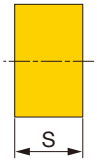
Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
TRGNR/L2525M1207-F	DCLS-4F	DLS-4A	S-43	BH-M5X0.8X0.8	DSP-4A	T-15F	P-3

INSERT

RNGN-E/T1







		TS200	TS300	RE	IC	S
P	Steel					
M	Stainless					
K	Cast iron					
N	Non-ferrous					
S	Superalloys	★	★			
H	Hard materials					

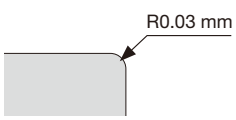
★ : First choice

Designation	Edge prep.*	Ceramic TS200	Ceramic TS300	RE	IC	S
RNGN120700-E	E	●	●	-	12.7	7.94
RNGN120700-T1	T1	●	●	-	12.7	7.94

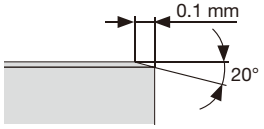
* Types of cutting edge preparations

● : Line up

E: Low cutting force

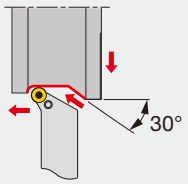


T1: Strong cutting edge

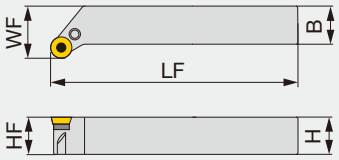


PRGCR/L

Lever-lock toolholder with 91° approach angle, for positive round inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	HF	WF	Insert
PRGCR/L2020K10	20	20	125	20	25	RCMM1003...
PRGCR/L2525M12	25	25	150	25	32	RCM*1204...
PRGCR/L3225P16	32	25	170	32	32	RCM*1606...
PRGCR/L3232P20	32	32	170	32	40	RCM*2006...

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PRGCR/L2020K10	LSR32C	LCS2	P-2	LSP3	LCL3C
PRGCR/L2525M12	LSR42C	LCS3	P-2.5	LSP3	LCL4C
PRGCR/L3225P16	LSR53C	LCS5	P-3	LSP4	LCL5C
PRGCR/L3232P20	LSR63C	LCS5	P-3	LSP6C	LCL6C

INSERT SELECTION

P

Application	Finishing to medium cutting	heavy cutting
Grade	T9215	T9215
Chipbreaker shape	RS 	61 
Cutting conditions	B016	

M

Application	heavy cutting
Grade	T9215
Chipbreaker shape	61 
Cutting conditions	B018

K

Application	heavy cutting
Grade	T9215
Chipbreaker shape	61 
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker shape	AL 
Cutting conditions	B022

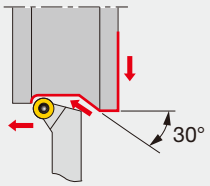
S

Application	Finishing to medium cutting	heavy cutting
Grade	AH8015	AH8015
Chipbreaker shape	RS 	61 
Cutting conditions	B024	

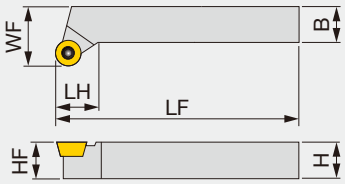
Reference pages: PRGCR/L: Inserts → B130 -

SRGCR/L

Screw-on toolholder with 91° approach angle, for positive round inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
SRGCR1212H05	12	12	100	9.5	12	16	RCMT0502...
SRGCR/L1212H06	12	12	100	10	12	16	RC*T0602...
SRGCR/L1616H05	16	16	100	9.5	16	20	RCMT0502...
SRGCR/L1616H06	16	16	100	10	16	20	RC*T0602...
SRGCR/L1616H08	16	16	100	11	16	20	RC*T0803...
SRGCR/L2020K05	20	20	125	11.2	20	25	RCMT0502...
SRGCR/L2020K06	20	20	125	12	20	25	RC*T0602...
SRGCR/L2020K08	20	20	125	12.7	20	25	RC*T0803...
SRGCR/L2020K10	20	20	125	14	25	25	RC*T1003...
SRGCR/L2525M05	25	25	150	14.7	25	32	RCMT0502...
SRGCR/L2525M06	25	25	150	15	25	32	RC*T0602...
SRGCR/L2525M08	25	25	150	16.2	25	32	RC*T0803...
SRGCR/L2525M10	25	25	150	17.5	25	32	RC*T1003...

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SRGCR1212H05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L1212H06	CSTB-2.5	-	-	-	T-8F
SRGCR/L1616H05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L1616H06	CSTB-2.5	-	-	-	T-8F
SRGCR/L1616H08	CSTB-3	-	-	-	T-9F
SRGCR/L2020K05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L2020K06	CSTB-2.5	-	-	-	T-8F
SRGCR/L2020K08	CSTB-3	-	-	-	T-9F
SRGCR/L2020K10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F
SRGCR/L2525M05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L2525M06	CSTB-2.5	-	-	-	T-8F
SRGCR/L2525M08	CSTB-3	-	-	-	T-9F
SRGCR/L2525M10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing to medium cutting	heavy cutting
Grade	T9215	T9215
Chipbreaker shape	RS 	61 
Cutting conditions	B016	

M

Application	heavy cutting
Grade	T9215
Chipbreaker shape	61 
Cutting conditions	B018

K

Application	heavy cutting
Grade	T9215
Chipbreaker shape	61 
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker shape	AL 
Cutting conditions	B022

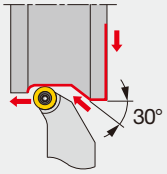
S

Application	Finishing to medium cutting	heavy cutting
Grade	AH8015	AH8015
Chipbreaker shape	RS 	61 
Cutting conditions	B024	

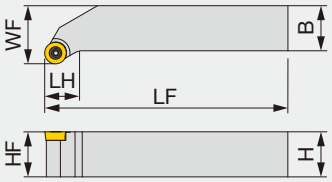
Reference pages: SRGCR/L: Inserts → **B130 -**

SRGCR/L-6F

Screw-on toolholder with 91° approach angle, for positive round inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert	Torque*
SRGCR/L2525M12-6F	25	25	150	18.6	25	32	RCMT1204M0-6RS/-6RM	3

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

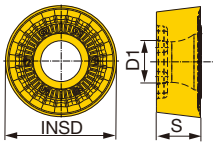
Designation	Clamping screw	Lubricant	Wrench
SRGCR/L2525M12-6F	CSTB-4	M-1000	T-15F

INSERT

RCMT

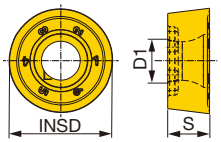


6RS





6RM



P	Steel	★	★					★			
M	Stainless	☆									
K	Cast iron	☆	☆					☆			
N	Non-ferrous										
S	Superalloys										
H	Hard materials										

★ : First choice
☆ : Second choice

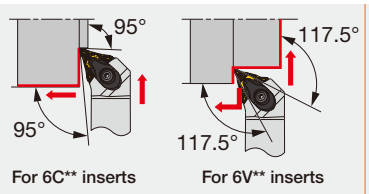
Designation	Coated						Cermet				INSD	S	D1
	T9215	T9225					NS9530						
RCMT1204M0-6RS	●	●					●				12	4.76	5.16
RCMT1204M0-6RM	●	●					●				12	4.76	5.16

● : Line up

Reference pages: SRGCR/L-6F: Standard cutting conditions → C120

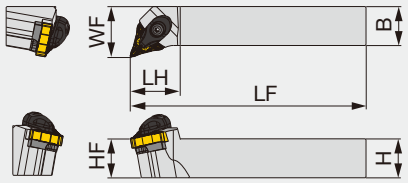
ATXOR/L

Double-clamp toolholder with 95°/117.5° approach angle, for negative 80°/35° triangular inserts



For 6C** inserts For 6V** inserts

Cutting edge style **X**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATXOR/L2020K25-A	20	20	125	32	20	25	0.8	6C/6V-TOMG2506...	3
ATXOR/L2525M25-A	25	25	150	32	25	32	0.8	6C/6V-TOMG2506...	3
ATXOR/L3232P25-A	32	32	170	32	32	40	0.8	6C/6V-TOMG2506...	3

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

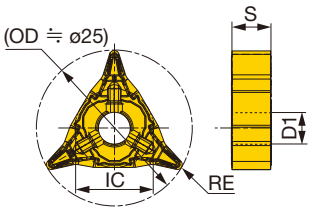
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATXOR/L**25-A	ACP4S	ACS-5W	BP-7	SP-2.5	LST33 KS15F	CSTB-3.5	T-15F

INSERT

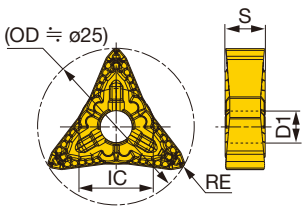
6V-TOMG**F-TSF





6C-TOMG**M-TM





P	Steel	★	★	
M	Stainless	☆		☆
K	Cast iron	☆		
N	Non-ferrous			
S	Superalloys			★
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	RE	Coated T9215	Coated T9225	Coated AH8015	IC	S	D1
6V-TOMG250604F-TSF	0.4	●	●	●	12.7	6.35	5.16
6V-TOMG250608F-TSF	0.8	●	●	●	12.7	6.35	5.16
6C-TOMG250608M-TM	0.8	●	●	●	12.1	6.35	5.16
6C-TOMG250612M-TM	1.2	●	●	●	12.1	6.35	5.16

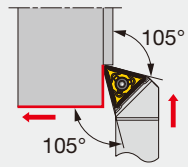
Please note, when machining with pull face-turning method, that **6V**-TOMG2506... insert may interfere with the workpiece whose external diameter is 70 mm or smaller and that **6C**-TOMG2506... insert 30 mm or smaller.

● : Line up

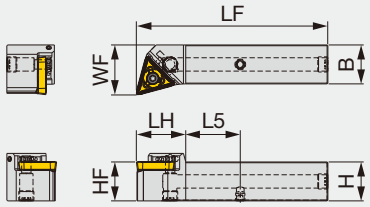
Reference pages: Standard cutting conditions → C116

STXCR/L-CHP-MC

Screw-on toolholder with 105° approach angle, for positive triangular inserts



Cutting edge style **X**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	L5	Insert	Torque*
STXCR/L2525X29-CHP-MC	25	25	122	32	25	32	35	3C-TCMT29X6...	5

Torque*: Recommended clamping torque (N·m)

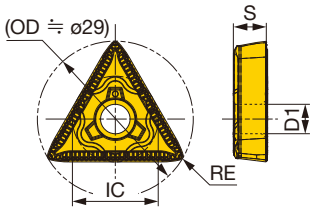
SPARE PARTS

Designation	Clamping screw	Grip	Torx bit	Coolant plug
STXCR/L2525X29-CHP-MC	CSTB-5	H-TB2W	BT20M	PLUGG1/8-6.5TL360

INSERT

3C-TCMT**-TM





P	Steel	★
M	Stainless	☆
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	RE	Coated	IC	S	D1
		T9215			
3C-TCMT29X608-TM	0.8	●	16	6.15	5.5

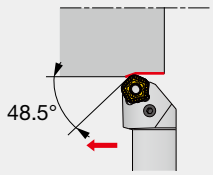
Please note that 3C-TCMT... insert is not recommended for pull face-turning method (pulling the insert away from the part center).

● : Line up

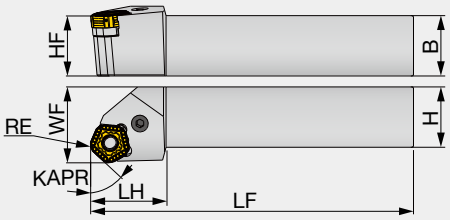
Reference pages: Standard cutting conditions → C116

PPXOR/L-HD

Lever-lock toolholder with 48.5° approach angle, for negative 108° pentagonal inserts



Cutting edge style **X**

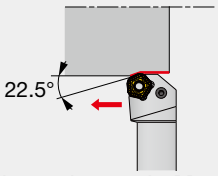


Designation	H	B	LF	LH	HF	WF	KAPR	RE	Insert
PPXOR/L2525M11-HD	25	25	150	35	25	32	48.5	1.2	POMG110612...
PPXOR/L3232P13-HD	32	32	170	40	32	40	48.5	1.2	POMG130612...

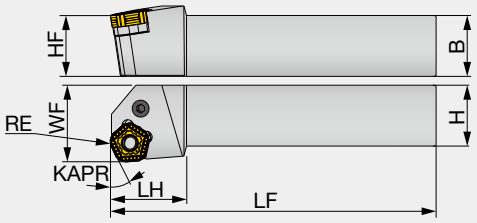
Note : Since the corner angle of TurnTenFeed insert is 108°, the workpiece corner may require additional post-process to remove stock to achieve a right angle.

PPXOR/L-HF

Lever-lock toolholder with 22.5° approach angle, for negative 108° pentagonal inserts



Cutting edge style **X**



Designation	H	B	LF	LH	HF	WF	KAPR	RE	Insert
PPXOR/L2525M11-HF	25	25	150	35	25	32	22.5	1.2	POMG110612...
PPXOR/L3232P13-HF	32	32	170	40	32	40	22.5	1.2	POMG130612...

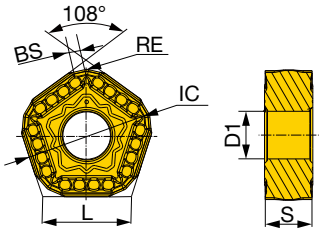
Note : Since the corner angle of TurnTenFeed insert is 108°, the workpiece corner may require additional post-process to remove stock to achieve a right angle.

SPARE PARTS

Designation	Shim	Spring pin	Lever	Clamping screw	Wrench
PPXOR/L2525M11-H*	LSPO53	LSP5	LCL5	LCS5	P-3
PPXOR/L3232P13-H*	LSPO63	LSP6	LCL6	LCS6	P-4

INSERT

POMG-MNW



P	Steel	★	★				
M	Stainless	☆		☆			
K	Cast iron	☆	☆				
N	Non-ferrous						
S	Superalloys			★			
H	Hard materials						

★ : First choice
☆ : Second choice

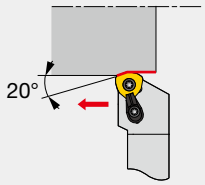
Designation	RE	Coated			IC	L	BS	S	D1
		T9215	T9225	AH8015					
POMG110612-MNW	1.2	●	●	●	15.875	11.53	1.5	6.35	6.35
POMG130612-MNW	1.2	●	●	●	19.05	13.84	2	6.35	7.93

● : Line up

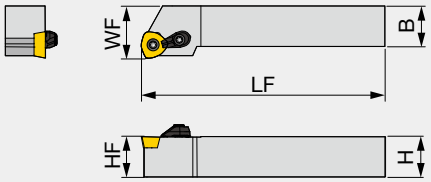
Reference pages: Standard cutting conditions → C117

XWXPR/L

Double-clamp toolholder for roughing with 20° approach angle, for positive 80° trigon inserts



Cutting edge style **X**



Right hand (R) shown.

Designation	H	B	LF	HF	WF	Insert
XWXPR/L2525M09	25	25	150	25	32	WPMT090725ZPR/L-ML
XWXPR/L3232P09	32	32	170	32	40	WPMT090725ZPR/L-ML
XWXPR/L4040S09	40	40	250	40	50	WPMT090725ZPR/L-ML

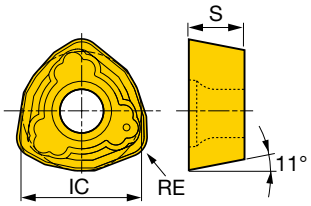
SPARE PARTS

Designation	Clamp set	Clamping screw	Wrench
XWXPR/L...	CSY-20	CSPB-5	IP-20T

Note: Each insert is either right- or left-handed. Please be sure not to use a wrong insert.

INSERT

WPMT09-ML



P	Steel	★	★	★	
M	Stainless	☆		☆	
K	Cast iron	☆	☆	☆	
N	Non-ferrous				
S	Superalloys				
H	Hard materials				

★ : First choice
☆ : Second choice

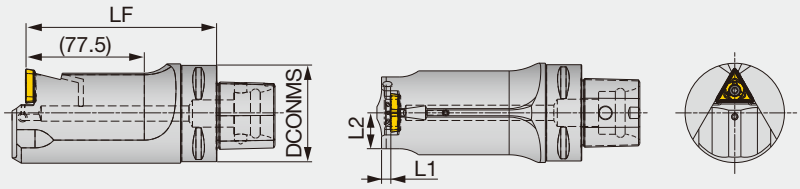
Designation	RE	Coated			IC	S
		T9215	T9225	AH120		
WPMT090725ZPR-ML	2.5	●	●	●	15	7
WPMT090725ZPL-ML	2.5	●	●	●	15	7

● : Line up

Reference pages: Standard cutting conditions → C117

C6STECN-Y-CHP

Screw-on Y-axis turning toolholder with TungCap connection, for positive triangular inserts



Cutting edge style **E**

Designation	SS	DCONMS	LF	L1	L2	RE	Insert	Torque*
C6STECN00125-29-Y-CHP	C6	63	125	6	23.5	0.8	3C-TCMT29X6...	5

Torque*: Recommended clamping torque (N·m)

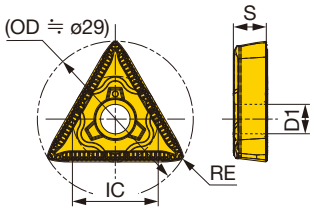
SPARE PARTS

Designation	Clamping screw	Grip	Torx bit
C6STECN00125-29-Y-CHP	CSTB-5	H-TB2W	BT20M

INSERT

3C-TCMT**-TM





P	Steel	★
M	Stainless	☆
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	RE	Coated	IC	S	D1
		T9215			
3C-TCMT29X608-TM	0.8	●	16	6.15	5.5

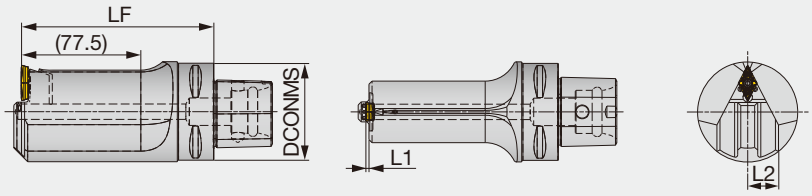
Please note that 3C-TCMT... insert is not recommended for pull face-turning method (pulling the insert away from the part center).

● : Line up

Reference pages: Standard cutting conditions → C116

C6SDNCN-Y-CHP

Screw-on Y-axis turning toolholder with TungCap connection, for positive 55° rhombic inserts



Cutting edge style **N**

Designation	SS	DCONMS	LF	L1	L2	RE	Insert	Torque*
C6SDNCN00125-13-Y-CHP	C6	63	125	2	20	0.4	2D-DCMT13T4...	3.5

Torque*: Recommended clamping torque (N·m)

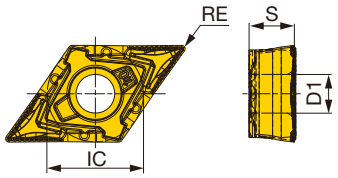
SPARE PARTS

Designation	Clamping screw	Grip	Torx bit
C6SDNCN00125-13-Y-CHP	CSTB-4M	H-TB2W	BT15M

INSERT

2D-DCMT**-ZF





P	Steel	★
M	Stainless	☆
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	RE	Coated	IC	S	D1
		T9215			
2D-DCMT13T404-ZF	0.4	●	11	5.16	4.4

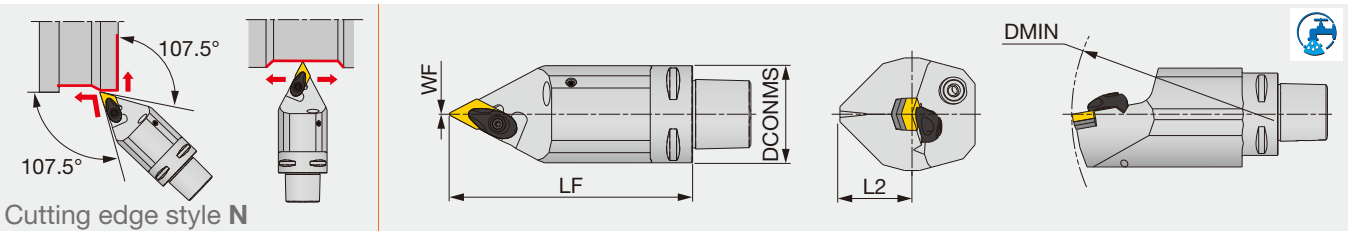
Please note that 2D-DCMT... insert is not recommended for pull face-turning method (pulling the insert away from the part center).

● : Line up

Reference pages: Standard cutting conditions → C116

C-ADNNN

Double-clamp toolholder, with 62.5° approach angle, for negative 55°/45° rhombic inserts



Designation	DCONMS	LF	L2	WF	DMIN	RE	Insert
C5ADNNN00090-15(1)	50	90	32	0	-	0.8	DN**/FNGA1504(06)...
C5ADNNN00090-15N(2)	50	90	32	0	165	0.8	DN**/FNGA1504(06)...
C5ADNNN00125-15(1)	50	125	32	0	-	0.8	DN**/FNGA1504(06)...
C5ADNNN00125-15N(2)	50	125	32	0	165	0.8	DN**/FNGA1504(06)...
C6ADNNN00100-15N(2)	63	100	37.5	0	190	0.8	DN**/FNGA1504(06)...
C6ADNNN00140-15N(2)	63	140	37.5	0	190	0.8	DN**/FNGA1504(06)...

The items without DMIN cannot be used for boring
(1) Applicable for 3 MPa coolant (2) Applicable for 7 MPa coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench
C5ADNNN00090-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00090-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00125-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00125-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00100-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00140-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Option: ASD423 (Shim for DN**1506**)

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

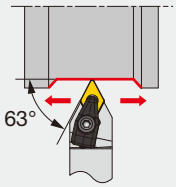
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

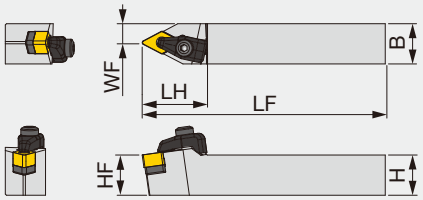
Reference pages: C-ADNNN: Inserts→ B066 -, CBN → B172 -, PCD → B211
Parts for coolant hose → C115

DIMPLEFX
CDNNN-RD

Double-clamp toolholder with 63° approach angle, for negative 55° rhombic ceramic inserts with dimple



Cutting edge style **N**



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CDNNN2525M1507-RD	25	25	150	40	25	12.5	1.2	DN*D1507...	4

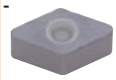
*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CDNNN2525M1507-RD	CCP4-A	CCS4-A	CD44-A	BH5-10-A	BP-5-A	P-3	P-4

INSERT SELECTION

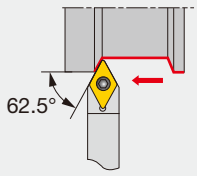
K

Application	Finishing to medium cutting
Grade	FX105
Chipbreaker shape	- 
Cutting conditions	C118

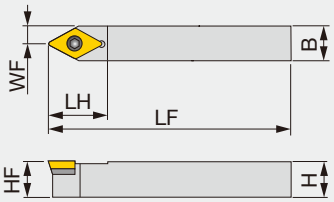
Reference pages: CDNNN-RD: Inserts→ B074
Standard cutting conditions → C118

SDNCN

Screw-on toolholder with 62.5° approach angle, for positive 55° rhombic inserts



Cutting edge style **N**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
SDNCN1616H11	16	16	100	21	16	8	0.8	DC**11T3...
SDNCN2020K11	20	20	125	21	20	10	0.8	DC**11T3...
SDNCN2525M11	25	25	150	21	25	12.5	0.8	DC**11T3...

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
SDNCN...	CSTB-3.5L	DTS5-3.5	SSD32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH6225	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

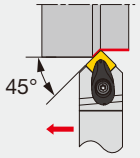
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

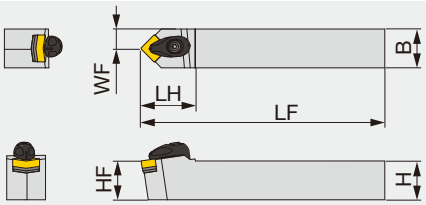
Reference pages: SDNCN:Inserts → B121 -, CBN → B193 -, PCD → B214

ASDNN

Double-clamp toolholder with 45° approach angle, for negative square inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ASDNN2020K12-A	20	20	125	35	20	10	0.8	SN**1204...	3
ASDNN2525M12-A	25	25	150	35	25	12.5	0.8	SN**1204...	3

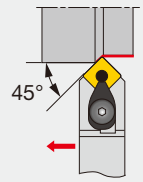
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

SPARE PARTS

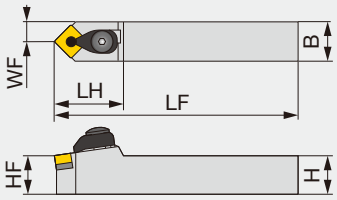
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ASDNN**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F

DSDNN

One-Double toolholder with 45° approach angle, for negative square inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
DSDNN2020K12	20	20	125	36	20	10	0.8	SN**1204...
DSDNN2525M12	25	25	150	36	25	12.5	0.8	SN**1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts
**RE: Standard corner radius

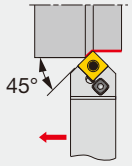
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSDNN...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

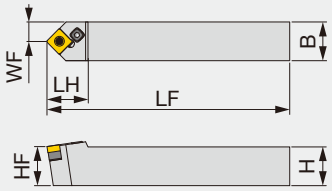
Reference pages: ASDNN, DSDNN: Inserts → B077 -, CBN → B180, PCD → B211

PSDNN

Lever-lock toolholder with 45° approach angle, for positive round inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
PSDNN1616	16	16	100	22	16	8	0.8	SN**0903...
PSDNN2020	20	20	125	30	20	10.3	0.8	SN**1204...
PSDNN2525	25	25	150	30	25	12.8	0.8	SN**1204...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSDNN1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSDNN2020	LSS42	LCS4	P-3	LSP4	LCL4
PSDNN2525	LSS42	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF 	TSF 	TM 	TH 
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF 	SM 	SH 
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker Shape	All-round 	All-round 	All-round 
Cutting conditions	B008		

N

Application	Finishing	Medium cutting
Grade	DX140	TH10
Chipbreaker Shape	DIA 	P 
Cutting conditions	B010	

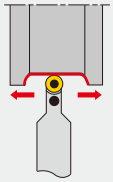
S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Chipbreaker Shape	CBN 	HRF 	HRM 
Cutting conditions	B012		

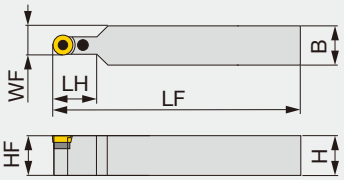
Reference pages: PSDNN: Inserts → B077 -, CBN → B180, PCD → B211

PRDCN

Lever-lock toolholder with 45° approach angle, for positive round inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	Insert
PRDCN2020K10	20	20	125	22.5	20	15	RCMM1003...
PRDCN2525M12	25	25	150	24	25	18.5	RCM*1204...
PRDCN3225P12	32	25	170	24	32	18.5	RCM*1204...
PRDCN3225P16	32	25	170	28	32	20.5	RCM*1606...
PRDCN3232P20	32	32	170	32	32	26	RCM*2006...
PRDCN4040R25	40	40	200	42	40	32.5	RCM*2507...

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PRDCN2020K10	LSR32C	LCS2	P-2	LSP3	LCL3C
PRDCN**25*12	LSR42C	LCS3	P-2.5	LSP3	LCL4C
PRDCN3225P16	LSR53C	LCS5	P-3	LSP4	LCL5C
PRDCN3232P20	LSR63C	LCS5	P-3	LSP6C	LCL6C
PRDCN4040R25	LSR84C	LCS8C	P-4	LSP6	LCL8C

INSERT SELECTION

P

Application	Finishing to medium cutting	Heavy cutting
Grade	T9215	T9215
Chipbreaker Shape	RS 	61 
Cutting conditions	B016	

M

Application	Heavy cutting
Grade	T9215
Chipbreaker Shape	61 
Cutting conditions	B018

K

Application	Heavy cutting
Grade	T9215
Chipbreaker Shape	61 
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker Shape	AL 
Cutting conditions	B022

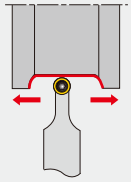
S

Application	Finishing to medium cutting	Heavy cutting
Grade	AH8015	AH8015
Chipbreaker Shape	RS 	61 
Cutting conditions	B024	

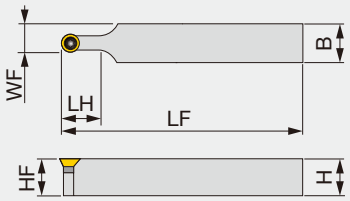
Reference pages: PRDCN: Inserts → B131

SRDCN

Screw-on toolholder with 45° approach angle, for positive round inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	Insert
SRDCN2020K06	20	20	125	12	20	13	RC*T0602...
SRDCN2020K08	20	20	125	16	20	14	RC*T0803...
SRDCN2020K10	20	20	125	20.3	25	15	RC*T1003...
SRDCN2525M06	25	25	150	12	25	15.5	RC*T0602...
SRDCN2525M08	25	25	150	16	25	16.5	RC*T0803...
SRDCN2525M10	25	25	150	20.3	25	17.5	RC*T1003...

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SRDCN2020K06	CSTB-2.5	-	-	-	T-8F
SRDCN2020K08	CSTB-3	-	-	-	T-9F
SRDCN2020K10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F
SRDCN2525M06	CSTB-2.5	-	-	-	T-8F
SRDCN2525M08	CSTB-3	-	-	-	T-9F
SRDCN2525M10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing to medium cutting	Heavy cutting
Grade	T9215	T9215
Chipbreaker Shape	RS 	61 
Cutting conditions	B016	

M

Application	Heavy cutting
Grade	T9215
Chipbreaker Shape	61 
Cutting conditions	B018

K

Application	Heavy cutting
Grade	T9215
Chipbreaker Shape	61 
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker Shape	AL 
Cutting conditions	B022

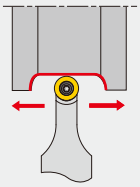
S

Application	Finishing to medium cutting	Heavy cutting
Grade	AH8015	AH8015
Chipbreaker Shape	RS 	61 
Cutting conditions	B024	

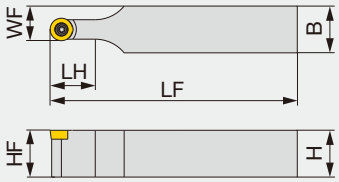
Reference pages: SRDCN: Inserts → B131

SRDCN-6F

Screw-on toolholder with 45° approach angle, for positive round inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	Insert	Torque*
SRDCN2525M12-6F	25	25	150	24.1	25	18.5	RCMT1204M0-6RS/-6RM	3

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

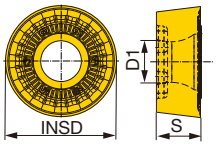
Designation	Clamping screw	Lubricant	Wrench
SRDCN2525M12-6F	CSTB-4	M-1000	T-15F

INSERT

RCMT

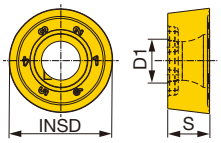


6RS





6RM



P	Steel	★	★					★			
M	Stainless	☆									
K	Cast iron	☆	☆					☆			
N	Non-ferrous										
S	Superalloys										
H	Hard materials										

★ : First choice
☆ : Second choice

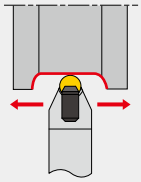
Designation	Coated						Cermet								
	T9215	T9225					NS9530							INSD	S	D1
RCMT1204M0-6RS	●	●					●							12	4.76	5.16
RCMT1204M0-6RM	●	●					●							12	4.76	5.16

● : Line up

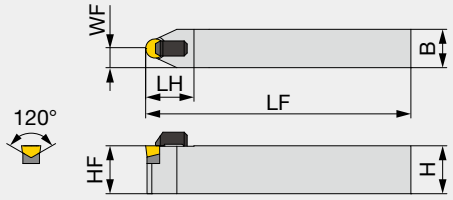
Reference pages: SRDCN-6F: Standard cutting conditions → C120

TRDCN

Toolholder with carbide clamping plate, with 45° approach angle, for positive round ceramic inserts with V-bottom shape



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
TRDCN3225P09-120	32	25	170	30	32	12.5	4.76	RCGX090700...
TRDCN3225P12-120	32	25	170	32	32	12.5	6.35	RCGX120700...

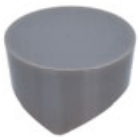
**RE: Standard corner radius

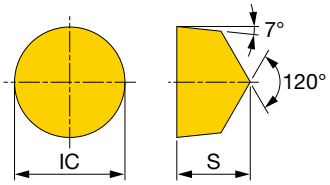
SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Wrench 1	Wrench 2
TRDCN3225P09-120	BCL6-20A	BH-M6X1X25	CBRS-09	BH-M2.5X0.45X10	P-4	P-1.5
TRDCN3225P12-120	BCL6	BH-M6X1X25	CBRS-12	BH-M2.5X0.45X10	P-4	P-1.5

INSERT

RCGX-E/T1





		TS200	TS300
P	Steel		
M	Stainless		
K	Cast iron		
N	Non-ferrous		
S	Superalloys	★	★
H	Hard materials		

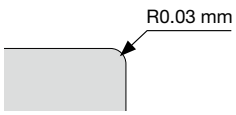
★ : First choice

Designation	Edge prep.*	Ceramic TS200	Ceramic TS300	RE	IC	S
RCGX090700-E	E	●	●	-	9.525	7.94
RCGX090700-T1	T1	●	●	-	9.525	7.94
RCGX120700-E	E	●	●	-	12.7	7.94
RCGX120700-T1	T1	●	●	-	12.7	7.94

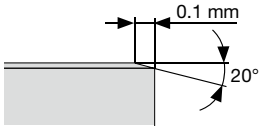
* Types of cutting edge preparations

● : Line up

E: Low cutting force

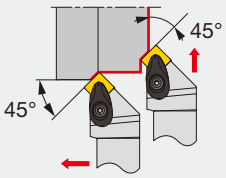


T1: Strong cutting edge

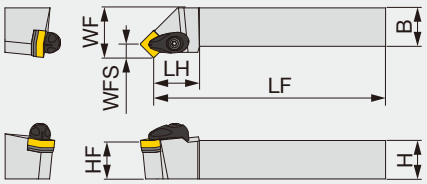


ASSNR/L

Double-clamp toolholder with 45° approach angle (S-style), for negative square inserts



Cutting edge style **S**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	WFS	RE**	Insert	Torque*
ASSNR/L2020K12-A	20	20	125	30	20	25	8.3	0.8	SN**1204...	3
ASSNR/L2525M12-A	25	25	150	30	25	32	8.3	0.8	SN**1204...	3
ASSNR/L2525M15-A	25	25	150	25	25	32	10.3	1.2	SN**1506...	6.4
ASSNR/L3232P15-A	32	32	170	25	32	40	10.3	1.2	SN**1506...	6.4
ASSNR/L3232P19-A	32	32	170	27.5	32	40	12.5	1.2	SN**1906...	6.4
ASSNR/L4040S19-A	40	40	250	27.5	40	50	12.5	1.2	SN**1906...	6.4

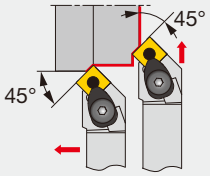
*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

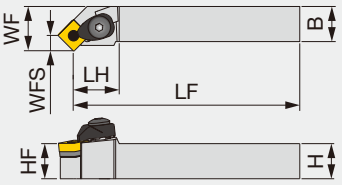
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench 1	Wrench 2
ASSNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	-
ASSNR/L**15-A	ACP5S	ACS-6W	BP-8.8	SP-2.5	ASS533	CSTB-5	-	KEYV-T20
ASSNR/L**19-A	ACP6S	ACS-6W	BP-8.8	SP-2.5	ASS634	CSTB-5	-	KEYV-T20

DSSNR/L

"One-Double" toolholder with 45° approach angle, for negative square inserts



Cutting edge style **S**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	WFS	RE**	Insert
DSSNR/L2020K12	20	20	125	34.3	20	25	8.3	0.8	SN**1204...
DSSNR/L2525M12	25	25	150	34.3	25	32	8.3	0.8	SN**1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts
**RE : Standard corner radius

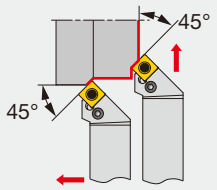
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSSNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

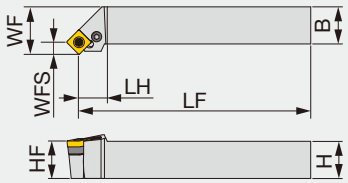
Reference pages: ASSNR/L, DSSNR/L: Inserts → B077 -, CBN → B180, PCD → B211

PSSNR/L

Lever-lock toolholder with 45° approach angle, for positive round inserts



Cutting edge style **S**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	WFS	RE**	Insert
PSSNR/L1616	16	16	94	16	16	20	6.1	0.8	SN**0903...
PSSNR/L2020	20	20	116	21	20	25	8.3	0.8	SN**1204...
PSSNR/L2525	25	25	141	21	25	32	8.3	0.8	SN**1204...
PSSNR3225	32	25	161	21	32	32	8.3	0.8	SN**1204...
PSSNR/L3232	32	32	157.5	27.5	32	40	12.5	1.2	SN**1906...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSSNR/L1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSSNR/L2020	LSS42	LCS4	P-3	LSP4	LCL4
PSSNR/L**25	LSS42	LCS4	P-3	LSP4	LCL4
PSSNR/L3232	LSS63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF 	TSF 	TM 	TH 
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF 	SM 	SH 
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker Shape	All-round 	All-round 	All-round 
Cutting conditions	B008		

N

Application	Finishing	Medium cutting
Grade	DX140	TH10
Chipbreaker Shape	DIA 	P 
Cutting conditions	B010	

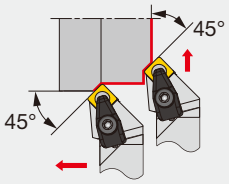
S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Chipbreaker Shape	CBN 	HRF 	HRM 
Cutting conditions	B012		

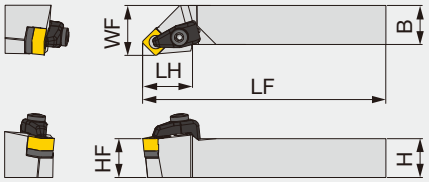
Reference pages: PSSNR/L: Inserts → B077 -, CBN → B180, PCD → B211

CSSNR/L-RD

Double-clamp toolholder with 45° approach angle, for negative square ceramic inserts with dimple



Cutting edge style **S**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CSSNR/L2525M1207-RD	25	25	150	32	25	32	1.2	SN*D1207...	4

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
CSSNR/L2525M1207-RD	CCP4-A	CCS4-A	CS44-A	BH5-10-A	BP-5-A	P-3	P-4

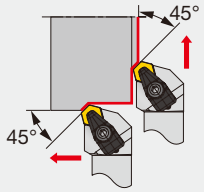
INSERT SELECTION

Application	Finishing to medium cutting
Grade	FX105
Chipbreaker Shape	- 
Cutting conditions	C118

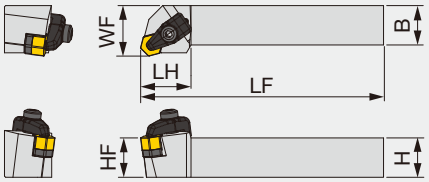
Reference pages: CSSNR/L-RD: Insert → B085
Standard cutting conditions → C118

CHSNR/L-RD

Double-clamp toolholder with 45° approach angle, for negative 120° hexagonal ceramic inserts with dimple



Cutting edge style **S**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CHSNR2525M0507-RD	25	25	150	32	25	32	1.2	HN*D0507...	4

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
CHSNR2525M0507-RD	CCP4-A	CCS4-A	CH44-A	BH-40050-A	BP-5-A	P-3	P-4

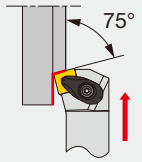
INSERT SELECTION

Application	Finishing to medium cutting
Grade	FX105
Chipbreaker Shape	- 
Cutting conditions	C118

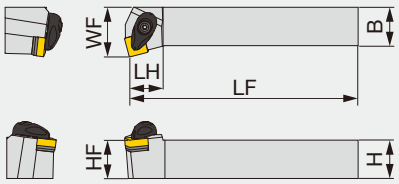
Reference pages: CHSNR/L-RD: Inserts → B111
Standard cutting conditions → C118

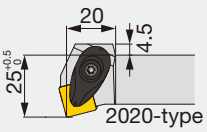
ASKNR/L

Double-clamp toolholder with 75° approach angle, for negative square inserts



Cutting edge style **K**





Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ASKNR/L2020K12-A	20	20	125	20	20	25	0.8	SN**1204...	3
ASKNR/L2525M12-A	25	25	150	22	25	32	0.8	SN**1204...	3

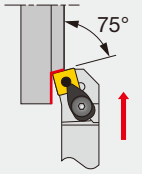
*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

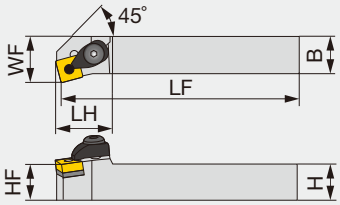
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ASKNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F

DSKNR/L

"One-Double" toolholder with 75° approach angle, for negative square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DSKNR/L2020K12	20	20	125	31	20	25	0.8	SN**1204...
DSKNR/L2525M12	25	25	150	31	25	32	0.8	SN**1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts
**RE : Standard corner radius

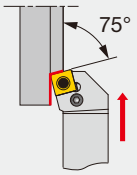
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSKNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

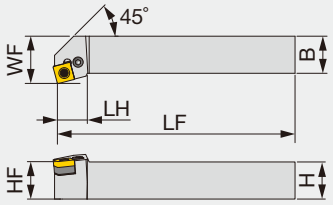
Reference pages: ASKNR/L, DSKNR/L: Inserts → B077 -, CBN → B180, PCD → B211

PSKNR/L

Lever-lock toolholder with 75° approach angle, for negative square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
PSKNR/L1616	16	16	100	17	16	25	0.8	SN**0903...
PSKNR/L2020	20	20	125	22	20	25	0.8	SN**1204...
PSKNR/L2525	25	25	150	22	25	32	0.8	SN**1204...
PSKNR3232	32	32	170	40	32	40	1.2	SN**1906...

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSKNR/L1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSKNR/L2*2*	LSS42	LCS4	P-3	LSP4	LCL4
PSKNR3232	LSS63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF 	TSF 	TM 	TH 
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF 	SM 	SH 
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker Shape	All-round 	All-round 	All-round 
Cutting conditions	B008		

N

Application	Finishing	Medium cutting
Grade	DX140	TH10
Chipbreaker Shape	DIA 	P 
Cutting conditions	B010	

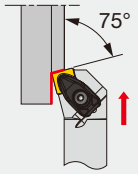
S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Chipbreaker Shape	CBN 	HRF 	HRM 
Cutting conditions	B012		

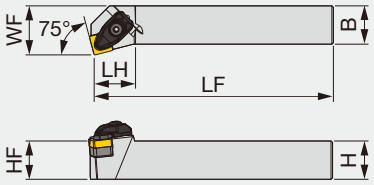
Reference pages: PSKNR/L: Inserts → B077 -, CBN → B180, PCD → B211

TSKNR/L-F

Toolholder with carbide clamping plate, with 75° approach angle, for negative square ceramic inserts without hole



Cutting edge style **K**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
TSKNR/L2525M1207-F	25	25	150	27	25	32	0.8	SNGN1207...

**RE: Standard corner radius

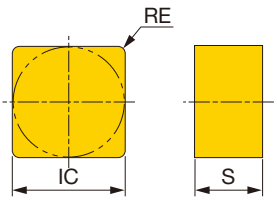
SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
TSKNR/L2525M1207-F	DCLS-4F	DLS-4A	TSS-42	BH-40050-A	DSP-4A	T-15F	P-3

INSERT

SNGN-T1





P	Steel		
M	Stainless		
K	Cast iron		
N	Non-ferrous		
S	Superalloys	★	★
H	Hard materials		

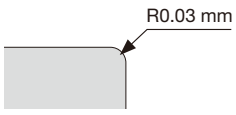
★ : First choice

Designation	Edge prep.*	Ceramic TS200	Ceramic TS300	RE	IC	S
SNGN120712-T1	T1		●	1.2	12.7	7.94

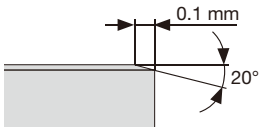
* Types of cutting edge preparations

● : Line up

E: Low cutting force

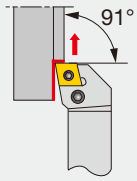


T1: Strong cutting edge

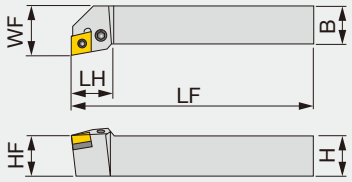


PCFNR/L

Lever-lock type toolholder for facing with 91° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
PCFNR/L2020	20	20	125	28	20	25	0.8	CN**/GNGA1204...
PCFNR/L2525	25	25	150	28	25	32	0.8	CN**/GNGA1204...

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCFNR/L...	LSC42 D30	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

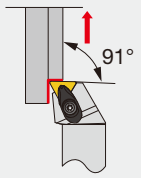
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

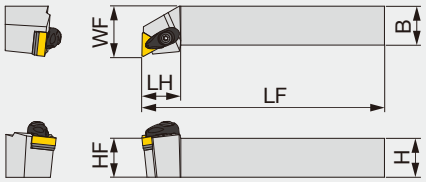
Reference pages: PCFNR/L: Inserts → B054 -, CBN → B168 -, B178, PCD → B211

ATFNR/L

Double-clamp toolholder for facing with 91° approach angle, for negative 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATFNR/L2020K16-A	20	20	125	25	20	25	0.8	TN**1604...	3
ATFNR/L2525M16-A	25	25	150	25	25	32	0.8	TN**1604...	3
ATFNR/L2525M22-A	25	25	150	29	25	32	0.8	TN**2204...	3

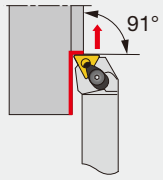
*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

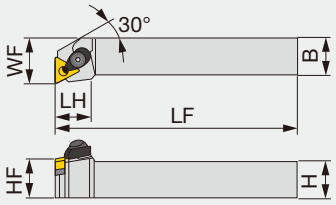
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATFNR/L**16-A	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F
ATFNR/L**22-A	ACP4S	ACS-5W	BP-7	SP-2.5	AST422	CSTB-3.5	T-15F

DTFNR/L

"One-Double" toolholder with 91° approach angle, for negative 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DTFNR/L2020K16	20	20	125	23	20	25	0.8	TN**1604...
DTFNR/L2525M16	25	25	150	23	25	32	0.8	TN**1604...
DTFNR/L2525M22	25	25	150	31	25	32	0.8	TN**2204...

Note: Except for 57-type chipbreaker inserts
**RE : Standard corner radius

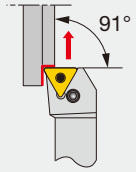
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DTFNR/L**16	DCPM-33	LCL33	DPIS33	DLCS33	LST317	BP-9	LSP3	P-2.5	P-3
DTFNR/L**22	DCPM-43	DLCL43	DPIS43	DLCS43	LST42	BP-10	LSP4	P-3	P-4

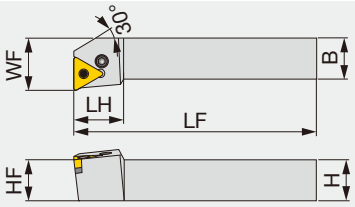
Reference pages: ATFNR/L, DTFNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

PTFNR/L

Lever-lock toolholder with 91° approach angle, for negative triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTFNR/L1616	16	16	100	22	16	20	0.8	TN**1604...	2
PTFNR/L2020K1104	20	20	125	16	20	25	0.8	TN**1104...	2
PTFNR/L2020	20	20	125	22	20	25	0.8	TN**1604...	2
PTFNR/L2525M1104	25	25	150	22	25	32	0.8	TN**1104...	2
PTFNR/L2525M3	25	25	150	22	25	32	0.8	TN**1604...	2
PTFNR/L2525M4	25	25	150	28	25	32	0.8	TN**2204...	3
PTFNR/L3225P4	32	25	170	28	32	32	0.8	TN**2204...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench	Spring pin	Lever
PTFNR/L1616, 2020	LST317	-	LCS3	P-2.5	LSP3	LCL3
PTFNR/L**1104	-	LCS23A	-	P-2.5	-	LCL23
PTFNR/L2525M3	LST317	-	LCS3	P-2.5	LSP3	LCL3
PTFNR/L**25*4	LST42	-	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

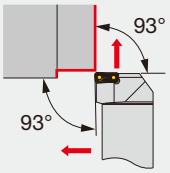
Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

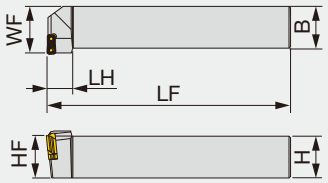
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PTFNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

Screw-on toolholder for roughing with 93° approach angle, for negative tangential inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
TLFNR/L2525M16	25	25	150	20	25	30	LNMX1606**L/R...
TLFNR/L3232P16	32	32	170	20	32	37	LNMX1606**L/R...

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

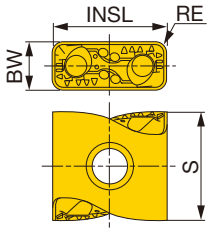
SPARE PARTS

Designation	Clamping screw	Shim	Spring pin	Wrench
TLFNR2525M16	CSTB-4L115-S	TSL16L	PSP-16	KEYV-T15
TLFNL2525M16	CSTB-4L115-S	TSL16R	PSP-16	KEYV-T15
TLFNR3232P16	CSTB-4L115-S	TSL16L	PSP-16	KEYV-T15
TLFNL3232P16	CSTB-4L115-S	TSL16R	PSP-16	KEYV-T15

INSERT

LNMX12/16/24





P	Steel	★	★	★			
M	Stainless	☆		☆			
K	Cast iron	☆	☆	☆			
N	Non-ferrous						
S	Superalloys						
H	Hard materials						

★ : First choice
☆ : Second choice

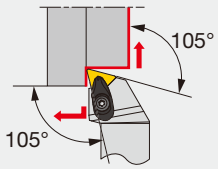
Designation	HAND	RE	Coated										BW	INSL	S
			T9115	T9125	AH725										
LNMX120408R-TDR	R	0.8	●	●									4.8	12	11.6
LNMX120408L-TDR	L	0.8	●	●									4.8	12	11.6
LNMX120412R-TDR	R	1.2	●	●									4.8	12	11.6
LNMX120412L-TDR	L	1.2	●	●									4.8	12	11.6
LNMX160608R-TDR	R	0.8	●	●									6.4	16.2	13.5
LNMX160608L-TDR	L	0.8	●	●									6.4	16.2	13.5
LNMX160612R-TDR	R	1.2	●	●									6.4	16.2	13.5
LNMX160612L-TDR	L	1.2	●	●									6.4	16.2	13.5
LNMX160616R-TDR	R	1.6	●	●									6.4	16.2	13.5
LNMX160616L-TDR	L	1.6	●	●									6.4	16.2	13.5
LNMX241016R-TDR	R	1.6	●	●									9.4	24	20.5
LNMX241016L-TDR	L	1.6	●	●									9.4	24	20.5
LNMX241024R-TDR	R	2.4	●	●									9.4	24	20.5
LNMX241024L-TDR	L	2.4	●	●									9.4	24	20.5
LNMX160608R-MDR	R	0.8	●		●								6.4	16.2	13.5
LNMX160608L-MDR	L	0.8	●		●								6.4	16.2	13.5
LNMX160612R-MDR	R	1.2	●		●								6.4	16.2	13.5
LNMX160612L-MDR	L	1.2	●		●								6.4	16.2	13.5
LNMX160608R-TWR	R	0.8	●										6.4	16.2	13.5
LNMX160608L-TWR	L	0.8	●	●									6.4	16.2	13.5
LNMX160612R-TWR	R	1.2	●	●									6.4	16.2	13.5
LNMX160612L-TWR	L	1.2	●	●									6.4	16.2	13.5

● : Line up

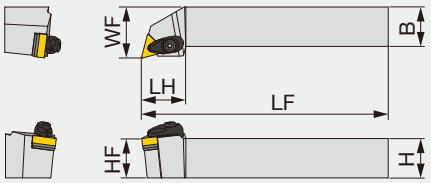
Reference pages: TLFNR/L: Standard cutting conditions → C119

ATQNR/L

Double-clamp toolholder with 105° approach angle, for negative 60° triangular inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATQNR/L2020K16-A	20	20	125	28	20	25	0.8	TN**1604...	3
ATQNR/L2525M16-A	25	25	150	28	25	32	0.8	TN**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATQNR/L**16-A	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

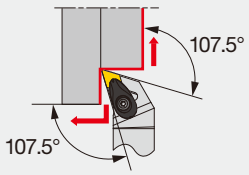
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

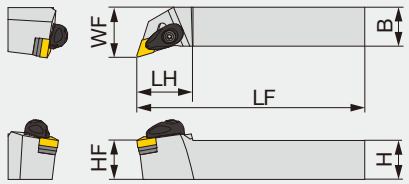
Reference pages: ATQNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

ADQNR/L

Double-clamp toolholder with 107.5° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **Q**



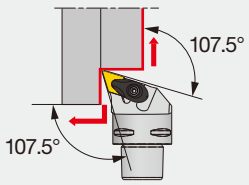
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ADQNR/L2020K1104-A	20	20	125	30	20	25	0.8	DN**/FNMG1104...	3
ADQNR/L2020K15-A	20	20	125	32	20	25	0.8	DN**/FNGA1504...	3
ADQNR/L2020K1506-A	20	20	125	32	20	25	0.8	DN**/FNGA1506...	3
ADQNR/L2525M1104-A	25	25	150	30	25	32	0.8	DN**/FNMG1104...	3
ADQNR/L2525M15-A	25	25	150	36	25	32	0.8	DN**/FNGA1504...	3
ADQNR/L2525M1506-A	25	25	150	36	25	32	0.8	DN**/FNGA1506...	3

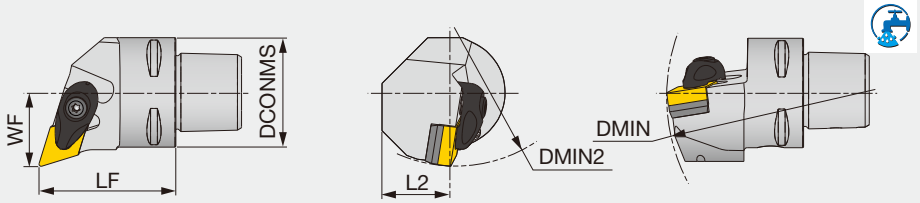
*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

C-ADQNR/L

Double-clamp toolholder, with 107.5° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C3ADQNR/L22040-15N	32	40	20	22	121	85	0.8	DN**/FNGA1504...
C4ADQNR/L27050-15N	40	50	25	27	145	110	0.8	DN**/FNGA1504...

Applicable for 7 MPa coolant

Option: ASD423 (Shim for DN**1506**)

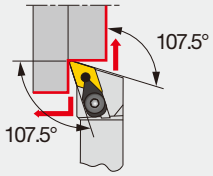
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ADQNR/L**1104-A	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASD322	CSTB-3.5	T-15F
ADQNR/L**15-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F
ADQNR/L**1506-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASD423	CSTB-3.5	T-15F
C*ADQNR/L**-15N	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F

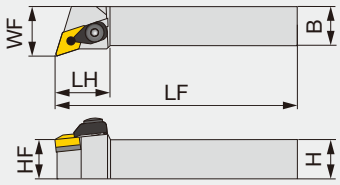
Reference pages: ADQNR/L, C-ADQNR/L: Inserts → B066 -, B075, CBN → B172 -, B176 -, PCD → B211

DDQNR/L

"One-Double" toolholder with 107.5° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **Q**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
DDQNR/L2020K15	20	20	125	35	20	25	0.8	DN**/FNGA1504...
DDQNR/L2020K1506	20	20	125	35	20	25	0.8	DN**/FNGA1506...
DDQNR/L2525M15	25	25	150	35	25	32	0.8	DN**/FNGA1504...
DDQNR/L2525M1506	25	25	150	35	25	32	0.8	DN**/FNGA1506...
DDQNR/L3225P15	32	25	170	35	32	32	0.8	DN**/FNGA1504...
DDQNR/L3225P1506	32	25	170	35	32	32	0.8	DN**/FNGA1506...

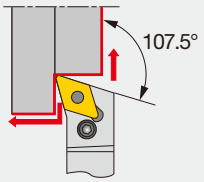
Note: Except for 57-type chipbreaker inserts
**RE : Standard corner radius

SPARE PARTS

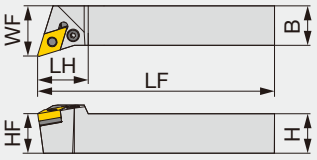
Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DDQNR/L**15	DCPM-43	DLCL43	DPIS43	DLCS43	LSD42	BP-10	LSP4	P-3	P-4
DDQNR/L**1506	DCPM-43	DLCL43	DPIS44	DLCS43	LSD42	BP-10	LSP4	P-3	P-4

PDQNR/L

Lever-lock toolholder with 107.5° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
PDQNR/L2525	25	25	150	32	25	32	0.8	DN**/FNGA1504...

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PDQNR/L...	LSD42 D30	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

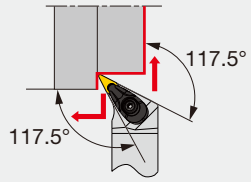
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

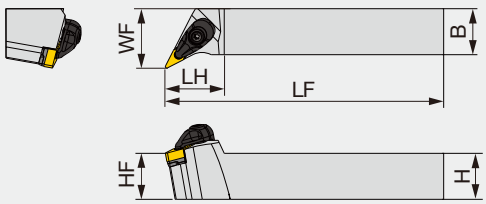
Reference pages: DDQNR/L, PDQNR/L: Inserts → B066 -, B075, CBN → B172 -, B176 -, PCD → B211

AVQNR/L

Double-clamp toolholder with 117.5° approach angle, for negative 35°/25° rhombic inserts



Cutting edge style **Q**





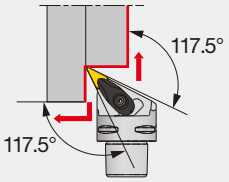
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AVQNR/L2020K1204-A	20	20	125	32	20	25	0.8	VN**1204...	3
AVQNR/L2020K16-A	20	20	125	35	20	25	0.8	VN**/YN**1604...	3
AVQNR/L2525M1204-A	25	25	150	32	25	32	0.8	VN**1204...	3
AVQNR/L2525M16-A	25	25	150	35	25	32	0.8	VN**/YN**1604...	3

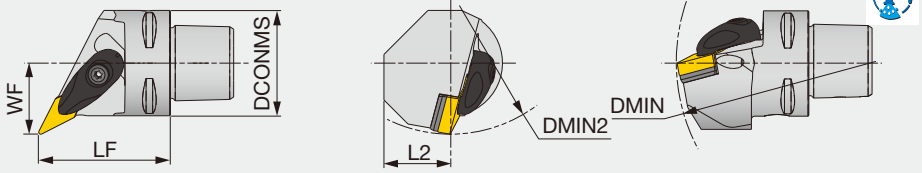
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

C-AVQNR/L

Double-clamp toolholder, with 117.5° approach angle, for negative 35°/25° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C4AVQNR/L27050-16N	40	50	25	27	145	110	0.8	VN**/YN**1604...

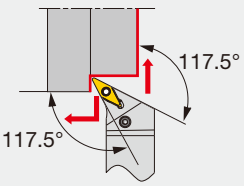
Applicable for 7 MPa coolant

SPARE PARTS

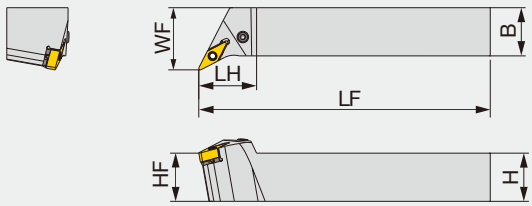
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AVQNR/L**1204-A	ACP3L-E	ACS-5W	BP-7	SP-2.5	ASV222	CSTB-3.0	T-15F
AVQNR/L**16-A	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F
C4AVQNR/L**-16N	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

PVQNR/L-Eco

Lever-lock toolholder with 117.5° approach angle, for negative 35° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVQNR/L2020K1204	20	20	125	30	20	25	0.8	VN**1204...	2
PVQNR/L2525M1204	25	25	150	30	25	32	0.8	VN**1204...	2

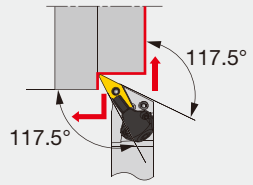
*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

SPARE PARTS

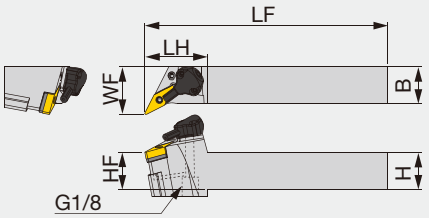
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PVQNR/L**1204	LSV212	LCS3V	P-2.5	LSP3	LCL3V

Reference pages: AVQNR/L, C-AVQNR/L: Inserts → B098 -, B110, CBN → B186 -, PCD → B188
PVQNR/L-Eco: Inserts → B098 -

Lever lock toolholders – 117.5° approach angle.
For negative 35°/25° rhombic insert. High-pressure coolant capability.



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE **	Insert	Torque*
PVQNR/L2020K16-CHP	20	20	125	42.5	20	32	0.8	VN**/YN**1604...	2
PVQNR/L2525M16-CHP	25	25	150	42.5	25	32	0.8	VN**/YN**1604...	2

*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PVQNR/L**16-CHP	LSV317	LCS3V	P-2.5	LSP3	LCL3V

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PVQNR/L**16-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Chipbreaker shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

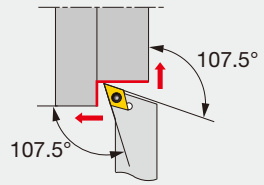
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

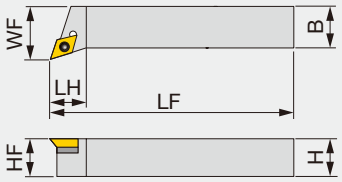
Reference pages: PVQNR/L-CHP: Inserts→ B098 -, CBN → B186 -, PCD → B212
Parts for coolant hose → C115

SDQCR/L

Screw-on toolholder with 107.5° approach angle, for positive 55° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SDQCR/L2020K11	20	20	125	20.5	20	25	0.8	DC**11T3...
SDQCR2525M11	25	25	150	21.5	25	32	0.8	DC**11T3...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SDQCR/L...	CSTB-3.5L	DTS5-3.5	SSD32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH6225	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

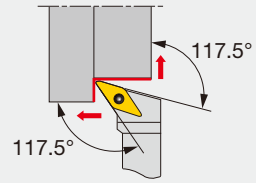
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

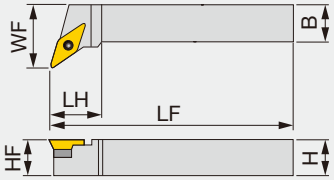
Reference pages: SDQCR/L: Inserts → B121 -, CBN → B194, PCD → B214

SVQCR/L

Screw-on toolholder with 117.5° approach angle, for positive 35° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SVQCR/L2020K16	20	20	125	35	20	27	0.8	VC**1604...
SVQCR/L2525M16	25	25	150	35	25	32	0.8	VC**1604...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SVQCR/L...	CSTB-3.5L	DTS5-3.5	SSV32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

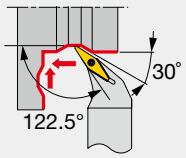
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

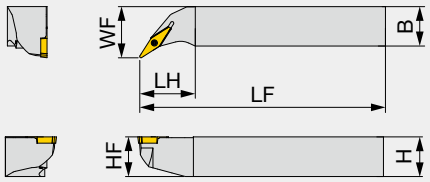
Reference pages: SVQCR/L: Inserts → B152 -, CBN → B209, PCD → B220

SYQBR/L

Screw-on toolholder with 122.5° approach angle, for positive 25° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SYQBR/L2020K16	20	20	125	35	20	27	0.8	YWMT16T3...
SYQBR/L2525M16	25	25	150	35	25	32	0.8	YWMT16T3...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
SYQBR/L...	CSTB-2.5L080	T-8F

INSERT SELECTION

P

Application	Finishing to medium cutting
Grade	T9225
Breaker Shape	ZM
Cutting conditions	B016

M

Application	Finishing to medium cutting
Grade	AH8015
Breaker Shape	ZM
Cutting conditions	B018

K

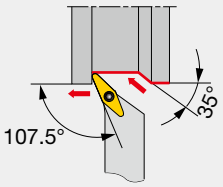
Application	Finishing to medium cutting
Grade	GT9530
Breaker Shape	ZM
Cutting conditions	B020

S

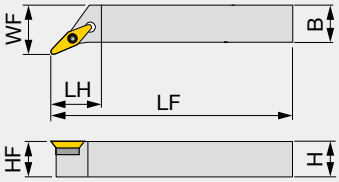
Application	Finishing to medium cutting
Grade	AH8015
Breaker Shape	ZM
Cutting conditions	B024

SVHCR/L

Screw-on toolholder with 107.5° approach angle, for positive 35° rhombic inserts



Cutting edge style **H**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SVHCR/L2525M22	25	25	150	33.8	25	32	0.8	VCG*2205...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SVHCR/L2525M22	CSTB-4.5L110P	DTS6-4.5	SSV42	P-4.5	T-15F

INSERT SELECTION

K

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker Shape	AL
Cutting conditions	B020

N

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker Shape	AL
Cutting conditions	B022

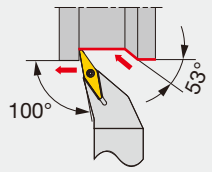
S

Application	Finishing to medium cutting
Grade	KS05F
Chipbreaker Shape	AL
Cutting conditions	B024

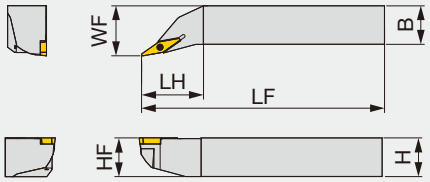
Reference pages: SYQBR/L: Inserts → B159, SVHCR/L: Inserts → B153

SYHBR/L

Screw-on toolholder with 100° approach angle, for positive 25° rhombic inserts



Cutting edge style **H**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
SYHBR/L2020K16	20	20	125	35	20	27	0.8	YWMT16T3...
SYHBR/L2525M16	25	25	150	40	25	32	0.8	YWMT16T3...

**RE : Standard corner radius

SPARE PARTS




Designation	Clamping screw	Wrench
SYHBR/L...	CSTB-2.5L080	T-8F

INSERT SELECTION

P	Application	Finishing to medium cutting
	Grade	T9225
	Breaker Shape	ZM 
	Cutting conditions	B016

M	Application	Finishing to medium cutting
	Grade	AH8015
	Breaker Shape	ZM 
	Cutting conditions	B018

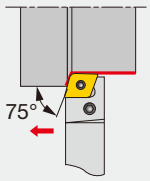
K	Application	Finishing to medium cutting
	Grade	GT9530
	Breaker Shape	ZM 
	Cutting conditions	B020

S	Application	Finishing to medium cutting
	Grade	AH8015
	Breaker Shape	ZM 
	Cutting conditions	B024

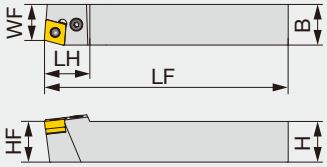
Reference pages: SYHBR/L: Inserts → B159

PCBNR/L

Lever-lock toolholder with 75° approach angle, for negative 80° rhombic inserts



Cutting edge style **B**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
PCBNR/L2525	25	25	150	28	25	22	0.8	CN**1204...

Note: 100° corner is used.
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCBNR/L2525	LSC42	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Medium cutting
Grade	TH10
Chipbreaker Shape	P
Cutting conditions	B010

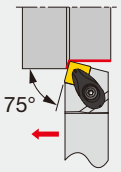
S

Application	Finishing	Medium cutting
Grade	AH8005	AH8005
Chipbreaker Shape	HRF	HRM
Cutting conditions	B012	

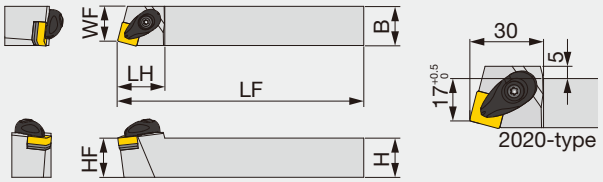
Reference pages: PCBNR/L: Inserts → B054 -, CBN → B168 -, PCD → B211

ASBNR/L

Double-clamp toolholder with 75° approach angle, for negative square inserts



Cutting edge style **B**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ASBNR/L2020K12-A	20	20	125	30	20	17	0.8	SN**1204...	3
ASBNR/L2525M12-A	25	25	150	30	25	22	0.8	SN**1204...	3
ASBNR/L2525M15-A	25	25	150	42.5	25	22	1.2	SN**1506...	6.4
ASBNR/L3232P15-A	32	32	170	42.5	32	27	1.2	SN**1506...	6.4
ASBNR/L3232P19-A	32	32	170	47.5	32	27	1.2	SN**1906...	6.4
ASBNR/L4040S19-A	40	40	250	47.5	40	35	1.2	SN**1906...	6.4

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench 1	Wrench 2
ASBNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	-
ASBNR/L**15-A	ACP5S	ACS-6W	BP-8.8	SP-2.5	ASS533	CSTB-5	-	KEYV-T20
ASBNR/L**19-A	ACP6S	ACS-6W	BP-8.8	SP-2.5	ASS634	CSTB-5	-	KEYV-T20

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF 	TSF 	TM 	TH 
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF 	SM 	SH 
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker Shape	All-round 	All-round 	All-round 
Cutting conditions	B008		

N

Application	Finishing	Medium cutting
Grade	DX140	TH10
Chipbreaker Shape	DIA 	P 
Cutting conditions	B010	

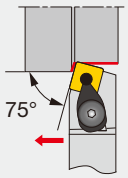
S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Chipbreaker Shape	CBN 	HRF 	HRM 
Cutting conditions	B012		

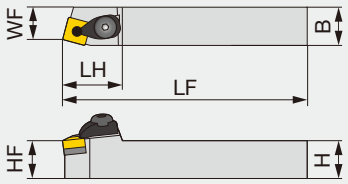
Reference pages: ASBNR/L: Inserts → B075 -, B077 -, CBN → B180, B182, PCD → B211

DSBNR/L

"One-Double" toolholder with 75° approach angle, for negative square inserts



Cutting edge style **B**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
DSBNR/L2020K12	20	20	125	35	20	17	0.8	SN**1204...
DSBNR/L2525M12	25	25	150	35	25	22	0.8	SN**1204...

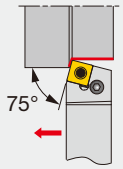
Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts
**RE: Standard corner radius

SPARE PARTS

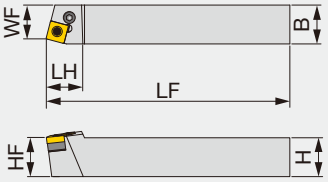
Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSBNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

PSBNR/L

Lever-lock toolholder with 75° approach angle, for negative square inserts



Cutting edge style **B**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
PSBNR/L1616	16	16	100	22	16	13	0.8	SN**0903...
PSBNR/L2020	20	20	125	28	20	17	0.8	SN**1204...
PSBNR/L2525	25	25	150	24	25	22	0.8	SN**1204...
PSBNR/L3232	32	32	170	40	32	27	1.2	SN**1906...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSBNR/L1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSBNR/L2*2*	LSS42	LCS4	P-3	LSP4	LCL4
PSBNR/L3232	LSS63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Finishing	Medium cutting
Grade	DX140	TH10
Chipbreaker Shape	DIA	P
Cutting conditions	B010	

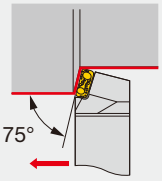
S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Chipbreaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

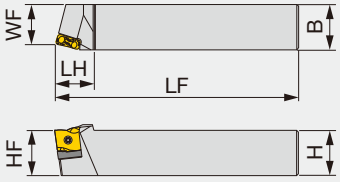
Reference pages: DSBNR/L, PSBNR/L: Inserts → B077 -, CBN → B180 -, B182 -, PCD → B211

TLBNR/L

Screw-on toolholder for roughing with 75° approach angle, for negative tangential inserts



Cutting edge style **B**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
TLBNR/L4040R24	40	40	200	35	40	35	LNMX2410**R/L...

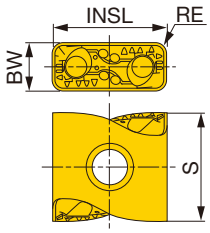
SPARE PARTS

Designation	Clamping screw	Shim	Spring pin	Wrench
TLBNR4040R24	CSTB-5L163-S	TSL24R	PSP-16	KEYV-T20
TLBNL4040R24	CSTB-5L163-S	TSL24L	PSP-16	KEYV-T20

INSERT

LNMX12/16/24





P	Steel	★	★	★	
M	Stainless	☆		☆	
K	Cast iron	☆	☆	☆	
N	Non-ferrous				
S	Superalloys				
H	Hard materials				

★ : First choice
☆ : Second choice

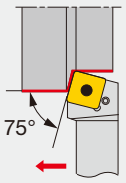
Designation	HAND	RE	Coated			BW	INSL	S
			T9115	T9125	AH725			
LNMX120408R-TDR	R	0.8	●	●		4.8	12	11.6
LNMX120408L-TDR	L	0.8	●	●		4.8	12	11.6
LNMX120412R-TDR	R	1.2	●	●		4.8	12	11.6
LNMX120412L-TDR	L	1.2	●	●		4.8	12	11.6
LNMX160608R-TDR	R	0.8	●	●		6.4	16.2	13.5
LNMX160608L-TDR	L	0.8	●	●		6.4	16.2	13.5
LNMX160612R-TDR	R	1.2	●	●		6.4	16.2	13.5
LNMX160612L-TDR	L	1.2	●	●		6.4	16.2	13.5
LNMX160616R-TDR	R	1.6	●	●		6.4	16.2	13.5
LNMX160616L-TDR	L	1.6	●	●		6.4	16.2	13.5
LNMX241016R-TDR	R	1.6	●	●		9.4	24	20.5
LNMX241016L-TDR	L	1.6	●	●		9.4	24	20.5
LNMX241024R-TDR	R	2.4	●	●		9.4	24	20.5
LNMX241024L-TDR	L	2.4	●	●		9.4	24	20.5
LNMX160608R-MDR	R	0.8	●		●	6.4	16.2	13.5
LNMX160608L-MDR	L	0.8	●		●	6.4	16.2	13.5
LNMX160612R-MDR	R	1.2	●		●	6.4	16.2	13.5
LNMX160612L-MDR	L	1.2	●		●	6.4	16.2	13.5
LNMX160608R-TWR	R	0.8	●			6.4	16.2	13.5
LNMX160608L-TWR	L	0.8	●	●		6.4	16.2	13.5
LNMX160612R-TWR	R	1.2	●	●		6.4	16.2	13.5
LNMX160612L-TWR	L	1.2	●	●		6.4	16.2	13.5

● : Line up

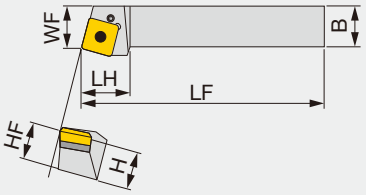
Reference pages: Standard cutting conditions → C119

HSRNR/L

Retract-pin toolholder with 75° approach angle, for negative square inserts



Cutting edge style **R**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert
HSRNR/L4040R	40	40	200	50	40	43	1.6	SNMM3109...
HSRNR/L5050S	50	50	250	60	50	53	1.6	SNMM3109...

**RE: Standard corner radius

SPARE PARTS

Designation	Pin	Clamping screw	Shim	Wrench
HSRNR/L...	SW99	LS-8	NAS-04	P-4

INSERT SELECTION

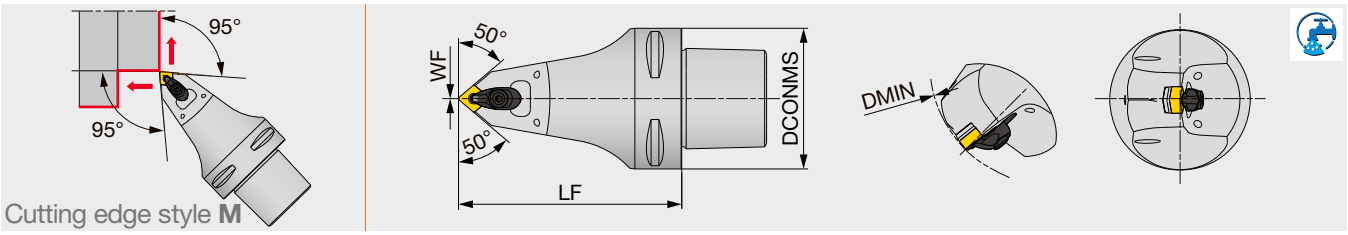
P

Application	Heavy cutting
Grade	T9225
Chipbreaker Shape	65 
Cutting conditions	B004

Reference pages: HSRNR/L: Inserts → B083

C-ACMNN

Double-clamp toolholder, with 50° approach angle, for negative 80°/70° rhombic inserts



Designation	DCONMS	LF	WF	DMIN	RE**	Insert
C6ACMNN00100-0904N	63	100	0	110	0.8	CN**/GNMG0904...
C6ACMNN00140-0904N	63	140	0	110	0.8	CN**/GNMG0904...

**RE: The holder measurements are true with this insert radius
Applicable for 7 MPa coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Spring pin	Wrench
C6ACMNN001**-0904N	ACP3S-E	ACS-5W	ASC322	CSTB-3.5	BP-7	SP-2.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

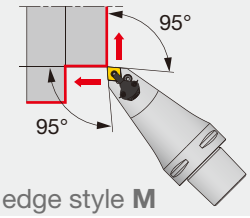
Reference pages: C-ACMNN: Inserts→ B054, B075, CBN → B168
Parts for coolant hose → C115

TUNGCAP

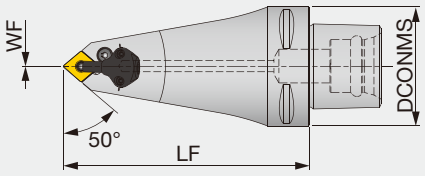
C-PCMNN-CHP

Direct connection

Lever lock toolholder with TungCap connection.
For negative 80°/70° rhombic insert. High-pressure coolant capability.



Cutting edge style **M**



Designation	DCONMS	LF	WF	RE**	Insert	Torque*
C6PCMNN00130-12-CHP	63	130	0	0.8	CN**/GNGA1204...	3

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant
**RE: Standard corner radius

For external turning only.

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C6PCMNN00130-12-CHP	LSC42	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C6PCMNN00130-12-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

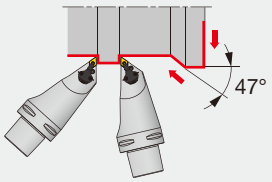
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-PCMNN-CHP: Inserts→ B054, CBN → B168 -, PCD → B211
Parts for coolant hose → C115

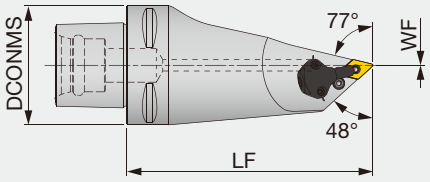
TUNGCAP
C-PDMNL-CHP

Direct connection

Lever lock toolholder with TungCap connection.
For negative 55°/45° rhombic insert. High-pressure coolant capability.



Cutting edge style **M**



Left hand (L) shown.

Designation	DCONMS	LF	WF	RE **	Insert	Torque*
C6PDMNL00130-1104-CHP	63	130	0	0.8	DN**/FNMG1104...	2

*Torque: Recommended torque (N·m) for clamping
Applicable for 14 MPa pressure coolant
**RE: Standard corner radius

For external turning only.

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C6PDMNL00130-1104-CHP	ELSD32	LCS3	P-2.5	LSP3	LCL33L

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C6PDMNL00130-1104-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P

Application	Finishing	Medium cutting
Grade	T9215	T9215
Chipbreaker shape	TSF	TM
Cutting conditions	B004	

M

Application	Finishing	Medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	SS	SM
Cutting conditions	B006	

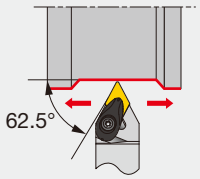
K

Application	Medium cutting
Grade	T515
Chipbreaker shape	TM
Cutting conditions	B008

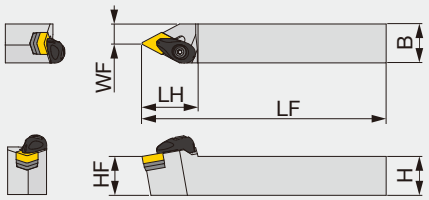
Reference pages: C-PDMNL-CHP: Inserts→ B066 -, B075, CBN → B172
Parts for coolant hose → C115

ADPNN

Double-clamp toolholder with 62.5° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **P**



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ADPNN2020K15-A	20	20	125	36	20	7.5	0.8	DN**/FNGA1504...	3
ADPNN2525M15-A	25	25	150	36	25	12.5	0.8	DN**/FNGA1504...	3

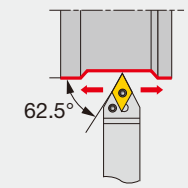
*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

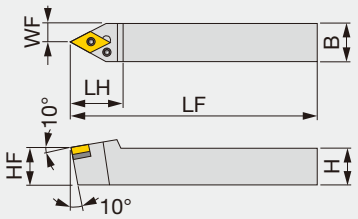
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ADPNN**15-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F

PDPNN

Lever-lock toolholder with 62.5° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style **P**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
PDPNN2525	25	25	150	36	25	12.5	0.8	DN**/FNGA1504...
PDPNN2525M15E	25	25	150	36	25	12.5	0.8	DN**/FNGA1506...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PDPNN2525	LSD42	LCS4	P-3	LSP4	LCL4
PDPNN2525M15E	ELSD42	ELCS4	P-3	LSP4S	LCL44

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

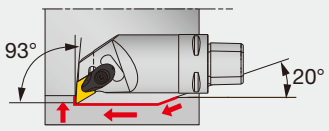
Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

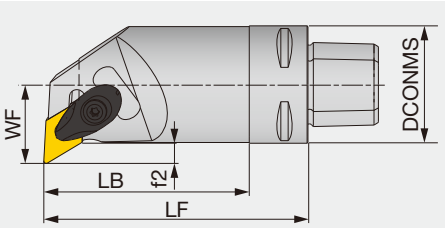
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

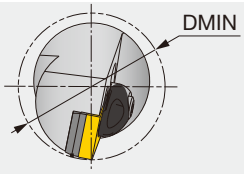
Reference pages: ADPNN, PDPNN: Inserts → B066 -, CBN → B172 -, B176, PCD → B211

Double-clamp internal toolholder, for negative 55°/45° rhombic inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	DMIN	DCONMS	LF	LB	WF	f2	RE	Insert
C4ADUNR20070-15	38	40	70	50	20	5	0.8	DN**/FNGA1504...
C4ADUNR27090-15	50	40	90	-	27	7	0.8	DN**/FNGA1504...

Applicable for 7 MPa coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Spring pin	Wrench
C*ADUNR/L...	ACP4S	ACS-5W	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Option: ASD423 (Shim for DN**1506**)

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

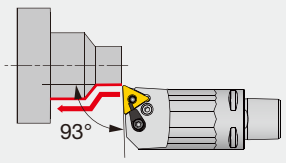
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-ADUNR/L: Inserts→ B066 -, CBN → B172 -, B176, PCD → B211
Parts for coolant hose → C115

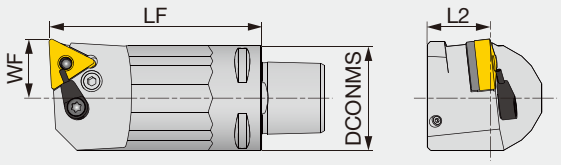
TUNGCAP

C-PTUNL-CHP

Lever-lock toolholder, with 93° approach angle, for negative 60° triangular inserts, with high pressure coolant capability



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	LF	L2	WF	RE	Insert
C3PTUNL18040-16-CHP	32	40	19	18	0.8	TN**1604...
C3PTUNL18065-16-CHP	32	65	19	18	0.8	TN**1604...

Applicable for 14 MPa coolant
Cannot be used for boring

SPARE PARTS

Designation	Coolant unit	Shim	Lever	Clamping screw	Spring pin	Wrench
C3PTUNL...	S-CU-CHP	LST317	LCL3	LCS3	LSP3	P-2.5

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

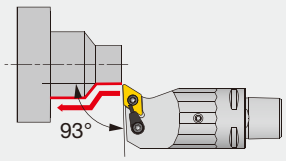
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

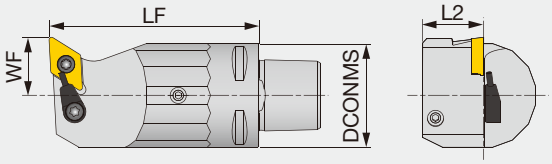
Reference pages: C-PTUNL-CHP: Inserts→ B087 -, CBN → B182 -, PCD → B212
Parts for coolant hose → C115

TUNGCAP
C-SDUCL-CHP

Screw-on toolholder, with 93° approach angle, for positive 55° rhombic inserts, with high pressure coolant capability



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	LF	L2	WF	RE	Insert
C3SDUCL18040-11-CHP	32	40	19	18	0.8	DC**11T3...
C3SDUCL18065-11-CHP	32	65	19	18	0.8	DC**11T3...

Applicable for 14 MPa coolant
Cannot be used for boring

SPARE PARTS





Designation	Clamping screw	Coolant unit	Wrench
C3SDUCL...	CSTB-4S	S-CU-CHP	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH6225	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

H

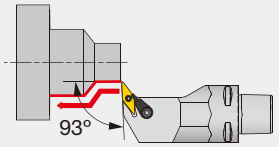
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: C-SDUCL-CHP: Inserts→ B121 -, CBN → B194, PCD → B214
Parts for coolant hose → C115

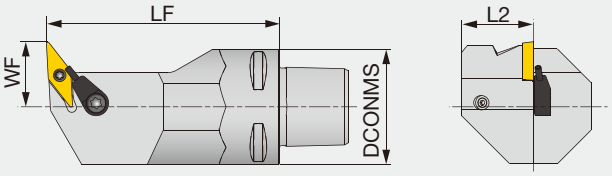
TUNGCAP

C-SVUCL-CHP

Screw-on toolholder, with 93° approach angle, for positive 35° rhombic inserts, with high pressure coolant capability



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	LF	L2	WF	RE	Insert
C3SVUCL18065-11-CHP	32	65	20	18	0.4	VC**1103...

Applicable for 14 MPa coolant
Cannot be used for boring

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
C3SVUCL18065-11-CHP	CSTB-2.5	S-CU-CHP	T-8F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

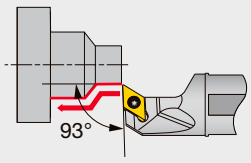
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

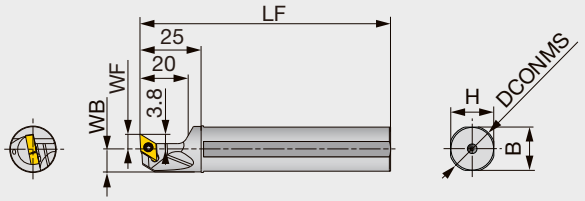
Reference pages: C-SVUCL-CHP: Inserts → B152
Parts for coolant hose → C115

JS-SDUXL

Screw-on round-shank toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	WF	LF	H	B	WB	RE**	Insert	Torque*
JS14H-SDUXL07	14	6	100	13	13	6.75	0.2	DX*U0703**L...	0.9
JS159F-SDUXL07	15.875	6	85	15	15	7.687	0.2	DX*U0703**L...	0.9
JS16F-SDUXL07	16	6	85	15	15	7.75	0.2	DX*U0703**L...	0.9
JS19G-SDUXL07	19.05	6	90	18	18	9.275	0.2	DX*U0703**L...	0.9
JS19X-SDUXL07	19.05	6	120	18	18	9.275	0.2	DX*U0703**L...	0.9
JS20G-SDUXL07	20	6	90	19	19	9.75	0.2	DX*U0703**L...	0.9
JS20X-SDUXL07	20	6	120	19	19	9.75	0.2	DX*U0703**L...	0.9
JS22X-SDUXL07	22	10	120	21	21	10.75	0.2	DX*U0703**L...	0.9
JS25H-SDUXL07	25	10	100	24	24	12.25	0.2	DX*U0703**L...	0.9
JS254X-SDUXL07	25.4	10	120	24	24	12.45	0.2	DX*U0703**L...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use left-hand toolholders (L) with left-hand inserts (L).

SPARE PARTS




Designation	Clamping screw	Wrench
JS**-SDUXL07	SR34-514	T-7F

INSERT SELECTION

Swiss lathes

P	Application	Finishing	Medium cutting
	Grade	SH725	AH725
	Chipbreaker shape	JSS 	JTS 
	Cutting conditions	C118	

M	Application	Finishing	Medium cutting
	Grade	SH725	AH725
	Chipbreaker shape	JSS 	JTS 
	Cutting conditions	C118	

Small CNC lathes

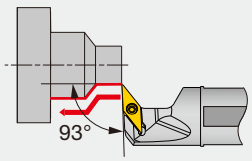
P	Application	Finishing	Medium cutting
	Grade	AH725	AH725
	Chipbreaker shape	SS 	TS 
	Cutting conditions	C118	

M	Application	Finishing	Medium cutting
	Grade	AH8015	AH8015
	Chipbreaker shape	SS 	TS 
	Cutting conditions	C118	

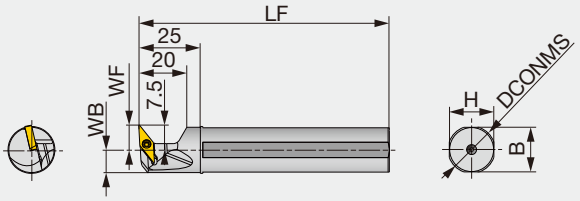
Reference pages: JS-SDUXL: Inserts → B126 -
Standard cutting conditions → C118

JS-SVUXL

Screw-on round-shank toolholder with 93° approach angle, for VXGU inserts



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	WF	LF	H	B	WB	RE**	Insert	Torque*
JS159F-SVUXL09	15.875	10	85	15	15	7.7	0.2	VXGU09T2**L...	0.9
JS16F-SVUXL09	16	10	85	15	15	7.7	0.2	VXGU09T2**L...	0.9
JS19G-SVUXL09	19.05	10	90	18	18	9.2	0.2	VXGU09T2**L...	0.9
JS19X-SVUXL09	19.05	10	120	18	18	9.2	0.2	VXGU09T2**L...	0.9
JS20G-SVUXL09	20	10	90	19	19	9.7	0.2	VXGU09T2**L...	0.9
JS20X-SVUXL09	20	10	120	19	19	9.7	0.2	VXGU09T2**L...	0.9
JS22X-SVUXL09	22	10	120	21	21	10.7	0.2	VXGU09T2**L...	0.9
JS25H-SVUXL09	25	10	100	24	24	12.2	0.2	VXGU09T2**L...	0.9
JS254X-SVUXL09	25.4	10	120	24	24	12.4	0.2	VXGU09T2**L...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use left-hand toolholders (L) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-SVUXL09	SR34-508	T-7F

INSERT SELECTION

P

Application	Finishing
Grade	SH725
Chipbreaker shape	JRP 
Cutting conditions	C118

M

Application	Finishing
Grade	SH725
Chipbreaker shape	JRP 
Cutting conditions	C118

Reference pages: JS-SVUXL: Inserts → B155
Standard cutting conditions → C118

PARTS FOR COOLANT HOSE

Connecting hose

Fig. 1

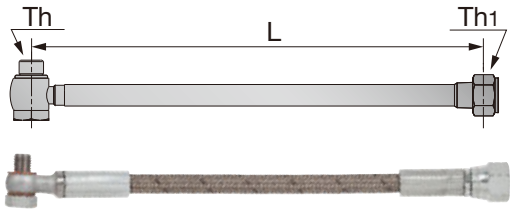
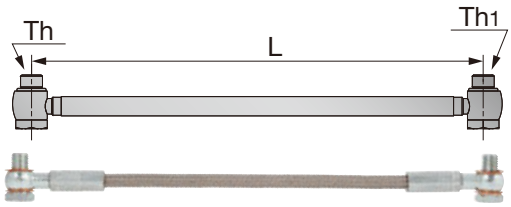
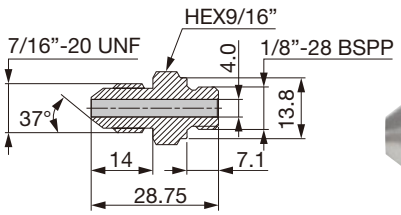


Fig. 2



Designation	L	Th	Th1	Max. pressure (Mpa)	Fig.
CHP-HOSE-G1/8-7/16-200BS	200	G1/8"-28 BSPP	7/16"-20 UNF	26	1
CHP-HOSE-G1/8-7/16-250BS	250	G1/8"-28 BSPP	7/16"-20 UNF	26	1
CHP-HOSE-5/16-7/16-200BS	200	5/16"-24UNF	7/16"-20 UNF	20	1
CHP-HOSE-5/16-G1/8-200BS	200	5/16"-24UNF	G1/8"-28 BSPP	20	1
CHP-HOSE-G1/8-G1/8-200BB	200	G1/8"-28 BSPP	G1/8"-28 BSPP	26	2
CHP-HOSE-G1/8-G1/8-250BB	250	G1/8"-28 BSPP	G1/8"-28 BSPP	26	2

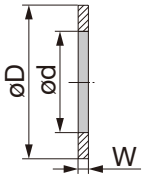
Connector





Designation
CHP-NIPPLE-G1/8-7/16UNF

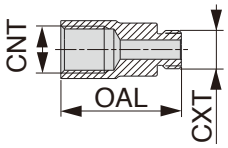
Seal washer





Designation	øD	ød	W
CHP-COPPER-SEAL1/8	15	10	1
CHP-COPPER-SEAL5/16	11.9	8.15	1.35
CHP-COPPER-SEAL5/16-2.5	9.4	8	2.5

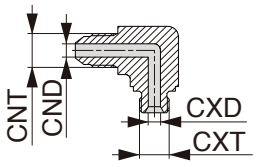
Connector for small lathe with seal washer





Designation	CNT	CXT	OAL
CHP-CONECTOR5/16-G1/8	G1/8"-28 BSPP	5/16"-24 UNF	25
CHP-CONNECTOR-G1/8-R1/8	G1/8"-28 BSPP	R1/8"-28 BSPT	25

Connector elbow





Designation	CNT	CND	CXT	CXD
CHP-ELBOW-90-G1/8-7/16UNF	7/16"-20 UNF	4.4	1/8"-28 BSPP	4
CHP-ELBOW-90-5/16-7/16UNF	7/16"-20 UNF	4.4	5/16"-24 UNF	4

STANDARD CUTTING CONDITIONS

ADDMULTITURN

Double-sided 6-corner insert

ISO	Operation	Chipbreaker	Grade	Depth of cut: *ap* (mm)		Feed: *f* (mm/rev)		Cutting speed
				Front turning	Back turning	Front turning	Back turning	*Vc* (m/min)
P	Finishing	TSF	T9215	0.2 - 1.5	0.2 - 1.5	0.08 - 0.4	0.2 - 1.2	150 - 400
		TSF	T9225	0.2 - 1.5	0.2 - 1.5	0.08 - 0.4	0.2 - 1.2	80 - 300
	Medium to heavy cutting	TM	T9215	0.5 - 2.5	0.5 - 2.5	0.2 - 0.6	0.4 - 1.2	150 - 400
		TM	T9225	0.5 - 2.5	0.5 - 2.5	0.2 - 0.6	0.4 - 1.2	80 - 300
M	Finishing	TSF	T9215	0.2 - 1.5	0.2 - 1.5	0.08 - 0.4	0.2 - 1.2	100 - 250
		TSF	AH8015	0.2 - 1.5	0.2 - 1.5	0.08 - 0.4	0.2 - 1.2	90 - 190
	Medium to heavy cutting	TM	T9215	0.5 - 2.5	0.5 - 2.5	0.2 - 0.6	0.4 - 1.2	100 - 250
		TM	AH8015	0.5 - 2.5	0.5 - 2.5	0.2 - 0.6	0.4 - 1.2	90 - 190
K	Finishing	TSF	T9215	0.2 - 1.5	0.2 - 1.5	0.08 - 0.4	0.2 - 1.2	140 - 500
	Medium to heavy cutting	TM	T9215	0.5 - 2.5	0.5 - 2.5	0.2 - 0.6	0.4 - 1.2	140 - 500
S	Finishing	TSF	AH8015	0.2 - 1.5	0.2 - 1.5	0.08 - 0.4	0.2 - 1.2	20 - 80
	Medium to heavy cutting	TM	AH8015	0.5 - 2.5	0.5 - 2.5	0.2 - 0.6	0.4 - 1.2	20 - 80

Single-sided 3-corner insert

ISO	Operation	Chipbreaker	Grade	Depth of cut: *ap* (mm)		Feed: *f* (mm/rev)		Cutting speed
				Front turning	Back turning	Front turning	Back turning	*Vc* (m/min)
P	Medium to heavy cutting	TM	T9215	0.5 - 4	0.5 - 2	0.2 - 0.6	0.4 - 2	150 - 400
M	Medium to heavy cutting	TM	T9215	0.5 - 4	0.5 - 2	0.2 - 0.6	0.4 - 2	100 - 250
K	Medium to heavy cutting	TM	T9215	0.5 - 4	0.5 - 2	0.2 - 0.6	0.4 - 2	140 - 500

ADDYAXISTURN

ISO	Operation	Chipbreaker	Grade	Cutting speed *Vc* (m/min)
P	Finishing	ZF	T9215	150 - 400
	Medium to heavy cutting	TM	T9215	150 - 400
M	Finishing	ZF	T9215	100 - 250
	Medium to heavy cutting	TM	T9215	100 - 250
K	Finishing	ZF	T9215	140 - 500
	Medium to heavy cutting	TM	T9215	140 - 500

Reference pages: ATXOR/L → C065, STXCR/L-CHP-MC → C066, C6STECN-Y-CHP → C069, C6SDNCN-Y-CHP → C070

STANDARD CUTTING CONDITIONS

TURN TEN FEED

For HD holder
(High Depth of Cut)

ISO	Insert	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)	
				T9215	T9225
P	POMG110612-MNW	0.8 - 5.5	0.4 - 1.2	150 - 400	120 - 300
	POMG130612-MNW	1 - 7	0.4 - 1.3	150 - 400	120 - 300

ISO	Insert	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)
				AH8015
M	POMG110612-MNW	0.8 - 5.5	0.4 - 1.2	50 - 150
	POMG130612-MNW	1 - 7	0.4 - 1.3	50 - 150
S	POMG110612-MNW	0.8 - 5.5	0.4 - 1.2	20 - 80
	POMG130612-MNW	1 - 7	0.4 - 1.3	20 - 80

For HF holder
(High Feed)

ISO	Insert	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)	
				T9215	T9225
P	POMG110612-MNW	1 - 2.5	0.5 - 1.5	150 - 400	120 - 300
	POMG130612-MNW	1 - 3	0.5 - 2	150 - 400	120 - 300

ISO	Insert	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)
				AH8015
M	POMG110612-MNW	1 - 2.5	0.5 - 1.5	50 - 150
	POMG130612-MNW	1 - 3	0.5 - 2	50 - 150
S	POMG110612-MNW	1 - 2.5	0.5 - 1.5	20 - 80
	POMG130612-MNW	1 - 3	0.5 - 2	20 - 80

Reference pages: PPXOR/L-HD → C067

STANDARD CUTTING CONDITIONS

MINIFORCE TURN

Applications	ISO	Workpiece material	Priority	Chipbreaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
Swiss lathes	P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	JS	SH725	50 - 180	0.1 - 3	0.03 - 0.1
			Sharpness	JSS	SH725	50 - 180	0.1 - 1.5	0.03 - 0.1
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	JS	SH725	50 - 180	0.1 - 1.25	0.03 - 0.1
			Sharpness	JSS	SH725	50 - 180	0.1 - 1.5	0.03 - 0.1
Small CNC lathes	P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	SS	AH725	50 - 180	0.15 - 1.5	0.05 - 0.2
				TS	AH725	50 - 180	0.3 - 2	0.08 - 0.3
			Surface quality	SS	NS9530	50 - 200	0.15 - 1.5	0.05 - 0.2
				TS	NS9530	50 - 200	0.3 - 2	0.08 - 0.3
			Wear resistance	SS	GT9530	50 - 250	0.15 - 1.5	0.05 - 0.2
				TS	GT9530	50 - 250	0.3 - 2	0.08 - 0.3
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	SS	AH725	50 - 150	0.15 - 1.5	0.05 - 0.2
			Fracture resistance	TS	AH725	50 - 150	0.3 - 2	0.08 - 0.3

DIMPLEFX

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
K	Grey cast irons	FX105	700 (300 - 1000)	1 (0.05 - 3)	0.3 (0.05 - 0.6)
	Ductile cast irons	FX105	200 (100 - 300)	1 (0.05 - 3)	0.2 (0.05 - 0.4)

Reference pages: CCLNR/L-RD → C022, JSWLXR/L, JSWL2XR/L → C029,
CDJNR/L-RD → C040, JSDJXR/L, JSDJ2XR/L → C045
JSVJXR/L, JSVJ2XR/L → C047, CVVNN-RD → C051, CDNNN-RD → C072,
CSSNR/L → C082, CHSNR/L → C083, JS-SDUXL, JS-SVUXL → C114

STANDARD CUTTING CONDITIONS

TURNTEC

*Values in red are for facing.

LNMX1204

ISO	Workpiece material	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut: *ap* (mm)		Feed: *f* (mm/rev)	
					RE : 0.8	RE : 1.2	RE : 0.8	RE : 1.2
P	Steel S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8

LNMX1606

ISO	Workpiece material	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut: *ap* (mm)			Feed: *f* (mm/rev)		
					RE : 0.8	RE : 1.2	RE : 1.6	RE : 0.8	RE : 1.2	RE : 1.6
P	Steel S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TWR	T9115	120 - 250	1 - 8 1 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
		TWR	T9125	80 - 180	1 - 8 1 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		MDR	T9115	100 - 150	1.5 - 6 0.5 - 3.2	1.5 - 7 0.8 - 3.2	-	0.1 - 0.5	0.15 - 0.7	-
		MDR	AH725	50 - 150	1.5 - 6 0.5 - 3.2	1.5 - 7 0.8 - 3.2	-	0.1 - 0.5	0.15 - 0.7	-
		TWR	T9115	100 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
		TWR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-

LNMX2410

ISO	Workpiece material	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut: *ap* (mm)		Feed: *f* (mm/rev)	
					RE : 1.6	RE : 2.4	RE : 1.6	RE : 2.4
P	Steel S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
		TDR	T9125	80 - 150	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
		TDR	T9125	80 - 150	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1

TURNFEED

ISO	Workpiece material	Grade	Chipbreaker	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
P	Mild and low carbon steels SS400, SM490, etc. E275A, C15E4, etc. < 180 HB	T9225	ML	100 - 300	0.5 - 2.5	0.5 - 2.5
	Carbon and alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc. < 300HB	T9215	ML	120 - 350	0.5 - 2.5	0.5 - 2.5
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc. < 250 HB	T9225	ML	100 - 300	0.5 - 2.5	0.5 - 2.5
K	Grey and ductile cast irons FC250, FCD400, etc. 250, 400-15S, etc.	AH120	ML	100 - 250	0.5 - 2.5	0.5 - 2.5

Note: When the side cutting edge is used for facing, the maximum feed is limited to within 1 mm/rev.

Reference pages: TLANR/L → C054, XWXPR/L → C068, TLFNR/L → C090, TLBNR/L → C103

STANDARD CUTTING CONDITIONS

Y-PRO SERIES

For negative insert

ISO	Operation	Chipbreaker	Grades	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)		
						Low carbon steels, alloy steels	Medium carbon steels, alloy steels	High carbon steels, alloy steels
P	Finishing	ZF	GT9530	0.2 - 1.5	0.03 -0.2	150 - 300	150 - 300	150 - 300
			NS9530	0.2 - 1.5	0.03 -0.2	150 - 300	150 - 300	150 - 300
			T9225	0.2 - 1.5	0.03 -0.2	120 - 300	120 - 300	100 - 250
			T9235	0.2 - 1.5	0.03 -0.2	50 - 200	50 - 200	50 - 150
	Finishing to medium	ZM	GT9530	0.7 - 2	0.15 -0.4	150 - 300	150 - 300	150 - 300
			NS9530	0.7 - 2	0.15 -0.4	150 - 300	150 - 300	150 - 300
			T9225	0.7 - 2	0.15 -0.4	120 - 300	120 - 300	100 - 250
			T9235	0.7 - 2	0.15 -0.4	50 - 200	50 - 200	50 - 150
							Stainless steels	
M	Finishing	ZF	AH8015	0.2 - 1.5	0.03 -0.2	50 - 150	50 - 150	50 - 150
	Finishing to medium	ZM	AH8015	0.7 - 2	0.15 -0.4	50 - 150	50 - 150	50 - 150
							Casrt iron	
K	Finishing	ZF	T9225	0.2 - 1.5	0.03 -0.2	140 - 500	140 - 500	140 - 500
	Finishing to medium	ZM	T9225	0.7 - 2	0.15 -0.4	140 - 500	140 - 500	140 - 500
							Heat-resistant alloys	
S	Finishing	ZF	AH8015	0.2 - 1.5	0.03 -0.2	20 - 80	20 - 80	20 - 80
	Finishing to medium	ZM	AH8015	0.7 - 2	0.15 -0.4	20 - 80	20 - 80	20 - 80

For positive insert

ISO	Operation	Chipbreaker	Grades	Depth of cut *ap* (mm)	Feed *f* (mm/rev)	Cutting speed: *Vc* (m/min)		
						Low carbon steels, alloy steels	Medium carbon steels, alloy steels	High carbon steels, alloy steels
P	Finishing to medium	ZF	GT9530	0.2 - 1.5	0.05 -0.25	150 - 300	150 - 300	150 - 300
			T9225	0.2 - 1.5	0.05 -0.25	100 - 300	80 - 300	80 - 250
		ZM	GT9530	0.5 - 2	0.05 -0.3	150 - 300	150 - 300	150 - 300
			T9225	0.5 - 2	0.05 -0.3	100 - 300	80 - 300	80 - 250
							Stainless steels	
M	Finishing to medium	ZF	AH8015	0.2 - 1.5	0.05 -0.25	50 - 150	50 - 150	50 - 150
		ZM	AH8015	0.5 - 2	0.05 -0.3	50 - 150	50 - 150	50 - 150
							Casrt iron	
K	Finishing to medium	ZF	T9225	0.2 - 1.5	0.05 -0.25	140 - 500	140 - 500	140 - 500
		ZM	T9225	0.5 - 2	0.05 -0.3	140 - 500	140 - 500	140 - 500
							Heat-resistant alloys	
S	Finishing to medium	ZF	AH8015	0.2 - 1.5	0.05 -0.25	20 - 80	20 - 80	20 - 80
		ZM	AH8015	0.5 - 2	0.05 -0.3	20 - 80	20 - 80	20 - 80

FIXRTURN

ISO	Workpiece material	Chipbreaker	Grade	Cutting Speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	6RS	T9215	120 - 350	0.5 - 2	0.5 - 1
		6RS	T9225	100 - 300	0.5 - 2	0.5 - 1
		6RS	NS9530	150 - 250	0.5 - 2	0.5 - 1
		6RM	T9215	120 - 350	1 - 3	0.5 - 1
		6RM	T9225	100 - 300	1 - 3	0.5 - 1
		6RM	NS9530	150 - 250	1 - 3	0.5 - 1

Reference pages: SYJBR/L → C049, SYIBN→ C053, SRGCR/L-6F→ C064, SRDCR/L-6F→ C078
SYQBR/L, SVHCR/L→ C098

Internal Toolholder



Internal Toolholder - Content structure

- Indexable toolholders are listed by cutting edge shape.
- Toolholders in the catalog are our standard items.

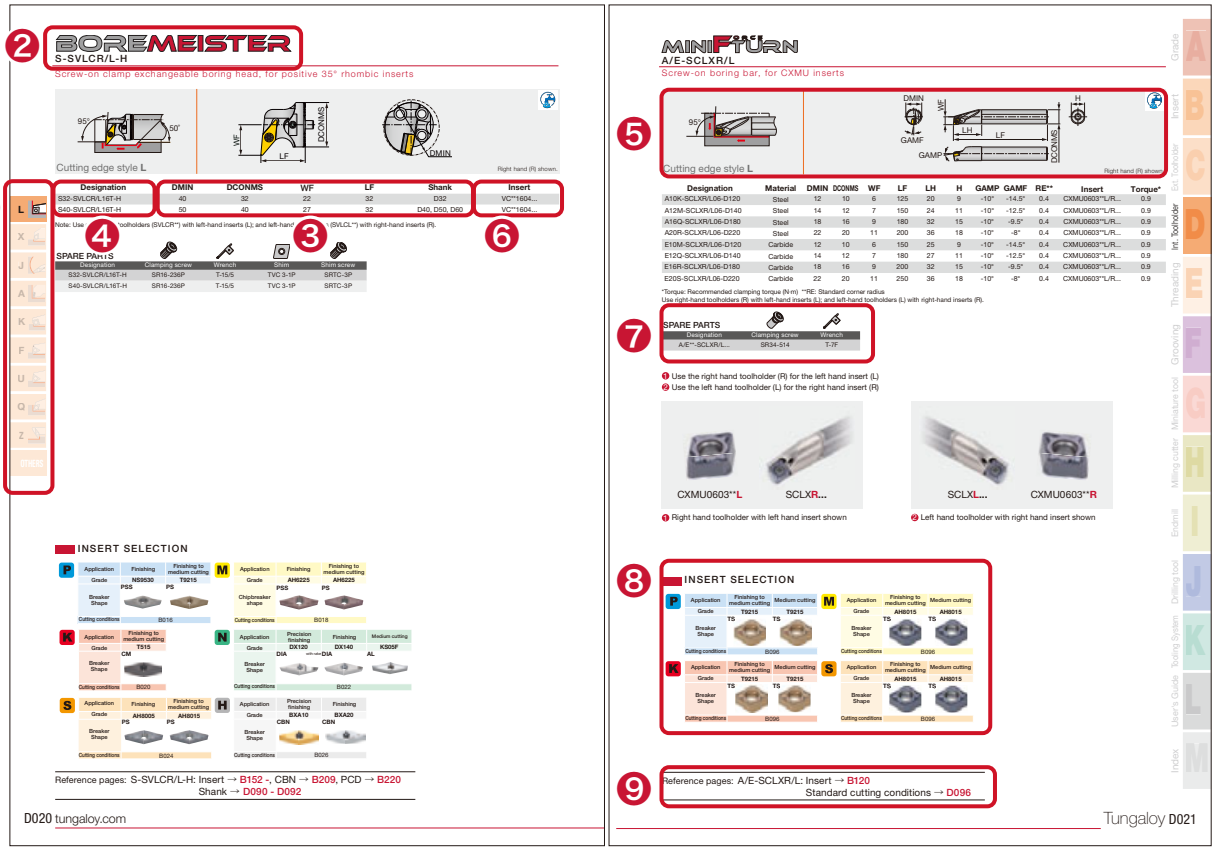
How to use the page

Method ① Select the cutting edge shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (❹) in the dimension table (❸). Applicable inserts are shown in (❻) and (❽).

Method ② Select the cutting edge on D003 and check the details on the product page.

Method ③ Select the series name of a toolholder on D003 and check the details on each page.

Method ④ Select an item from Quick Guide on D004 - D009.



❶ : Cutting edge shape
❷ : Series name of indexable boring bars
❸ : Dimension table
❹ : Toolholder designation
e.g. To select right-handed steel shank with minimum machining diameter ø13

→ **A10K-SDXXR07-D130**

❺ : Dimension drawing (conforming to ISO13399)
❻ : Applicable insert
❼ : Spare parts
❽ : Insert selection
❾ : Reference pages

When ordering
- Please specify the designation and quantity.
  e.g. **A12M-SDZXR/L07-D140 ...** 1 (one boring bar per package)
  * Inserts are not included. Please order those separately.

Main products

L 95° D014
X 100° D034
J 142° D038
A 91° D040
K 75° D041
F 91° D045
U 93° D052
Q 107.5° D076
Z 93° D084
OTHERS D090



BOREMEISTER

Boring head suitable for L/D=10

Shank **ø16 - 60 mm**

D010



MINIFORCE TURN

Economical double-sided inserts with excellent sharpness

Shank **ø10 - 20 mm**

D013



ISOECO TURN

Small-sized “Eco” insert series for maximized profits

Shank **ø16 - 32 mm**

D025 -, D031 -
D049 -, D067
D069 -, D074



STREAMJETBAR

Highly rigid toolholders providing good chip evacuation

Shank **ø4 - 50 mm**

D011



Y-PRO SERIES

Inserts with 25° corner angle for profiling

Shank **ø12 - 16 mm**

D064, D083



TURNINGA

Highly rigid clamping system with excellent repeatability

Shank **ø25 - 50 mm**

D030, D033, D044
D051, D072, D075



TUNGTJET TURN

Toolholders for high pressure coolant supply

D026, D071



TUNGBMINI BORE

Multifunctional tool for drilling, external turning and internal turning

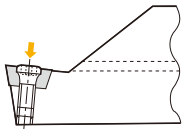
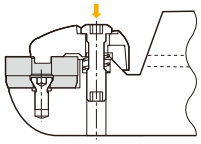
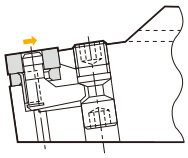
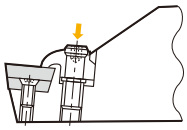
Shank **ø8 - 12 mm**

D012

Sleeve

D092 -

Internal Toolholder - Quick Guide

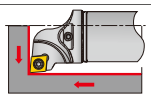
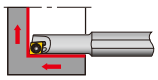
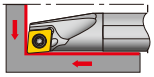
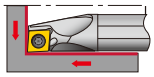
Screw-on	Double clamping	Lever-lock	Clamp-on
  STREAMJETBAR MINIFTURN	  TURNINGA	  ISOETURN	 
• Simple clamping mechanism. • Smart shape without overhang area. • Minimum bore diameter: ø4.5 mm. • Good cutting action by using positive inserts. • Carbide shanks that have excellent resistance to chatter. • "Tsuppari-Ichiban" shanks (reinforced with carbide plates) are also stocked.	• Increased clamping rigidity contributes to superior cutting edge positioning accuracy & longer tool life. • Enlarged insert holding area of the clamp allows more accurate cutting edge positioning. It delivers high performance even when using VNMG type (35° corner angle) inserts, which tend to destabilize cutting edge positioning. • Simple structure keeps cost low. Easy clamping with only one wrench.	• Negative rake, lever-lock type, round shank boring bars. • The insert is positively held into a two wall pocket, excelling in indexing accuracy. • Minimum bore diameter: ø20 mm. • "Tsuppari-Ichiban" shanks that are reinforced with carbide plates are also stocked.	• Clamp-on type insert locking mechanism assures secure holding & accurate indexing. • For inserts without a hole, it provides stronger cutting edge strength than S-type tools & can withstand heavier cutting conditions. • Minimum bore diameter: ø16 mm

Tool selection according to the ratio of length to tool diameter (L/D) for different shank materials

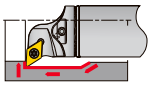
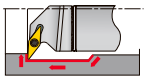
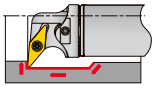
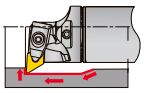
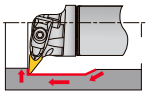
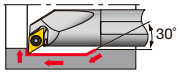
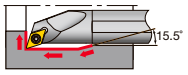
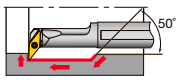
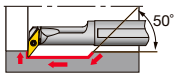
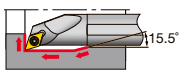
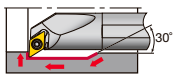
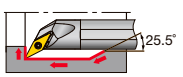
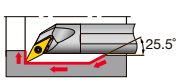
Steel shank	Carbide reinforced	Carbide shank	BoreMeister
L/D ≤ 3	L/D ≤ 4	L/D ≤ 5	L/D ≤ 10

For custom tooling inquiries, contact Tungaloy

Positive type

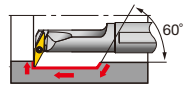
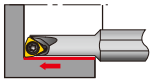
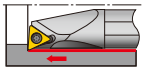
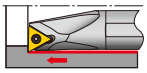
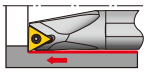
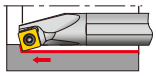
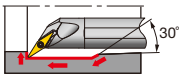
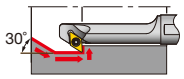
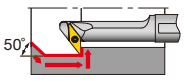
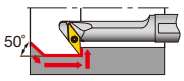
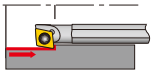
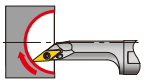
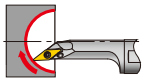
Application	Style	Designation	Insert	Material	Through coolant	ISO Insert	BOREMEISTER	STREAMJETBAR	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Boring & internal facing		**S-SCLCR/L-H**	CC...	Steel Carbide	○	✓	✓		ø20 – ø50	D017
		**SEXPR/L**	EP...	Steel Carbide	○	✓		✓	ø4.5 – ø7 ø4.5 – ø7	D034 D035
		**SCLCR/L**	CC...	Steel Carbide Reinforced	○	✓		✓	ø5 – ø27 ø5 – ø27 ø16 – ø32	D014 - D016
		**SCLPR/L**	CP...	Steel Carbide Reinforced	○	✓		✓	ø10 – ø27 ø10 – ø20 ø14 – ø32	D018 D019

Positive type

Appli-cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	BOREMEISTER	STREAMJETBAR	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Boring & internal profiling		**S-SDUCR/L-H**	DC...	Steel Carbide	○	✓	✓		ø20 – ø50	D057
		**S-SVUCR/L-H**	VC...	Steel Carbide	○	✓	✓		ø27 – ø31	D063
		**S-SVLCR/L-H**	VC...	Steel Carbide	○	✓	✓		ø40 – ø50	D020
		**S-DDUNR/L-H**	DN...	Steel Carbide	○	✓	✓		ø40 – ø50	D073
		**S-DVUNR/L-H**	VN...	Steel Carbide	○	✓	✓		ø56	D075
		**SDUCR/L**	DC...	Steel Carbide	○	✓		✓	ø13 – ø32 ø13 – ø27	D056
		**SDUPR/L**	DP...	Steel Carbide	○			✓	ø15 – ø22 ø15 – ø22	D058
		**SVUCR/L**	VC...	Steel Carbide Reinforced	○	✓		✓	ø16 – ø32 ø18 – ø32 ø32	D061
		**SVUBR/L**	VB...	Steel Carbide Reinforced	○	✓		✓	ø20 – ø32 ø24.5 – ø34 ø25	D059
		**SDQCR/L**	DC...	Steel Carbide Reinforced	○	✓		✓	ø13 – ø30 ø13 – ø25 ø20 – ø32	D076 D077
		**SDQPR/L**	DP...	Steel Carbide	○			✓	ø15 – ø22 ø15 – ø22	D078
		**SVQCR/L**	VC...	Steel Carbide Reinforced	○	✓		✓	ø13.5 – ø21.5 ø13.5 – ø21.5 ø32	D081
		**SVQBR/L**	VB...	Steel Carbide Reinforced	○	✓		✓	ø17 – ø30.5 ø17 – ø30.5 ø25	D079

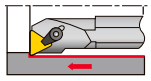
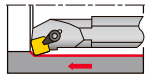
Internal Toolholder - Quick Guide

Positive type

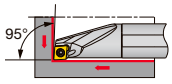
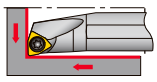
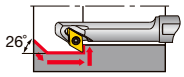
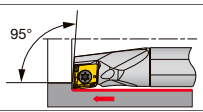
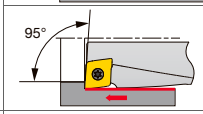
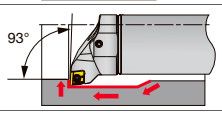
Appli-cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	STREAMJETBAR	Min. bore diameter DMIN (mm)	Page
Boring & internal profiling		**SYUBR/L**	YW...	Steel Carbide	○		✓	ø20 ø20 ø24.5	D064
Boring		**SWUBR/L**	WB...	Steel Carbide	○	✓	✓	ø6 ø8 ø6 ø8	D052
Boring		**STUPR/L**	TP...	Steel Carbide Reinforced	○	✓	✓	ø8 ø34 ø8 ø27 ø14 ø31	D053 - D055
Blind hole boring		**STFPR/L**	TP...	Steel Carbide	○	✓	✓	ø10 ø27 ø10 ø22	D046
Blind hole boring		**STFCR/L**	TC...	Steel Carbide	○	✓	✓	ø12 ø18 ø12 ø18	D045
Through boring		**SSKPR**	SP...	Steel	○	✓	✓	ø20 ø31	D041
Boring, undercutting & profiling		**SYQBR/L**	YW...	Steel Carbide	○		✓	ø17 ø21.5 ø17 ø21.5	D083
Back boring		**SDZCR/L**	DC...	Steel Carbide	○	✓	✓	ø14 ø25 ø18 ø22	D085
Back boring		**SVZCR/L**	VC...	Steel	○	✓	✓	ø16	D088
Back boring		**SVZBR/L**	VB...	Steel	○	✓	✓	ø20 ø40	D087
Back boring		**SEZPR/L**	EP...	Steel Carbide	○	✓	✓	ø5.5 ø6.5 ø5.5 ø6.5	D084
Internal sphere cutting		**SVJCR/L**	VC...	Steel	○	✓	✓	ø16 ø20	D039
Internal sphere cutting		**SVJBR/L**	VB...	Steel	○	✓	✓	ø25 ø30	D038

Positive type

Clamp on

Application	Style	Designation	Insert	Material	Through coolant	ISO Insert	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Blind hole boring		**CTFPR/L**	TP... Without hole	Steel Carbide		✓	ø16 ø40 ø16 ø20	D047
Through boring		**CSKPR/L**	SP... Without hole	Steel		✓	ø20 ø32	D042

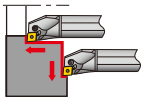
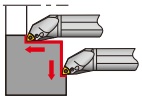
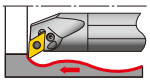
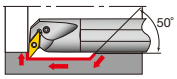
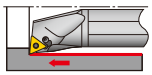
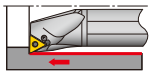
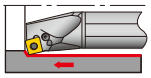
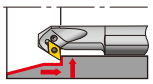
Positive double side

Application	Style	Designation	Insert	Material	Through coolant	TUNGBÖMINI	BOREMEISTER	MINIFÜRN	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Boring & internal facing		**SCLXR/L**	CX...	Steel Carbide	○			✓	ø12 ø22 ø12 ø22	D021
		**SWLXR/L**	WX...	Steel Carbide	○			✓	ø12 ø22 ø12 ø22	D023
Boring & internal profiling		**SDXXR/L**	DX...	Steel Carbide	○			✓	ø13 ø24 ø13 ø24	D036
Back boring		**SDZXR/L**	DX...	Steel Carbide	○			✓	ø14 ø20 ø18 ø22	D086
Boring		**A/E-SXUOR/L**	XOMU	Steel Carbide	○	✓			ø10 ø14 ø10 ø14	D065
		**TBM**	XOMU	Steel	○	✓			ø10 ø16	D065
Boring & internal profiling		**S-SXUOR05-H**	XOMU	Steel Carbide	○	✓	✓		ø25 ø32	D066

Internal Toolholder - Quick Guide

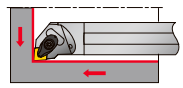
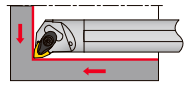
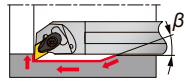
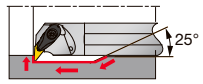
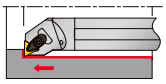
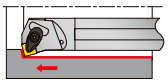
Negative type

Lever lock

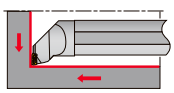
Application	Style	Designation	Insert	Material	Through coolant	ISO Insert	ISOTURN	STREAMJETBAR	TUNGTJET	Min. bore diameter DMIN (mm) 20 30 40 50 60 70	Page
Boring & internal facing		**PCLNR/L**	CN..., GN...	Steel Reinforced	○	✓	✓	✓	✓	ø20 ø63 ø20 ø63	D025 - D028
		**PWLNR/L**	WN...	Steel	○	✓	✓	✓		ø20 ø50	D031 D032
Boring & internal profiling		**PDUNR/L**	DN..., FN...	Steel Reinforced	○	✓	✓	✓	✓	ø25 ø63 ø40 ø63	D069 D070
		**PVUNR/L**	VN..., YN...	Steel	○	✓	✓	✓		ø37 ø50	D074
Boring		**PTUNR/L**	TN...	Steel Reinforced	○	✓	✓	✓		ø20 ø40 ø20 ø63	D067
		**PTFNR/L**	TN...	Steel	○	✓	✓	✓		ø32 ø63	D049 D050
Through boring		**PSKNR/L**	SN...	Steel	○	✓		✓		ø40 ø63	D043
Back boring		**PDZNR/L**	DN...	Steel	○	✓		✓		ø40 ø63	D088 D089

Negative type

Double clamp

Application	Style	Designation	Insert	Material	Through coolant	ISO Insert	ISOTURN	TURNINGA	Min. bore diameter DMIN (mm) 20 30 40 50 60 70	Page
Boring & internal facing		**ACLNR/L**	CN..., GN...	Steel	○	✓	✓	✓	ø32 — ø63	D030
Boring & internal facing		**AWLNR/L**	WN...	Steel	○	✓	✓	✓	ø32 — ø63	D033
Boring & internal profiling		**ADUNR/L**	DN..., FN...	Steel	○	✓	✓	✓	ø32 — ø63	D072
Boring & internal profiling		**AVUNR/L**	VN..., YN...	Steel	○	✓		✓	ø40 — ø50	D075
Boring		**ATFNR/L**	TN...	Steel	○	✓		✓	ø32 — ø40	D051
Boring		**ASKNR/L**	SN...	Steel	○	✓		✓	ø32 — ø40	D044

Screw-on

Application	Style	Designation	Insert	Material	Through coolant	TURNTEC	Min. bore diameter DMIN (mm) 40 50 60 70 80 90	Page
Boring & internal facing		**S-TLANR/L**	LNMX	Steel		✓	ø53 — ø85	D040

BOREMEISTER

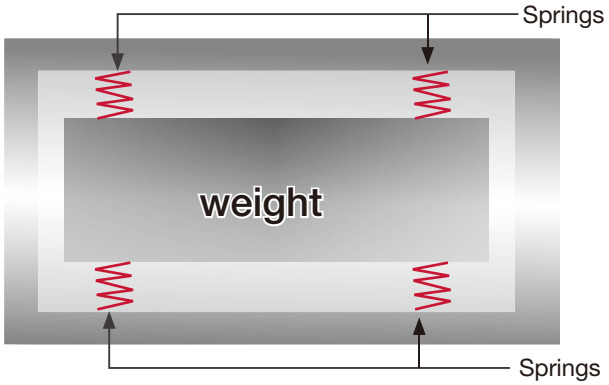


Unique anti-vibration mechanism in the tool body reduces vibration during deep hole boring with long overhangs of up to **L/D = 10**

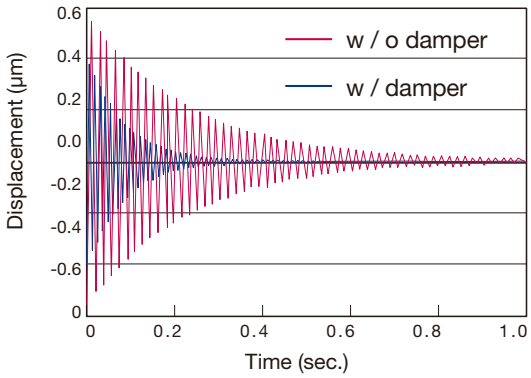
Vibration Dampening Mechanism

When cutting forces create vibration on boring bar set up with long overhangs, the bar's dampening mechanism counters the tool's motion and cancels the vibration.
The dampening mechanism consists of a weight supported by spring elements.
The vibrations die out quickly eliminating noise and chatter marks.

- Concept image of dampening

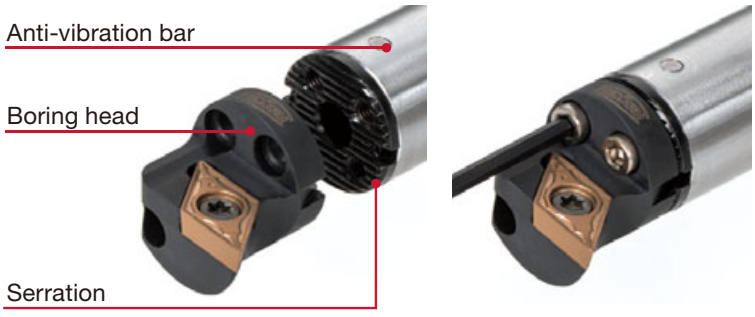


- Tool vibrations with and without vibration damper



Standard Lineup

BoreMeister is comprised of the anti-vibration bar and interchangeable boring head, featuring serrated interfaces for high precision indexing. They are connected by screws, allowing the fitting of a wide range of cutting heads for great flexibility.
- Minimum bore diameter : ø20 mm



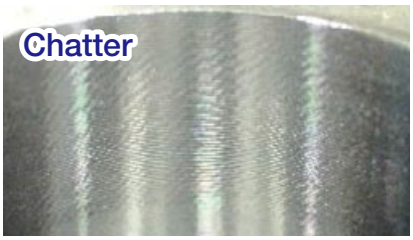
Reference pages: D017, D020, D029, D048, D050, D057, D063, D066, D073, D075, D090 - D092

STREAMJETBAR



Engineered for tool strength and optimal chip evacuation

Tool body of special alloy steel, designed to reduce chatter !



Competitor



STREAMJETBAR

Minimum bore diameter from ø4.5 mm

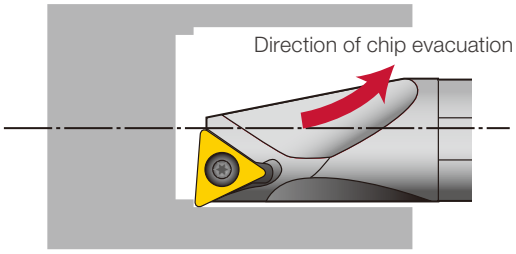
Steel and carbide shank available

New pocket design for excellent chip evacuation

Cutting performance

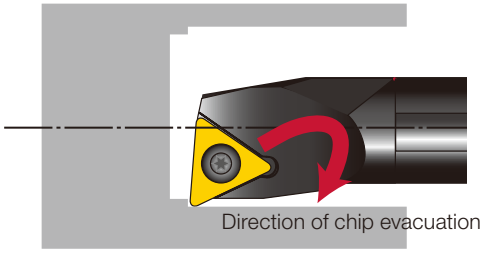
The excellent chip evacuation minimizes tool failure caused by recutting chips and poor chip control. Damage to the work surface from chips is also eliminated.

STREAMJETBAR



Combination of the well designed chip pocket and coolant flow helps chips to effectively evacuate.

Competitor



Chip packing is likely to occur.

Reference pages: D014, D018, D025, D031, D034, D036, D038, D041, D043, D045, D046, D049 D052, D053, D056, D058, D059, D061, D067, D069, D074, D076, D078, D079 D081, D084, D085, D087 - D089, D093 - D095

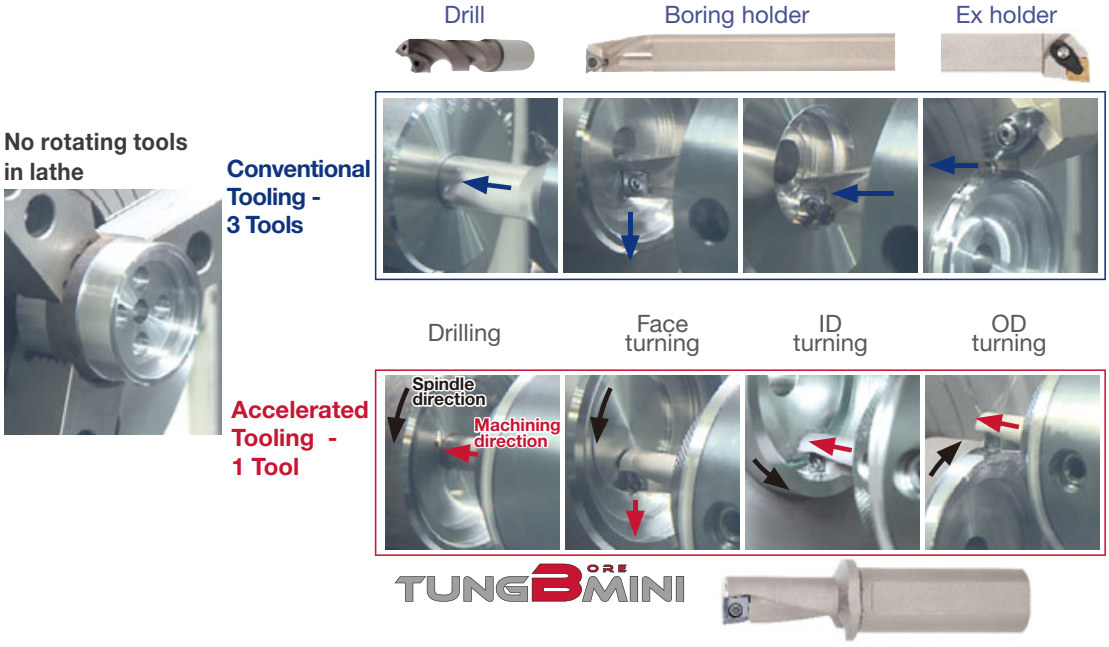
TUNGBORE MINI



Reduced machine downtime thanks to eliminating the need for tool changes. Multifunctional Tool for Drilling and Turning.

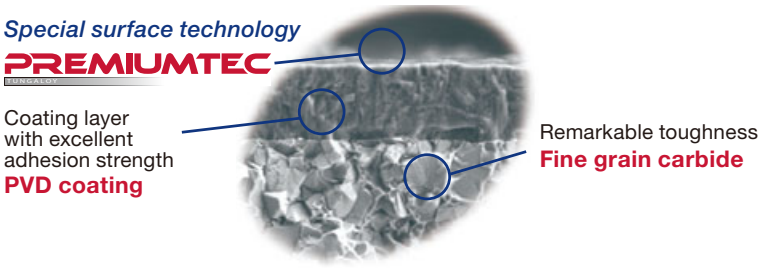
Minimum number of tools for maximum productivity

- A single TungBoreMini tool can handle multiple operations such as ID turning after drilling without exchanging the tools
- Allows drilling and hole enlargement on various materials, instead of using a drill and turning tool
- Can be used just like a standard ISO turning tool for ID, OD, and/or face turning applications



PVD grade: AH725

AH725 features a super tough substrate with a new PVD coating layer.



Reference pages: D065

MINIFORCE TURN

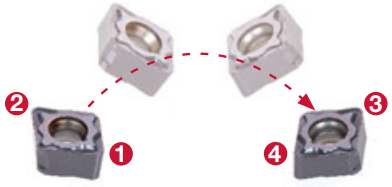


Economical double-sided positive insert

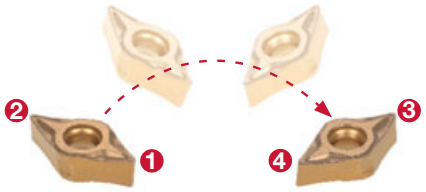
Innovative geometry and seat interface ensures stability and high performance.

Insert

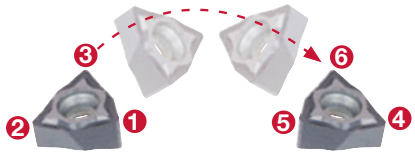
CXMU0603... 4 edges, rhombic 80°



DXM/GU0703... 4 edges, rhombic 55°



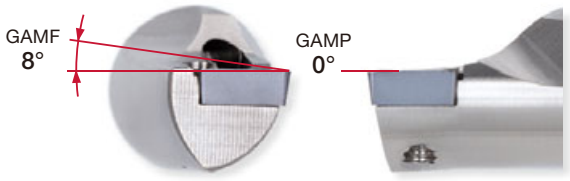
WXGU0403... 6 positive cutting edges



Low cutting force machining with high rake angle



MINIFORCE TURN
A12M-SCLXR06-D140



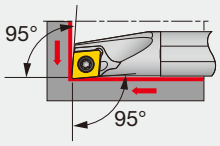
Conventional
A12M-SCLCR06-D140

Reference pages: D021 - D024, D036

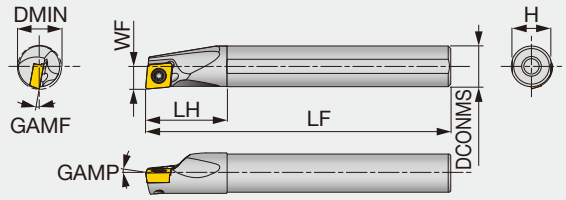
STREAMJETBAR

A/E-SCLCR/L

Screw-on boring bar, for positive 80° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A04F-SCLCR/L03-D050	Steel	5	4	2.5	80	8	3.8	0°	-15°	0.2	CC**03X1...	0.6
A05F-SCLCR/L03-D060	Steel	6	5	3	80	9	4.8	0°	-13°	0.2	CC**03X1...	0.6
A06G-SCLCR/L04-D070	Steel	7	6	3.5	90	11	5.75	0°	-13°	0.2	CC**04T1...	0.6
A07G-SCLCR/L04-D080	Steel	8	7	4	90	12	6.75	0°	-11°	0.2	CC**04T1...	0.6
A08H-SCLCR/L06-D100	Steel	10	8	5.5	100	16	7.5	0°	-13°	0.4	CC**0602...	1.2
A10F-SCLCR06-D120	Steel	12	10	6	80	20	9	0°	-10°	0.4	CC**0602...	1.2
A10K-SCLCR/L06-D120	Steel	12	10	6	125	20	9	0°	-10°	0.4	CC**0602...	1.2
A12H-SCLCR06-D140	Steel	14	12	7	100	24	11	0°	-8°	0.4	CC**0602...	1.2
A12M-SCLCR/L06-D140	Steel	14	12	7	150	24	11	0°	-8°	0.4	CC**0602...	1.2
A12H-SCLCR06-D160	Steel	16	12	9	100	24	11	0°	-7°	0.4	CC**0602...	1.2
A12M-SCLCR/L06-D160	Steel	16	12	9	150	24	11	0°	-7°	0.4	CC**0602...	1.2
A16K-SCLCR09-D180	Steel	18	16	9	125	32	15	0°	-9°	0.8	CC**09T3...	3
A16Q-SCLCR/L09-D180	Steel	18	16	9	180	32	15	0°	-10°	0.8	CC**09T3...	3
A16K-SCLCR09-D200	Steel	20	16	11	125	32	15	0°	-9°	0.8	CC**09T3...	3
A16Q-SCLCR/L09-D200	Steel	20	16	11	180	32	15	0°	-9°	0.8	CC**09T3...	3
A20R-SCLCR/L09-D220	Steel	22	20	11	200	32	18	0°	-8°	0.8	CC**09T3...	3
A25S-SCLCR/L09-D270	Steel	27	25	13.5	250	45	23	0°	-6°	0.8	CC**09T3...	3
E04G-SCLCR/L03-D050	Carbide	5	4	2.5	90	9	3.8	0°	-15°	0.2	CC**03X1...	0.6
E05G-SCLCR/L03-D060	Carbide	6	5	3	90	10	4.8	0°	-13°	0.2	CC**03X1...	0.6
E06H-SCLCR/L04-D070	Carbide	7	6	3.5	100	12	5.75	0°	-13°	0.2	CC**04T1...	0.6
E07H-SCLCR/L04-D080	Carbide	8	7	4	100	14	6.75	0°	-11°	0.2	CC**04T1...	0.6
E08G-SCLCR06-D100	Carbide	10	8	5.5	90	22	7.5	0°	-13°	0.4	CC**0602...	1.2
E08K-SCLCR/L06-D100	Carbide	10	8	5.5	125	22	7.5	0°	-13°	0.4	CC**0602...	1.2
E10F-SCLCR06-D120	Carbide	12	10	6	80	25	9	0°	-10°	0.4	CC**0602...	1.2
E10H-SCLCR06-D120	Carbide	12	10	6	100	25	9	0°	-10°	0.4	CC**0602...	1.2
E10M-SCLCR/L06-D120	Carbide	12	10	6	150	25	9	0°	-10°	0.4	CC**0602...	1.2
E12G-SCLCR06-D140	Carbide	14	12	7	90	27	11	0°	-8°	0.4	CC**0602...	1.2
E12J-SCLCR06-D140	Carbide	14	12	7	110	27	11	0°	-8°	0.4	CC**0602...	1.2
E12Q-SCLCR/L06-D140	Carbide	14	12	7	180	27	11	0°	-8°	0.4	CC**0602...	1.2
E12G-SCLCR06-D160	Carbide	16	12	9	90	27	11	0°	-7°	0.4	CC**0602...	1.2
E12J-SCLCR06-D160	Carbide	16	12	9	110	27	11	0°	-7°	0.4	CC**0602...	1.2
E12Q-SCLCR/L06-D160	Carbide	16	12	9	180	27	11	0°	-7°	0.4	CC**0602...	1.2
E16H-SCLCR09-D180	Carbide	18	16	9	100	32	15	0°	-10°	0.8	CC**09T3...	3
E16L-SCLCR09-D180	Carbide	18	16	9	130	32	15	0°	-10°	0.8	CC**09T3...	3
E16R-SCLCR/L09-D180	Carbide	18	16	9	200	32	15	0°	-10°	0.8	CC**09T3...	3
E16H-SCLCR09-D200	Carbide	20	16	11	100	32	15	0°	-9°	0.8	CC**09T3...	3
E16L-SCLCR09-D200	Carbide	20	16	11	130	32	15	0°	-9°	0.8	CC**09T3...	3
E16R-SCLCR/L09-D200	Carbide	20	16	11	200	32	15	0°	-9°	0.8	CC**09T3...	3
E20S-SCLCR09-D220	Carbide	22	20	11	250	36	18	0°	-8°	0.8	CC**09T3...	3
E25T-SCLCR09-D270	Carbide	27	25	13.5	300	45	23	0°	-6°	0.8	CC**09T3...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
Note: Use right-hand toolholders (SCLCR**) with left-hand inserts (L); and left-hand toolholders (SCLCL**) with right-hand inserts (R).

Reference pages: A/E-SCLCR/L: Insert → B112 -, CBN → B189 -, PCD → B213

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SCLCR/L03-D...	CSTA-1.6	T-6F
A**-SCLCR/L04-D...	CSTB-2	T-6F
A**-SCLCR/L06-D...	CSTB-2.5S	T-8F
A**-SCLCR/L09-D...	CSTB-4S	T-15F
E**-SCLCR/L03-D...	CSTA-1.6	T-6F
E**-SCLCR/L04-D...	CSTB-2	T-6F
E**-SCLCR/L06-D...	CSTB-2.5S	T-8F
E16*-SCLCR/L09-D...	CSTB-4L060	T-15F
E2**-SCLCR/L09-D...	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	NS9530	SH725	T9215
Breaker Shape	JP	PSS	JS	PS
Cutting conditions	B016			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	AH6225	SH725	AH6225
Chipbreaker shape	JP	PSS	JS	PS
Cutting conditions	B018			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PM
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

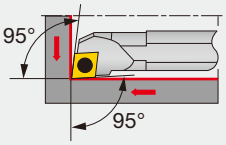
Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

H

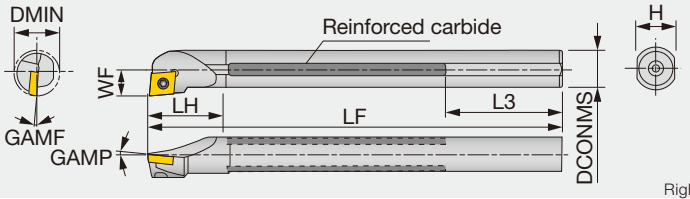
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

T-SCLCR/L

Screw-on boring bar, for positive 80° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMF	GAMP	RE**	Insert	Torque*
T12M-SCLCR/L06	Reinforced	16	–	12	9	150	22	59	11	-10°	0°	0.4	CC**0602...	1.2
T16Q-SCLCR/L09	Reinforced	20	–	16	11	180	27	59	15	-10°	0°	0.8	CC**09T3...	3
T20R-SCLCR/L09C	Reinforced	25	Rc1/4	20	13	200	35	49	18	-8°	0°	0.8	CC**09T3...	3
T25S-SCLCR/L09C	Reinforced	32	Rc1/4	25	17	250	40	64	23	-6°	0°	0.8	CC**09T3...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Note: Use right-hand toolholders (SCLCR**) with left-hand inserts (L); and left-hand toolholders (SCLCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
T12M-SCLCR/L06	CSTB-2.5	T-8F
T16Q-SCLCR/L09	CSTB-4S	T-15F
T20R-SCLCR/L09C	CSTB-4S	T-15F
T25S-SCLCR/L09C	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	NS9530	SH725	T9215
Breaker Shape	JP	PSS	JS	PS
Cutting conditions	B016			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	AH6225	SH725	AH6225
Chipbreaker shape	JP	PSS	JS	PS
Cutting conditions	B018			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PM
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

H

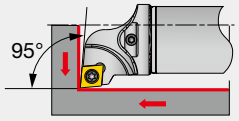
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: T-SCLCR/L: Insert → B112 -, CBN → B189 -, PCD → B213

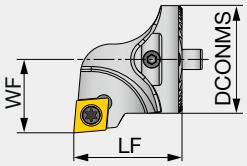
BOREMEISTER

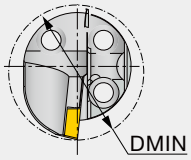
S-SCLCR/L-H

Screw-on clamp exchangeable boring head, for positive 80° rhombic inserts



Cutting edge style **L**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S16-SCLCR/L06-H	20	16	11	20	D/G16	CC**0602...
S20-SCLCR/L09-H	25	20	13	20	D/G20	CC**09T3...
S25-SCLCR/L09-H	32	25	17	20	D25	CC**09T3...
S32-SCLCR/L09-H	40	32	22	32	D32	CC**09T3...
S40-SCLCR/L12T-H	50	40	27	38	D40, D50, D60	CC**1204...

Note: Use right-hand toolholders (SCLCR**) with left-hand inserts (L); and left-hand toolholders (SCLCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench	Shim	Shim screw
S16-SCLCR/L06-H	SR14-548	T-7/5	-	-
S20-SCLCR/L09-H	SR16-236	T-15/5	-	-
S25-SCLCR/L09-H	SR16-236	T-15/5	-	-
S32-SCLCR/L09-H	SR16-236	T-15/5	-	-
S40-SCLCR/L12T-H	SR16-212	T-20/5	TCC4-2	SRTC-4

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	NS9530	SH725	T9215
Breaker Shape	JP	PSS	JS	PS
Cutting conditions	B016			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	AH6225	SH725	AH6225
Chipbreaker shape	JP	PSS	JS	PS
Cutting conditions	B018			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PM
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

H

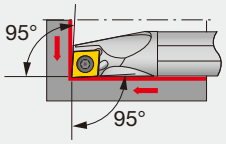
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: S-SCLCR/L-H: Insert → B112 -, CBN → B189 -, PCD → B213
Shank → D090 - D092

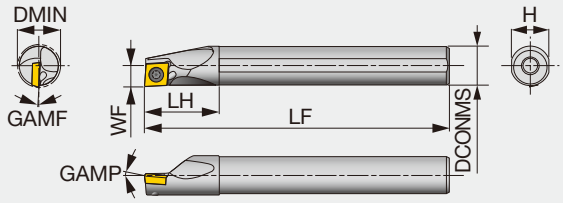
STREAMJETBAR

A/E-SCLPR/L

Screw-on boring bar, for positive 80° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A08H-SCLPR/L06-D100	Steel	10	8	5.5	100	16	7.5	5°	-8°	0.4	CP**0602...	1.2
A10K-SCLPR/L06-D120	Steel	12	10	6	125	20	9	5°	-5°	0.4	CP**0602...	1.2
A10K-SCLPR/L08-D120	Steel	12	10	6	125	20	9	5°	-5°	0.4	CP**0802...	1.4
A12M-SCLPR/L06-D140	Steel	14	12	7	150	24	11	5°	-4°	0.4	CP**0602...	1.2
A12M-SCLPR/L08-D140	Steel	14	12	7	150	24	11	5°	-4°	0.4	CP**0802...	1.4
A12M-SCLPR/L08-D160	Steel	16	12	9	150	24	11	5°	-3°	0.4	CP**0802...	1.4
A16Q-SCLPR/L09-D180	Steel	18	16	9	180	32	15	5°	-3.5°	0.8	CP**0903...	3
A16Q-SCLPR/L09-D200	Steel	20	16	11	180	32	15	5°	-3°	0.8	CP**0903...	3
A20R-SCLPR/L09-D220	Steel	22	20	11	200	36	18	5°	-2°	0.8	CP**0903...	3
A25S-SCLPR/L09-D270	Steel	27	25	13.5	250	45	23	5°	-1°	0.8	CP**0903...	3
E08K-SCLPR/L06-D100	Carbide	10	8	5.5	125	22	7.5	5°	-8°	0.4	CP**0602...	1.2
E10M-SCLPR/L06-D120	Carbide	12	10	6	150	25	9	5°	-5°	0.4	CP**0602...	1.2
E10H-SCLPR08-D120	Carbide	12	10	6	100	25	9	5°	-5°	0.4	CP**0802...	1.4
E10M-SCLPR/L08-D120	Carbide	12	10	6	150	25	9	5°	-5°	0.4	CP**0802...	1.4
E12Q-SCLPR/L06-D140	Carbide	14	12	7	180	27	11	5°	-4°	0.4	CP**0602...	1.2
E12G-SCLPR08-D140	Carbide	14	12	7	90	27	11	5°	-4°	0.4	CP**0802...	1.4
E12J-SCLPR08-D140	Carbide	14	12	7	110	27	11	5°	-4°	0.4	CP**0802...	1.4
E12Q-SCLPR/L08-D140	Carbide	14	12	7	180	27	11	5°	-4°	0.4	CP**0802...	1.4
E12G-SCLPR08-D160	Carbide	16	12	9	90	27	11	5°	-3°	0.4	CP**0802...	1.4
E12J-SCLPR08-D160	Carbide	16	12	9	110	27	11	5°	-3°	0.4	CP**0802...	1.4
E12Q-SCLPR/L08-D160	Carbide	16	12	9	180	27	11	5°	-3°	0.4	CP**0802...	1.4
E16H-SCLPR09-D180	Carbide	18	16	9	100	32	15	5°	-3.5°	0.8	CP**0903...	3
E16L-SCLPR09-D180	Carbide	18	16	9	130	32	15	5°	-3.5°	0.8	CP**0903...	3
E16R-SCLPL09-D180	Carbide	18	16	9	200	32	15	5°	-3.5°	0.8	CP**0903...	3
E16H-SCLPR09-D200	Carbide	20	16	11	100	32	15	5°	-3°	0.8	CP**0903...	3
E16L-SCLPR09-D200	Carbide	20	16	11	130	32	15	5°	-3°	0.8	CP**0903...	3
E16R-SCLPL09-D200	Carbide	20	16	11	200	32	15	5°	-3°	0.8	CP**0903...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
Note: Use right-hand toolholders (SCLPR**) with left-hand inserts (L); and left-hand toolholders (SCLPL**) with right-hand inserts (R).

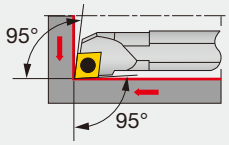
SPARE PARTS

Designation	Clamping screw	Wrench
A**-SCLPR/L06-D...	CSTB-2.5S	T-8F
A10K-SCLPR/L08-D120	CSTB-3L042	T-9F
A12M-SCLPR/L08-D...	CSTB-3L050	T-9F
A**-SCLPR/L09-D...	CSTB-4L060	T-15F
E**-SCLPR/L06-D...	CSTB-2.5S	T-8F
E10*-SCLPR/L08-D...	CSTB-3L042	T-9F
E12*-SCLPR/L08-D...	CSTB-3L050	T-9F
E16*-SCLPR/L09-D...	CSTB-4L060	T-15F

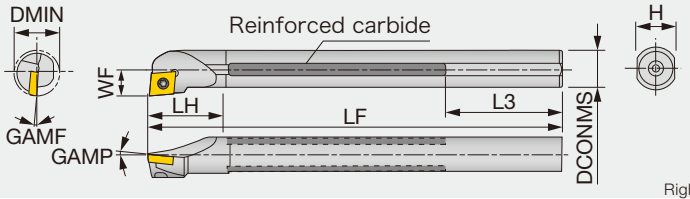
Reference pages: A/E-SCLPR/L: Insert → B118 -, CBN → B192

T-SCLPR/L

Screw-on boring bar, for positive 80° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMF	GAMP	RE**	Insert	Torque*
T12M-SCLPR08-D14	Reinforced	14	-	12	7	150	22	59	11	-4°	5°	0.4	CP**0802...	1.4
T12M-SCLPR/L08	Reinforced	16	-	12	9	150	25	59	11	-3°	5°	0.4	CP**0802...	1.4
T16Q-SCLPR09-D18	Reinforced	18	-	16	9	180	27	59	15	-3.5°	5°	0.8	CP**0903...	3
T16Q-SCLPR/L09	Reinforced	20	-	16	11	180	30	59	15	-4°	5°	0.8	CP**0903...	3
T20R-SCLPR09C-D22	Reinforced	22	Rc1/4	20	11	200	35	49	18	-2°	5°	0.8	CP**0903...	3
T20R-SCLPR/L09	Reinforced	25	-	20	13	200	35	49	18	-2°	5°	0.8	CP**0903...	3
T25S-SCLPR09C-D27	Reinforced	27	Rc1/4	25	13.5	250	40	64	23	-1°	5°	0.8	CP**0903...	3
T25S-SCLPR/L09	Reinforced	32	-	25	17	250	40	64	23	0°	5°	0.8	CP**0903...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
Note: Use right-hand toolholders (SCLPR**) with left-hand inserts (L); and left-hand toolholders (SCLPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
T12M-SCLPR/L08...	CSTB-3L050	T-9F
T16Q-SCLPR09-D18	CSTB-4L060	T-15F
T16Q-SCLPR/L09	CSTB-4S	T-15F
T20R-SCLPR09C-D22	CSTB-4L060	T-15F
T20R-SCLPR/L09	CSTB-4S	T-15F
T25S-SCLPR09C-D27	CSTB-4L060	T-15F
T25S-SCLPR/L09	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH6225	AH6225	AH6225
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B018		

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Finishing
Grade	DX140
Breaker Shape	DIA
Cutting conditions	B022

S

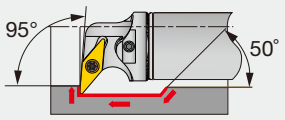
Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B024	

Reference pages: T-SCLPR/L: Insert → B118 -, CBN → B192

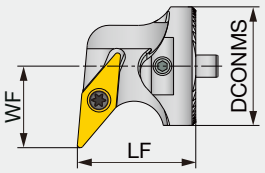
BOREMEISTER

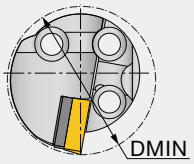
S-SVLCR/L-H

Screw-on clamp exchangeable boring head, for positive 35° rhombic inserts



Cutting edge style **L**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S32-SVLCR/L16T-H	40	32	22	32	D32	VC**1604...
S40-SVLCR/L16T-H	50	40	27	32	D40, D50, D60	VC**1604...

Note: Use right-hand toolholders (SVLCR**) with left-hand inserts (L); and left-hand toolholders (SVLCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench	Shim	Shim screw
S32-SVLCR/L16T-H	SR16-236P	T-15/5	TVC 3-1P	SRTC-3P
S40-SVLCR/L16T-H	SR16-236P	T-15/5	TVC 3-1P	SRTC-3P

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

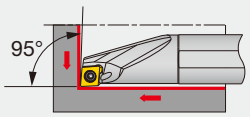
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

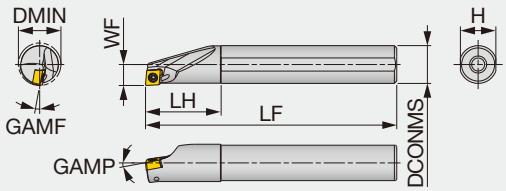
Reference pages: S-SVLCR/L-H: Insert → B152 -, CBN → B209, PCD → B220
Shank → D090 - D092

A/E-SCLXR/L

Screw-on boring bar, for CXMU inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A10K-SCLXR/L06-D120	Steel	12	10	6	125	20	9	-10°	-14.5°	0.4	CXMU0603**L/R...	0.9
A12M-SCLXR/L06-D140	Steel	14	12	7	150	24	11	-10°	-12.5°	0.4	CXMU0603**L/R...	0.9
A16Q-SCLXR/L06-D180	Steel	18	16	9	180	32	15	-10°	-9.5°	0.4	CXMU0603**L/R...	0.9
A20R-SCLXR/L06-D220	Steel	22	20	11	200	36	18	-10°	-8°	0.4	CXMU0603**L/R...	0.9
E10M-SCLXR/L06-D120	Carbide	12	10	6	150	25	9	-10°	-14.5°	0.4	CXMU0603**L/R...	0.9
E12Q-SCLXR/L06-D140	Carbide	14	12	7	180	27	11	-10°	-12.5°	0.4	CXMU0603**L/R...	0.9
E16R-SCLXR/L06-D180	Carbide	18	16	9	200	32	15	-10°	-9.5°	0.4	CXMU0603**L/R...	0.9
E20S-SCLXR/L06-D220	Carbide	22	20	11	250	36	18	-10°	-8°	0.4	CXMU0603**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A/E**-SCLXR/L...	SR34-514	T-7F

❶ Use the right hand toolholder (R) for the left hand insert (L)
❷ Use the left hand toolholder (L) for the right hand insert (R)



❶ Right hand toolholder with left hand insert shown



❷ Left hand toolholder with right hand insert shown

INSERT SELECTION

P

Application	Finishing to medium cutting	Medium cutting
Grade	T9215	T9215
Breaker Shape	TS	TS
Cutting conditions	B096	

M

Application	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	TS	TS
Cutting conditions	B096	

K

Application	Finishing to medium cutting	Medium cutting
Grade	T9215	T9215
Breaker Shape	TS	TS
Cutting conditions	B096	

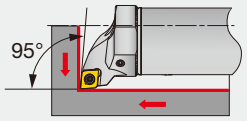
S

Application	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	TS	TS
Cutting conditions	B096	

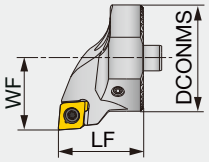
Reference pages: A/E-SCLXR/L: Insert → B120
Standard cutting conditions → D096

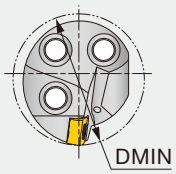
S-SCLXR/L-H

Screw-on clamp exchangeable boring head, for CXMU inserts



Cutting edge style **L**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S25-SCLXR/L06-H	32	25	17	20	D25	CXMU0603**L/R...
S32-SCLXR/L06-H	40	32	22	32	D32	CXMU0603**L/R...
S40-SCLXR/L06-H	50	40	27	32	D40, D50, D60	CXMU0603**L/R...

Note: Use right-hand toolholders (SCLXR**) with left-hand inserts (L); and left-hand toolholders (SCLXL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
S**-SCLXR/L06-H	SR34-514	T-7F

INSERT SELECTION

P

Application	Finishing to medium cutting	Medium cutting
Grade	T9215	T9215
Breaker Shape	TS	TS
Cutting conditions	B096	

M

Application	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	TS	TS
Cutting conditions	B096	

K

Application	Finishing to medium cutting	Medium cutting
Grade	T9215	T9215
Breaker Shape	TS	TS
Cutting conditions	B096	

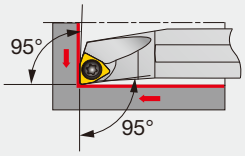
S

Application	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	TS	TS
Cutting conditions	B096	

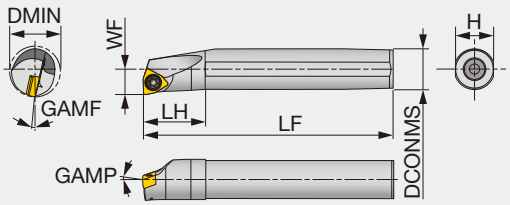
Reference pages: S-SCLXR/L-H: Insert → B120, Shank → D090 - D092
Standard cutting conditions → D096

A/E-SWLXR/L

Screw-on boring bar, for WXGU inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A10K-SWLXR/L04-D120	Steel	12	10	6	125	20	9	-10°	-16°	0.4	WXGU0403**L/R...	0.9
A12M-SWLXR/L04-D140	Steel	14	12	7	150	24	11	-10°	-14°	0.4	WXGU0403**L/R...	0.9
A16Q-SWLXR/L04-D180	Steel	18	16	9	180	32	15	-10°	-11°	0.4	WXGU0403**L/R...	0.9
A20R-SWLXR/L04-D220	Steel	22	20	11	200	36	18	-10°	-10°	0.4	WXGU0403**L/R...	0.9
E10M-SWLXR/L04-D120	Carbide	12	10	6	150	25	9	-10°	-16°	0.4	WXGU0403**L/R...	0.9
E12Q-SWLXR/L04-D140	Carbide	14	12	7	180	27	11	-10°	-14°	0.4	WXGU0403**L/R...	0.9
E16R-SWLXR/L04-D180	Carbide	18	16	9	200	32	15	-10°	-11°	0.4	WXGU0403**L/R...	0.9
E20S-SWLXR/L04-D220	Carbide	22	20	11	250	36	18	-10°	-10°	0.4	WXGU0403**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R)

SPARE PARTS

Designation	Clamping screw	Wrench
A/E**-SWLXR/L...	SR34-514	T-7F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	B096			

P

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	B096

K

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	B096			

K

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	B096

H

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	BXA10	BXA20	BXA20
Breaker Shape	HP		
Cutting conditions	B096		

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Chipbreaker shape	JS	JTS	SS	TS
Cutting conditions	B096			

M

Application	Medium cutting
Grade	AH8015
Chipbreaker shape	TS
Cutting conditions	B096

N

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	KS05F	KS05F	KS05F
Breaker Shape	SS	TS	TS
Cutting conditions	B096		

S

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	B096			

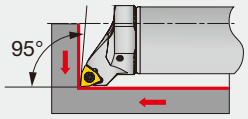
S

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	B096

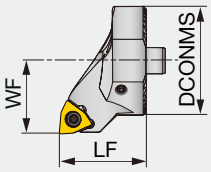
Reference pages: A/E-SWLXR/L: Insert → B157 -
Standard cutting conditions → D096

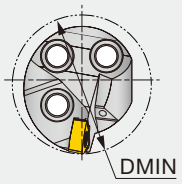
S-SWLXR/L-H

Screw-on clamp exchangeable boring head, for WXGU inserts



Cutting edge style **L**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S25-SWLXR/L04-H	32	25	17	20	D25	WXGU…
S32-SWLXR/L04-H	40	32	22	32	D32	WXGU…
S40-SWLXR/L04-H	50	40	27	32	D40, D50, D60	WXGU…

Note: Use right-hand toolholders (SWLXR**) with left-hand inserts (L); and left-hand toolholders (SWLXL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
S**-SWLXR/L04-H	SR34-514	T-7F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	B096			

P

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	B096

K

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	B096			

K

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	B096

H

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	BXA10	BXA20	BXA20
Breaker Shape	HP	CBN	CBN
Cutting conditions	B096		

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Chipbreaker shape	JS	JTS	SS	TS
Cutting conditions	B096			

M

Application	Medium cutting
Grade	AH8015
Chipbreaker shape	TS
Cutting conditions	B096

N

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	KS05F	KS05F	KS05F
Breaker Shape	SS	TS	TS
Cutting conditions	B096		

S

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	B096			

S

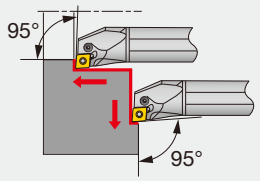
Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	B096

Reference pages: S-SWLXR/L-H: Insert → B157 -, Shank → D090 - D092
Standard cutting conditions → D096

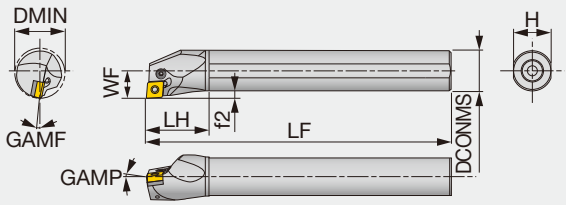
STREAMJETBAR

A-PCLNR/L

Lever-lock boring bar, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16M-PCLNR/L0904-D200	Steel	20	16	11	150	32	15	3	-6°	-16°	0.8	CN**/GNMG0904...	1.7
A20Q-PCLNR/L0904-D250	Steel	25	20	13	180	36	18	3	-6°	-12°	0.8	CN**/GNMG0904...	1.7
A16M-PCLNR/L09-D200	Steel	20	16	11	150	32	15	3	-6°	-14°	0.8	CN**0903...	1.7
A20Q-PCLNR/L09-D250	Steel	25	20	13	180	36	18	3	-6°	-12°	0.8	CN**0903...	1.7
A25R-PCLNR/L09-D320	Steel	32	25	17	200	45	23	4.5	-6°	-11°	0.8	CN**0903...	1.7
A25R-PCLNR/L12-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	CN**/GNGA1204...	2.7
A32S-PCLNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	CN**/GNGA1204...	4.8
A40T-PCLNR/L12-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	CN**/GNGA1204...	4.8
A50U-PCLNR/L12-D630	Steel	63	50	35	350	65	47	10	-6°	-8°	0.8	CN**/GNGA1204...	4.8

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
Note: Use right-hand toolholders (PCLNR**) with left-hand inserts (L); and left-hand toolholders (PCLNL**) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A16M-PCLNR/L0904-D200	-	-	LCS33	P-2F	-	-	LCL33N	-	SSHM3-4
A20Q-PCLNR/L0904-D250	-	-	LCS33	P-2F	-	-	LCL33N	EA-20	SSHM3-4
A**-PCLNR/L09-D**0	-	LCS22A	-	P-2F	-	-	LCL32N	EA-25	SSHM5-6
A25R-PCLNR/L12-D320	-	LCS43	-	-	P-2.5	-	LCL43N	EA-25	SSHM5-6
A32S-PCLNR12-D400	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4	EA-32	SSHM5-6
A32S-PCLNL12-D400	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A40T-PCLNR12-D500	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A40T-PCLNL12-D500	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PCLNR12-D630	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PCLNL12-D630	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6

*Optional

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX815	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

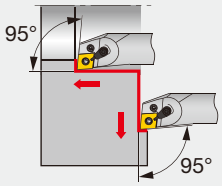
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

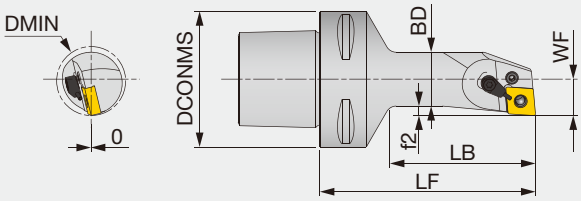
Reference pages: A-PCLNR/L: Insert → B054 -, B075, CBN → B168 -, PCD → B211

TUNGCAP
C-PCLNL-CHP

Lever-lock boring bar with TungCap connection, with 95° approach angle,
for negative 80°/70° rhombic inserts, with high pressure coolant capability



Cutting edge style **L**



Left hand (L) shown.

Designation	DMIN	DCONMS	BD	LF	LB	WF	f2	RE**	Insert
C6PCLNL17100-12-CHP	32	63	25	100	67.5	17	4.5	0.8	CN**/GNGA1204...

Applicable for 14 MPa coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Lever
C6PCLNL17100-12-CHP	LCS43	S-CU-CHP	P-2.5F	LCL43N

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX815	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

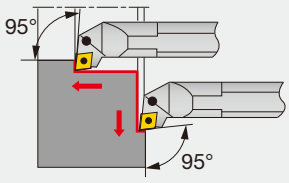
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: C-PCLNL-CHP: Insert → B054 -, CBN → B168 -, PCD → B211

S-PCLNR/L

Lever-lock boring bar, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMP	GAMF	RE**	Insert	Torque*
S16M-PCLNR/L09	Steel	20	16	11	150	30	15	15.5	-6°	-14°	0.8	CN**0903...	1.7
S20Q-PCLNR/L09	Steel	25	20	13	180	35	18	19	-6°	-12°	0.8	CN**0903...	1.7
S25R-PCLNR/L09	Steel	32	25	17	200	40	23	24	-6°	-11°	0.8	CN**0903...	1.7
S32S-PCLNR/L12	Steel	40	32	22	250	50	30	29.5	-6°	-11°	0.8	CN**/GNGA1204...	4.8
S40T-PCLNR/L12	Steel	50	40	27	300	55	37	37.5	-6°	-10°	0.8	CN**/GNGA1204...	4.8
S50U-PCLNR/L12	Steel	63	50	35	350	65	47	47.5	-6°	-8°	0.8	CN**/GNGA1204...	4.8

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
S**-PCLNR/L09	-	LCS22A	-	P-2F	-	-	LCL32N
S32S-PCLNR/L12	LSC42BR/L	-	LCS4	-	P-3	LSP4	LCL4
S40T-PCLNR/L12	LSC42BR/L	-	LCS4	-	P-3	LSP4	LCL4
S50U-PCLNR/L12	LSC42BR/L	-	LCS4	-	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

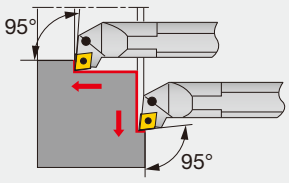
Application	Precision finishing	Finishing	Medium cutting
Grade	BX815	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

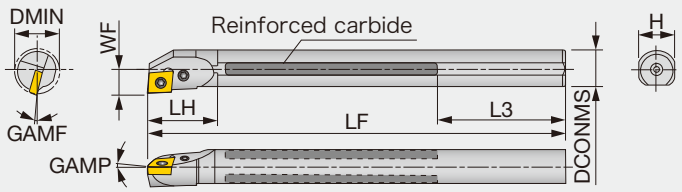
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: S-PCLNR/L: Insert → B054 -, CBN → B168 -, PCD → B211

Lever-lock boring bar, for negative 80°/70° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMP	GAMF	RE**	Insert	Torque*
T16Q-PCLNR09	Reinforced	20	-	16	11	180	27	59	15	-6°	-14°	0.8	CN**0903...	1.7
T20R-PCLNR09C	Reinforced	25	Rc1/4	20	13	200	35	49	18	-6°	-12°	0.8	CN**0903...	1.7
T25S-PCLNR09C	Reinforced	32	Rc1/4	25	17	250	40	64	23	-6°	-11°	0.8	CN**0903...	1.7
T32U-PCLNR12C	Reinforced	40	Rc1/2	32	22	350	50	103	30	-6°	-11°	0.8	CN**/GNGA1204...	4.8
T40V-PCLNR12C	Reinforced	50	Rc1/2	40	27	400	55	88	37	-6°	-10°	0.8	CN**/GNGA1204...	4.8
T50W-PCLNR12C	Reinforced	63	Rc1/2	50	35	450	65	63	47	-6°	-8°	0.8	CN**/GNGA1204...	4.8

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
T**-PCLNR09...	-	LCS22A	-	P-2F	-	-	LCL32N
T**-PCLNR12C	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX815	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

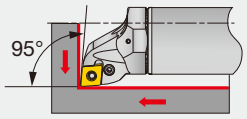
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: T-PCLNR: Insert → B054 -, CBN → B168 -, PCD → B211

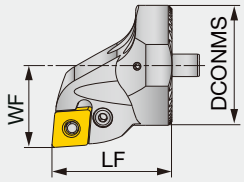
BOREMEISTER

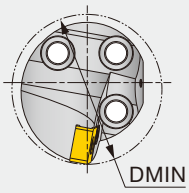
S-PCLNR/L-H

Lever-lock clamp exchangeable boring head, for negative 80°/70° rhombic inserts



Cutting edge style **L**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S32-PCLNR/L09-H	40	32	22	32	D32	CN**/GNMG0904...
S40-PCLNR/L09-H	50	40	27	32	D40, D50, D60	CN**/GNMG0904...

Note: Use right-hand toolholders (PCLNR**) with left-hand inserts (L); and left-hand toolholders (PCLNL**) with right-hand inserts (R).

SPARE PARTS

Designation	Lever	Clamping screw	Shim	Spring pin	Wrench
S32-PCLNR/L09-H	LCL33N	LCS33	-	-	P-2F
S40-PCLNR/L09-H	LCL33	LCS3	LSC317	LSP3	P-2.5

INSERT SELECTION

P

Application	Finishing	Medium cutting
Grade	T9215	T9215
Chipbreaker shape	TSF 	TM 
Cutting conditions	B004	

M

Application	Finishing	Medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	SS 	SM 
Cutting conditions	B006	

K

Application	Medium cutting
Grade	T515
Chipbreaker shape	TM 
Cutting conditions	B008

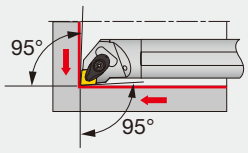
S

Application	Medium cutting
Grade	AH8015
Chipbreaker shape	TM 
Cutting conditions	B012

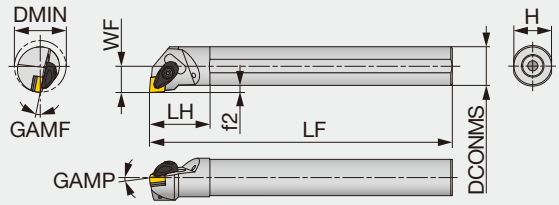
Reference pages: S-PCLNR/L-H: Insert → B054 -, B075, CBN → B168 -, PCD → B211
Shank → D090 - D092

A-ACLNR/L

Double-clamp boring bar, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ACLNR/L0904-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	CN**/GNMG0904...	3
A32S-ACLNR/L0904-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	CN**/GNMG0904...	3
A25R-ACLNR/L12-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	CN**/GNGA1204...	3
A32S-ACLNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	CN**/GNGA1204...	3
A40T-ACLNR/L12-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	0.8	CN**/GNGA1204...	3
A50U-ACLNR12-D630	Steel	63	50	35	350	65	47	10	-6°	-7°	0.8	CN**/GNGA1204...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ACLNR/L0904-D...	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASC322	CSTB-3.5	T-15F
A**-ACLNR/L12-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASC422	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX815	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

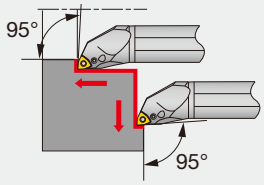
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: A-ACLNR/L: Insert → B054 -, B075, CBN → B168 -, PCD → B211

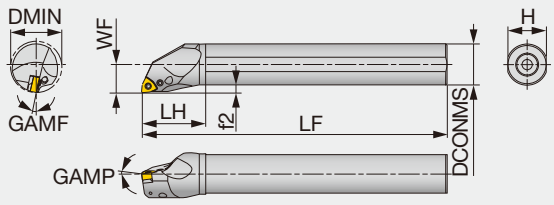
STREAMJETBAR

A-PWLNR/L

Lever-lock boring bar, for negative 80° trigon inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16M-PWLNR/L0604-D200	Steel	20	16	11	150	32	15	3	-8°	-17°	0.8	WN**0604...	1.7
A20Q-PWLNR/L0604-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	WN**0604...	1.7
A16M-PWLNR/L06-D200	Steel	20	16	11	150	32	15	3	-8°	-17°	0.8	WN**0604...	1.7
A20Q-PWLNR/L06-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	WN**0604...	1.7
A25R-PWLNR/L06-D320	Steel	32	25	17	200	45	23	4.5	-6°	-12°	0.8	WN**0604...	2.7
A32S-PWLNR/L06-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	WN**0604...	2.7
A25R-PWLNR/L08-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0804...	2.7
A32S-PWLNR/L08-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	WN**0804...	4.8
A40T-PWLNR/L08-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	WN**0804...	4.8

*Torque: Recommended clamping torque (N·m) **RE: Standard corner radius

Note: Use right-hand toolholders (PWLNR**) with left-hand inserts (L); and left-hand toolholders (PWLNL**) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A16M-PWLNR/L0604-D200	-	-	LCS33	P-2F	-	-	LCL33N	-	SSHM3-4
A20Q-PWLNR/L0604-D250	-	-	LCS33	P-2F	-	-	LCL33N	EA-20	SSHM3-4
A16M-PWLNR/L06-D200	-	LCS33	-	P-2F	-	-	LCL33N	-	SSHM3-4
A20Q-PWLNR/L06-D250	-	LCS33	-	P-2F	-	-	LCL33N	EA-20	SSHM3-4
A25R-PWLNR/L06-D320	LSW312BR/L	-	LCS3B	-	P-2.5	LSP3	LCL3	EA-25	SSHM4-5
A32S-PWLNR/L06-D400	LSW312BR/L	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32	SSHM4-5
A25R-PWLNR/L08-D320	-	LCS43	-	-	P-2.5	-	LCL43N	EA-25	SSHM4-5
A32S-PWLNR/L08-D400	LSW42BR/L	-	LCS4	-	P-3	LSP4	LCL4	EA-32	SSHM4-5
A40T-PWLNR/L08-D500	LSW42BR/L	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM4-5

*Optional

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

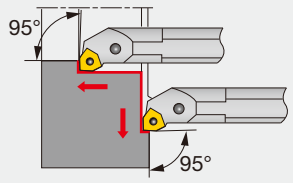
H

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	CBN	CBN
Cutting conditions	B014	

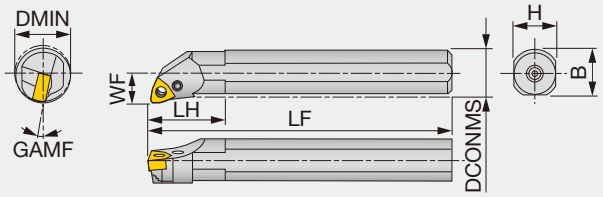
Reference pages: A-PWLNR/L: Insert → B102 -, CBN → B187

S-PWLNR/L

Lever-lock boring bar, for negative 80° trigon inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S16M-PWLNR/L06	Steel	20	16	11	150	30	15	15.5	-17°	0.8	WN**0604...
S20Q-PWLNR/L06	Steel	25	20	13	180	35	18	19	-14°	0.8	WN**0604...
S25R-PWLNR/L06	Steel	32	25	17	200	40	23	24	-12°	0.8	WN**0604...

**RE : Standard corner radius

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench	Spring pin	Lever
S**-PWLNR/L06	-	LCS33	-	P-2F	-	-	LCL33N
S25R-PWLNR06	LSW312BR	-	LCS3B	-	P-2.5	LSP3	LCL3
S25R-PWLNL06	LSW312BL	-	LCS3B	-	P-2.5	LSP3	LCL3

INSERT SELECTION

P

Application	Finishing	Medium cutting
Grade	T9215	T9215
Breaker Shape	TSF 	TM 
Cutting conditions	B004	

M

Application	Finishing	Medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	SS 	SM 
Cutting conditions	B006	

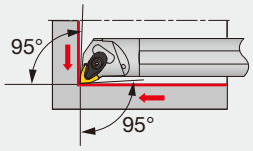
K

Application	Medium cutting
Grade	T515
Breaker Shape	TM 
Cutting conditions	B008

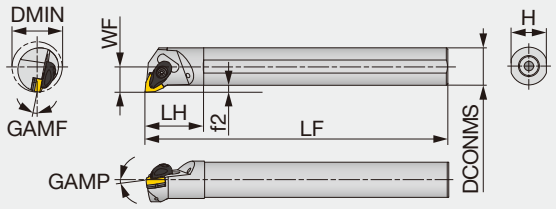
Reference pages: A-PWLNR/L: Insert → B102 -, CBN → B187

A-AWLNR/L

Double-clamp boring bar, for negative 80° trigon inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-AWLNR/L0604-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0604...	3
A32S-AWLNR/L0604-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	WN**0604...	3
A25R-AWLNR/L06-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0604...	3
A32S-AWLNR/L06-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	WN**0604...	3
A25R-AWLNR/L08-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0804...	3
A32S-AWLNR/L08-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	WN**0804...	3
A40T-AWLNR/L08-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	0.8	WN**0804...	3
A50U-AWLNR/L08-D630	Steel	63	50	35	350	65	47	10	-6°	-7°	0.8	WN**0804...	3

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-AWLNR/L0604-D...	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F
A**-AWLNR/L06-D...	ACP3S	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F
A**-AWLNR/L08-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

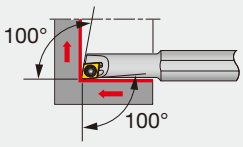
Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	CBN	CBN
Cutting conditions	B014	

Reference pages: A-AWLNR/L: Insert → B102 -, CBN → B187

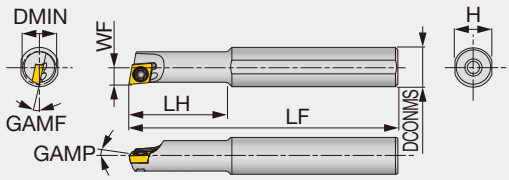
STREAMJETBAR

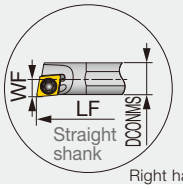
A/E-SEXPR/L

Screw-on boring bar, for positive 75° rhombic inserts



Cutting edge style **X**





Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A04F-SEXPR/L03-D045	Steel	4.5	4	2.3	80	8	3.8	0°	-15°	0.2	EP**03X1...	0.6
A04F-SEXPR/L03-D050	Steel	5	4	2.5	80	8	3.8	0°	-13°	0.2	EP**03X1...	0.6
A05F-SEXPR/L04-D055	Steel	5.5	5	2.75	80	9	4.8	0°	-12°	0.4	EP**0401...	0.6
A06G-SEXPR/L04-D070	Steel	7	6	3.6	90	11	5.75	0°	-12°	0.4	EP**0401...	0.6
A08H-SEXPR/L04-D055	Steel	5.5	8	2.75	100	16	7.5	0°	-12°	0.4	EP**0401...	0.6
A08H-SEXPR/L04-D070	Steel	7	8	3.6	100	20	7.5	0°	-12°	0.4	EP**0401...	0.6
E04G-SEXPR/L03-D045	Carbide	4.5	4	2.3	90	9	3.8	0°	-15°	0.2	EP**03X1...	0.6
E04G-SEXPR/L03-D050	Carbide	5	4	2.5	90	9	3.8	0°	-13°	0.2	EP**03X1...	0.6
E05G-SEXPR/L04-D055	Carbide	5.5	5	2.75	90	10	4.8	0°	-12°	0.4	EP**0401...	0.6
E06H-SEXPR/L04-D070	Carbide	7	6	3.6	100	12	5.75	0°	-12°	0.4	EP**0401...	0.6
E08K-SEXPR/L04-D055	Carbide	5.5	8	2.75	125	28	7.5	0°	-12°	0.4	EP**0401...	0.6
E08K-SEXPR/L04-D070	Carbide	7	8	3.6	125	40	7.5	0°	-12°	0.4	EP**0401...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SEXPR**) with left-hand inserts (L); and left-hand toolholders (SEXPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SEXPR/L03-D...	CSTA-1.6	T-6F
A**-SEXPR/L04-D...	CSTB-2	T-6F
E**-SEXPR/L03-D...	CSTA-1.6	T-6F
E**-SEXPR/L04-D...	CSTB-2	T-6F

INSERT SELECTION

P

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B016

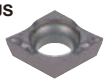
M

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B018

K

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B020

S

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B024

N

Application	Precision finishing	Finishing
Grade	DX140	SH725
Breaker Shape	DIA 	JS 
Cutting conditions	B022	

H

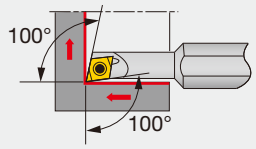
Application	Precision finishing
Grade	BX310
Breaker Shape	CBN 
Cutting conditions	B026

Reference pages: A/E-SEXPR/L: Insert → B128 -, CBN → B195, PCD → B214

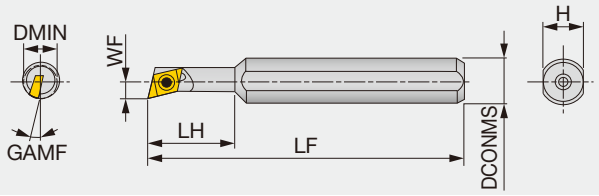
J-SERIES

JS-SEXPR/L

Screw-on boring bar, for positive 75° rhombic inserts



Cutting edge style **X**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMF	RE**	Insert	Torque*
JS08H-SEXPR045	Steel	5.5	8	2.7	100	16	7	12°	0.4	EP**0401...	0.6
JS08H-SEXPR047	Steel	7	8	3.6	100	20	7	12°	0.4	EP**0401...	0.6

SPARE PARTS

Designation	Clamping screw	Wrench
JS08H-SEXPR04...	CSTB-2	T-6F

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SEXPR**) with left-hand inserts (L); and left-hand toolholders (SEXPL**) with right-hand inserts (R).

INSERT SELECTION

P

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B016

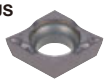
M

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B018

K

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B020

S

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B024

N

Application	Precision finishing	Finishing
Grade	DX140	SH725
Breaker Shape	DIA 	JS 
Cutting conditions	B022	

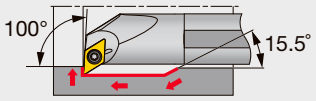
H

Application	Precision finishing
Grade	BX310
Breaker Shape	CBN 
Cutting conditions	B026

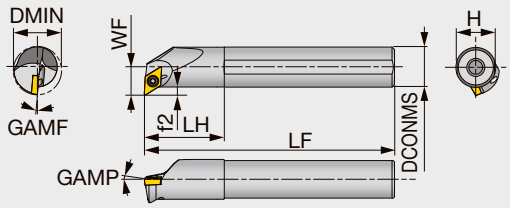
Reference pages: JS-SEXPR/L: Insert → B128 -, CBN → B195, PCD → B214

A/E-SDXXR/L

Screw-on boring bar, for DXG/MU inserts



Cutting edge style **X**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SDXXR/L07-D130	Steel	13	10	7.6	125	20	9	2.6	-14°	-16°	0.4	DXG/MU0703**L/R...	0.9
A12M-SDXXR/L07-D160	Steel	16	12	8.6	150	24	11	2.6	-14°	-14°	0.4	DXG/MU0703**L/R...	0.9
A16Q-SDXXR/L07-D200	Steel	20	16	10.6	180	32	15	2.6	-13°	-13°	0.4	DXG/MU0703**L/R...	0.9
A20R-SDXXR/L07-D240	Steel	24	20	12.6	200	36	18	2.6	-13°	-12°	0.4	DXG/MU0703**L/R...	0.9
E10M-SDXXR/L07-D130	Carbide	13	10	7.6	150	25	9	2.6	-14°	-16°	0.4	DXG/MU0703**L/R...	0.9
E12Q-SDXXR/L07-D160	Carbide	16	12	8.6	180	27	11	2.6	-14°	-14°	0.4	DXG/MU0703**L/R...	0.9
E16R-SDXXR/L07-D200	Carbide	20	16	10.6	200	32	15	2.6	-13°	-13°	0.4	DXG/MU0703**L/R...	0.9
E20S-SDXXR/L07-D240	Carbide	24	20	12.6	250	36	18	2.6	-13°	-12°	0.4	DXG/MU0703**L/R...	0.9

*Torque: Recommended clamping torque (N·m) **RE : Standard corner radius

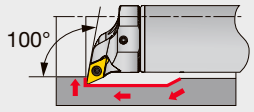
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R)

SPARE PARTS

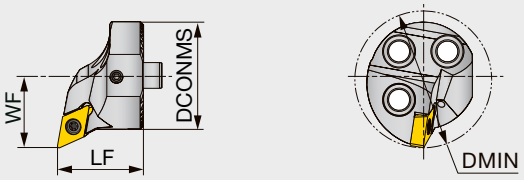
Designation	Clamping screw	Wrench
A/E**-SDXXR/L...	SR34-514	T-7F

S-SDXXR/L-H

Screw-on clamp exchangeable boring head, for DXG/MU inserts



Cutting edge style **X**



Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S25-SDXXR/L07-H	32	25	17	20	D25	DXG/MU0703**L/R...
S32-SDXXR/L07-H	40	32	22	32	D32	DXG/MU0703**L/R...
S40-SDXXR/L07-H	50	40	27	32	D40, D50, D60	DXG/MU0703**L/R...

Note: Use right-hand toolholders (SDXXR**) with left-hand inserts (L); and left-hand toolholders (SDXXL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
S**-SDXXR/L07-H	SR34-514	T-7F

Reference pages: A/E-SDXXR/L, S-SDXXR/L-H: Insert → B126 -, Shank → D090 - D092
Standard cutting conditions → D096

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JS 	JTS 	SS 	TS 
Cutting conditions	B096			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	TS 
Cutting conditions	B096

K

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JS 	JTS 	SS 	TS 
Cutting conditions	B096			

K

Application	Medium cutting
Grade	T9215
Breaker Shape	TS 
Cutting conditions	B096

S

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Breaker Shape	JS 	JTS 	SS 	TS 
Cutting conditions	B096			

S

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS 
Cutting conditions	B096

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Chipbreaker shape	JS 	JTS 	SS 	TS 
Cutting conditions	B096			

M

Application	Medium cutting
Grade	AH8015
Chipbreaker shape	TS 
Cutting conditions	B096

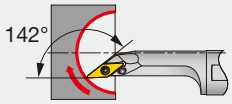
N

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	KS05F	KS05F	KS05F
Breaker Shape	SS 	TS 	TS 
Cutting conditions	B096		

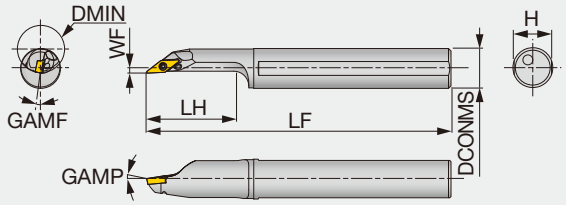
STREAMJETBAR

A-SVJBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A20R-SVJBR/L11-D250	Steel	25	20	2	200	40	18	-5°	-5°	0.4	VB**1103...	1.2
A25S-SVJBR/L11-D300	Steel	30	25	3.5	250	50	23	-5°	-5°	0.4	VB**1103...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVJBR**) with left-hand inserts (L); and left-hand toolholders (SVJBL**) with right-hand inserts (R).

SPARE PARTS




Designation	Clamping screw	Wrench
A**-SVJB*11-D...	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B014			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Chipbreaker shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PS
Cutting conditions	B014

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PS
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

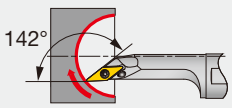
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: A-SVJBR/L: Insert → B150 -, CBN → B207 -

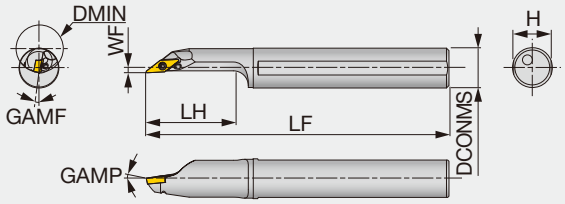
STREAMJETBAR

A-SVJCR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVJCR/L08-D160	Steel	16	12	2	150	28	11	-5°	-5°	0.4	VC**0802...	0.6
A16Q-SVJCR/L08-D200	Steel	20	16	2	180	35	15	-5°	-5°	0.4	VC**0802...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVJCR**) with left-hand inserts (L); and left-hand toolholders (SVJCL**) with right-hand inserts (R).

SPARE PARTS




Designation	Clamping screw	Wrench
A**-SVJC*08-D...	CSTB-2L	T-6F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B014	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

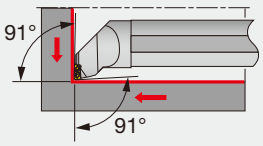
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

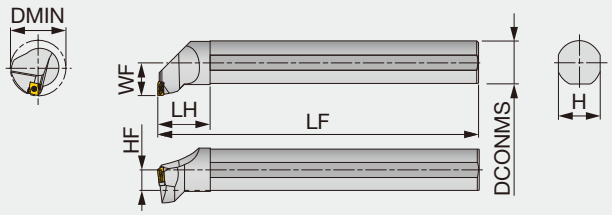
Reference pages: A-SVJCR/L: Insert → B152 -

S-TLANR/L

Screw-on boring bar for roughing, for negative tangential inserts



Cutting edge style **A**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	HF	Insert
S25T-TLANR/L12-D530	Steel	53	25	17	300	40	23	11.5	LNMX1204**L/R...
S32U-TLANR/L12-D530	Steel	53	32	22	350	45	30	15	LNMX1204**L/R...
S40V-TLANR/L12-D530	Steel	53	40	27	400	53	37	18.5	LNMX1204**L/R...
S50U-TLANR/L16-D850	Steel	85	50	37	350	63	47	23.5	LNMX1606**L/R...

Note: Use right-hand toolholders (TLANR**) with left-hand inserts (L); and left-hand toolholders (TLANL**) with right-hand inserts (R).

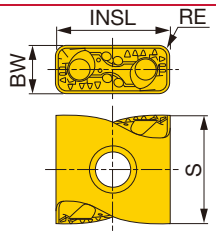
SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Spring pin	Wrench 1	Wrench 2
S**-TLANR/L12-D530	CSTB-3.5L115-S	CSTF-2L055-S	TSL12L/RI	-	KEYV-T10	T-6F-S
S50U-TLANR16-D850	CSTB-4L115-S	-	TSL16LI	PSP-16	KEYV-T15	-
S50U-TLANL16-D850	CSTB-4L115-S	-	TSL16RI	PSP-16	KEYV-T15	-

INSERT

LNMX12/16/24





P	Steel	★	★	★			
M	Stainless	☆		☆			
K	Cast iron	☆	☆	☆			
N	Non-ferrous						
S	Superalloys						
H	Hard materials						

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated									BW	INSL	S
			T9115	T9125	AH725									
LNMX120408R-TDR	R	0.8	●	●								4.8	12	11.6
LNMX120408L-TDR	L	0.8	●	●								4.8	12	11.6
LNMX120412R-TDR	R	1.2	●	●								4.8	12	11.6
LNMX120412L-TDR	L	1.2	●	●								4.8	12	11.6
LNMX160608R-TDR	R	0.8	●	●								6.4	16.2	13.5
LNMX160608L-TDR	L	0.8	●	●								6.4	16.2	13.5
LNMX160612R-TDR	R	1.2	●	●								6.4	16.2	13.5
LNMX160612L-TDR	L	1.2	●	●								6.4	16.2	13.5
LNMX160616R-TDR	R	1.6	●	●								6.4	16.2	13.5
LNMX160616L-TDR	L	1.6	●	●								6.4	16.2	13.5
LNMX241016R-TDR	R	1.6	●	●								9.4	24	20.5
LNMX241016L-TDR	L	1.6	●	●								9.4	24	20.5
LNMX241024R-TDR	R	2.4	●	●								9.4	24	20.5
LNMX241024L-TDR	L	2.4	●	●								9.4	24	20.5
LNMX160608R-MDR	R	0.8	●		●							6.4	16.2	13.5
LNMX160608L-MDR	L	0.8	●		●							6.4	16.2	13.5
LNMX160612R-MDR	R	1.2	●		●							6.4	16.2	13.5
LNMX160612L-MDR	L	1.2	●		●							6.4	16.2	13.5
LNMX160608R-TWR	R	0.8	●									6.4	16.2	13.5
LNMX160608L-TWR	L	0.8	●	●								6.4	16.2	13.5
LNMX160612R-TWR	R	1.2	●	●								6.4	16.2	13.5
LNMX160612L-TWR	L	1.2	●	●								6.4	16.2	13.5

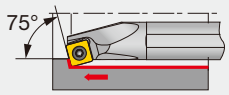
●: Line up

Reference pages: Standard cutting conditions → D097

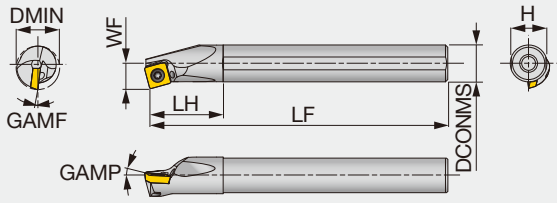
STREAMJETBAR

A-SSKPR

Screw-on boring bar, for positive square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SSKPR09-D200	Steel	20	16	11	180	32	15	5°	-6°	0.8	SP**0903...	3
A20R-SSKPR09-D240	Steel	24	20	13	200	36	18	5°	-2°	0.8	SP**0903...	3
A25S-SSKPR12-D310	Steel	31	25	17	250	45	23	5°	-2°	0.8	SP**1204...	6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SSKPR**) with left-hand inserts (L); and left-hand toolholders (SSKPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SSKPR09-D2*0	CSTB-4L060	T-15F
A25S-SSKPR12-D310	CSTB-5S	T-20F

INSERT SELECTION

P

Application	Finishing to medium cutting
Grade	T9215
Breaker Shape	PS 
Cutting conditions	B016

M

Application	Finishing to medium cutting
Grade	AH6225
Breaker Shape	PS 
Cutting conditions	B018

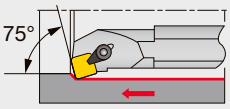
K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM 
Cutting conditions	B020

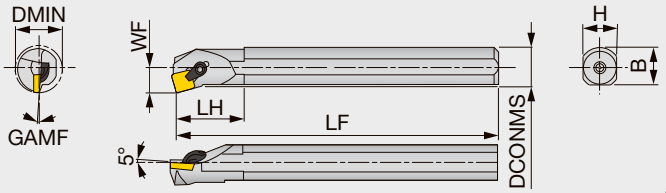
Reference pages: A-SSKPR: Insert → B135 -, CBN → B195 -

S/C-CSKPR/L

Clamp-on boring bar, for positive square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S16Q-CSKPR09	Steel	20	16	11	180	30	15	15	-4°	0.8	SP**0903...
S20R-CSKPR/L09	Steel	25	20	13	200	40	18	18.5	-2°	0.8	SP**0903...
S25S-CSKPR12	Steel	32	25	17	250	45	23	22.5	0°	0.8	SP**1203...

**RE : Standard corner radius

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

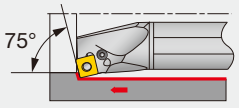
Designation	Clamp set	Wrench
S16Q-CSKPR09	CSG-5S	P-2.5
S20R-CSKPR/L09	CSG-5	P-2.5
S25S-CSKPR12	CSG-6	P-3

Reference pages: S/C-CSKPR/L: Insert → B135 -, CBN → B195 -, PCD → B215

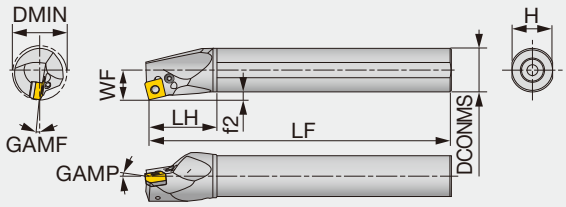
STREAMJETBAR

A-PSKNR/L

Lever-lock boring bar, for negative square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A32S-PSKNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	SN**1204...	4.8
A40T-PSKNR/L12-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	SN**1204...	4.8
A50U-PSKNR/L12-D630	Steel	63	50	35	350	65	47	10	-6°	-8°	0.8	SN**1204...	4.8

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (PSKNR**) with left-hand inserts (L); and left-hand toolholders (PSKNL**) with right-hand inserts (R).

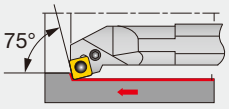
SPARE PARTS

Designation	Shim	Screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A32S-PSKNR/L12-D400	LSS42BR/L	LCS4	P-3	LSP4	LCL4	EA-32	SSHM4-5
A40T-PSKNR/L12-D500	LSS42BR/L	LCS4	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PSKNR/L12-D630	LSS42BR/L	LCS4	P-3	LSP4	LCL4	-	SSHM6-6

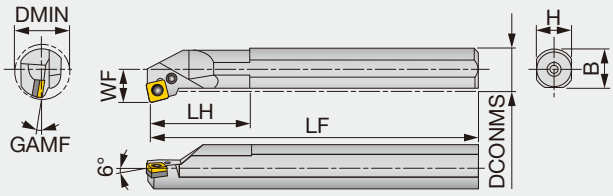
*Optional

S-PSKNR

Lever-lock boring bar, for negative square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S32S-PSKNR12	Steel	40	32	22	250	50	30	29.5	-10°	0.8	SN**1204...
S40T-PSKNR12	Steel	50	40	27	300	55	37	37.5	-10°	0.8	SN**1204...
S50U-PSKNR12	Steel	63	50	35	350	65	47	47.5	-8°	0.8	SN**1204...

**RE : Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

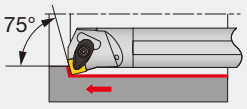
SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
S**-PSKNR12	LSS42BR	LCS4	P-3	LSP4	LCL4

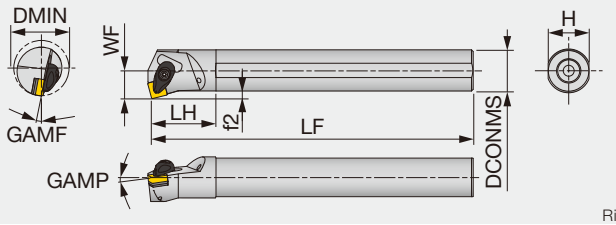
Reference pages: A-PSKNR/L, S-PSKNR: Insert → B077 -, CBN → B180, PCD → B211

A-ASKNR/L

Double-clamp boring bar, for negative square inserts



Cutting edge style **K**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ASKNR/L12-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	SN**1204...	3
A32S-ASKNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	SN**1204...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ASKN*12-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Finishing	Medium cutting
Grade	DX140	TH10
Breaker Shape	T-DIA	P
Cutting conditions	B010	

S

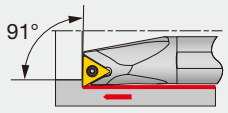
Application	Precision finishing	Finishing	Medium cutting
Grade	BX480	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B012		

Reference pages: A-ASKNR/L: Insert → B077 -, CBN → B180, PCD → B211

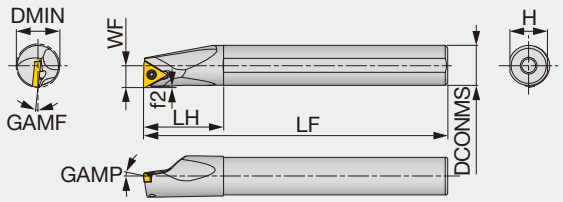
STREAMJETBAR

A/E-STFCR/L

Screw-on boring bar, for positive 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-STFCR/L1103-D120	Steel	12	10	6.5	125	20	9	0.6	0°	-13°	0.4	TC**1103...	1.2
A12M-STFCR/L1103-D140	Steel	14	12	7	150	24	11	0.5	0°	-10°	0.4	TC**1103...	1.2
A16Q-STFCR/L1103-D180	Steel	18	16	9	180	32	15	0.5	0°	-7°	0.4	TC**1103...	1.2
E10M-STFCR/L1103-D120	Carbide	12	10	6.5	150	25	9	0.7	0°	-13°	0.4	TC**1103...	1.2
E12Q-STFCR/L1103-D140	Carbide	14	12	7	180	27	11	0.5	0°	-10°	0.4	TC**1103...	1.2
E16R-STFCR/L1103-D180	Carbide	18	16	9	200	32	15	0.5	0°	-7°	0.4	TC**1103...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (STFCR**) with left-hand inserts (L); and left-hand toolholders (STFCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-STFCR/L1103-D...	CSTB-2.5	T-8F
E**-STFCR/L1103-D...	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	SH725	SH725	T9215	T9215
Breaker Shape	JP	JS	PS	PM
Cutting conditions	B016			

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PS	PM
Cutting conditions	B018			

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing to medium cutting
Grade	DX120	KS05F
Breaker Shape	DIA	with rake AL
Cutting conditions	B022	

S

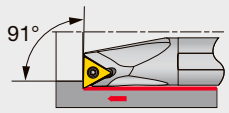
Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PS	PM
Cutting conditions	B024			

Reference pages: A/E-STFCR/L: Insert → B138 -, PCD → B216

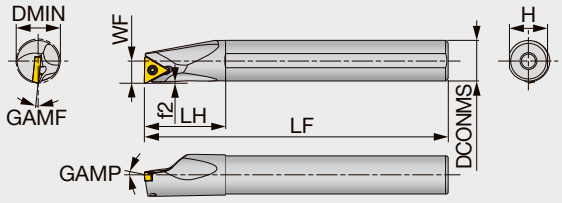
STREAMJETBAR

A/E-STFPR/L

Screw-on boring bar, for positive 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A08H-STFPR/L09-D100	Steel	10	8	5.5	100	16	7.5	0.7	5°	-8°	0.4	TP**0902...	0.9
A10K-STFPR/L1102-D120	Steel	12	10	6.5	125	20	9	0.7	5°	-6°	0.4	TP**1102...	1.2
A12M-STFPR/L1102-D140	Steel	14	12	7.0	150	24	11	0.6	5°	-4°	0.4	TP**1102...	1.2
A16Q-STFPR/L13-D180	Steel	18	16	9	180	32	15	0.7	5°	-2°	0.4	TP**1303...	1.4
A20R-STFPR13-D220	Steel	22	20	11	200	36	18	0.8	5°	-2°	0.4	TP**1303...	1.4
A25S-STFPR16-D270	Steel	27	25	13.5	250	45	23	0.6	5°	-1°	0.4	TP**16T3...	3
E08K-STFPR/L09-D100	Carbide	10	8	5.5	125	22	7.5	0.7	5°	-8°	0.4	TP**0902...	0.9
E10M-STFPR/L1102-D120	Carbide	12	10	6.5	150	25	9	0.7	5°	-6°	0.4	TP**1102...	1.2
E12Q-STFPR/L1102-D140	Carbide	14	12	7	180	27	11	0.6	5°	-4°	0.4	TP**1102...	1.2
E16R-STFPR13-D180	Carbide	18	16	9	200	32	15	0.7	5°	-2°	0.4	TP**1303...	1.4
E20S-STFPR13-D220	Carbide	22	20	11	250	36	18	0.8	5°	-2°	0.4	TP**1303...	1.4

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (STFPR**) with left-hand inserts (L); and left-hand toolholders (STFPL**) with right-hand inserts (R).
TPGH, TPGM, and TPGA inserts cannot be used.

SPARE PARTS

Designation	Clamping screw	Wrench
A08H-STFPR/L09-D100	CSTB-2.2S	T-7F
A10K-STFPR/L1102-D120	CSTB-2.5B	T-8F
A12M-STFPR/L1102-D140	CSTB-2.5	T-8F
A16Q-STFPR/L13-D180	CSTB-3S	T-9F
A20R-STFPR13-D220	CSTB-3	T-9F
A25S-STFPR16-D270	CSTB-4M	T-15F
E08K-STFPR/L09-D100	CSTB-2.2S	T-7F
E10M-STFPR/L1102-D120	CSTB-2.5B	T-8F
E12Q-STFPR/L1102-D140	CSTB-2.5	T-8F
E16R-STFPR13-D180	CSTB-3S	T-9F
E20S-STFPR13-D220	CSTB-3	T-9F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH6225	AH6225	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing
Grade	DX140
Breaker Shape	DIA (with rake)
Cutting conditions	B022

S

Application	Precision finishing
Grade	BX470
Breaker Shape	CBN
Cutting conditions	B024

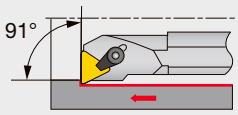
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

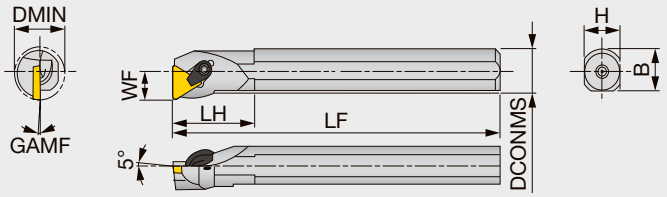
Reference pages: A/E-STFPR/L: Insert → B142 -, CBN → B199 -, PCD → B216 -

S/C-CTFPR/L

Clamp-on boring bar, for positive 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S12M-CTFPR/L11	Steel	16	12	9	150	25	11	11.5	-6°	0.4	TP**1103...
S16Q-CTFPR/L11	Steel	20	16	11	180	30	15	15	-4°	0.4	TP**1103...
S20R-CTFPR/L16	Steel	25	20	13	200	40	18	18.5	-2°	0.8	TP**1603...
S25S-CTFPR/L16	Steel	32	25	17	250	45	23	22.5	0°	0.8	TP**1603...
S32T-CTFPR/L16	Steel	40	32	22	300	50	30	29.5	0°	0.8	TP**1603...
C12Q-CTFPR/L11	Carbide	16	12	9	180	-	11	-	-6°	0.4	TP**1103...
C16R-CTFPR/L11	Carbide	20	16	11	200	-	15	-	-4°	0.4	TP**1103...

**RE : Standard corner radius

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

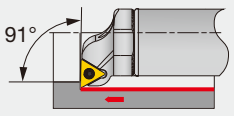
Designation	Clamp set 1	Clamp set 2	Wrench	Shim	Shim screw
S12M-CTFPR/L11	CSW-00	-	P-2.5	-	-
S16Q-CTFPR/L11	-	CSG-5S	P-2.5	-	-
S20R-CTFPR/L16	-	CSG-6S	P-3	-	-
S25S-CTFPR/L16	-	CSG-6	P-3	-	-
S32T-CTFPR/L16	-	CSG-6	P-3	PAT-32	M3X0.5X6
C12Q-CTFPR/L11	CSW-00	-	P-2.5	-	-
C16R-CTFPR/L11	-	CSG-5S	P-2.5	-	-

Reference pages: S/C-CTFPR/L: Insert → B142 -, CBN → B199 -, PCD → B217 -

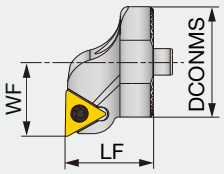
BOREMEISTER

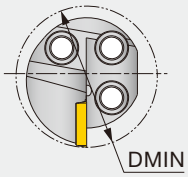
S-STFPR/L-H

Screw-on clamp exchangeable boring head, for positive 60° triangular inserts



Cutting edge style **F**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S16-STFPR/L09-H	20	16	11	20	D16	TP**0902...
S16-STFPR/L11-H	20	16	11	20	D16	TP**1102...
S20-STFPR/L11-H	25	20	13	20	D20	TP**1102...
S25-STFPR/L11-H	32	25	17	20	D25	TP**1102...
S32-STFPR/L16-H	40	32	22	32	D32	TP**16T3...
S40-STFPR/L16-H	50	40	27	32	D40, D50, D60	TP**16T3...

Note: Use right-hand toolholders (STFPR**) with left-hand inserts (L); and left-hand toolholders (STFPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
S16-STFPR/L09-H	CSTB-2.2S	T-7F
S16-STFPR/L11-H	CSTB-2.5	T-8F
S20-STFPR/L11-H	CSTB-2.5	T-8F
S25-STFPR/L11-H	CSTB-2.5	T-8F
S32-STFPR/L16-H	CSTB-4M	T-15F
S40-STFPR/L16-H	CSTB-4M	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH6225	AH6225	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing
Grade	DX140
Breaker Shape	DIA (with rake)
Cutting conditions	B022

S

Application	Precision finishing
Grade	BX470
Breaker Shape	CBN
Cutting conditions	B024

H

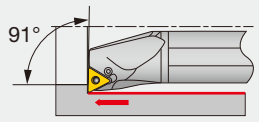
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: S-STFPR/L-H: Insert → B142 -, CBN → B199 -, PCD → B216 -
Shank → D090 - D092

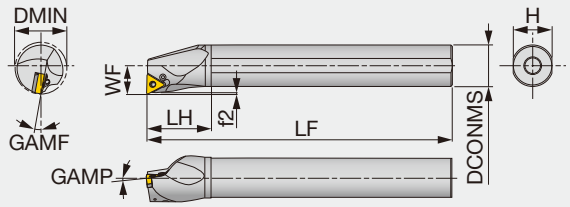
STREAMJETBAR

A-PTFNR/L

Lever-lock boring bar, for negative triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PTFNR/L1104-D320	Steel	32	25	17	200	45	23	1.31	-6°	-12°	0.8	TN**1104...	2
A32S-PTFNR/L1104-D400	Steel	40	32	22	250	50	30	1.25	-6°	-10°	0.8	TN**1104...	2
A25R-PTFNR/L16-D320	Steel	32	25	17	200	45	23	1.2	-6°	-12°	0.8	TN**1604...	2.7
A32S-PTFNR/L16-D400	Steel	40	32	22	250	50	30	1.1	-6°	-10°	0.8	TN**1604...	2.7
A40T-PTFNR/L16-D500	Steel	50	40	27	300	60	37	1.1	-6°	-10°	0.8	TN**1604...	2.7
A50U-PTFNR/L16-D630	Steel	63	50	35	350	65	47	1.1	-6°	-8°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (PTFNR**) with left-hand inserts (L); and left-hand toolholders (PTFNL**) with right-hand inserts (R).

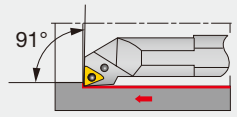
SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PTFNR/L1104-D320	-	LCS23A	-	P-2.5	-	LCL23	EA-25	SSHM4-5
A32S-PTFNR/L1104-D400	-	LCS23A	-	P-2.5	-	LCL23	EA-32	SSHM4-5
A25R-PTFNR/L16-D320	ELST317BR/L	-	LCS3	P-2.5	LSP3	LCL33	EA-25	SSHM4-5
A32S-PTFNR/L16-D400	LST317BR/L	-	LCS3	P-2.5	LSP3	LCL3	EA-32	SSHM4-5
A40T-PTFNR/L16-D500	LST317BR/L	-	LCS3	P-2.5	LSP3	LCL3	-	SSHM6-6
A50U-PTFNR/L16-D630	LST317BR/L	-	LCS3	P-2.5	LSP3	LCL3	-	SSHM6-6

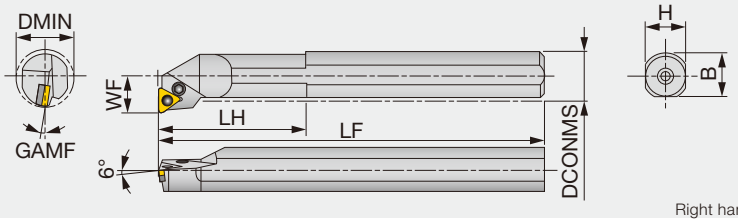
*Optional

S-PTFNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert	Torque*
S32S-PTFNR/L16	Steel	40	32	22	250	50	30	29.5	-10°	0.8	TN**1604...	2.7
S40T-PTFNR/L16	Steel	50	40	27	300	55	37	37.5	-10°	0.8	TN**1604...	2.7
S50U-PTFNR16	Steel	63	50	35	350	65	47	47.5	-8°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

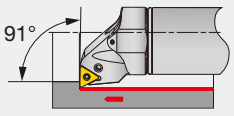
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
S32S-PTFNR16	LST317BR	LCS3	P-2.5	LSP3	LCL3
S32S-PTFNL16	LST317BL	LCS3	P-2.5	LSP3	LCL3
S40T-PTFNR16	LST317BR	LCS3	P-2.5	LSP3	LCL3
S40T-PTFNL16	LST317BL	LCS3	P-2.5	LSP3	LCL3
S50U-PTFNR16	LST317BR	LCS3	P-2.5	LSP3	LCL3

Reference pages: A-PTFNR/L, S-PTFNR/L: Insert → B087 -, CBN → B182 -, PCD → B212

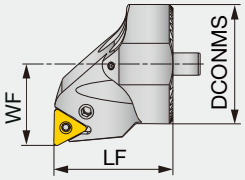
BOREMEISTER

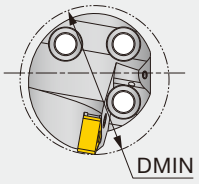
S-PTFNR/L-H

Lever-lock clamp exchangeable boring head, for negative 60° triangular inserts



Cutting edge style **F**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S32-PTFNR/L11-H	40	32	22	32	D32	TN**1104...
S40-PTFNR/L11-H	50	40	27	32	D40, D50, D60	TN**1104...

Note: Use right-hand toolholders (PTFNR**) with left-hand inserts (L); and left-hand toolholders (PTFNL**) with right-hand inserts (R).

SPARE PARTS

Designation	Lever	Clamping screw	Wrench
S**-PTFNR/L11-H	LCL23	LCS23A	P-2.5

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Breaker Shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B012		

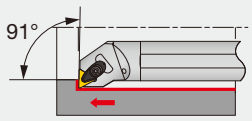
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

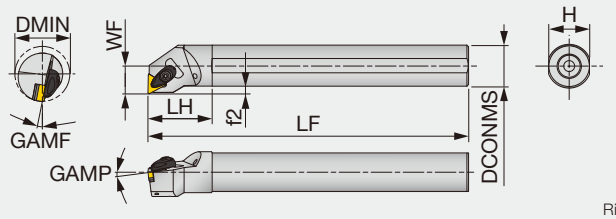
Reference pages: S-PTFNR/L-H: Insert → B087 -, CBN → B184
Shank → D090 - D092

A-ATFNR/L

Double-clamp boring bar, for negative 60° triangular inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ATFNR/L16-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	TN**1604...	3
A32S-ATFNR/L16-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	TN**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ATFNR/L16-D...	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Breaker Shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

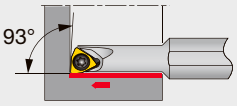
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: A-ATFNR/L: Insert → B087 -, CBN → B182 -, PCD → B212

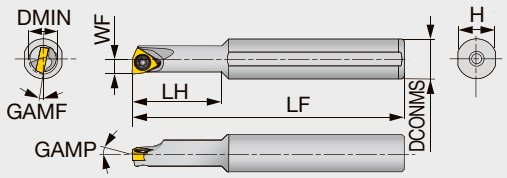
STREAMJETBAR

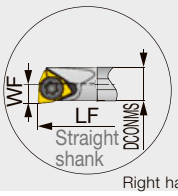
A/E-SWUBR/L

Screw-on boring bar, for positive 80° trigon inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A05F-SWUBR/L03-D060	Steel	6	5	3	80	9	4.8	0°	-13°	0.4	WB**0301...	0.6
A06G-SWUBR/L03-D070	Steel	7	6	3.5	90	11	5.75	0°	-12°	0.4	WB**0301...	0.6
A07G-SWUBR/L03-D080	Steel	8	7	4	90	12	6.75	0°	-11°	0.4	WB**0301...	0.6
A08H-SWUBR03-D060	Steel	6	8	3.1	100	18	7.5	0°	-12°	0.4	WB**0301...	0.6
A08H-SWUBR03-D070	Steel	7	8	3.6	100	20	7.5	0°	-12°	0.4	WB**0301...	0.6
E05G-SWUBR/L03-D060	Carbide	6	5	3	90	10	4.8	0°	-13°	0.4	WB**0301...	0.6
E06H-SWUBR/L03-D070	Carbide	7	6	3.5	100	12	5.75	0°	-12°	0.4	WB**0301...	0.6
E07H-SWUBR/L03-D080	Carbide	8	7	4	100	14	6.75	0°	-11°	0.4	WB**0301...	0.6
E08K-SWUBR03-D060	Carbide	6	8	3.1	125	30	7.5	0°	-12°	0.4	WB**0301...	0.6
E08K-SWUBR03-D070	Carbide	7	8	3.6	125	40	7.5	0°	-12°	0.4	WB**0301...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SWUBR**) with left-hand inserts (L); and left-hand toolholders (SWUBL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A/E**-SWUBR/L...	CSTB-2	T-6F

INSERT SELECTION

P

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B016

M

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B018

K

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B020

N

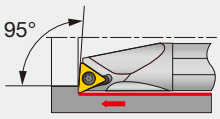
Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B022

Reference pages: A/E-SWUBR/L: Insert → B156 -

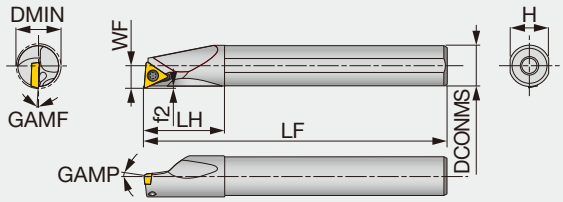
STREAMJETBAR

A/E-STUPR/L

Screw-on boring bar, for positive 60° triangular inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A07G-STUPR/L07-D080	Steel	8	7	4	90	12	6.75	0.4	5°	-10°	0.4	TP**0701...	0.9
A08H-STUPR/L07-D080	Steel	8	8	4	100	19.5	7.5	0.5	5°	-10°	0.4	TP**0701...	0.9
A08H-STUPR/L09-D100	Steel	10	8	5.5	100	16	7.5	0.6	5°	-8°	0.4	TP**0902...(1)	0.9
A10F-STUPR1102-D120	Steel	12	10	6.5	80	20	9	1.4	5°	-6°	0.4	TP**1102...(1)	1.2
A10K-STUPR/L1102-D120	Steel	12	10	6.5	125	20	9	0.7	5°	-6°	0.4	TP**1102...(1)	1.2
A10K-STUPR/L1103-D120	Steel	12	10	6.5	125	20	9	0.6	5°	-10°	0.4	TP**1103...(1)	1.4
A12H-STUPR1102-D140	Steel	14	12	7	100	24	11	0.8	5°	-4°	0.4	TP**1102...(1)	1.2
A12M-STUPR/L1102-D140	Steel	14	12	7	150	24	11	0.8	5°	-4°	0.4	TP**1102...(1)	1.2
A12M-STUPR/L1103-D140	Steel	14	12	7	150	24	11	0.6	5°	-6°	0.4	TP**1103...(1)	1.4
A12H-STUPR1102-D160	Steel	16	12	9	100	24	11	0.6	5°	-3°	0.4	TP**1102...(1)	1.2
A12M-STUPR/L1102-D160	Steel	16	12	9	150	24	11	0.6	5°	-3°	0.4	TP**1102...(1)	1.2
A16K-STUPR13-D180	Steel	18	16	9	125	32	15	0.8	5°	-3°	0.4	TP**1303...(1)	1.4
A16Q-STUPR/L1103-D180	Steel	18	16	9	180	32	15	0.8	5°	-4°	0.4	TP**1103...(1)	1.4
A16Q-STUPR/L13-D180	Steel	18	16	9	180	32	15	0.8	5°	-3°	0.4	TP**1303...(1)	1.4
A16K-STUPR13-D200	Steel	20	16	11	125	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
A16Q-STUPR/L13-D200	Steel	20	16	11	180	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
A20R-STUPR/L1103-D220	Steel	22	20	11	200	36	18	0.7	5°	-2°	0.4	TP**1103...(1)	1.4
A20R-STUPR/L13-D220	Steel	22	20	11	200	36	18	0.7	5°	-2°	0.4	TP**1303...(1)	1.4
A25S-STUPR/L16-D270	Steel	27	25	13.5	250	45	23	0.5	5°	-1°	0.8	TP**16T3...(1)	3
A32T-STUPR/L16-D340	Steel	34	32	17	300	50	30	0.7	5°	0°	0.8	TP**16T3...	3
E07H-STUPR/L07-D080	Carbide	8	7	4	100	14	6.75	0.3	5°	-10°	0.4	TP**0701...	0.9
E08G-STUPR07-D080	Carbide	8	8	4	90	44.5	7.5	0.5	5°	-10°	0.4	TP**0701...	0.9
E08K-STUPR/L07-D080	Carbide	8	8	4	125	44.5	7.5	0.5	5°	-10°	0.4	TP**0701...	0.9
E08G-STUPR09-D100	Carbide	10	8	5.5	90	22	7	0.6	5°	-8°	0.4	TP**0902...(1)	0.9
E08K-STUPR/L09-D100	Carbide	10	8	5.5	125	22	7	0.6	5°	-8°	0.4	TP**0902...(1)	0.9
E10F-STUPR1102-D120	Carbide	12	10	6.5	80	25	9	0.5	5°	-6°	0.4	TP**1102...(1)	1.2
E10H-STUPR1102-D120	Carbide	12	10	6.5	100	25	9	0.6	5°	-6°	0.4	TP**1102...(1)	1.2
E10M-STUPR/L1102-D120	Carbide	12	10	6.5	150	25	9	0.6	5°	-6°	0.4	TP**1102...(1)	1.2
E10M-STUPR/L1103-D120	Carbide	12	10	6.5	150	25	9	0.7	5°	-10°	0.4	TP**1103...(1)	1.4
E12G-STUPR1102-D140	Carbide	14	12	7	90	27	11	0.8	5°	-4°	0.4	TP**1102...(1)	1.2
E12J-STUPR1102-D140	Carbide	14	12	7	110	27	11	0.8	5°	-4°	0.4	TP**1102...(1)	1.2
E12Q-STUPR/L1102-D140	Carbide	14	12	7	180	27	11	0.8	5°	-4°	0.4	TP**1102...(1)	1.2
E12Q-STUPR/L1103-D140	Carbide	14	12	7	180	27	11	0.7	5°	-6°	0.4	TP**1103...(1)	1.4
E12G-STUPR1102-D160	Carbide	16	12	9	90	27	11	0.6	5°	-3°	0.4	TP**1102...(1)	1.2
E12J-STUPR1102-D160	Carbide	16	12	9	110	27	11	0.6	5°	-3°	0.4	TP**1102...(1)	1.2
E12Q-STUPR/L1102-D160	Carbide	16	12	9	180	27	11	0.6	5°	-3°	0.4	TP**1102...(1)	1.2
E16H-STUPR13-D180	Carbide	18	16	9	100	32	15	0.9	5°	-3°	0.4	TP**1303...(1)	1.4
E16R-STUPR/L1103-D180	Carbide	18	16	9	200	32	15	0.8	5°	-3°	0.4	TP**1103...(1)	1.4
E16L-STUPR13-D180	Carbide	18	16	9	130	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
E16R-STUPR/L13-D180	Carbide	18	16	9	200	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
E16H-STUPR13-D200	Carbide	20	16	11	100	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
E16L-STUPR13-D200	Carbide	20	16	11	130	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
E16R-STUPR/L13-D200	Carbide	20	16	11	200	32	15	0.6	5°	-3°	0.4	TP**1303...(1)	1.4
E20S-STUPR1103-D220	Carbide	22	20	11	250	36	18	0.7	5°	-2°	0.4	TP**1103...(1)	1.4
E20S-STUPR13-D220	Carbide	22	20	11	250	36	18	0.6	5°	-2°	0.4	TP**1303...(1)	1.4
E25T-STUPR16-D270	Carbide	27	25	13.5	300	45	23	0.5	5°	-1°	0.8	TP**16T3...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (STUPR**) with left-hand inserts (L); and left-hand toolholders (STUPL**) with right-hand inserts (R).
(1) TPGH, TPGM, and TPGA inserts cannot be used.

Reference pages: A/E-STUPR/L: Insert → B142 -, CBN → B199 -, PCD → B216 -

SPARE PARTS

Designation	Clamping screw	Wrench
A/E07*-STUPR/L07-...	CSTB-2.2L038	T-7F
A/E08*-STUPR/L07-...	CSTB-2.2L038	T-7F
A/E08*-STUPR/L09-...	CSTB-2.2L038	T-7F
A/E10*-STUPR/L1102-...	CSTB-2.5S	T-8F
A/E10*-STUPR/L1103-...	CSTB-3L050	T-9F
A/E12*-STUPR/L1102-...	CSTB-2.5B	T-8F
A/E12*-STUPR/L1103-...	CSTB-3L050	T-9F
A/E16*-STUPR/L1103-...	CSTB-3S	T-9F
A/E16*-STUPR/L13-...	CSTB-3S	T-9F
A/E20*-STUPR/L1103-...	CSTB-3S	T-9F
A/E20*-STUPR/L13-...	CSTB-3	T-9F
A/E25*-STUPR/L16-...	CSTB-4M	T-15F
A32*-STUPR/L16-...	CSTB-4M	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Breaker Shape	PSS 	PS 	PM 
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH6225	AH6225	AH6225
Breaker Shape	PSS 	PS 	PM 
Cutting conditions	B018		

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM 
Cutting conditions	B020

N

Application	Precision finishing
Grade	DX140
Breaker Shape	DIA (with rake) 
Cutting conditions	B022

S

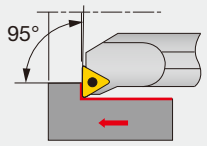
Application	Precision finishing
Grade	BX470
Breaker Shape	CBN 
Cutting conditions	B024

H

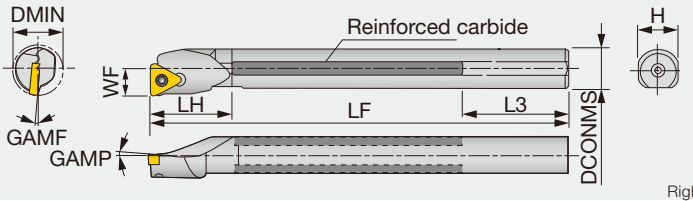
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP 	HS 
Cutting conditions	B026	

T-STUPR/L

Screw-on boring bar, for positive 60° triangular inserts (Tsuppari-Ichiban)



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMP	GAMF	RE**	Insert	Torque*
T12M-STUPR11-D14	Reinforced	14	-	12	7	150	24	59	11	5°	-4°	0.4	TP**1102...	1.2
T12M-STUPR/L11	Reinforced	16	-	12	9	150	24	58	11	5°	-4°	0.4	TP**1102...	1.2
T16Q-STUPR13-D18	Reinforced	18	-	16	9	180	30	59	15	5°	-3.5°	0.4	TP**1303...	1.4
T16Q-STUPR/L13	Reinforced	20	-	16	11	180	30	59	15	5°	-3°	0.4	TP**1303...	1.4
T20R-STUPR13C-D22	Reinforced	22	Rc1/4	20	11	200	35	49	18	5°	-2°	0.4	TP**1303...	1.4
T20R-STUPR/L13	Reinforced	24	-	20	13	200	40	49	18	5°	-2°	0.4	TP**1303...	1.4
T25S-STUPR16C-D27	Reinforced	27	Rc1/4	25	13.5	250	40	64	23	5°	-1°	0.8	TP**16T3...	3
T25S-STUPR/L16	Reinforced	31	-	25	17	250	45	64	23	5°	0°	0.8	TP**16T3...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (STUPR**) with left-hand inserts (L); and left-hand toolholders (STUPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
T12M-STUPR11-D14	CSTB-2.5B	T-8F
T12M-STUPR/L11	CSTB-2.5	T-8F
T16Q-STUPR13-D18	CSTB-3S	T-9F
T16Q-STUPR/L13	CSTB-3	T-9F
T20R-STUPR13C-D22	CSTB-3S	T-9F
T20R-STUPR/L13	CSTB-3	T-9F
T25S-STUPR/L16...	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH6225	AH6225	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing
Grade	DX140
Breaker Shape	DIA (with rake)
Cutting conditions	B022

S

Application	Precision finishing
Grade	BX470
Breaker Shape	CBN
Cutting conditions	B024

H

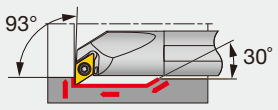
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: T-STUPR/L: Insert → B142 -, CBN → B199 -, PCD → B216 -

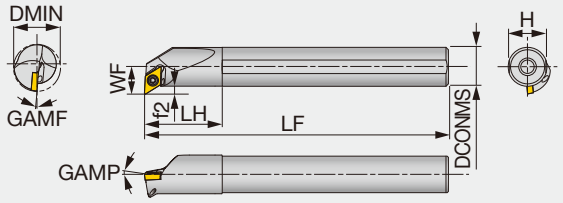
STREAMJETBAR

A/E-SDUCR/L

Screw-on boring bar, for positive 55° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SDUCR/L07-D130	Steel	13	10	7	125	20	9	2	0°	-10°	0.4	DC**0702...	1.2
A12M-SDUCR/L07-D160	Steel	16	12	9.3	150	24	11	3.3	0°	-6°	0.4	DC**0702...	1.2
A16Q-SDUCR/L07-D200	Steel	20	16	11.3	180	32	15	3.3	0°	-5°	0.4	DC**0702...	1.2
A20R-SDUCR/L11-D270	Steel	27	20	16.1	200	36	18	6.1	0°	-5°	0.8	DC**11T3...	3
A25S-SDUCR/L11-D320	Steel	32	25	18.6	250	45	23	6.1	0°	-4°	0.8	DC**11T3...	3
E10H-SDUCR07-D130	Carbide	13	10	7	100	25	9	1.9	5°	-3.5°	0.4	DC**0702...	1.2
E10M-SDUCR/L07-D130	Carbide	13	10	7	150	25	9	2	0°	-10°	0.4	DC**0702...	1.2
E12J-SDUCR07-D160	Carbide	16	12	9.3	110	27	11	3.2	0°	-6°	0.4	DC**0702...	1.2
E12Q-SDUCR/L07-D160	Carbide	16	12	9.3	180	27	11	3.3	0°	-6°	0.4	DC**0702...	1.2
E16L-SDUCR07-D200	Carbide	20	16	11.3	130	32	15	3.2	0°	-5°	0.4	DC**0702...	1.2
E16R-SDUCR/L07-D200	Carbide	20	16	11.3	200	32	15	3.3	0°	-5°	0.4	DC**0702...	1.2
E20S-SDUCR11-D270	Carbide	27	20	16.1	250	36	18	6.1	0°	-5°	0.8	DC**11T3...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SDUCR**) with left-hand inserts (L); and left-hand toolholders (SDUCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A1**-SDUCR/L07-D1*0	CSTB-2.5S	T-8F
A16Q-SDUCR/L07-D200	CSTB-2.5	T-8F
A2**-SDUCR/L11-D**0	CSTB-4S	T-15F
E1**-SDUCR/L07-D1*0	CSTB-2.5S	T-8F
E16*-SDUCR/L07-D200	CSTB-2.5	T-8F
E20S-SDUCR11-D270	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B018			

M

Application	Medium cutting
Grade	AH6225
Breaker Shape	PM
Cutting conditions	B018

N

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)		AL
Cutting conditions	B022		

H

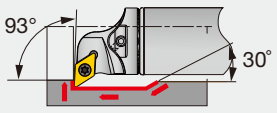
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: A/E-SDUCR/L: Insert → B119 -, CBN → B182, PCD → B194 -

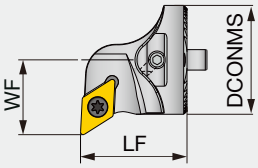
BOREMEISTER

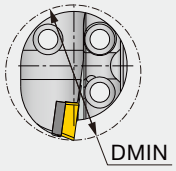
S-SDUCR/L-H

Screw-on clamp exchangeable boring head, for positive 55° rhombic inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S16-SDUCR/L07-H	20	16	11	20	D/G16	DC**0702...
S20-SDUCR/L11-H	25	20	13	20	D/G20	DC**11T3...
S25-SDUCR/L11-H	32	25	17	20	D25	DC**11T3...
S32-SDUCR/L11T-H	40	32	22	32	D32	DC**11T3...
S40-SDUCR/L11T-H	50	40	27	32	D40, D50, D60	DC**11T3...

Note: Use right-hand toolholders (SDUCR**) with left-hand inserts (L); and left-hand toolholders (SDUCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench	Shim	Shim screw
S16-SDUCR/L07-H	SR14-548	T-7/5	-	-
S20-SDUCR/L11-H	SR16-236P	T-15/5	-	-
S25-SDUCR/L11-H	SR16-236P	T-15/5	-	-
S32-SDUCR/L11T-H	SR16-236P	T-15/5	TDC3-1P	SRTC-3P
S40-SDUCR/L11T-H	SR16-236P	T-15/5	TDC3-1P	SRTC-3P

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B016			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B018			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

M

Application	Medium cutting
Grade	AH6225
Breaker Shape	PM
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)		AL
Cutting conditions	B022		

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

H

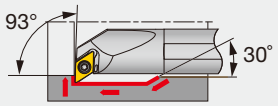
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: S-SDUCR/L-H: Insert → B121 -, CBN → B193 -, PCD → B214
Shank → D090 - D092

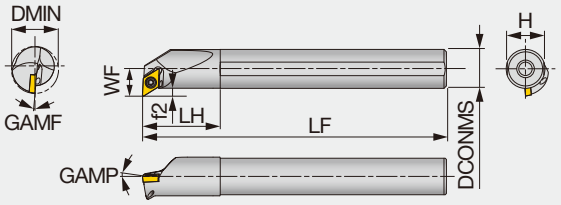
STREAMJETBAR

A/E-SDUPR/L

Screw-on boring bar, for positive 55° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDUPR07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.4	DPMT0702...	1.2
A12M-SDUPL07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.4	DPMT0702...	1.2
A12M-SDUPR07-D180-P	Special alloy steel	18	12	10.3	150	24	11	4.3	5	0	0.4	DPMT0702...	1.2
A12M-SDUPL07-D180-P	Special alloy steel	18	12	10.3	150	24	11	4.3	5	0	0.4	DPMT0702...	1.2
A16Q-SDUPR07-D220-P	Special alloy steel	22	16	12.3	180	32	15	4.3	5	0	0.4	DPMT0702...	1.2
A16Q-SDUPL07-D220-P	Special alloy steel	22	16	12.3	180	32	15	4.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPR07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPL07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPR07-D180	Carbide	18	12	10.3	180	27	11	4.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPL07-D180	Carbide	18	12	10.3	180	27	11	4.3	5	0	0.4	DPMT0702...	1.2
E16R-SDUPR07-D220	Carbide	22	16	12.3	200	32	15	4.3	5	0	0.4	DPMT0702...	1.2
E16R-SDUPL07-D220	Carbide	22	16	12.3	200	32	15	4.3	5	0	0.4	DPMT0702...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SCLPR**) with left-hand inserts (L); and left-hand toolholders (SCLPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SDUPR/L07-D**0-P	CSTB-2.5S	T-8F
E**-SDUPR/L07-D**0	CSTB-2.5S	T-8F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PS	PS
Cutting conditions	B018	

K

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PS	PS
Cutting conditions	B020	

S

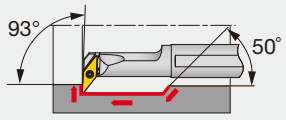
Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

Reference pages: A/E-SDUPR/L: Insert → B126

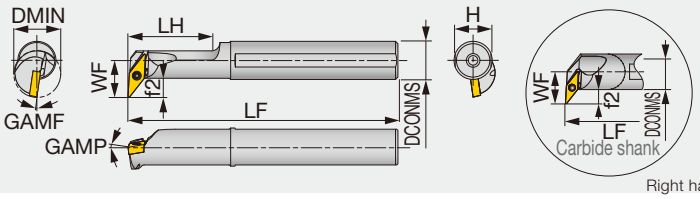
STREAMJETBAR

A/E-SVUBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SVUBR/L11-D200	Steel	20	16	15.5	180	35	15	8	0°	-8°	0.4	VB**1103...	1.2
A20R-SVUBR/L11-D250	Steel	25	20	17.5	200	40	19	8	0°	-7°	0.4	VB**1103...	1.2
A25S-SVUBR/L16-D320	Steel	32	25	20.5	250	50	23	8.5	0°	-6°	0.8	VB**1604...	3
E16R-SVUBR/L11-D245	Carbide	24.5	16	16	200	-	15	8	0°	-8°	0.4	VB**1103...	1.2
E20S-SVUBR/L11-D285	Carbide	28.5	20	18	250	-	19	8	0°	-7°	0.4	VB**1103...	1.2
E25T-SVUBR/L16-D340	Carbide	34	25	21	300	-	23	8.5	0°	-6°	0.8	VB**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVUBR**) with left-hand inserts (L); and left-hand toolholders (SVUBL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVUBR/L11-D2*0	CSTB-2.5	T-8F
A25S-SVUBR/L16-D320	CSTB-3.5	T-15F
E**-SVUBR/L11-D2*5	CSTB-2.5	T-8F
E25T-SVUBR/L16-D340	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B014			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Chipbreaker shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PS
Cutting conditions	B014

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PS
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

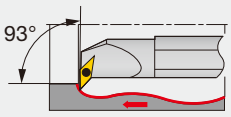
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

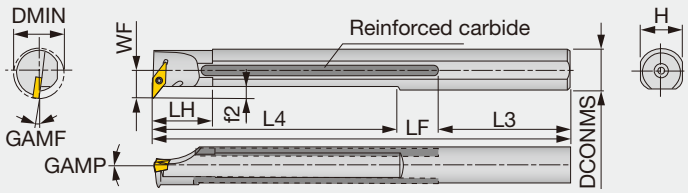
Reference pages: A/E-SVUBR/L: Insert → B150 -, CBN → B207 -

T-SVUBR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	L4	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T20R-SVUBR11C	Reinforced	25	Rc1/4	20	14	200	30	59	121	18	4	0°	-8°	0.4	VB**1103...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVUBR**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
T20R-SVUBR11C	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B014			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Chipbreaker shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PS
Cutting conditions	B014

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PS
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

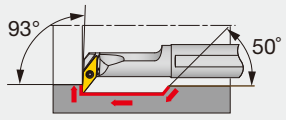
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: T-SVUBR: Insert → B150 -, CBN → B207 -

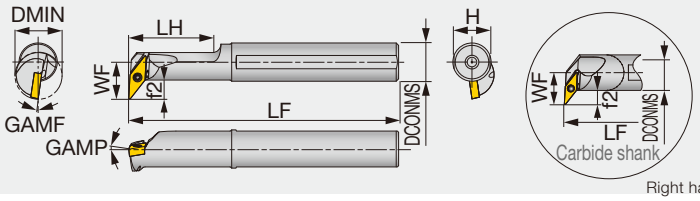
STREAMJETBAR

A/E-SVUCR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVUCR/L08-D160	Steel	16	12	11	150	30	11	5.5	0°	-8°	0.4	VC**0802...	0.6
A25S-SVUCR/L16-D320	Steel	32	25	19	250	45	23	6.5	0°	-5°	0.8	VC**1604...	3
E12Q-SVUCR/L08-D180	Carbide	18	12	11.5	180	-	11	5.5	0°	-8°	0.4	VC**0802...	0.6
E25T-SVUCR/L16-D320	Carbide	32	25	19	300	-	23	6.5	0°	-5°	0.8	VC**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVUCR**) with left-hand inserts (L); and left-hand toolholders (SVUCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A12M-SVUCR/L08-D160	CSTB-2L	T-6F
A25S-SVUCR/L16-D320	CSTB-3.5	T-15F
E12Q-SVUCR/L08-D180	CSTB-2L	T-6F
E25T-SVUCR/L16-D320	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

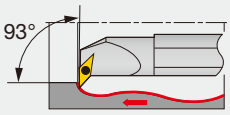
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

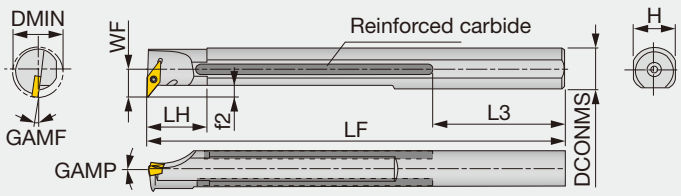
Reference pages: A/E-SVUCR/L: Insert → B152 -, CBN → B209, PCD → B220

T-SVUCR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T25S-SVUCR16C	Reinforced	32	Rc1/4	25	19	250	40	64	23	6.5	0°	-5°	0.8	VC**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Note: Use right-hand toolholders (SVUCR**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
T25S-SVUCR16C	CSTB-3.5L	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
	B024	

H

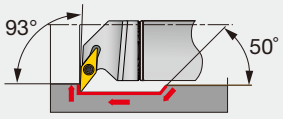
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
	B026	

Reference pages: T-SVUCR: Insert → B152 -, CBN → B209, PCD → B220

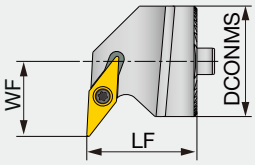
BOREMEISTER

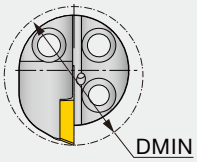
S-SVUCR/L-H

Screw-on clamp exchangeable boring head, for positive 35° rhombic inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S20-SVUCR/L11-H	27	20	16	20	D/G20	VC**1103...
S25-SVUCR/L11-H	31	25	17	25	D25	VC**1103...

Note: Use right-hand toolholders (SVUCR**) with left-hand inserts (L); and left-hand toolholders (SVUCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
S20-SVUCR/L11-H	SR14-560	T-8/5
S25-SVUCR/L11-H	SR14-560	T-8/5

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

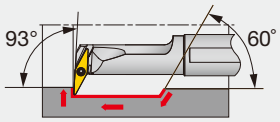
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

Reference pages: S-SVUCR/L-H: Insert → B152 -, CBN → B209, PCD → B220
Shank → D090 - D092

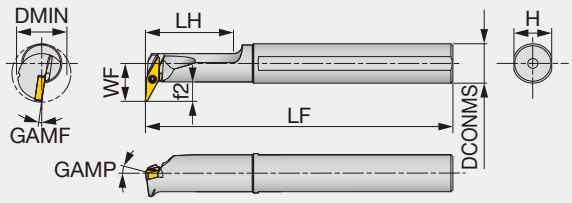
Y-PRO SERIES

A/E-SYUBR/L

Screw-on boring bar, for positive 25° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SYUBR/L11-D200	Steel	20	16	15.5	180	35	15	8	0°	-8°	0.4	YW**11T2...	0.6
E12Q-SYUBR/L11-D200	Carbide	20	12	13.5	180	27	11	7.5	0°	-8°	0.4	YW**11T2...	0.6
E16R-SYUBR/L11-D245	Carbide	24.5	16	16	200	32	15	8	0°	-8°	0.4	YW**11T2...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
A16Q-SYUBR/L11-D200	CSTB-2L	T-6F
E**-SYUBR/L11-D...	CSTB-2L	T-6F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	GT9215	T9215	T9215
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015	AH8015
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B018		

K

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	GT9530	T9215	T9215
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B020		

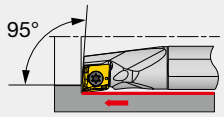
S

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015	AH8015
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B024		

Reference pages: A/E-SYUBR/L: Insert → B159

A/E-SXUOR/L

Screw-on boring bar, for XOMU rhombic inserts



Cutting edge style **U**



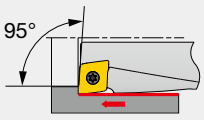
Designation	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	Insert
A08H-SXUOR/L05-D100	10	8	5	100	16	7.5	-7°	-0.8°	XOMU05X204-PS
A12M-SXUOR/L07-D140	14	12	7	150	24	11	-7.2°	3.2°	XOMU07H304-PS
E08K-SXUOR/L05-D100	10	8	5	125	22	7.5	-7°	-0.8°	XOMU05X204-PS
E12Q-SXUOR/L07-D140	14	12	7	180	27	11	-7.2°	3.2°	XOMU07H304-PS

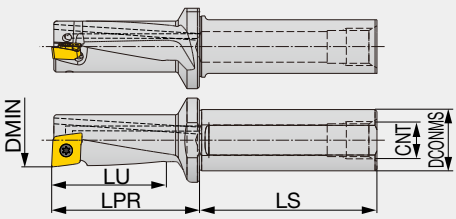
SPARE PARTS

Designation	Clamping screw	Wrench
A08H-SXUOR/L05-D100	CSTB-2L040	T-6F
A12M-SXUOR/L07-D140	CSPB-2.5	IP-8D
E08K-SXUOR/L05-D100	CSTB-2L040	T-6F
E12Q-SXUOR/L07-D140	CSPB-2.5	IP-8D

TBM

Maximum hole depth for LH/DC = 2.25





Designation	DMIN	DCONMS	LU	LS	LPR	CNT	Insert
TBM10R/LF12-2.25	10	12	22.5	41.5	28.45	UNF 5/16-24	XOMU05X204-PS
TBM12R/LF16-2.25	12	16	27	43.9	33.53	G1/8	XOMU06H204-PS
TBM14R/LF16-2.25	14	16	31.5	46.4	38.57	G1/8	XOMU07H304-PS
TBM16R/LF20-2.25	16	20	36	57.1	42.9	G1/8	XOMU08T304-PS

SPARE PARTS

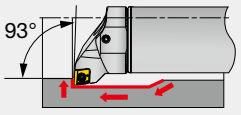
Designation	Clamping screw	Wrench
TBM10R/LF12-2.25	CSTB-2L040	T-6D
TBM12R/LF16-2.25	CSPB-2.2	IP-7D
TBM14R/LF16-2.25	CSPB-2.5	IP-8D
TBM16R/LF20-2.25	CSTB-3	T-9D

Reference pages: Insert → D066
Standard cutting conditions → D098

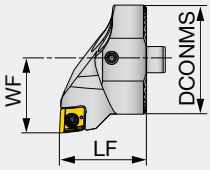
BOREMEISTER

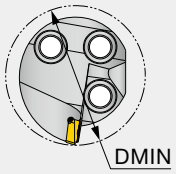
S-SXUOR05-H

Screw-on clamp exchangeable boring head, for XOMU inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S20-SXUOR05-H	25	20	13	20	D20	XOMU05X204-PS
S25-SXUOR05-H	32	25	17	20	D25	XOMU05X204-PS

SPARE PARTS

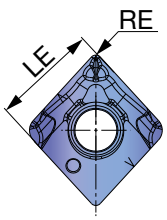


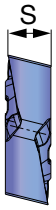


Designation	Clamping screw	Wrench
S**-SXUOR05-H	CSTB-2L040	T-6F

INSERT

XOMU-PS





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	RE	Coated AH725	S	LE
XOMU05X204-PS	0.4	●	2.3	5.56
XOMU06H204-PS	0.4	●	2.7	6.3
XOMU07H304-PS	0.4	●	3.3	7.3
XOMU08T304-PS	0.4	●	4	8.3

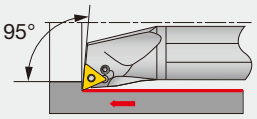
●: Line up

Reference pages: Shank → D090 - D092
Standard cutting conditions → D098

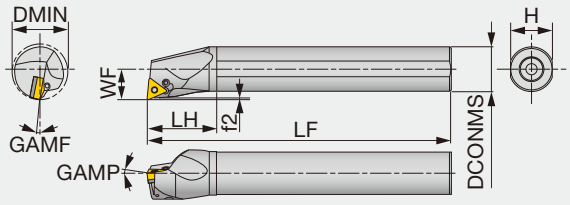
STREAMJETBAR

A-PTUNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PTUNR/L1104-D320	Steel	32	25	17	200	45	23	1.22	-6°	-12°	0.8	TN**1104...	2
A32S-PTUNR/L1104-D400	Steel	40	32	22	250	50	30	1.16	-6°	-10°	0.8	TN**1104...	2
A16M-PTUNR/L11-D200	Steel	20	16	11	150	32	15	1	-6°	-14°	0.4	TN**1103...	1.7
A20Q-PTUNR/L11-D250	Steel	25	20	13	180	36	18	1	-6°	-12°	0.4	TN**1103...	1.7
A25R-PTUNR/L16-D320	Steel	32	25	17	200	45	23	1.4	-6°	-12°	0.8	TN**1604...	2.7
A32S-PTUNR/L16-D400	Steel	40	32	22	250	50	30	1.3	-6°	-10°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N·m) **RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Toolholder length may not conform to ISO standard.
Note: Use right-hand toolholders (PTUNR**) with left-hand inserts (L); and left-hand toolholders (PTUNL**) with right-hand inserts (R).

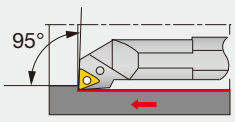
SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PTUNR/L1104-D320	-	LCS23A	-	-	P-2.5	-	LCL23	EA-25	SSHM4-5
A32S-PTUNR/L1104-D400	-	LCS23A	-	-	P-2.5	-	LCL23	EA-32	SSHM4-5
A16M-PTUNR/L11-D200	-	LCS22A	-	P-2F	-	-	LCL22N	-	SSHM3-4
A20Q-PTUNR/L11-D250	-	LCS22A	-	P-2F	-	-	LCL22N	EA-20	SSHM3-4
A25R-PTUNR/L16-D320	ELST317BR/L	-	LCS3	-	P-2.5	LSP3	LCL33	EA-25	SSHM4-5
A32S-PTUNR/L16-D400	LST317BR/L	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32	SSHM4-5

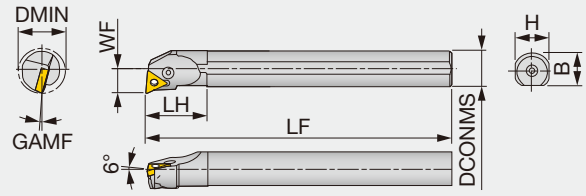
*Optional

A/S-PTUNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert	Torque*
S16M-PTUNR/L11	Steel	20	16	11	150	30	15	15.5	-14°	0.4	TN**1103...	1.7
S20Q-PTUNR/L11	Steel	25	20	13	180	35	18	19	-12°	0.4	TN**1103...	1.7
S25R-PTUNR/L16	Steel	32	25	17	200	40	23	24	-12°	0.8	TN**1604...	2.7
A32S-PTUNR/L16	Steel	40	32	22	250	50	30	29.5	-12°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N·m) **RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Toolholder length may not conform to ISO standard.
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

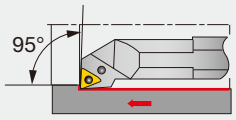
Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*
S**-PTUNR/L11	-	LCS22A	-	P-2F	-	-	LCL22N	-
S25R-PTUNR16	ELST317BR	-	LCS3	-	P-2.5	LSP3	LCL33	-
S25R-PTUNL16	ELST317BL	-	LCS3	-	P-2.5	LSP3	LCL33	-
A32S-PTUNR16	LST317BR	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32
A32S-PTUNL16	LST317BL	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32

*Optional

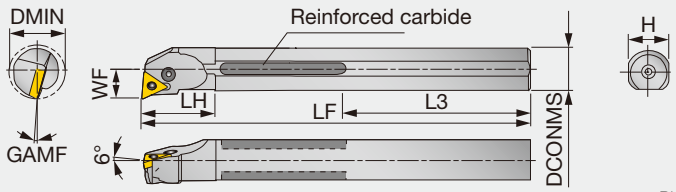
Reference pages: A-PTUNR/L, A/S-PTUNR/L: Insert → B087 -, CBN → B182 -, PCD → B212

T-PTUNR

Lever-lock boring bar, for negative 60° triangular inserts (Tsuppari-Ichiban)



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMF	RE**	Insert	Torque*
T16Q-PTUNR11	Reinforced	20	-	16	11	180	27	59	15	-14°	0.4	TN**1103...	1.7
T20R-PTUNR11C	Reinforced	25	Rc1/4	20	13	200	35	49	18	-12°	0.4	TN**1103...	1.7
T25S-PTUNR16C	Reinforced	32	Rc1/4	25	17	250	40	64	23	-12°	0.8	TN**1604...	2.7
T32U-PTUNR16C	Reinforced	40	Rc1/2	32	22	350	50	103	30	-10°	0.8	TN**1604...	2.7
T40V-PTUNR16C	Reinforced	50	Rc1/2	40	27	400	55	88	37	-10°	0.8	TN**1604...	2.7
T50W-PTUNR16C	Reinforced	63	Rc1/2	50	35	450	65	63	47	-8°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Toolholder length may not conform to ISO standard.
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
T**-PTUNR11...	-	LCS22A	-	P-2F	-	-	LCL22N
T25S-PTUNR16C	ELST317BR	-	LCS3	-	P-2.5	LSP3	LCL33
T**-PTUNR16C	LST317BR	-	LCS3	-	P-2.5	LSP3	LCL3

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Breaker Shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	T-DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

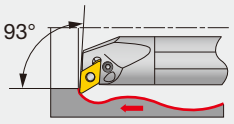
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: T-PTUNR: Insert → B087 -, CBN → B182 -, PCD → B212

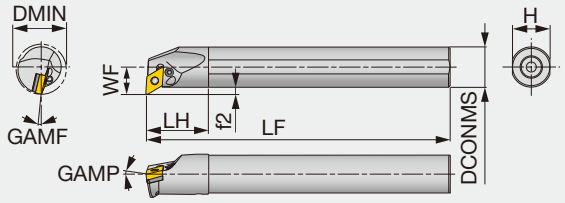
STREAMJETBAR

A-PDUNR/L

Lever-lock boring bar, for negative 55°/45° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A20Q-PDUNR/L1104-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	DN**/FNMG1104...	1.7
A20Q-PDUNR/L11-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	DN**/FNMG1104...	1.7
A25R-PDUNR/L11-D320	Steel	32	25	17	200	45	23	4.5	-6°	-12°	0.8	DN**/FNMG1104...	2.7
A32S-PDUNR/L15-D400	Steel	40	32	22	250	50	30	6	-6°	-13°	0.8	DN**/FNGA1504...	4.8
A40T-PDUNR/L15-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	DN**/FNGA1504...	4.8
A50U-PDUNR/L15-D630	Steel	63	50	35	350	65	47	10	-6°	-8°	0.8	DN**/FNGA1504...	4.8
A32S-PDUNR/L1506-D400	Steel	40	32	22	250	50	30	6	-6°	-13°	0.8	DN**/FNGA1506...	4.8
A40T-PDUNR/L1506-D500	Steel	50	40	27	300	60	37	7	-6°	-11°	0.8	DN**/FNGA1506...	4.8
A50U-PDUNR/L1506-D630	Steel	63	50	35	350	65	47	10	-6°	-10°	0.8	DN**/FNGA1506...	4.8

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (PDUNR**) with left-hand inserts (L); and left-hand toolholders (PDUNL**) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A20Q-PDUNR/L1104-D250	-	LCS22A	-	P-2F	-	-	LCL33NL	EA-20	SSHM2.5-3
A20Q-PDUNR/L11-D250	-	LCS22A	-	P-2F	-	-	LCL33NL	EA-20	SSHM2.5-3
A25R-PDUNR/L11-D320	ELSD317BR/L	-	LCS3	-	P-2.5	LSP3	LCL33L	EA-25	SSHM3-4
A32S-PDUNR/L15-D400	LSD42BR/L	-	LCS4	-	P-3	LSP4	LCL4	EA-32	SSHM5-6
A40T-PDUNR/L15-D500	LSD42BR/L	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PDUNR/L15-D630	LSD42BR/L	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A32S-PDUNR/L1506-D400	ELSD42	-	ELCS4	-	P-3	LSP4S	LCL44	EA-20	SSHM5-6
A40T-PDUNR/L1506-D500	ELSD42	-	ELCS4	-	P-3	LSP4S	LCL44	-	SSHM6-6
A50U-PDUNR/L1506-D630	ELSD42	-	ELCS4	-	P-3	LSP4S	LCL44	-	SSHM6-6

*Optional

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	T-DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

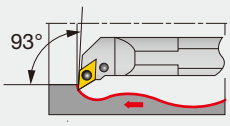
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

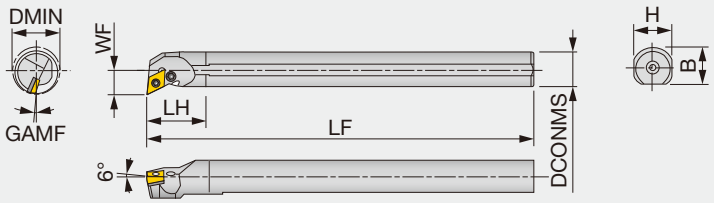
Reference pages: A-PDUNR/L: Insert → B066 -, B075, CBN → B172 -, PCD → B211

S-PDUNR/L

Lever-lock boring bar, for negative 55°/45° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S20Q-PDUNR/L11	Steel	25	20	13	180	35	18	19	-14°	0.8	DN**/FNMG1104...
S25R-PDUNR/L11	Steel	32	25	17	200	40	23	24	-12°	0.8	DN**/FNMG1104...
S32S-PDUNR/L15	Steel	40	32	22	250	50	30	29.5	-13°	0.8	DN**/FNGA1504...
S40T-PDUNR/L15	Steel	50	40	27	300	55	37	37.5	-10°	0.8	DN**/FNGA1504...
S50U-PDUNR/L15	Steel	63	50	35	350	65	47	47.5	-8°	0.8	DN**/FNGA1504...

**RE : Standard corner radius

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
S20Q-PDUNR/L11	-	LCS22A	-	P-2F	-	-	LCL33NL
S25R-PDUNR11	ELSD317BR	-	LCS3	-	P-2.5	LSP3	LCL33L
S25R-PDUNL11	ELSD317BL	-	LCS3	-	P-2.5	LSP3	LCL33L
S32S-PDUNR15	LSD42BR	-	LCS4	-	P-3	LSP4	LCL4
S32S-PDUNL15	LSD42BL	-	LCS4	-	P-3	LSP4	LCL4
S40T-PDUNR15	LSD42BR	-	LCS4	-	P-3	LSP4	LCL4
S40T-PDUNL15	LSD42BL	-	LCS4	-	P-3	LSP4	LCL4
S50U-PDUNR15	LSD42BR	-	LCS4	-	P-3	LSP4	LCL4
S50U-PDUNL15	LSD42BL	-	LCS4	-	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

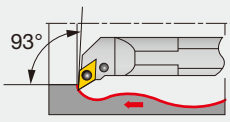
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

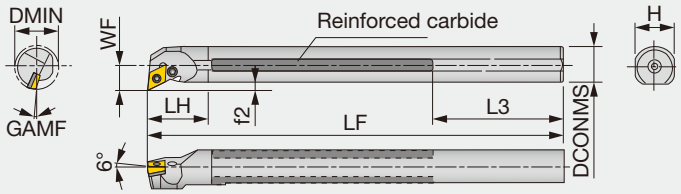
Reference pages: S-PDUNR/L: Insert → B066 -, B075, CBN → B172 -, PCD → B211

T-PDUNR

Lever-lock boring bar, for negative 55°/45° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMF	RE**	Insert
T32U-PDUNR15C	Reinforced	40	Rc1/2	32	22	350	50	103	30	6	-13°	0.8	DN**/FNGA1504...
T40V-PDUNR15C	Reinforced	50	Rc1/2	40	27	400	55	88	37	7	-10°	0.8	DN**/FNGA1504...
T50W-PDUNR15C	Reinforced	63	Rc1/2	50	35	450	65	63	47	10	-8°	0.8	DN**/FNGA1504...

**RE : Standard corner radius

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

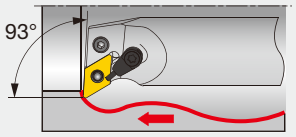
SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
T**-PDUNR15C	LSD42BR	LCS4	P-3	LSP4	LCL4

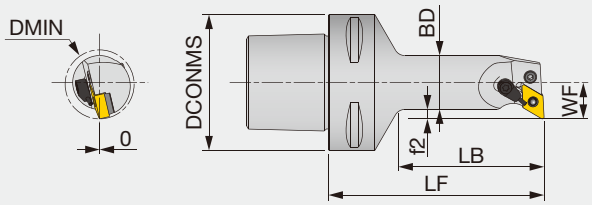
TUNGCAP

C-PDUNL-CHP

Lever-lock boring bar with TungCap connection, with 93° approach angle, for negative 55°/45° rhombic inserts, with high pressure coolant capability



Cutting edge style **U**



Left hand (L) shown.

Designation	DMIN	DCONMS	BD	LF	LB	WF	f2	RE**	Insert
C6PDUNL17100-1104-CHP	32	63	25	100	67.5	17	4.5	0.8	DN**/FNMG1104...

Applicable for 14 MPa coolant

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Coolant unit	Wrench	Spring pin	Lever
C6PDUNL17100-1104-CHP	ELSD317BL	LCS43	S-CU-CHP	P-2.5	LSP3	LCL33L

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

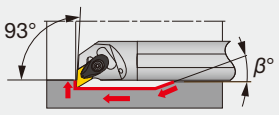
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

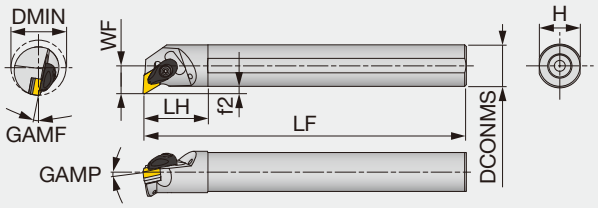
Reference pages: T-PDUNR, C-PDUNL-CHP: Insert → B066 -, B075, CBN → B172 -, PCD → B211

A-ADUNR/L

Double-clamp boring bar, for negative 55°/45° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	β°	RE**	Insert	Torque*
A25R-ADUNR/L1104-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	20	0.8	DN**/FNMG1104...	3
A32S-ADUNR/L1104-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	20	0.8	DN**/FNMG1104...	3
A25R-ADUNR/L15-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	30	0.8	DN**/FNGA1504...	3
A32S-ADUNR/L15-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	20	0.8	DN**/FNGA1504...	3
A40T-ADUNR15-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	15	0.8	DN**/FNGA1504...	3
A50U-ADUNR15-D630	Steel	63	50	35	350	65	47	10	-6°	-7°	15	0.8	DN**/FNGA1504...	3
A25R-ADUNR/L1506-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	15	0.8	DN**/FNGA1506...	3
A32S-ADUNR/L1506-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	20	0.8	DN**/FNGA1506...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ADUNR/L1104-D...	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASD322	CSTB-3.5	T-15F
A**-ADUNR/L15-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F
A**-ADUNR/L1506-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASD423	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

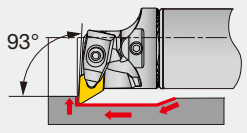
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: A-ADUNR/L: Insert → B066 -, B075, CBN → B172 -, PCD → B211

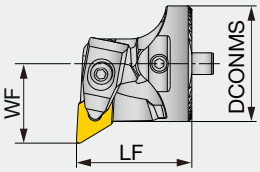
BOREMEISTER

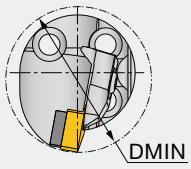
S-DDUNR/L-H

Double-clamp exchangeable boring head, for negative 55°/45° rhombic inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank size	Insert
S32-DDUNR/L11T-H	40	32	22	32	D32	DN**/FNMG1104...
S40-DDUNR/L15T-H(1)	50	40	27	38	D40, D50, D60	DN**/FNGA1506(04)...

Note: When using a right or left hand insert, the right hand insert (R) is used for the left hand toolholders (DDUNL** type), and the left hand insert (L) is used for the right hand toolholders (DDUNR** type).
(1) DN**/FNGA1504... inserts require a separate shim (# RDT443).

SPARE PARTS

Designation	Shim 1	Shim 2 (Optional)	Shim screw	Clamp	Clamping screw	Spring	Wrench
S32-DDUNR/L11T-H	RDT3-2	-	SR40085I	LCGR-3	SRRC3	KSP3	HW2.5
S40-DDUNR/L15T-H	RDT433	(RDT443)	SR14-506	DLM4	DLS4	DSP4	HW3.0

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	T-DIA with rake	T-DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

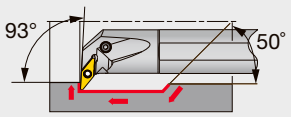
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: S-DDUNR/L-H: Insert → B066 -, B075, CBN → B172 -, PCD → B211
Shank → D090 - D092

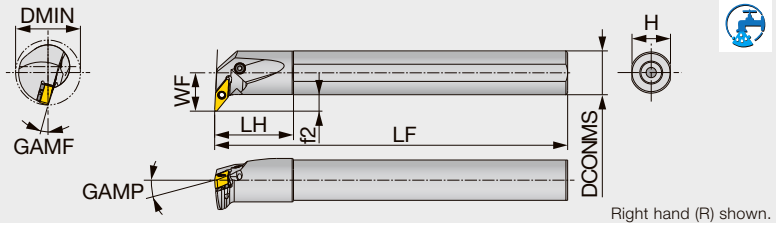
STREAMJETBAR

A-PVUNR/L

Lever-lock boring bar, for negative 35°/25° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PVUNR/L1204-D320	Steel	32	25	18	200	45	23	5.0	-5°	-15°	0.8	VN**1204...	3
A25R-PVUNR/L1204-D370	Steel	37	25	22	200	45	23	8.0	-4°	-15°	0.8	VN**1204...	3
A32S-PVUNR/L1204-D400	Steel	40	32	22	250	50	30	5.5	-6°	-12°	0.8	VN**1204...	3
A25R-PVUNR/L16-D370	Steel	37	25	22	200	45	23	9.5	-5°	-14°	0.8	VN**/YN**1604...	2.7
A32S-PVUNR/L16-D400	Steel	40	32	22	250	50	30	6	-5°	-12°	0.8	VN**/YN**1604...	2.7
A40T-PVUNR/L16-D500	Steel	50	40	27	300	60	37	7	-5°	-10°	0.8	VN**/YN**1604...	2.7

*Torque: Recommended clamping torque (N·m)
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PVUNR/L1204-D...	LSV212	LCS3V	P-2.5	LSP3	LCL3V	EA-25	SSHM4-5
A32S-PVUNR/L1204-D400	LSV212	LCS3V	P-2.5	LSP3	LCL3V	EA-32	SSHM4-5
A25R-PVUNR/L16-D370	LSV317BR/L	LCS3V	P-2.5	LSP3	LCL3V	EA-25	SSHM4-5
A32S-PVUNR/L16-D400	LSV317BR/L	LCS3V	P-2.5	LSP3	LCL3V	EA-32	SSHM4-5
A40T-PVUNR/L16-D500	LSV317BR/L	LCS3V	P-2.5	LSP3	LCL3V	-	SSHM5-6

*Optional

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Breaker Shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

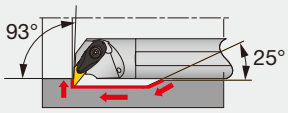
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: A-PVUNR/L: Insert → B098 -, B110, CBN → B186 -, PCD → B188

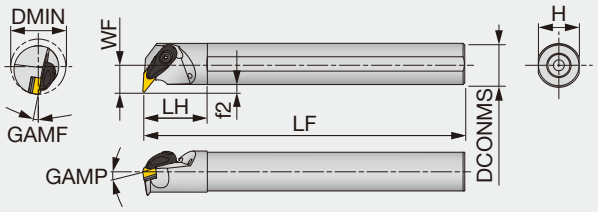
TURNINGA

A-AVUNR/L

Double-clamp boring bar, for negative 35°/25° rhombic inserts



Cutting edge style **U**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A32S-AVUNR/L16-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	VN**/YN**1604...	3
A40T-AVUNR/L16-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	0.8	VN**/YN**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

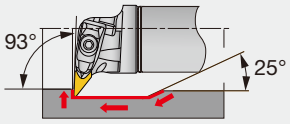
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-AVUNR/L16-D...	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

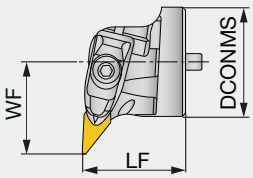
BOREMEISTER

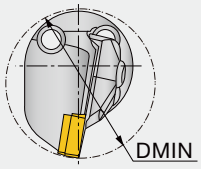
S-DVUNR/L-H

Double-clamp exchangeable boring head, for negative 35° rhombic inserts



Cutting edge style **U**





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S40-DVUNR/L16T-H	56	40	34	38	D40, D50, D60	VN**1604...

SPARE PARTS

Designation	Shim	Shim screw	Clamp	Clamp screw	Spring	Wrench
S40-DVUNR/L16T-H	ASV322	SR35080I	DLM3V	SR10402267	KSP5	HW4.0

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Breaker Shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

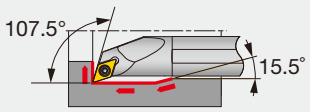
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: A-AVUNR/L, S-DVUNR/L-H: Insert → B098 -, B110, CBN → B186 -, PCD → B192
Shank → D090 - D092

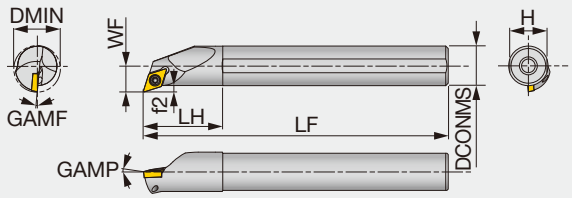
STREAMJETBAR

A/E-SDQCR/L

Screw-on boring bar, for positive 55° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SDQCR/L07-D130	Steel	13	10	7.6	125	20	9	2.6	0°	-8°	0.4	DC**0702...	1.2
A12M-SDQCR/L07-D160	Steel	16	12	8.6	150	24	11	2.6	0°	-6°	0.4	DC**0702...	1.2
A16Q-SDQCR/L07-D200	Steel	20	16	10.6	180	32	15	2.6	0°	-5°	0.4	DC**0702...	1.2
A20R-SDQCR/L11-D250	Steel	25	20	13.7	200	36	18	3.7	0°	-7°	0.8	DC**11T3...	3
A25S-SDQCR/L11-D300	Steel	30	25	16.2	250	45	23	3.7	0°	-4°	0.8	DC**11T3...	3
E10H-SDQCR07-D130	Carbide	13	10	7.6	100	25	9	2.5	0°	-8°	0.4	DC**0702...	1.2
E10M-SDQCR/L07-D130	Carbide	13	10	7.6	150	25	9	2.6	0°	-8°	0.4	DC**0702...	1.2
E12J-SDQCR07-D160	Carbide	16	12	8.6	110	27	11	2.5	0°	-6°	0.4	DC**0702...	1.2
E12Q-SDQCR/L07-D160	Carbide	16	12	8.6	180	27	11	2.6	0°	-6°	0.4	DC**0702...	1.2
E16L-SDQCR07-D200	Carbide	20	16	10.6	130	32	15	2.5	0°	-5°	0.4	DC**0702...	1.2
E16R-SDQCR/L07-D200	Carbide	20	16	10.6	200	32	15	2.6	0°	-5°	0.4	DC**0702...	1.2
E20S-SDQCR/L11-D250	Carbide	25	20	13.7	250	36	18	3.7	0°	-7°	0.8	DC**11T3...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SDQCR**) with left-hand inserts (L); and left-hand toolholders (SDQCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A1**-SDQCR/L07-D**0	CSTB-2.5S	T-8F
A2**-SDQCR/L11-D**0	CSTB-4S	T-15F
E1**-SDQCR/L07-D**0	CSTB-2.5S	T-8F
E20S-SDQCR/L11-D250	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B016			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B018			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

M

Application	Medium cutting
Grade	AH6225
Breaker Shape	PM
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)		AL
Cutting conditions	B022		

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

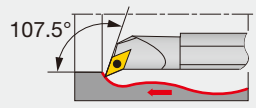
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

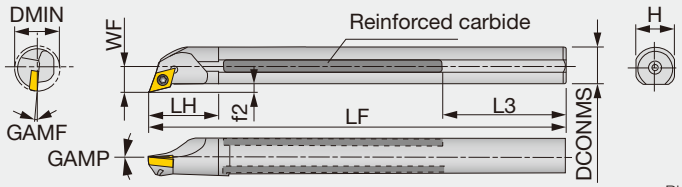
Reference pages: A/E-SDQCR/L: Insert → B121, CBN → B193 -, PCD → B214

T-SDQCR/L

Screw-on boring bar, for positive 55° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T16Q-SDQCR/L07	Reinforced	20	-	16	11	180	27	59	15	3	0°	-6°	0.4	DC**0702...	1.2
T20R-SDQCR/L11C	Reinforced	25	Rc1/4	20	13	200	35	49	18	3	0°	-6°	0.8	DC**11T3...	3
T25S-SDQCR/L11C	Reinforced	32	Rc1/4	25	17	250	40	64	23	4.5	0°	-4°	0.8	DC**11T3...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Note: Use right-hand toolholders (SDQCR**) with left-hand inserts (L); and left-hand toolholders (SDQCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
T16Q-SDQCR/L07	CSTB-2.5	T-8F
T20R-SDQCR/L11C	CSTB-4M	T-15F
T25S-SDQCR/L11C	CSTB-4	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B018			

M

Application	Medium cutting
Grade	AH6225
Breaker Shape	PM
Cutting conditions	B018

N

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)		AL
Cutting conditions	B022		

H

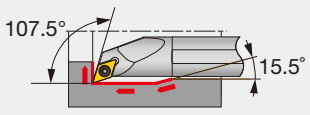
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: T-SDQCR/L: Insert → B121, CBN → B193 -, PCD → B214

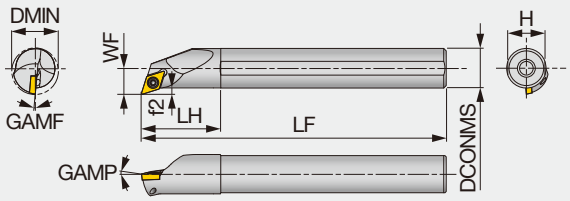
STREAMJETBAR

A/E-SDQPR/L

Screw-on boring bar, for positive 55° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDQPR07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.40	DPMT0702...	1.2
A12M-SDQPL07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.40	DPMT0702...	1.2
A12M-SDQPR07-D180-P	Special alloy steel	18	12	9.6	150	24	11	3.6	5	0	0.40	DPMT0702...	1.2
A12M-SDQPL07-D180-P	Special alloy steel	18	12	9.6	150	24	11	3.6	5	0	0.40	DPMT0702...	1.2
A16Q-SDQPR07-D220-P	Special alloy steel	22	16	11.6	180	32	15	3.6	5	0	0.40	DPMT0702...	1.2
A16Q-SDQPL07-D220-P	Special alloy steel	22	16	11.6	180	32	15	3.6	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPR07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPL07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPR07-D180	Carbide	18	12	9.6	180	27	11	3.6	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPL07-D180	Carbide	18	12	9.6	180	27	11	3.6	5	0	0.40	DPMT0702...	1.2
E16R-SDQPR07-D220	Carbide	22	16	11.6	200	32	15	3.6	5	0	0.40	DPMT0702...	1.2
E16R-SDQPL07-D220	Carbide	22	16	11.6	200	32	15	3.6	5	0	0.40	DPMT0702...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SDQCR**) with left-hand inserts (L); and left-hand toolholders (SDQCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SDQPR/L07-D**0-P	CSTB-2.5S	T-8F
E**-SDQPR/L07-D**0	CSTB-2.5S	T-8F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PS	PS
Cutting conditions	B018	

K

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PS	PS
Cutting conditions	B020	

S

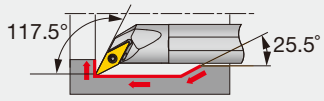
Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

Reference pages: A/E-SDQPR/L: Insert → B126

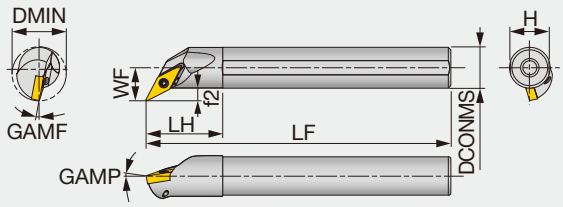
STREAMJETBAR

A/E-SVQBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVQBR/L11-D170	Steel	17	12	10.5	150	24	11	4.5	-5°	-10°	0.4	VB**1103...	1.2
A16Q-SVQBR/L11-D215	Steel	21.5	16	13	180	30	15	5	-5°	-8°	0.4	VB**1103...	1.2
A20R-SVQBR/L11-D255	Steel	25.5	20	15	200	36	18	5	-5°	-6°	0.4	VB**1103...	1.2
A25S-SVQBR/L16-D305	Steel	30.5	25	17.5	250	45	23	5	-5°	-8°	0.8	VB**1604...	3
E12Q-SVQBR/L11-D170	Carbide	17	12	10.5	180	27	11	4.5	-5°	-10°	0.4	VB**1103...	1.2
E16R-SVQBR/L11-D215	Carbide	21.5	16	13	200	32	15	5	-5°	-8°	0.4	VB**1103...	1.2
E20S-SVQBR/L11-D255	Carbide	25.5	20	15	250	36	18	5	-5°	-6°	0.4	VB**1103...	1.2
E25T-SVQBR/L16-D305	Carbide	30.5	25	17.5	300	45	23	5	-5°	-8°	0.8	VB**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVQBR**) with left-hand inserts (L); and left-hand toolholders (SVQBL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVQBR/L11-D...	CSTB-2.5	T-8F
A25S-SVQBR/L16-D305	CSTB-3.5	T-15F
E**-SVQBR/L11-D...	CSTB-2.5	T-8F
E25T-SVQBR/L16-D305	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B014			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Chipbreaker shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PS
Cutting conditions	B014

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PS
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

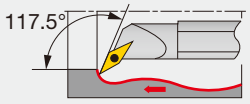
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

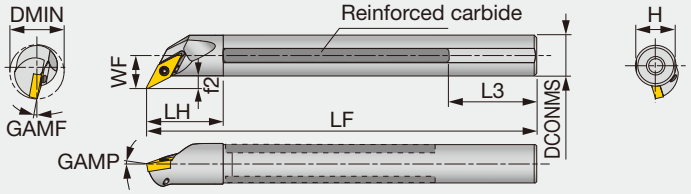
Reference pages: A/E-SVQBR/L: Insert → B150 -, CBN → B207 -

T-SVQBR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T20R-SVQBR11C	Reinforced	25	Rc1/4	20	14	200	30	59	18	4	-5°	-7°	0.4	VB**1103...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS




Designation	Clamping screw	Wrench
T20R-SVQBR11C	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B014			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Chipbreaker shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PS
Cutting conditions	B014

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PS
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

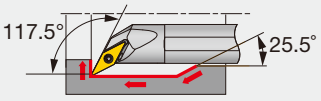
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: T-SVQBR: Insert → B150 -, CBN → B207 -

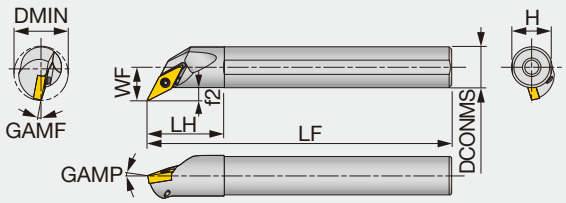
STREAMJETBAR

A/E-SVQCR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SVQCR/L08-D135	Steel	13.5	10	8	125	20	9	3	-5°	-8°	0.4	VC**0802...	0.6
A16Q-SVQCR/L11-D215	Steel	21.5	16	13	180	30	15	4.9	-5°	-8°	0.4	VC**1103...	1.2
E10M-SVQCR/L08-D135	Carbide	13.5	10	8	150	25	9	3	-5°	-8°	0.4	VC**0802...	0.6
E16R-SVQCR/L11-D215	Carbide	21.5	16	13	200	32	15	4.9	-5°	-8°	0.4	VC**1103...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVQCR**) with left-hand inserts (L); and left-hand toolholders (SVQCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A10K-SVQCR/L08-D135	CSTB-2L	T-6F
A16Q-SVQCR/L11-D215	CSTB-2.5	T-8F
E10M-SVQCR/L08-D135	CSTB-2L	T-6F
E16R-SVQCR/L11-D215	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

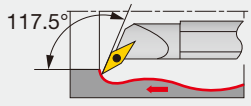
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

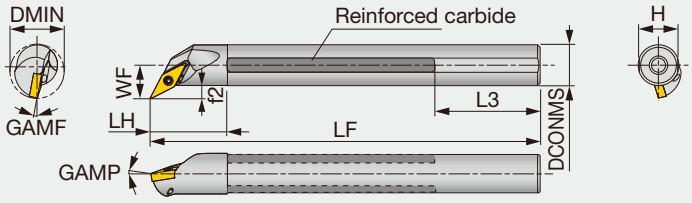
Reference pages: A/E-SVQCR/L: Insert → B152 -, CBN → B209, PCD → B220

T-SVQCR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T25S-SVQCR16C	Reinforced	32	Rc1/4	25	17	250	40	64	23	4.5	0°	-5°	0.8	VC**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
*The hole specification of applicable inserts conforms to ISO standard.
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
T25S-SVQCR16C	CSTB-3.5L	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

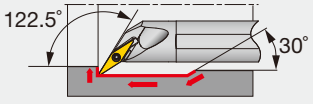
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

Reference pages: T-SVQCR: Insert → B152 -, CBN → B209, PCD → B220

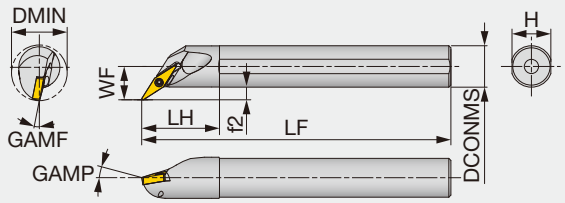
Y-PRO SERIES

A/E-SYQBR/L

Screw-on boring bar, for positive 25° rhombic inserts



Cutting edge style **Q**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SYQBR/L11-D170	Steel	17	12	10.5	150	24	11	4.5	-5°	-10°	0.4	YW**11T2...	0.6
A16Q-SYQBR/L11-D215	Steel	21.5	16	13	180	30	15	5	-5°	-8°	0.4	YW**11T2...	0.6
E12Q-SYQBR/L11-D170	Carbide	17	12	10.5	180	27	11	4.5	-5°	-10°	0.4	YW**11T2...	0.6
E16R-SYQBR/L11-D215	Carbide	21.5	16	13	200	32	15	5	-5°	-8°	0.4	YW**11T2...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SYQBR/L11-D...	CSTB-2L	T-6F
E**-SYQBR/L11-D...	CSTB-2L	T-6F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	GT9215	T9215	T9215
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B016		

M

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015	AH8015
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B018		

K

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	GT9530	T9215	T9215
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B020		

S

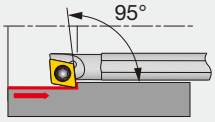
Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	AH8015	AH8015	AH8015
Breaker Shape	ZF	ZF	ZM
Cutting conditions	B024		

Reference pages: A/E-SYQBR/L: Insert → B159

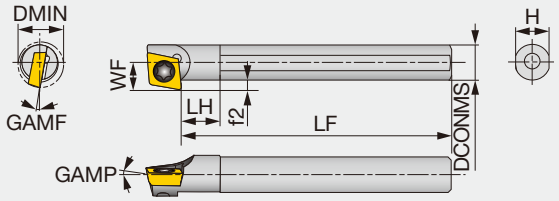
STREAMJETBAR

A/E-SEZPR/L

Screw-on boring bar, for positive 75° rhombic inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A04F-SEZPR/L03-D055	Steel	5.5	4	3.2	80	4	3.8	1.2	0°	-8°	0.2	EP**03X1...	0.6
A05F-SEZPR/L03-D065	Steel	6.5	5	3.7	80	5	4.8	1.2	0°	-6°	0.2	EP**03X1...	0.6
E04G-SEZPR/L03-D055	Carbide	5.5	4	3.2	90	5	3.8	1.2	0°	-8°	0.2	EP**03X1...	0.6
E05G-SEZPR/L03-D065	Carbide	6.5	5	3.7	90	6	4.8	1.2	0°	-6°	0.2	EP**03X1...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SEZPR**) with right-hand inserts (R); and left-hand toolholders (SEZPL**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SEZPR/L03-D...	CSTA-1.6	T-6F
E**-SEZPR/L03-D...	CSTA-1.6	T-6F

INSERT SELECTION

P

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B016

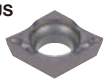
M

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B018

K

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B020

S

Application	Finishing
Grade	SH725
Breaker Shape	JS 
Cutting conditions	B024

N

Application	Precision finishing	Finishing
Grade	DX140	SH725
Breaker Shape	DIA 	JS 
Cutting conditions	B022	

H

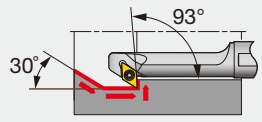
Application	Precision finishing
Grade	BX310
Breaker Shape	CBN 
Cutting conditions	B026

Reference pages: A/E-SEZPR/L: Insert → B128 -, CBN → B195, PCD → B214

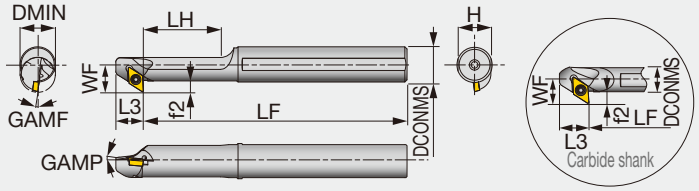
STREAMJETBAR

A/E-SDZCR/L

Screw-on boring bar, for positive 55° rhombic inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDZCR/L07-D140	Steel	14	12	10.5	150	30	12.5	11	4.5	0°	-9°	0.4	DC**0702...	1.2
A16Q-SDZCR/L07-D160	Steel	16	16	12.5	180	35	12.5	15	4.5	0°	-8°	0.4	DC**0702...	1.2
A20R-SDZCR/L11-D200	Steel	20	20	15.5	200	40	15.0	18	5.5	0°	-8°	0.8	DC**11T3...	3
A25S-SDZCR/L11-D250	Steel	25	25	18	250	50	15	23	5.5	0°	-6°	0.8	DC**11T3...	3
E12Q-SDZCR/L07-D180	Carbide	18	12	10.5	180	-	12.5	11	4.5	0°	-8°	0.4	DC**0702...	1.2
E16R-SDZCR/L07-D220	Carbide	22	16	12.5	200	-	12.5	15	4.5	0°	-6°	0.4	DC**0702...	1.2

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SDZCR**) with right-hand inserts (R); and left-hand toolholders (SDZCL**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
A1**-SDZCR/L07-D1*0	CSTB-2.5	T-8F
A2**-SDZCR/L11-D2*0	CSTB-4S	T-15F
E1**-SDZCR/L07-D**0	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B016			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B018			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PM
Cutting conditions	B016

M

Application	Medium cutting
Grade	AH6225
Breaker Shape	PM
Cutting conditions	B018

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA (with rake)		AL
Cutting conditions	B022		

S

Application	Precision finishing	Finishing	Finishing to medium cutting
Grade	BX470	AH8005	AH8015
Breaker Shape	CBN	PS	PS
Cutting conditions	B024		

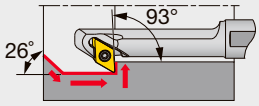
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

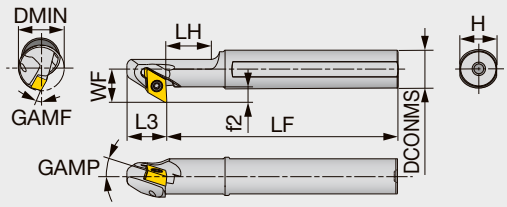
Reference pages: A/E-SDZCR/L: Insert → B121, CBN → B193 -, PCD → B214

A/E-SDZXR/L

Screw-on boring bar, for DXG/MU inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDZXR/L07-D140	Steel	14	12	10.5	150	30	13	11	4.5	-10°	-14°	0.4	DXG/MU0703**R/L...	0.9
A16Q-SDZXR/L07-D160	Steel	16	16	12.5	180	35	13	15	4.5	-10°	-12.5°	0.4	DXG/MU0703**R/L...	0.9
A20R-SDZXR/L07-D200	Steel	20	20	14.5	200	40	13	18	4.5	-10°	-10.5°	0.4	DXG/MU0703**R/L...	0.9
E12Q-SDZXR/L07-D180	Carbide	18	12	10.5	180	-	13	11	4.5	-11°	-11°	0.4	DXG/MU0703**R/L...	0.9
E16R-SDZXR/L07-D220	Carbide	22	16	12.5	200	-	13	15	4.5	-11°	-9°	0.4	DXG/MU0703**R/L...	0.9

*Torque: Recommended clamping torque (N·m) **RE : Standard corner radius
Note: Use right-hand toolholders (R) with right-hand inserts (R); and left-hand toolholders (L) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
A/E**-SDZXR/L...	SR34-514	T-7F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	D096			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	TS
Cutting conditions	D096

K

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	D096			

K

Application	Medium cutting
Grade	T9215
Breaker Shape	TS
Cutting conditions	D096

S

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Breaker Shape	JS	JTS	SS	TS
Cutting conditions	D096			

S

Application	Medium cutting
Grade	AH8015
Breaker Shape	TS
Cutting conditions	D096

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH8015	AH8015
Chipbreaker shape	JS	JTS	SS	TS
Cutting conditions	D096			

M

Application	Medium cutting
Grade	AH8015
Chipbreaker shape	TS
Cutting conditions	D096

N

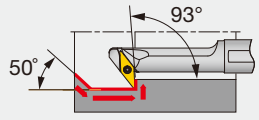
Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	KS05F	KS05F	KS05F
Breaker Shape	SS	TS	TS
Cutting conditions	D096		

Reference pages: A/E-SDZXR/L: Insert → B126 -
Standard cutting conditions → D096

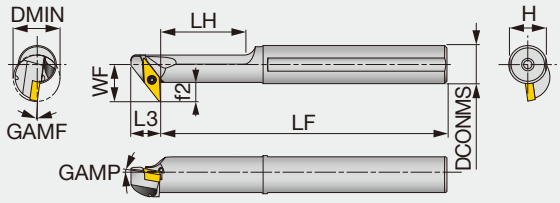
STREAMJETBAR

A-SVZBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SVZBR/L11-D200	Steel	20	16	15.5	180	35	12.5	15	8	0°	-8°	0.4	VB**1103...	1.2
A20R-SVZBR/L11-D250	Steel	25	20	17.5	200	40	12.5	18	8	0°	-7°	0.4	VB**1103...	1.2
A25S-SVZBR/L16-D320	Steel	32	25	24	250	50	17.5	23	12	0°	-6°	0.8	VB**1604...	3
A32T-SVZBR/L16-D400	Steel	40	32	27.5	300	72	17.5	30	12	0°	-5°	0.8	VB**1604...	3

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVZBR**) with right-hand inserts (R); and left-hand toolholders (SVZBL**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVZBR/L11-D2*0	CSTB-2.5	T-8F
A25S-SVZBR/L16-D320	CSTB-3.5	T-15F
A32T-SVZBR/L16-D400	CSTB-3.5L	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	NS9530	T9215
Breaker Shape	JP	JS	PSS	PS
Cutting conditions	B014			

M

Application	Precision finishing	Finishing		Finishing to medium cutting
Grade	SH725	SH725	AH6225	AH6225
Chipbreaker shape	JP	JS	PSS	PS
Cutting conditions	B016			

P

Application	Medium cutting
Grade	T9215
Breaker Shape	PS
Cutting conditions	B014

M

Application	Medium cutting
Grade	AH6225
Chipbreaker shape	PS
Cutting conditions	B016

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

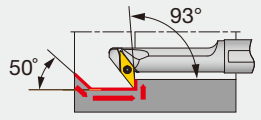
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B026	

Reference pages: A-SVZBR/L: Insert → B150 -, CBN → B207 -

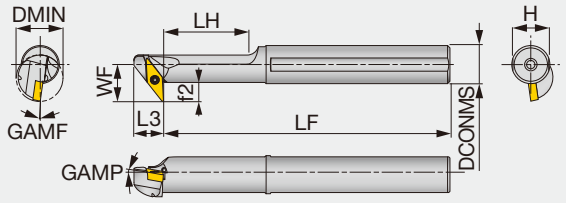
STREAMJETBAR

A-SVZCR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVZCR/L08-D160	Steel	16	12	11	150	30	10	11	5.5	0°	-8°	0.4	VC**0802...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SVZCR**) with right-hand inserts (R); and left-hand toolholders (SVZCL**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
A12M-SVZCR/L08-D160	CSTB-2L	T-6F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B014	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	DIA with rake	DIA	AL
Cutting conditions	B022		

S

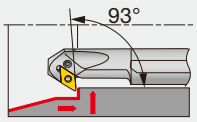
Application	Finishing	Finishing to medium cutting
Grade	AH8005	AH8015
Breaker Shape	PS	PS
Cutting conditions	B024	

H

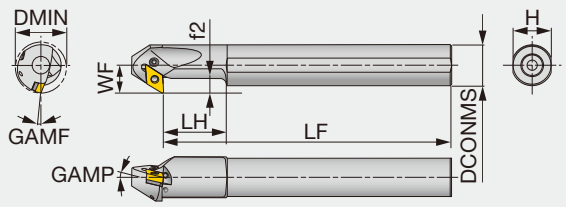
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

A-PDZNR/L

Lever-lock boring bar, for negative 55°/45° rhombic inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A32S-PDZNR/L15-D400	Steel	40	32	22	250	50	30	11.5	-6°	-13°	0.8	DN**/FNGA1504...	4.8
A40T-PDZNR/L15-D500	Steel	50	40	27	300	60	37	14.5	-6°	-10°	0.8	DN**/FNGA1504...	4.8
A50U-PDZNR/L15-D630	Steel	63	50	35	350	65	47	14.5	-6°	-8°	0.8	DN**/FNGA1504...	4.8

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (PDZNR**) with right-hand inserts (R); and left-hand toolholders (PDZNL**) with left-hand inserts (L).

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A32S-PDZNR15-D400	LSZ42BR	LCS4	P-3	LSP4	LCL4	EA-32	SSHM4-5
A32S-PDZNL15-D400	LSZ42BL	LCS4	P-3	LSP4	LCL4	EA-32	SSHM4-5
A40T-PDZNR15-D500	LSZ42BR	LCS4	P-3	LSP4	LCL4	-	SSHM5-6
A40T-PDZNL15-D500	LSZ42BL	LCS4	P-3	LSP4	LCL4	-	SSHM5-6
A50U-PDZNR15-D630	LSZ42BR	LCS4	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PDZNL15-D630	LSZ42BL	LCS4	P-3	LSP4	LCL4	-	SSHM6-6

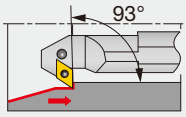
*Optional

Reference pages: A-SVZCR/L: Insert → B152 -, CBN → B209, PCD → B220
A-PDZNR/L,: Insert → B066 -, B075, CBN → B172 -, PCD → B211

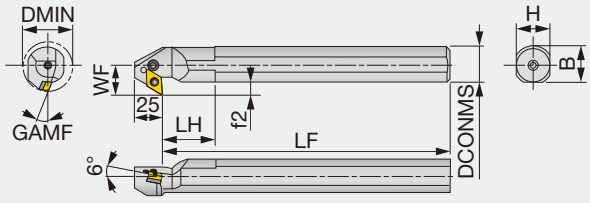
STREAMJETBAR

S-PDZNR/L

Lever-lock boring bar, for negative 55°/45° rhombic inserts



Cutting edge style **Z**



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	B	GAMF	RE**	Insert
S32S-PDZNR/L15	Steel	40	32	22	250	30	30	6	29.5	-13°	0.8	DN**/FNGA1504...
S40T-PDZNR15	Steel	50	40	27	300	35	37	7	37.5	-10°	0.8	DN**/FNGA1504...
S50U-PDZNR15	Steel	60	50	35	350	40	47	10	47.5	-8°	0.8	DN**/FNGA1504...

**RE : Standard corner radius

Note: Use right-hand toolholders (R) with right-hand inserts (R); and left-hand toolholders (L) with left-hand inserts (L)

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
S32S-PDZNR15	LSZ42BR	LCS4	P-3	LSP4	LCL4
S32S-PDZNL15	LSZ42BL	LCS4	P-3	LSP4	LCL4
S*0*-PDZNR15	LSZ42BR	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	DIA with rake	DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

H

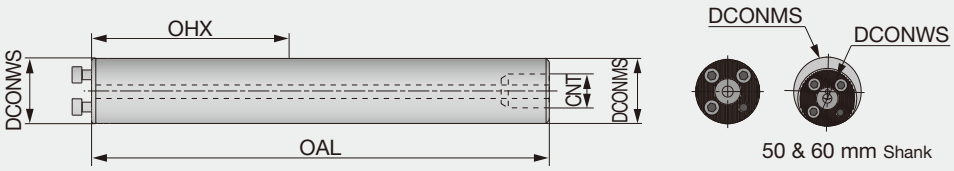
Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Breaker Shape	HP	HS
Cutting conditions	B014	

Reference pages: S-PDZNR/L: Insert → B066 -, B075, CBN → B172 -, PCD → B211

BOREMEISTER

Anti-vibration bar

Anti-vibration bar for exchangeable turning heads, with through coolant



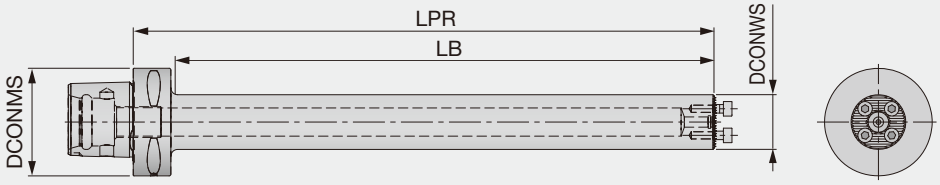
Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS

Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SR55-2M3.5X10	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L... D60-L...	SRM6X16DIN912-12.9	HW5.0

C6-9D-C

PSC adapter with anti vibration, L/D = 9



Designation	Material	DCONWS	DCONMS	LPR	LB	WT (kg)
C6-D25-L230-9D-C	Steel	25	63	230.5	200.1	1.65
C6-D32-L288-9D-C	Steel	32	63	288.5	259.5	2.73
C6-D40-L368-9D-C	Steel	40	63	368.5	339	4.45

SPARE PARTS

Designation	Clamping screw	Wrench
C6-D25...	SRM4X12DIN912	HW3.0
C6-D32...	SRM5X12DIN912	HW4.0
C6-D40...	SRM6X16DIN912-12.9	HW5.0

BOREMEISTER

C#-SH-CHP / C#-SH-E-CHP

PSC compatible adapter with steel or carbide core

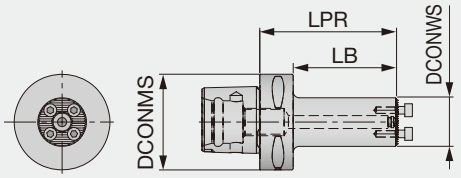


Fig. 1

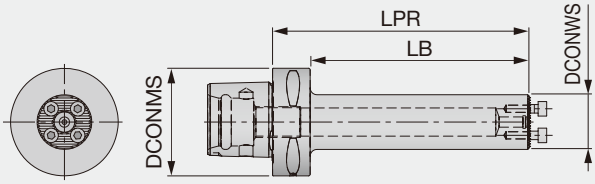


Fig. 2

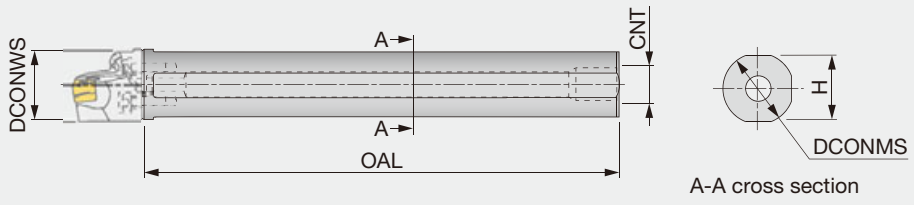
Designation	Material	DCONWS	DCONMS	LPR	LB	Fig
C4-SH-D16-2.5D-CHP	Steel	16	40	40	20	1
C4-SH-D20-2.5D-CHP	Steel	20	40	50	30	1
C4-SH-D25-2.5D-CHP	Steel	25	40	55	35	1
C4-SH-D32-2.5D-CHP	Steel	32	40	75	55	1
C4-SH-D40-3D-CHP	Steel	40	40	80	80	1
C6-SH-D20-5D-E-CHP	Carbide	20	63	100	78	2
C6-SH-D25-5D-E-CHP	Carbide	25	63	115	93	2
C6-SH-D32-5D-E-CHP	Carbide	32	63	150	128	2
C6-SH-D40-5D-E-CHP	Carbide	40	63	185	163	2

SPARE PARTS

Designation	Clamping screw	Wrench
C4**D16...	SRM3X10DIN912	HW2.5
C4/C6**D20...	SR55-2M3.5X10	HW2.5
C4/C6**D25...	SRM4X12DIN912	HW3.0
C4/C6**D32...	SRM5X12DIN912	HW4.0
C4/C6**D40...	SRM6X16DIN912-12.9	HW5.0

D#4D-SH

Steel shank for internal turning, with through coolant



A-A cross section

Designation	Material	DCONWS	DCONMS	OAL	CNT	H
D16-L105-4D-SH	Steel	16	16	105	UNC-2B 3/8"-16	15
D20-L140-4D-SH	Steel	20	20	140	UNFC-2B 3/8"-24	18
D25-L200-4D-SH	Steel	25	25	200	UNF-2B 1/2"-20	23
D32-L218-4D-SH	Steel	32	32	218	UNF-2B 1/2"-20	29
D40-L283-4D-SH	Steel	40	40	283	UNF-2B 1/2"-20	36

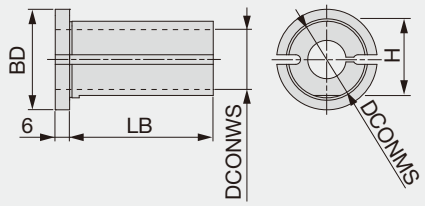
SPARE PARTS

Designation	Clamping screw	Wrench
D16**4D-SH	SRM3X10DIN912	HW2.5
D20**4D-SH	SR55-2M3.5X10	HW2.5
D25**4D-SH	SRM4X12DIN912	HW3.0
D32**4D-SH	SRM5X12DIN912	HW4.0
D40**4D-SH	SRM6X16DIN912-12.9	HW5.0

BOREMEISTER

RSL sleeve

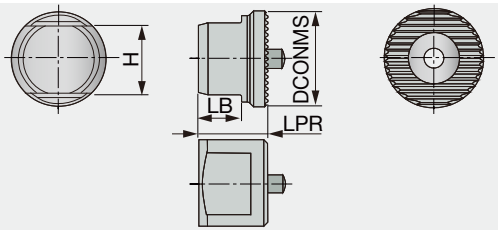
Split sleeve for anti-vibration bar



Designation	DCONWS	DCONMS	BD	LB	H
RSL-32-16-L66	16	32	42	60	31
RSL-32-20-L66	20	32	42	60	31
RSL-32-25-L66	25	32	42	60	31
RSL-40-16-L76	16	40	50	70	38.5
RSL-40-20-L76	20	40	50	70	38.5
RSL-40-25-L76	25	40	50	70	38.5

AVC-SET

Center height set up device

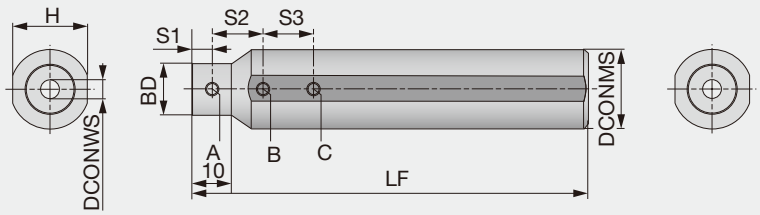


Designation	DCONMS	H	LPR	LB	Applicable shank
AVC-SET 16-25	20	15	14.5	8.9	16, 20, 25
AVC-SET 32-60	29	16	17.5	11.43	32, 40, 50, 60

STREAMJETBAR

BLM sleeve

Round shank sleeve for StreamJetBar-Mini series



Designation	DCONMS	DCONWS	BD	LF	H	S1	S2	S3
BLM159-04	15.875	4	15	100	15	5	15	15
BLM159-05	15.875	5	15	100	15	5	15	15
BLM159-06	15.875	6	15	100	15	5	20	20
BLM159-07	15.875	7	15	100	15	5	20	20
BLM16-04	16	4	15	100	15	5	15	15
BLM16-05	16	5	15	100	15	5	15	15
BLM16-06	16	6	15	100	15	5	20	20
BLM16-07	16	7	15	100	15	5	20	20
BLM19-04	19.05	4	18	100	18	5	15	15
BLM19-05	19.05	5	18	100	18	5	15	15
BLM19-06	19.05	6	18	100	18	5	20	20
BLM19-07	19.05	7	18	100	18	5	20	20
BLM20-04	20	4	13	100	19	5	15	15
BLM20-05	20	5	14	100	19	5	15	15
BLM20-06	20	6	15	100	19	5	20	20
BLM20-07	20	7	16	100	19	5	20	20
BLM22-04	22	4	13	125	21	5	15	15
BLM22-05	22	5	14	125	21	5	15	15
BLM22-06	22	6	15	125	21	5	20	20
BLM22-07	22	7	16	125	21	5	20	20
BLM25-04	25	4	13	125	24	5	15	15
BLM25-05	25	5	14	125	24	5	15	15
BLM25-06	25	6	15	125	24	5	20	20
BLM25-07	25	7	16	125	24	5	20	20
BLM254-04	25.4	4	13	125	24	5	15	15
BLM254-05	25.4	5	14	125	24	5	15	15
BLM254-06	25.4	6	15	125	24	5	20	20
BLM254-07	25.4	7	16	125	24	5	20	20

SPARE PARTS





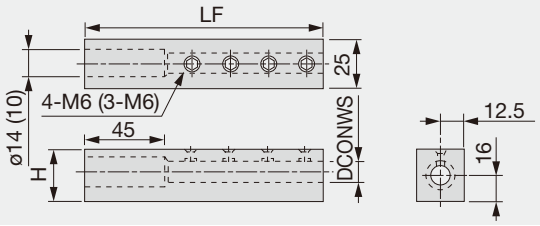

Designation	Clamping screw A	Clamping screw B, C	Wrench	Seal cap* (inner screw)
BLM159, 16...	SSHM4-4	SSHM4-4	P-2	CA-16(M6)
BLM19-04	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM19-05, 06, 07	SSHM4-4	SSHM4-4	P-2	CA-16(M6)
BLM20-04, 05	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM20-06, 07	SSHM4-4	SSHM4-4	P-2	CA-16(M6)
BLM22-...	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM25-04, 05	SSHM4-4	SSHM4-8	P-2	CA-16(M6)
BLM25-06	SSHM4-4	SSHM4-8	P-2	CA-16(M6)
BLM25-07	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM254-04, 05, 06	SSHM4-4	SSHM4-8	P-2	CA-16(M6)
BLM254-07	SSHM4-4	SSHM4-6	P-2	CA-16(M6)

*Optional

STREAMJETBAR

BLS sleeve

Square shank sleeve for boring bars (regular length)



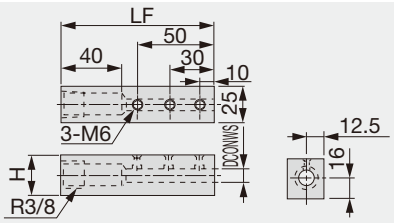
Designation	DCONWS	LF	H
BLS16-08	8	125	28
BLS16-10	10	125	28
BLS16-12	12	125	28

SPARE PARTS

Designation	Wrench
BLS16-...	P-3

BLS-C sleeve

Square shank sleeve for boring bars (short type)



Designation	DCONWS	LF	H
BLS16-08C	8	100	28
BLS16-10C	10	100	28
BLS16-12C	12	100	28

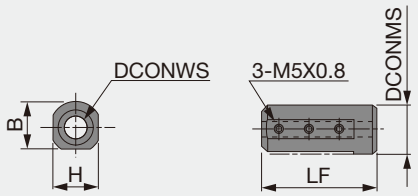
SPARE PARTS

Designation	Wrench
BLS16-**C	P-3

STREAMJETBAR

BLM sleeve

Round shank sleeve for boring bars



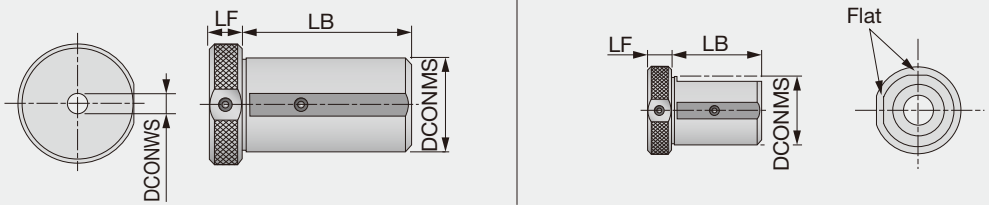
Designation	DCONWS	DCONMS	LF	H	B
BLM19-08	8	19.05	100	18	18
BLM20-08	8	20	100	18	19
BLM22-08	8	22	125	21	21
BLM254-08	8	25.4	125	24	24
BLM25-08C	8	25	55	23	24
BLM25-10C	10	25	55	23	24
BLM25-12C	12	25	55	23	24

SPARE PARTS

Designation	Wrench
BLM...	P-2.5

BLC sleeve

Round shank sleeve for boring bars



Designation	DCONWS	LB	LF	DCONMS
BLC40-8	8	73	13	40
BLC40-10	10	73	13	40
BLC40-12	12	73	13	40
BLC40-16	16	73	13	40
BLC32-8C	8	45	20	32
BLC32-10C	10	45	20	32
BLC32-12C	12	45	20	32
BLC40-8C	8	55	13	40
BLC40-10C	10	55	13	40
BLC40-12C	12	55	13	40
BLC40-16C	16	55	13	40

SPARE PARTS

Designation	Wrench
BLC40-8	P-3
BLC40-1...	P-4
BLC32-8C	P-3
BLC32-1*C	P-4
BLC40-8C	P-3
BLC40-1*C	P-4

MINIFORCE TURN

STANDARD CUTTING CONDITIONS

FOR INTERNAL TURNING

ISO	Workpiece material	Grade		Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
		First choice	Second choice			
P	Low carbon steel / Low alloy steel	T9215	-	120 - 350	0.3 - 2	0.08 - 0.3
		T9225	-	100 - 300	0.3 - 2	0.08 - 0.3
		AH8015	-	50 - 200	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 180	0.3 - 2	0.08 - 0.3
		-	NS9530	80 - 250	0.3 - 2	0.08 - 0.3
		-	GT9530	80 - 300	0.3 - 2	0.08 - 0.3
	Carbon steel / Alloy steel	T9215	-	80 - 350	0.3 - 2	0.08 - 0.3
		T9225	-	80 - 300	0.3 - 2	0.08 - 0.3
		AH8015	-	50 - 200	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 180	0.3 - 2	0.08 - 0.3
		-	NS9530	80 - 250	0.3 - 2	0.08 - 0.3
		-	GT9530	80 - 300	0.3 - 2	0.08 - 0.3
M	Stainless steel (Austenitic)	AH8015	-	50 - 150	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 150	0.3 - 2	0.08 - 0.3
		-	T9215	50 - 200	0.3 - 2	0.08 - 0.3
	Stainless steel (Martensitic and ferritic)	AH8015	-	50 - 150	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 150	0.3 - 2	0.08 - 0.3
		-	T9215	50 - 200	0.3 - 2	0.08 - 0.3
	Stainless steel (Precipitation hardening)	AH8015	-	50 - 150	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 150	0.3 - 2	0.08 - 0.3
		-	T9215	50 - 200	0.3 - 2	0.08 - 0.3
K	Grey cast iron	T9215	-	100 - 350	0.3 - 2	0.08 - 0.3
		T9225	-	100 - 350	0.3 - 2	0.08 - 0.3
		-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 180	0.3 - 2	0.08 - 0.3
		-	NS9530	80 - 250	0.3 - 2	0.08 - 0.3
		-	GT9530	80 - 300	0.3 - 2	0.08 - 0.3
	Ductile cast iron	T9215	-	100 - 350	0.3 - 2	0.08 - 0.3
		T9225	-	100 - 350	0.3 - 2	0.08 - 0.3
		-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	AH725	50 - 180	0.3 - 2	0.08 - 0.3
		-	NS9530	80 - 250	0.3 - 2	0.08 - 0.3
		-	GT9530	80 - 300	0.3 - 2	0.08 - 0.3
N	Aluminum alloys	KS05F	-	100 - 300	0.3 - 2	0.08 - 0.3
	Copper alloys	KS05F	-	100 - 300	0.3 - 2	0.08 - 0.3
S	Titanium alloys	AH8015	-	20 - 80	0.3 - 2	0.08 - 0.3
	Nickel-based alloys	AH8015	-	20 - 80	0.3 - 2	0.08 - 0.3
H	Hardened steel	BXA20	-	50 - 220	0.12 - 0.8	0.1 - 0.3
		-	BXA10	50 - 220	0.12 - 0.8	0.1 - 0.3

Reference pages: A/E-SCLXR/L → D021, S-SCLXR/L-H → D022
A/E-SWLXR/L → D023, S-SWLXR/L-H → D024
A/E-SDXXR/L → D036

TURNTEC

STANDARD CUTTING CONDITIONS

*Values in red are for facing.

LNMX1204

ISO	Workpiece material	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut: *ap* (mm)		Feed: *f* (mm/rev)	
					RE : 0.8	RE : 1.2	RE : 0.8	RE : 1.2
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8

LNMX1606

ISO	Workpiece material	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut: *ap* (mm)			Feed: *f* (mm/rev)		
					RE : 0.8	RE : 1.2	RE : 1.6	RE : 0.8	RE : 1.2	RE : 1.6
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TWR	T9115	120 - 250	1 - 8 1 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
		TWR	T9125	80 - 180	1 - 8 1 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		MDR	T9115	100 - 150	1.5 - 6 0.5 - 3.2	1.5 - 7 0.8 - 3.2	-	0.1 - 0.5	0.15 - 0.7	-
		MDR	AH725	50 - 150	1.5 - 6 0.5 - 3.2	1.5 - 7 0.8 - 3.2	-	0.1 - 0.5	0.15 - 0.7	-
		TWR	T9115	100 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
		TWR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-

LNMX2410

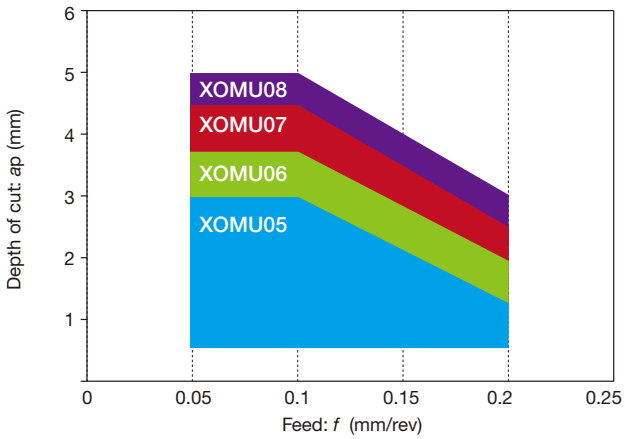
ISO	Workpiece material	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut: *ap* (mm)		Feed: *f* (mm/rev)	
					RE : 1.6	RE : 2.4	RE : 1.6	RE : 2.4
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
		TDR	T9125	80 - 150	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
		TDR	T9125	80 - 150	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1

Reference pages: S-TLANR/L → D040

TUNGBORE MINI

STANDARD CUTTING CONDITIONS

DMIN	Description	Depth of cut	Feed	Cutting speed: *Vc* (m/min)	
	Insert	*ap* (mm)	*f* (mm/rev)	Carbon steel, Alloy steel	Stainless steel
ø10	XOMU05X204-PS	0.5 - 3	0.05 - 0.2	50 - 180 m/min	50 - 160 m/min
ø12	XOMU06H204-PS	0.5 - 3.5			
ø14	XOMU07H304-PS	0.5 - 4.5			
ø16	XOMU08T304-PS	0.5 - 5			



Reference pages: A/E-SXUOR/L → D065

Threading Tool

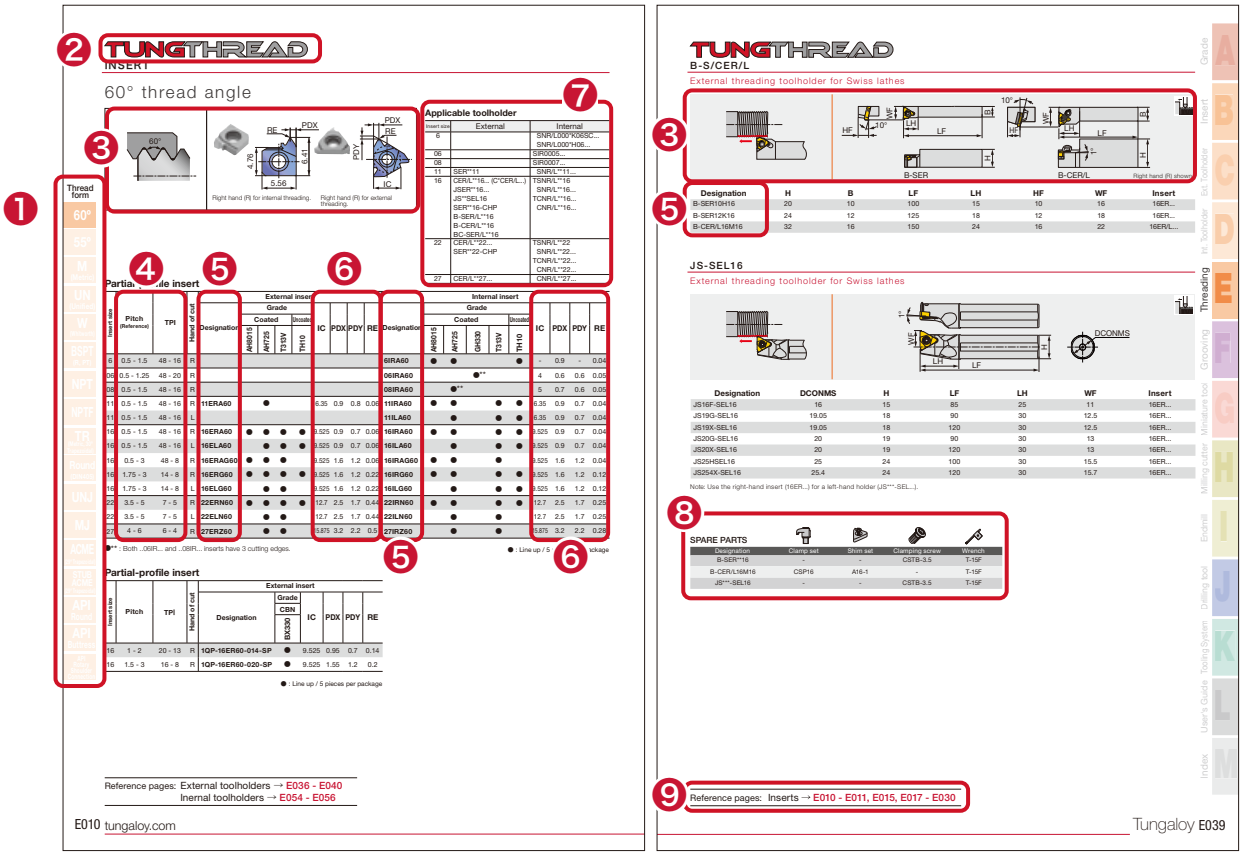


Threading Tool - Content structure

- Products are listed by product series and thread shape to be machined.
- Inserts and toolholders in the catalog are our standard items.

How to use the page

Method ① Select the screw shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (❺) in the dimension table (❻). Applicable toolholders are shown in (❼).
Method ② Select the series name on E003 and check the details on the product page.
Method ③ Select an item from Quick Guide on E004 - E007.



❶ : Screw shape
❷ : Series name
❸ : Drawing of thread, threading insert, threading toolholder
❹ : Applicable pitch and the number of threads
❺ : Designation (for external, for internal)
❻ : Dimension table (conforming to ISO13399)
❼ : Applicable toolholder
❽ : Spare parts
❾ : Reference page

When ordering
- Please specify the designation and quantity for threading toolholders.
  e.g. **TSNR0020R22 ...** 1 (one threading toolholder per package)
- Please specify the designation, grade, and quantity for threading inserts.
  e.g. **16IR175ISO AH725 ...** 5 (five threading inserts per package)

Main products

Thread form

60° E010
55° E015
M (Metric) E017
UN (Unified) E021
W (Whitworth) E023
BSPT (R, PT) E024
NPT E025
NPTF E026
TR (Metric, 30° Trapezoidal) E027
Round (DIN405) E027
UNJ E028
MJ E028
ACME (29° Trapezoidal) E029
STUB ACME (29° Trapezoidal) E030
API Round E030
API Buttress E032
API Rotary Shoulder Connection E035



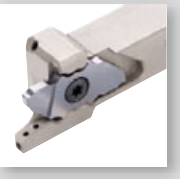
TUNGTHREAD
Lay down insert, toolholder
Standard items cover a wide variety of threading inserts.
Standard tool series with double-clamp system for excellent insert stability in machining API-standard threads.

E004 -, E010 - E067



TETRAMINICUT
Standard tool with 4 corners for threading on Swiss lathes.
In small diameter threading using the center of the tool post on general NC lathes, interference with the center is less likely occur.

E004 -, E008



DUOJUSTCUT
Standard tool suitable for all types of threading on Swiss lathes.
The incomplete thread part from the workpiece face to the thread groove can be the shortest thanks to the excellent accessibility to the workpiece face.

E004 -, E009



J-SERIES
Tool series with 3-cornered inserts. Subselection for threading on Swiss lathes. Standard tool also suitable for radial Swiss lathes.

E004, E013 E016, E048



TUNGT-CLAMP
Tool with high clamp rigidity that firmly holds the insert with a clamp. Grooving insert and threading insert can be used with the same toolholder.

E004 -, E014 E062 -, E068



On edge insert, toolholder
ACME and STUB ACME inserts can be used for the range of 16 to 3TPI with 2 types of toolholders. The special full-profile insert realizes both the fine adjustment of thread height and the minimum burr on the crest.

E004 -, E029 - E052, E065



Chaser
Threading tool with multiple cutting edges for highly efficient machining of API-standard round, buttress, and NPT.

E005 -, E026 E031 -, E053 E066



BOREMEISTER
Boring heads for deep hole threading.
All 16-size inserts of TungThread Internal series are applicable, allowing to apply for large variety of threads type.

E056 -



TINYMINITURN
Internal threading tool suitable for the minimum machining diameter ø4. All tools have oil holes that can supply coolant from the cutting edge.

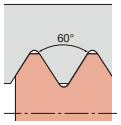
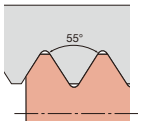
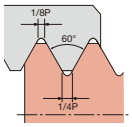
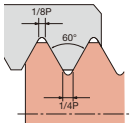
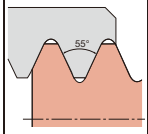
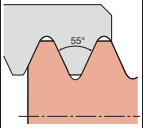
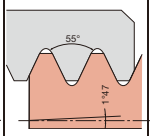
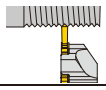
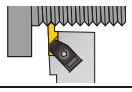
E059 -, E068



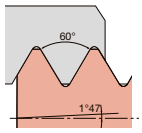
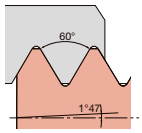
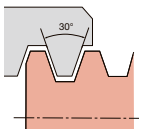
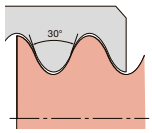
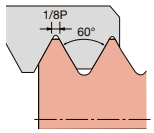
Other tool
TT type

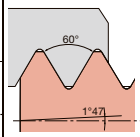
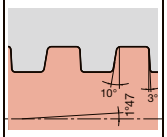
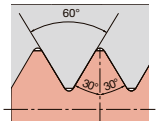
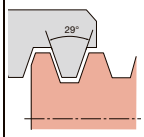
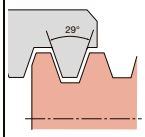
E004 -, E014 E016, E053, E066

Applicable tool for each external thread type

Applicable tool for each external thread type			General purpose, Machine parts for machine and automotive parts				For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		
Thread types			60°	55°	ISO metric threads, coarse and fine	Unified national threads series, 60° inch threads	- British standard whitworth - British standard fine	- British standard parallel pipe - British standard pipe - Parallel pipe thread (JIS B 9912) - 55° inch thread	- JIS tapered pipe thread - British standard pipe taper
Thread symbols			M, UN, UNC, UNF, UNEF, UNS	G, BSP, PF, BSPP	M	UN, UNR, UNC, UNRC, UNF, UNRF, UNEF, UNREF, UNS, UNRS	BSW, BSF, W	G, BSP, PF, BSPP	R, PT, BSPT
Thread form									
Tool type	Full profile With	Full profile Without							
ST type  E036	○		—	—	0.5 ~ 6 mm E017	32 ~ 5TPI E021	28 ~ 5TPI E023	28 ~ 5TPI E023	28 ~ 11TPI E024
		○	0.5 ~ 6 mm 48 ~ 4TPI E010	0.5 ~ 5 mm 48 ~ 5TPI E015	—	—	—	—	—
TETRAMINI CUT  E041	○		—	—	0.5 ~ 1.5 mm E020	—	—	—	—
		○	0.4 ~ 3 mm 64 ~ 8TPI E012	—	—	—	—	—	—
DUOJUST CUT  E047		○	0.2 ~ 1.5 mm 127 ~ 16TPI E012	—	—	—	—	—	—
J-SERIES  E048		○	0.5 ~ 1 mm 48 ~ 25TPI E013	0.5 ~ 1 mm 48 ~ 25TPI E016	—	—	—	—	—
TUNGT-CLAMP  E050		○	1.27 ~ 4.23 mm 20 ~ 6TPI E014	—	—	—	—	—	—
TT type  E053		○	~ 3 mm ~ 8TPI E014	~ 3 mm ~ 8TPI E016	—	—	—	—	—

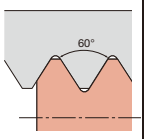
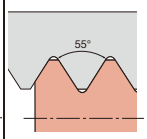
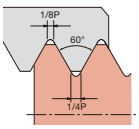
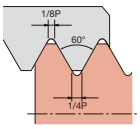
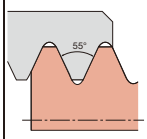
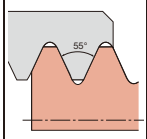
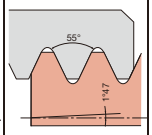
Please see page E*** for the product details.

Applicable tool for each external thread type		For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		Machine parts		Aerospace threads
Thread types		National pipe taper thread	National pipe taper fuel thread	- TR - 30° trapezoidal - ISO trapezoidal	Knuckle thread	Unified inch screw threads
Thread symbols		NPT	NPTF	TR	Rd	UNJ, UNJC, UNJF, UNUEF, UNJS
Thread form						
Tool type	Full profile With / Without					
ST type  E036	○	27 ~ 8TPI E025	27 ~ 8TPI E026	1.5 ~ 6 mm E027	8TPI, 6TPI E027	32 ~ 8TPI E028
Chaser  E053	○	11.5TPI, 8TPI E026	—	—	—	—

Applicable tool for each external thread type		Oil and gas fields and OCTG drill pipes							Machine parts, Pipe	
Thread types		- API round - API casing - Short casing - API tubing	API buttress casing	- API rotary shoulder connection for drill pipe and collar connections					- ACME - 29° trapezoidal thread	- STUB ACME - 29° trapezoidal thread
				V-0.038R 2TPF	V-0.038R 3TPF	V-0.040R 3TPF	V-0.050R 2TPF	V-0.050R 3TPF		
Thread symbols		CSG, LCSG, TBG, UPTBG	BCSG	NC	NC	REG	REG, FH	REG	—	—
Thread form										
Tool type	Full profile With / Without									
ST type  E036	○	10TPI, 8TPI E030	5TPI (0.75TPF) E032	—	—	—	—	—	12 ~ 5TPI E029	—
Chaser  E053	○	10TPI, 8TPI E031	5TPI (0.75TPF) E033	—	—	—	—	—	—	—
Other  E051	○	10TPI, 8TPI E031	5TPI (0.75TPF) 5TPI (1TPF) E032	4TPI (2TPF) 4TPI (3TPF) 5TPI (3TPF) E035					16 ~ 3TPI E029	16 ~ 3TPI E030

Please see page E*** for the product details.

Applicable tool for each internal thread type

Applicable tool for each external thread type			General purpose, Machine parts for machine and automotive parts				For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		
Thread types			60°	55°	ISO metric threads, coarse and fine	Unified national threads series, 60° inch threads	- British standard whitworth - British standard fine	- British standard parallel pipe - British standard pipe - Parallel pipe thread (JIS B 9912) - 55° inch thread	- JIS tapered pipe thread - British standard pipe taper
Thread symbols			M, UN, UNC, UNF, UNEF, UNS	G, BSP, PF, BSPP	M	UN, UNR, UNC, UNRC, UNF, UNRF, UNEF, UNREF, UNS, UNRS	BSW, BSF, W	G, BSP, PF, BSPP	R, PT, BSPT
Thread form									
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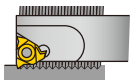
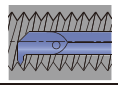
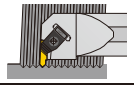
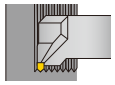
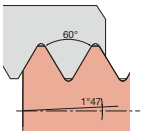
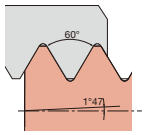
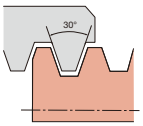
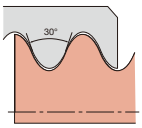
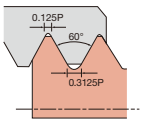
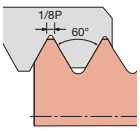
ST type  E054	○		—	—	0.5 ~ 6 mm E017	32 ~ 5TPI E021	28 ~ 5TPI E023	28 ~ 5TPI E023	19 ~ 11TPI E024
		○	0.5 ~ 6 mm 48 ~ 4TPI E010	0.5 ~ 5 mm 48 ~ 5TPI E015	—	—	—	—	—
TINYMTURN  E060		○	0.5 ~ 1.5 mm 48 ~ 16TPI E060	—	—	—	—	—	—
TUNGT-CLAMP  E063		○	1.27 ~ 4.23 mm 12 ~ 5TPI E014	—	—	—	—	—	—
TT type  E065		○	~ 3 mm ~ 8TPI E014	~ 3 mm ~ 8TPI E016	—	—	—	—	—

Please see page E*** for the product details.

Applicable tool for each external thread type		For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		Machine parts		Aerospace threads	
Thread types		National pipe taper thread	National pipe taper fuel thread	- TR - 30° trapezoidal - ISO trapezoidal	Knuckle thread	Aerospace standard MJ threads	Unified inch screw threads
Thread symbols		NPT	NPTF	TR	Rd	MJ	UNJ, UNJC, UNJF, UNUEF, UNJS
Thread form							
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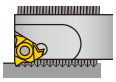
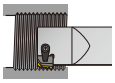
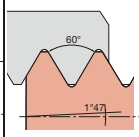
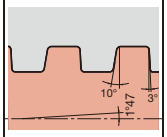
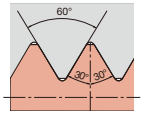
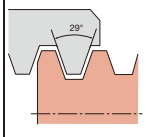
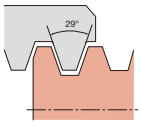
	With / Without						
ST type  E054	○	27 ~ 8TPI E025	14 ~ 8TPI E026	1.5 ~ 5 mm E027	6TPI E027	1 mm E028	—
Chaser  E065	○	11.5TPI, 8TPI E026	—	—	—	—	—

Applicable tool for each external thread type		Oil and gas fields and OCTG drill pipes							Machine parts, Pipe	
Thread types		- API round - API casing - API tubing - Short casing	API buttress casing	- API rotary shoulder connection for drill pipe and collar connections					ACME 29° trapezoidal thread	STUB ACME 29° trapezoidal thread
				V-0.038R 2TPF	V-0.038R 3TPF	V-0.040R 3TPF	V-0.050R 2TPF	V-0.050R 3TPF		
Thread symbols		CSG, LCSG, TBG, UPTBG	BCSG	NC	NC	REG	REG, FH	REG	—	—
Thread form										
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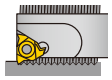
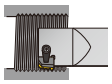
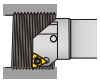
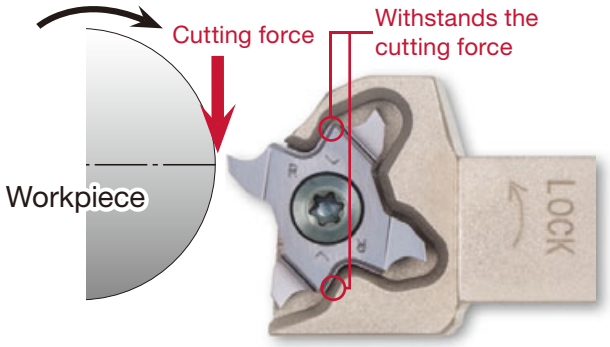
	With / Without									
ST type  E054	○	10TPI, 8TPI E030	5TPI (0.75TPF) E032	—	—	—	—	—	12 ~ 5TPI E029	—
Chaser  E065	○	10TPI, 8TPI E031	5TPI (0.75TPF) E033	—	—	—	—	—	—	—
Other  E063	○	10TPI, 8TPI E031	5TPI (0.75TPF) 5TPI (1TPF) E032	4TPI (2TPF) 4TPI (3TPF) 5TPI (3TPF) E035					—	—

Please see page E*** for the product details.



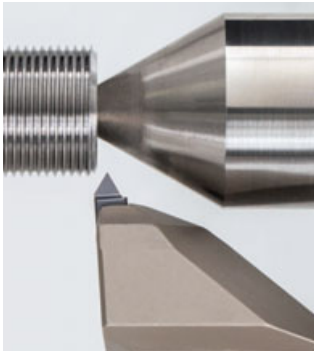
Unique clamping system

The unique pocket design provides accurate indexing repeatability of the cutting edge height.



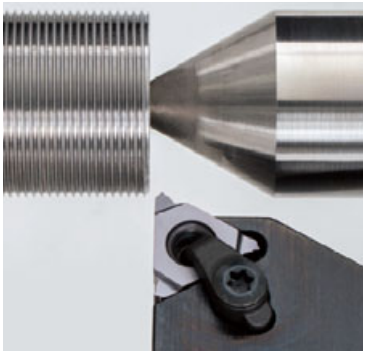
No tool interference with the lathe center when machining small parts

TETRAMCUT
M16x1



Insert: TCT18R-60N-020

Conventional
M24x1



Insert: 16ER10ISO

Reference pages: Inserts → E012, External toolholders → E041 - E043, Standard cutting conditions → E067

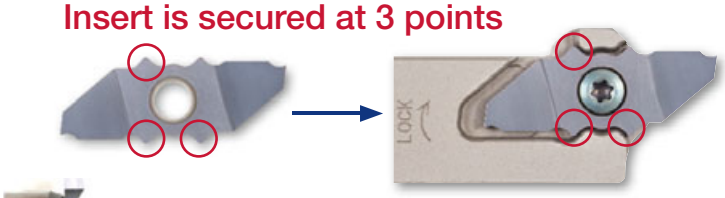
DUOJCUT UST



Unique clamping system for highly rigid clamping

The unused cutting edge is always protected due to the innovative clamping system.
Even if the first cutting edge is chipped, the other unused cutting edge can be used because the insert is clamped in the center.

Insert is secured at 3 points





DUOJCUT UST

Excellent accessibility to the workpiece face

Utilizing various tools minimizes the incomplete thread part.



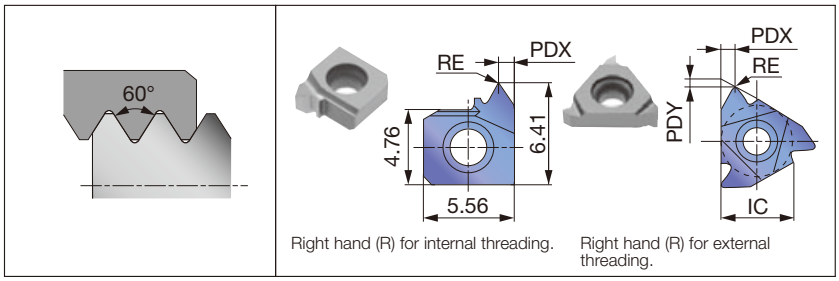
	Type A	Type B	Type N
Right hand	a b a > b	a b a < b	a b a = b
Left hand	a b a > b	a b a < b	a b a = b

Insert designation	Cutting edge geometry (mm)	PDX (mm)	Pitch (mm) 0.2	0.25	0.35	0.4	0.5	0.6	0.8	1	1.25	1.5
JXTG12FR-60A-000	0.05 (flat)	0.25	Applicable area									
JXTG12FL-60A-000												
JXTG12FR-60B-000	0.05 (flat)	2.25										
JXTG12FL-60B-000												
JXTG12FR-60A-005	R0.05	0.6				Applicable area						
JXTG12FL-60A-005												
JXTG12FR-60B-005	R0.05	1.9										
JXTG12FL-60B-005												
JXTG12FR-60N-010	R0.1	1.25								Applicable area		
JXTG12FL-60N-010												
			127		72		52		32			16

Threads per inch (TPI)

Reference pages: Inserts → E012, External toolholders → E047 - E048,
Standard cutting conditions → E067

60° thread angle (General purpose)



Right hand (R) for internal threading.

Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
06		SIR0005...
08		SIR0007...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...
27	CER/L**27...	CNR/L**27...

Partial-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Coated AH725	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Coated AH725	Coated GH330	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE
6	0.5 - 1.5	48 - 16	R										6IRA60	●	●			●	-	0.9	-	0.04
06	0.5 - 1.25	48 - 20	R										06IRA60			●**			4	0.6	0.6	0.05
08	0.5 - 1.5	48 - 16	R										08IRA60		●**				5	0.7	0.6	0.05
11	0.5 - 1.5	48 - 16	R	11ERA60		●			6.35	0.9	0.8	0.06	11IRA60	●	●		●	●	6.35	0.9	0.7	0.04
11	0.5 - 1.5	48 - 16	L										11ILA60		●		●	●	6.35	0.9	0.7	0.04
16	0.5 - 1.5	48 - 16	R	16ERA60	●	●	●	●	9.525	0.9	0.7	0.06	16IRA60	●	●		●	●	9.525	0.9	0.7	0.04
16	0.5 - 1.5	48 - 16	L	16ELA60		●	●	●	9.525	0.9	0.7	0.06	16ILA60		●		●	●	9.525	0.9	0.7	0.04
16	0.5 - 3	48 - 8	R	16ERAG60	●	●	●		9.525	1.6	1.2	0.06	16IRAG60	●	●		●		9.525	1.6	1.2	0.04
16	1.75 - 3	14 - 8	R	16ERG60	●	●	●	●	9.525	1.6	1.2	0.22	16IRG60	●	●		●	●	9.525	1.6	1.2	0.12
16	1.75 - 3	14 - 8	L	16ELG60		●	●		9.525	1.6	1.2	0.22	16ILG60		●		●	●	9.525	1.6	1.2	0.12
22	3.5 - 5	7 - 5	R	22ERN60	●	●	●	●	12.7	2.5	1.7	0.44	22IRN60	●	●		●	●	12.7	2.5	1.7	0.25
22	3.5 - 5	7 - 5	L	22ELN60		●	●		12.7	2.5	1.7	0.44	22ILN60		●		●		12.7	2.5	1.7	0.25
27	4 - 6	6 - 4	R	27ERZ60		●	●		15.875	3.2	2.2	0.5	27IRZ60		●		●		15.875	3.2	2.2	0.28

●** : Both ..06IR... and ..08IR... inserts have 3 cutting edges.

● : Line up / 5 pieces per package

Partial-profile insert

Insert size	Pitch	TPI	Hand of cut	External insert: Designation	Grade: CBN BX330	IC	PDX	PDY	RE
16	1 - 2	20 - 13	R	1QP-16ER60-014-SP	●	9.525	0.95	0.7	0.14
16	1.5 - 3	16 - 8	R	1QP-16ER60-020-SP	●	9.525	1.55	1.2	0.2

● : Line up / 1 piece per package

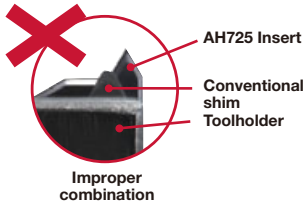
Reference pages: External toolholders → E036 - E040
Inernal toolholders → E054 - E056

Partial-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725	NS9530						AH8015	AH725	NS9530				
11	0.5 - 1.5	48 - 16	R									11IRA60-B		●		6.35	0.9	0.7	0.04
11	0.5 - 1.5	48 - 16	R									11IRA60-M	●		●	6.35	0.9	0.7	0.04
16	0.5 - 1.5	48 - 16	R	16ERA60-B		●*		9.525	0.9	0.8	0.05	16IRA60-B		●*		9.525	0.9	0.8	0.05
16	0.5 - 1.5	48 - 16	R	16ERA60-M	●		●	9.525	0.9	0.7	0.06	16IRA60-M	●		●	9.525	0.9	0.7	0.04
16	0.5 - 3	48 - 8	R	16ERAG60-B		●*		9.525	1.7	1.2	0.08	16IRAG60-B		●*		9.525	1.7	1.2	0.05
16	0.5 - 3	48 - 8	R	16ERAG60-M	●	●	●	9.525	1.6	1.2	0.06	16IRAG60-M	●	●	●	9.525	1.6	1.2	0.04
16	1.75 - 3	14 - 8	R	16ERG60-B		●*		9.525	1.7	1.2	0.25	16IRG60-B		●*		9.525	1.7	1.2	0.1
16	1.75 - 3	14 - 8	R	16ERG60-M	●		●	9.525	1.6	1.2	0.22	16IRG60-M	●		●	9.525	1.6	1.2	0.14
22	3.5 - 5	7 - 5	R	22ERN60-B		●		12.7	2.5	1.7	0.32	22IRN60-B		●		12.7	2.5	1.7	0.19

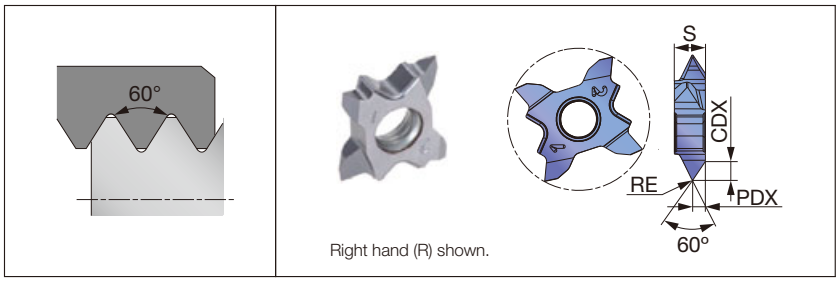
- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- requires the use of dedicated shim.
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim.
Please refer to the page E69.

● : Line up / 5 pieces per package



Reference pages: External toolholders → E036 - E040
Inernal toolholders → E054 - E056

60° thread angle (General purpose)



Applicable toolholder

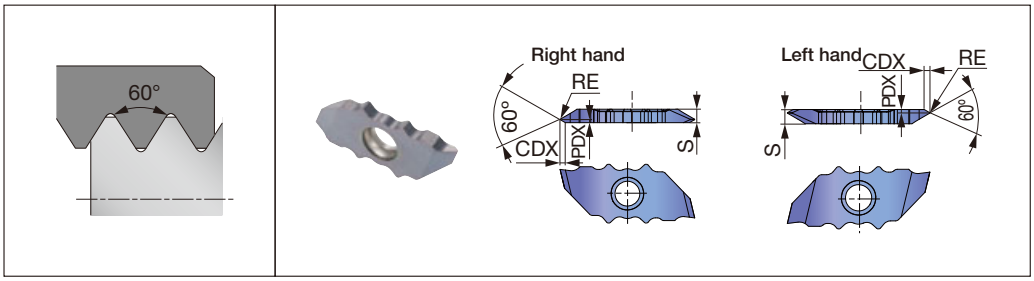
External
STCR/L**-18
STCR/L**18-CHP
JS**-STCL18
C*STCFL**18-CHP
C*STCR/L**18-CHP
QC**STCR/L18 (-Y)
QC**STCR/L18 (-Y)-CHP

Partial-profile insert

Pitch	TPI	Hand of cut	External insert						
			Designation	Grade		PDX	CDX	RE	S
				Coated					
				SH725	AH725				
0.4 - 1	25 - 64	R	**TCT18FR-60A-005**	●		0.6	0.99	0.05	4
1 - 2	25 - 12	R	**TCT18FR-60A-010**	●		1	1.63	0.1	4
0.8 - 3	8 - 32	R/L	**TCT18R/L-60N-010**		●	1.6	2.67	0.1	4
1.5 - 3	8 - 16	R/L	**TCT18R/L-60N-020**		●	1.6	2.57	0.2	4

● : Line up / 5 pieces per package

60° thread angle (General purpose)



Applicable toolholder

External
JSXXR/L**09
JSXXR/L**09-CHP
JS**-SXXL09

Partial-profile insert

Insert size	Pitch	TPI	Hand of cut	External insert						
				Designation	Grade		PDX	CDX	RE	S
					Coated					
					SH725					
					R	L				
12	0.2 - 0.4	64 - 127	R/L	**JXTG12FR/L-60A-000**	●	●	0.25	0.4	0.05 max flat	2.5
12	0.2 - 0.4	64 - 127	R/L	**JXTG12FR/L-60B-000**	●	●	2.25	0.4	0.05 max flat	2.5
12	0.4 - 1	25 - 64	R/L	**JXTG12FR/L-60A-005**	●	●	0.6	0.99	0.05	2.5
12	0.4 - 1	25 - 64	R/L	**JXTG12FR/L-60B-005**	●	●	1.9	0.99	0.05	2.5
12	1 - 1.5	16 - 25	R/L	**JXTG12FR/L-60N-010**	●	●	1.25	2.07	0.1	2.5

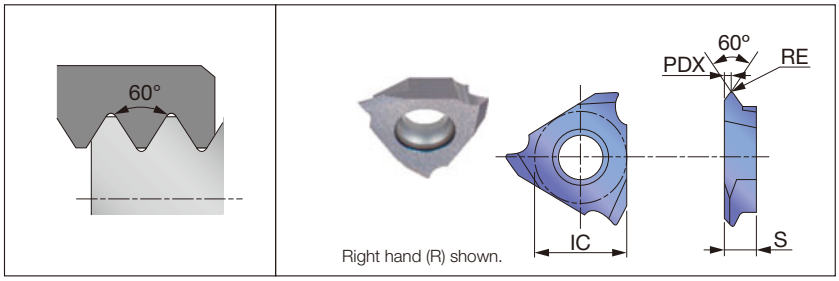
● : Line up / 5 pieces per package

	Type A	Type B	Type N
Right hand	a b a > b	a b a < b	a b a = b
Left hand	a b a > b	a b a < b	a b a = b

Thread form
60°
55°
M (Metric)
UN (Unified)
W (Whitworth)
BSPT (R, PT)
NPT
NPTF
TR (Metric, 30° Trapezoidal)
Round (DIN405)
UNJ
MJ
ACME (29° Trapezoidal)
STUB ACME (29° Trapezoidal)
API Round
API Buttress
API Rotary Shoulder Connection

Reference pages: TetraMini-Cut : External toolholders → E041 - E045
DuoJust-cut : External toolholders → E047 - E048

60° thread angle (General purpose)



Applicable toolholder

External
JSTTR/L**3
JS**-TTL3

Partial-profile insert

Pitch	TPI	Hand of cut	Designation	External insert								IC	PDX	S	RE
				Grade											
				Coated				Cermet		Uncoated					
				SH725		J740		NS9530		TH10					
				R	L	R	L	R	L	R	L				
0.5 - 1	25 - 48	R/L	**JTTR3005F**	●	●	●		●		●		9.525	0.6	3.18	0.05
0.5 - 1	25 - 48	R/L	**JTTL3010F**	●	●	●		●		●		9.525	1.1	3.18	0.1

● : Line up / 10 pieces per package

J-SERIES
INSERT

60° thread angle (General purpose)



Applicable toolholder

External
JSXBR**K8
JSXBR**K8-C

Partial-profile insert

Pitch	TPI	Hand of cut	Designation	External insert					
				Grade			IC	S	RE
				Coated	Uncoated				
				J740	TH10				
0.5 - 1	25 - 48	R	**JXT1R6000F**	●	●		8	3.97	0.03
0.5 - 1	25 - 48	R	**JXT2R6000F**	●	●		8	3.97	0.03

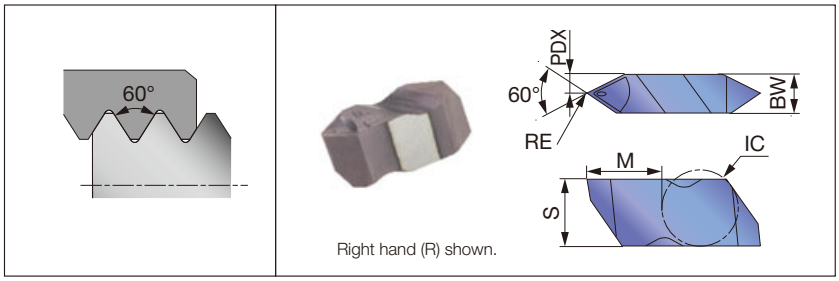
● : Line up / 10 pieces per package

Reference pages: J-Series : External toolholders → E048 - E049

TUNGT-CLAMP

INSERT

60° thread angle (General purpose)



Applicable toolholder

External	Internal
FLASR/L-1616M3	A**M-FLER/L3
FLSR/L-**M3	HS**-FLER3W

Partial-profile insert for external and internal threads

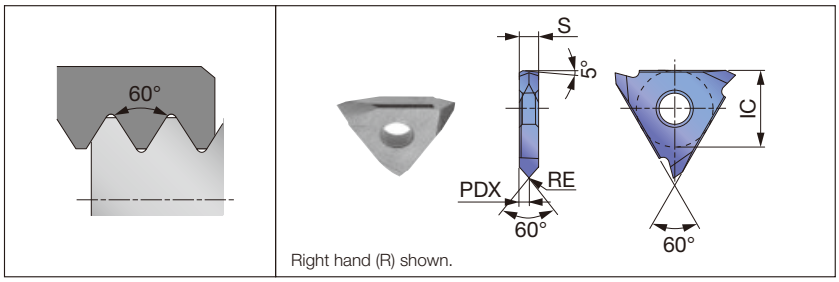
TPI	Hand of cut	External Pitch	Internal Pitch	Designation	Grade Coated AH725	IC	PDX	BW	RE	S	M
6 - 20	R/L	1.27 - 4.23	2.11 - 5.08	**FLT-3R/L-HCB**	●	9.525	2.49	4.95	0.17	8.74	10.16
11 - 20	R/L	2.31 - 4.23	3.175 - 5.08	**FLT-3R/LC-HCB**	●	9.525	2.49	4.95	0.35	8.74	10.16
6 - 20	R/L	1.27 - 4.23	2.11 - 5.08	**FLT-3R/L-CB**	●	9.525	2.49	4.95	0.17	8.74	10.16

● : Line up / 10 pieces per package

TUNGTHREAD

INSERT

TT type / 60° thread angle (General purpose)



Applicable toolholder

External	Internal
TT-****RE/LI	TT-2525RI

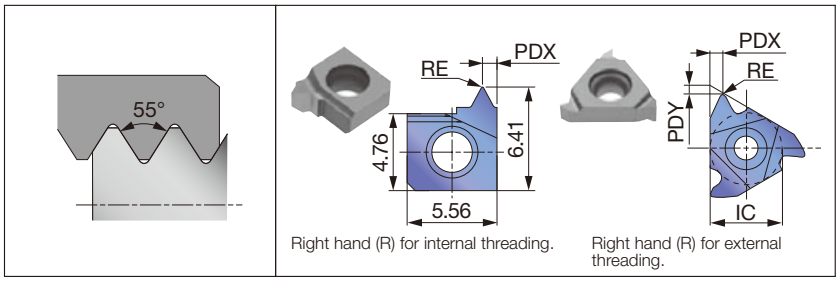
Partial-profile insert for external and internal threads

Pitch	TPI	Hand of cut	Designation	Grade Cermet NS9530	Grade Uncoated TH10	IC	PDX	S	RE
≤ 3	≥ 8	R	**TTR42M-005**	●	●	12.7	1.6	3.2	0.05
≤ 3	≥ 8	L	**TTL42M-005**	●	●	12.7	1.6	3.2	0.05

● : Line up / 5 pieces per package

Reference pages: TungT-Clamp : External toolholders → E050,
Internal toolholders → E063 - E064
TT type : External toolholders → E053
Internal toolholders → E066

55° thread angle (General purpose)



Right hand (R) for internal threading.

Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
06		SIR0005...
08		SIR0007...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Partial-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Coated AH725	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Coated AH725	Coated GH330	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE
6	0.5 - 1.5	48 - 16	R										6IRA55		●			●	-	0.9	-	0.07
06	0.5 - 1.25	48 - 20	R										06IRA55			●**			4	0.5	0.5	0.08
08	0.5 - 1.5	48 - 16	R										08IRA55		●**				5	0.7	0.6	0.08
11	0.5 - 1.5	48 - 16	R	11ERA55		●			6.35	0.9	0.8	0.05	11IRA55	●	●		●	●	6.35	0.9	0.7	0.07
16	0.5 - 1.5	48 - 16	R	16ERA55		●	●	●	9.525	0.9	0.7	0.07	16IRA55		●		●	●	9.525	0.9	0.7	0.07
16	0.5 - 3	48 - 8	R	16ERAG55		●			9.525	1.7	1.2	0.07	16IRAG55		●				9.525	1.7	1.2	0.07
16	1.75 - 3	14 - 8	R	16ERG55	●	●	●	●	9.525	1.6	1.2	0.25	16IRG55	●	●		●	●	9.525	1.7	1.2	0.25
22	3.5 - 5	7 - 5	R	22ERN55		●	●	●	12.7	2.5	1.7	0.5	22IRN55		●		●	●	12.7	2.5	1.7	0.5

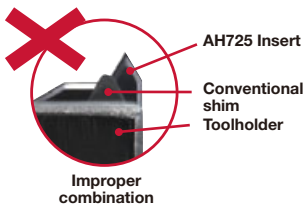
● : Line up / 5 pieces per package

Partial-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH725	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH725	IC	PDX	PDY	RE
16	0.5 - 3	48 - 16	R	16ERAG55-B	●*	9.525	1.7	1.2	0.07	16IRAG55-B	●*	9.525	1.7	1.2	0.05
16	1.75 - 3	14 - 8	R	16ERG55-B	●*	9.525	1.7	1.2	0.23	16IRG55-B	●*	9.525	1.7	1.2	0.2

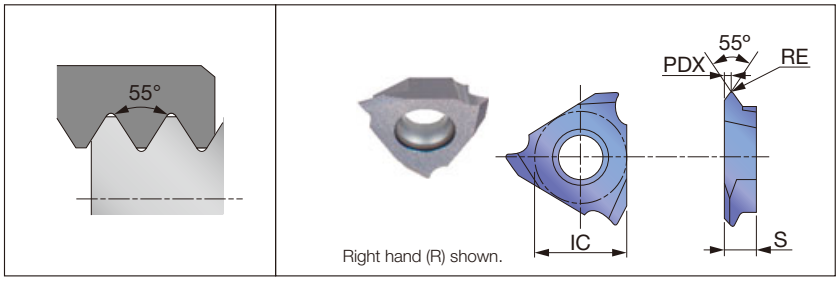
● : Line up / 5 pieces per package

- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- ●** : Both ..06IR... and ..08IR... inserts have 3 cutting edges.
- requires the use of dedicated shim.
  When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim.
  Please refer to the page E069.



Reference pages: External toolholders → E036 - E040
Inernal toolholders → E054 - E056

55° thread angle (General purpose)



Applicable toolholder

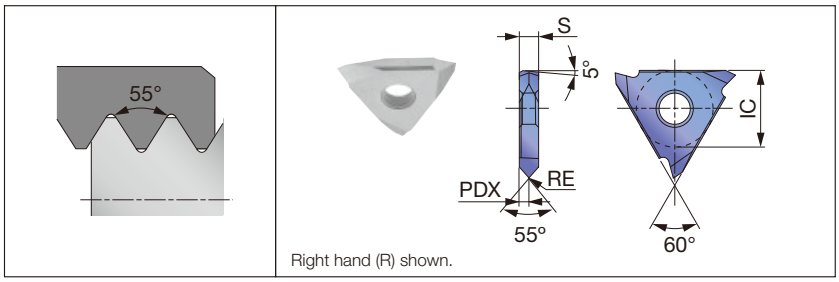
External
JSTTR/L**3
JS**-TTL3

Partial-profile insert

Pitch	TPI	Hand of cut	External insert: Designation	Grade: Coated: SH725 R	SH725 L	J740 R	J740 L	IC	PDX	S	RE
0.5 - 1	25 - 48	R/L	**JTTR/L3005F-55**	●		●		9.525	0.6	3.18	0.05

● : Line up / 5 pieces per package

TT type / 55° thread angle (General purpose)



Applicable toolholder

External	Internal
TT-****RE/LI	TT-2525RI

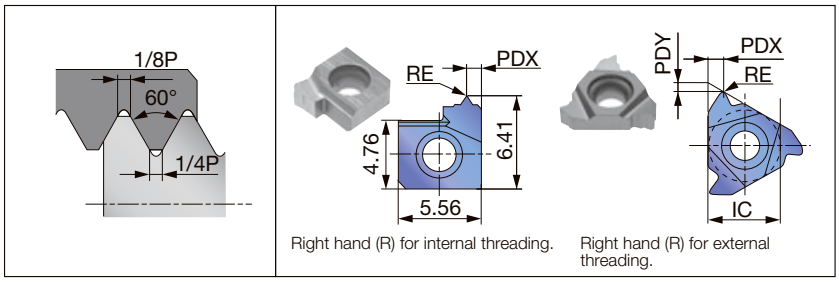
Partial-profile insert for external and internal threads

Pitch	TPI	Hand of cut	Designation	Grade: Cermet: NS9530	Uncoated: TH10	IC	PDX	S	RE
≤ 3	≥ 8	R	**TTR42W-005**	●	●	12.7	1.6	3.2	0.05
≤ 3	≥ 8	L	**TTL42W-005**	●	●	12.7	1.6	3.2	0.05

● : Line up / 5 pieces per package

Reference pages: J-Series: External toolholders → E048 - E049
TT type: External toolholders → E053
Inernal toolholders → E066

ISO metric (General purpose)



Right hand (R) for internal threading.

Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
06		SIR0005...
08		SIR0007...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...
27	CER/L**27...	CNR/L**27...

Full-profile insert

Insert size	Pitch (Reference)	Hand of cut	External insert									Internal insert								
			Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
				Coated			Uncoated						Coated			Uncoated				
				AH8015	AH725	T313V	TH10						AH8015	AH725	T313V	TH10				
6	0.75	R										6IR075ISO		●		●	-	0.5	-	0.05
6	1	R										6IR10ISO	●	●		●	-	0.9	-	0.07
6	1.25	R										6IR125ISO	●	●		●	-	0.9	-	0.09
6	1.5	R										6IR15ISO	●	●		●	-	0.9	-	0.11
6	1.75	R										6IR175ISO	●	●		●	-	0.9	-	0.12
6	2	R										6IR20ISO	●	●		●	-	0.9	-	0.14
06	0.5	R										06IR05ISO		●**			4	0.4	0.6	0.04
06	0.75	R										06IR075ISO		●**			4	0.5	0.6	0.06
06	1	R										06IR10ISO		●**			4	0.6	0.6	0.05
06	1.25	R										06IR125ISO		●**			4	0.6	0.6	0.07
08	1	R										08IR10ISO		●**			5	0.6	0.6	0.07
08	1.25	R										08IR125ISO		●**			5	0.7	0.7	0.09
08	1.5	R										08IR15ISO		●**			5	0.7	0.7	0.1
08	1.75	R										08IR175ISO		●**			5	0.8	0.6	0.15
11	0.35	R	11ER035ISO	●				6.35	0.4	0.6	0.04									
11	0.5	R	11ER05ISO	●				6.35	0.6	0.6	0.07	11IR05ISO		●		●	6.35	0.5	1.2	0.04
11	0.7	R	11ER07ISO	●				6.35	0.6	0.6	0.11									
11	0.75	R	11ER075ISO	●				6.35	0.6	0.6	0.11	11IR075ISO	●	●			6.35	0.5	1.2	0.05
11	0.8	R	11ER080ISO	●				6.35	0.6	0.6	0.12									
11	1	R	11ER10ISO	●				6.35	0.7	0.7	0.15	11IR10ISO	●	●	●	●	6.35	0.9	0.7	0.07
11	1	L										11IL10ISO	●	●			6.35	0.9	0.7	0.07
11	1.25	R	11ER125ISO	●				6.35	0.9	0.8	0.16	11IR125ISO		●			6.35	0.9	0.7	0.09
11	1.25	L										11IL125ISO		●			6.35	0.9	0.7	0.09
11	1.5	R	11ER15ISO	●				6.35	0.8	1	0.19	11IR15ISO	●	●	●	●	6.35	0.9	0.7	0.11
11	1.5	L										11IL15ISO	●	●			6.35	0.9	0.7	0.11
11	1.75	R										11IR175ISO		●	●		6.35	0.9	0.7	0.12
11	1.75	L										11IL175ISO		●			6.35	0.9	0.7	0.12
11	2	R										11IR20ISO	●	●	●		6.35	0.9	0.7	0.14
11	2	L										11IL20ISO	●	●			6.35	0.9	0.7	0.14

●** : Both ..06IR... and ..08IR... inserts have 3 cutting edges.

● : Line up / 5 pieces per package

Reference pages: External toolholders → E036 - E040
Inernal toolholders → E054 - E056

Insert size	Pitch (Reference)	Hand of cut	External insert									Internal insert							
			Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
				Coated			Uncoated						Coated			Uncoated				
				AH8015	AH725	T313V	TH10						AH8015	AH725	T313V	TH10				
16	0.5	R	**16ER05ISO**	●	●		●	9.525	0.5	1.2	0.06	**16IR05ISO**		●			9.525	0.5	1.2	0.04
16	0.75	R	**16ER075ISO**	●	●	●	●	9.525	0.5	1.2	0.09	**16IR075ISO**		●			9.525	0.5	1.2	0.05
16	1	R	**16ER10ISO**	●	●	●	●	9.525	0.9	0.7	0.13	**16IR10ISO**	●	●	●	●	9.525	0.9	0.7	0.07
16	1	L										**16IL10ISO**	●	●			9.525	0.9	0.7	0.07
16	1.25	R	**16ER125ISO**	●	●	●		9.525	0.9	0.7	0.16	**16IR125ISO**		●			9.525	0.9	0.7	0.09
16	1.25	L										**16IL125ISO**		●			9.525	0.9	0.7	0.09
16	1.5	R	**16ER15ISO**	●	●	●	●	9.525	0.9	0.7	0.19	**16IR15ISO**	●	●	●	●	9.525	0.9	0.7	0.11
16	1.5	L	**16EL15ISO**	●				9.525	0.9	0.7	0.19	**16IL15ISO**	●	●			9.525	0.9	0.7	0.11
16	1.75	R	**16ER175ISO**	●	●	●		9.525	1.6	1.2	0.22	**16IR175ISO**		●	●		9.525	1.6	1.2	0.12
16	2	R	**16ER20ISO**	●	●	●	●	9.525	1.6	1.2	0.25	**16IR20ISO**	●	●	●	●	9.525	1.6	1.2	0.14
16	2	L	**16EL20ISO**	●	●			9.525	1.6	1.2	0.25	**16IL20ISO**		●			9.525	1.6	1.2	0.14
16	2.5	R	**16ER25ISO**	●	●	●	●	9.525	1.6	1.2	0.31	**16IR25ISO**	●	●	●	●	9.525	1.6	1.2	0.18
16	3	R	**16ER30ISO**	●	●	●	●	9.525	1.6	1.2	0.38	**16IR30ISO**	●	●	●	●	9.525	1.6	1.2	0.21
16	3	L										**16IL30ISO**		●			9.525	1.6	1.2	0.21
22	3.5	R	**22ER35ISO**	●	●	●		12.7	2.5	1.7	0.44	**22IR35ISO**	●	●	●		12.7	2.5	1.7	0.25
22	4	R	**22ER40ISO**	●	●	●		12.7	2.5	1.7	0.5	**22IR40ISO**	●	●	●		12.7	2.5	1.7	0.28
22	4.5	R	**22ER45ISO**	●	●			12.7	2.5	1.7	0.56	**22IR45ISO**	●	●			12.7	2.5	1.7	0.32
22	5	R	**22ER50ISO**		●	●		12.7	2.5	1.7	0.63	**22IR50ISO**		●	●		12.7	2.5	1.7	0.35
27	6	R	**27ER60ISO**		●	●		15.875	3.2	2.2	0.75	**27IR60ISO**		●	●		15.875	3.2	2.2	0.42

● : Line up / 5 pieces per package

Thread form
60°
55°
M (Metric)
UN (Unified)
W (Whitworth)
BSPT (R, PT)
NPT
NPTF
TR (Metric, 30° Trapezoidal)
Round (DIN405)
UNJ
MJ
ACME (29° Trapezoidal)
STUB ACME (29° Trapezoidal)
API Round
API Buttress
API Rotary Shoulder Connection

Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	Hand of cut	External insert								Internal insert							
			Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
				Coated		Cermet						Coated		Cermet				
				AH8015	AH725	NS9530						AH8015	AH725	NS9530				
11	0.5	R									11IR05ISO-B		●		6.35	0.5	1.2	0.04
11	0.5	R									11IR05ISO-M			●	6.35	0.5	1.2	0.04
11	0.75	R									11IR075ISO-B		●		6.35	0.5	1.2	0.05
11	0.75	R									11IR075ISO-M			●	6.35	0.5	1.2	0.05
11	1	R									11IR10ISO-B		●		6.35	0.9	0.7	0.08
11	1	R									11IR10ISO-M	●		●	6.35	0.9	0.7	0.08
11	1.25	R									11IR125ISO-B		●		6.35	0.9	0.7	0.1
11	1.25	R									11IR125ISO-M	●		●	6.35	0.9	0.7	0.1
11	1.5	R									11IR15ISO-B		●		6.35	0.9	0.7	0.12
11	1.5	R									11IR15ISO-M	●		●	6.35	0.9	0.7	0.12
11	1.75	R									11IR175ISO-B		●		6.35	0.9	0.7	0.12
11	1.75	R									11IR175ISO-M			●	6.35	0.9	0.7	0.12
11	2	R									11IR20ISO-B		●		6.35	0.9	0.7	0.14
11	2	R									11IR20ISO-M	●		●	6.35	0.9	0.7	0.14
16	0.5	R	16ER05ISO-M			●	9.525	0.5	1.2	0.06								
16	0.75	R	16ER075ISO-B		●*		9.525	0.6	0.6	0.08								
16	0.75	R	16ER075ISO-M	●		●	9.525	0.5	1.2	0.09								
16	1	R	16ER10ISO-B		●*		9.525	0.7	0.7	0.11	16IR10ISO-B		●*		9.525	0.7	0.6	0.05
16	1	R	16ER10ISO-M	●	●	●	9.525	0.9	0.7	0.13	16IR10ISO-M	●		●	9.525	0.9	0.7	0.08
16	1.25	R	16ER125ISO-B		●*		9.525	0.9	0.8	0.14	16IR125ISO-B		●*		9.525	0.9	0.8	0.06
16	1.25	R	16ER125ISO-M	●		●	9.525	0.9	0.7	0.16	16IR125ISO-M			●	9.525	0.9	0.7	0.1
16	1.5	R	16ER15ISO-B		●*		9.525	1	0.8	0.19	16IR15ISO-B		●*		9.525	1	0.8	0.08
16	1.5	R	16ER15ISO-M	●	●	●	9.525	0.9	0.7	0.19	16IR15ISO-M	●	●	●	9.525	0.9	0.7	0.12
16	1.75	R	16ER175ISO-B		●*		9.525	1.2	0.9	0.25	16IR175ISO-B		●*		9.525	1.2	0.9	0.10
16	1.75	R	16ER175ISO-M	●		●	9.525	1.6	1.2	0.22	16IR175ISO-M			●	9.525	1.6	1.2	0.14
16	2	R	16ER20ISO-B		●*		9.525	1.3	1	0.28	16IR20ISO-B		●*		9.525	1.3	1	0.11
16	2	R	16ER20ISO-M	●	●	●	9.525	1.6	1.2	0.25	16IR20ISO-M	●		●	9.525	1.6	1.2	0.14
16	2.5	R	16ER25ISO-B		●*		9.525	1.5	1.1	0.3	16IR25ISO-B		●*		9.525	1.5	1.1	0.14
16	2.5	R	16ER25ISO-M	●		●	9.525	1.6	1.2	0.31	16IR25ISO-M			●	9.525	1.6	1.2	0.18
16	3	R	16ER30ISO-B		●*		9.525	1.6	1.2	0.38	16IR30ISO-B		●*		9.525	1.5	1.1	0.22
16	3	R	16ER30ISO-M	●		●	9.525	1.6	1.2	0.38	16IR30ISO-M	●		●	9.525	1.6	1.2	0.21
22	3.5	R	22ER35ISO-B		●		12.7	2.3	1.6	0.48								
22	4	R	22ER40ISO-B		●		12.7	2.3	1.6	0.52								

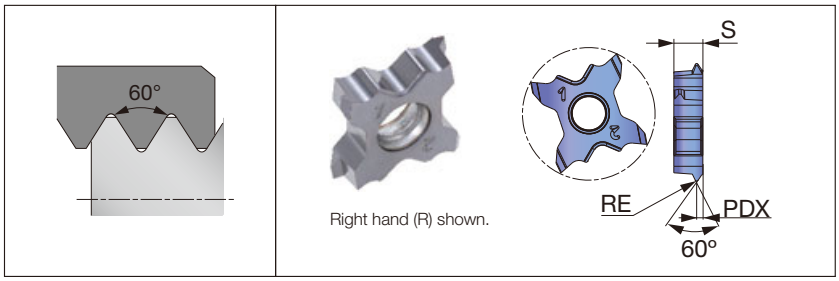
- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- requires the use of dedicated shim.
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page E069.

● : Line up / 5 pieces per package



Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

ISO metric (General purpose)



Applicable toolholder

External
STCR/L**-18
STCR/L**18-CHP
JS**-STCL18
C*STCFL**18-CHP
C*STCR/L**18-CHP
QC**STCR/L18 (-Y)
QC**STCR/L18 (-Y)-CHP

Partial-profile insert

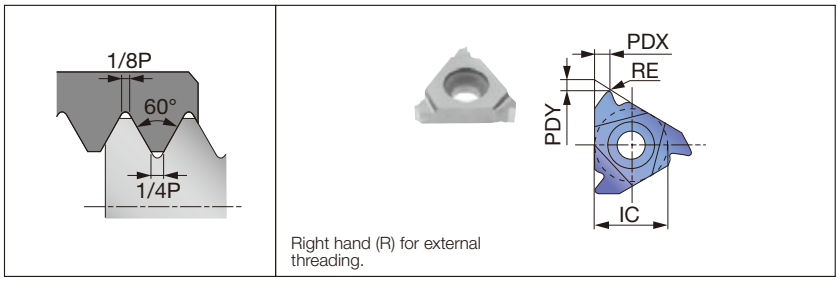
Pitch	Hand of cut	External insert			PDX	RE	S
		Designation	Grade				
			Coated				
			SH725	AH725			
0.5	R	**TCT18FR-05ISO**	●		0.35	0.06	4
0.7	R	**TCT18FR-07ISO**	●		0.45	0.09	4
0.75	R	**TCT18FR-075ISO**	●		0.5	0.09	4
0.8	R	**TCT18FR-08ISO**	●		0.5	0.1	4
1	R	**TCT18R-10ISO**		●	0.6	0.13	4
1.25	R	**TCT18R-125ISO**		●	0.7	0.17	4
1.5	R	**TCT18R-15ISO**		●	0.8	0.2	4

● : Line up / 5 pieces per package

Thread form
60°
55°
M (Metric)
UN (Unified)
W (Whitworth)
BSPT (R, PT)
NPT
NPTF
TR (Metric, 30° Trapezoidal)
Round (DIN405)
UNJ
MJ
ACME (29° Trapezoidal)
STUB ACME (29° Trapezoidal)
API Round
API Buttress
API Rotary Shoulder Connection

Reference pages: External toolholders → E041 - E045

Unified (General purpose)



Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade / Coated AH8015	Grade / Coated AH725	Grade / Coated T313V	IC	PDX	PDY	RE	Designation	Grade / Coated AH8015	Grade / Coated AH725	Grade / Coated T313V	IC	PDX	PDY	RE
11	(0.794)	32	R									11IR32UN		●		6.35	0.5	1.2	0.06
11	(0.907)	28	R									11IR28UN		●		6.35	0.5	1.2	0.06
11	(1.058)	24	R									11IR24UN		●		6.35	0.9	0.7	0.07
11	(1.27)	20	R									11IR20UN		●		6.35	0.9	0.7	0.09
11	(1.411)	18	R									11IR18UN		●		6.35	0.9	0.7	0.1
11	(1.588)	16	R									11IR16UN	●	●		6.35	0.9	0.7	0.11
11	(1.814)	14	R									11IR14UN		●		6.35	0.9	0.7	0.13
16	(0.794)	32	R	16ER32UN	●	●		9.525	0.5	1.2	0.1	16IR32UN		●		9.525	0.5	1.2	0.06
16	(0.907)	28	R	16ER28UN	●	●		9.525	0.5	1.2	0.11	16IR28UN		●		9.525	0.5	1.2	0.06
16	(1.058)	24	R	16ER24UN	●	●		9.525	0.9	0.7	0.13	16IR24UN		●		9.525	0.9	0.7	0.07
16	(1.27)	20	R	16ER20UN	●	●		9.525	0.9	0.7	0.16	16IR20UN		●		9.525	0.9	0.7	0.09
16	(1.411)	18	R	16ER18UN	●	●		9.525	0.9	0.7	0.18	16IR18UN		●		9.525	0.9	0.7	0.1
16	(1.588)	16	R	16ER16UN	●	●	●	9.525	0.9	0.7	0.2	16IR16UN		●	●	9.525	0.9	0.7	0.11
16	(1.814)	14	R	16ER14UN	●	●	●	9.525	1.6	1.2	0.23	16IR14UN		●	●	9.525	1.6	1.2	0.13
16	(1.954)	13	R	16ER13UN		●		9.525	1.6	1.2	0.24	16IR13UN		●		9.525	1.6	1.2	0.14
16	(2.117)	12	R	16ER12UN	●	●	●	9.525	1.6	1.2	0.27	16IR12UN		●	●	9.525	1.6	1.2	0.15
16	(2.309)	11	R	16ER11UN		●		9.525	1.6	1.2	0.29	16IR11UN		●		9.525	1.6	1.2	0.16
16	(2.54)	10	R	16ER10UN	●	●		9.525	1.6	1.2	0.32	16IR10UN		●		9.525	1.6	1.2	0.18
16	(2.822)	9	R	16ER9UN		●		9.525	1.6	1.2	0.35	16IR9UN		●		9.525	1.6	1.2	0.2
16	(3.175)	8	R	16ER8UN		●	●	9.525	1.6	1.2	0.4	16IR8UN		●	●	9.525	1.6	1.2	0.22
22	(3.629)	7	R	22ER7UN		●		12.7	2.5	1.7	0.45	22IR7UN		●		12.7	2.5	1.7	0.25
22	(4.233)	6	R	22ER6UN		●		12.7	2.5	1.7	0.53	22IR6UN		●		12.7	2.5	1.7	0.3
22	(5.08)	5	R	22ER5UN		●		12.7	2.5	1.7	0.64	22IR5UN		●		12.7	2.5	1.7	0.36

● : Line up / 5 pieces per package

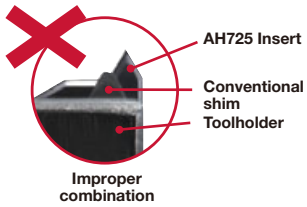
Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Grade: Coated AH725	Grade: Cermet NS9530	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Grade: Coated AH725	Grade: Cermet NS9530	IC	PDX	PDY	RE
16	(1.058)	24	R	**16ER24UN-B**		●*		9.525	0.8	0.7	0.11								
16	(1.058)	24	R	**16ER24UN-M**			●	9.525	0.9	0.7	0.13								
16	(1.27)	20	R	**16ER20UN-B**		●*		9.525	0.9	0.8	0.14	**16IR20UN-B**		●*		9.525	0.9	0.8	0.06
16	(1.27)	20	R	**16ER20UN-M**	●		●	9.525	0.9	0.7	0.16	**16IR20UN-M**			●	9.525	0.9	0.7	0.09
16	(1.411)	18	R	**16ER18UN-B**		●*		9.525	1	0.8	0.15	**16IR18UN-B**		●*		9.525	1	0.8	0.08
16	(1.411)	18	R	**16ER18UN-M**	●		●	9.525	0.9	0.7	0.18	**16IR18UN-M**	●		●	9.525	0.9	0.7	0.1
16	(1.588)	16	R	**16ER16UN-B**		●*		9.525	1.1	0.9	0.19	**16IR16UN-B**		●*		9.525	1.1	0.9	0.09
16	(1.588)	16	R	**16ER16UN-M**	●		●	9.525	0.9	0.7	0.2	**16IR16UN-M**			●	9.525	0.9	0.7	0.11
16	(1.814)	14	R	**16ER14UN-B**		●*		9.525	1.2	1	0.22	**16IR14UN-B**		●*		9.525	1.2	0.9	0.11
16	(1.814)	14	R	**16ER14UN-M**	●		●	9.525	1.6	1.2	0.23	**16IR14UN-M**			●	9.525	1.6	1.2	0.13
16	(1.954)	13	R	**16ER13UN-B**		●*		9.525	1.3	1	0.24								
16	(2.117)	12	R	**16ER12UN-B**		●*		9.525	1.4	1.1	0.25	**16IR12UN-B**		●*		9.525	1.4	1.1	0.12
16	(2.117)	12	R	**16ER12UN-M**	●		●	9.525	1.6	1.2	0.27	**16IR12UN-M**	●		●	9.525	1.6	1.2	0.15
16	(3.175)	8	R	**16ER8UN-B**		●*		9.525	1.6	1.2	0.41	**16IR8UN-B**		●*		9.525	1.5	1.1	0.2
16	(3.175)	8	R	**16ER8UN-M**			●	9.525	1.6	1.2	0.4	**16IR8UN-M**			●	9.525	1.6	1.2	0.22

● : Line up / 5 pieces per package

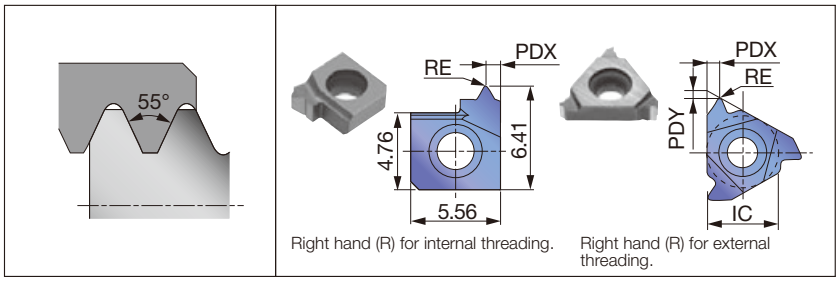
- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- requires the use of dedicated shim.
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page E069.



Thread form
60°
55°
M (Metric)
UN (Unified)
W (Whitworth)
BSPT (R, PT)
NPT
NPTF
TR (Metric, 30° Trapezoidal)
Round (DIN405)
UNJ
MJ
ACME (29° Trapezoidal)
STUB ACME (29° Trapezoidal)
API Round
API Buttress
API Rotary Shoulder Connection

Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

Whitworth, Parallel pipe thread



Right hand (R) for internal threading.

Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Coated AH725	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Coated AH725	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE
6	(1.337)	19	R										6IR19W	●	●		●	-	0.9	-	0.17
11	(1.337)	19	R										11IR19W	●	●	●	●	6.35	0.9	0.7	0.17
11	(1.814)	14	R										11IR14W	●	●	●	●	6.35	0.9	0.7	0.23
16	(0.907)	28	R	16ER28W		●	●		9.525	0.9	0.7	0.11	16IR28W		●			9.525	0.9	0.7	0.11
16	(0.97)	26	R	16ER26W		●			9.525	0.9	0.7	0.12	16IR26W		●			9.525	0.9	0.7	0.12
16	(1.27)	20	R	16ER20W		●			9.525	0.9	0.7	0.16	16IR20W		●			9.525	0.9	0.7	0.16
16	(1.337)	19	R	16ER19W	●	●	●		9.525	0.9	0.7	0.17	16IR19W		●			9.525	0.9	0.7	0.17
16	(1.411)	18	R	16ER18W		●			9.525	0.9	0.7	0.18	16IR18W		●			9.525	0.9	0.7	0.18
16	(1.588)	16	R	16ER16W		●	●		9.525	0.9	0.7	0.2	16IR16W		●	●		9.525	0.9	0.7	0.2
16	(1.814)	14	R	16ER14W	●	●	●	●	9.525	1.6	1.2	0.23	16IR14W	●	●	●	●	9.525	1.6	1.2	0.23
16	(1.814)	14	L	16EL14W		●			9.525	1.6	1.2	0.23									
16	(2.117)	12	R	16ER12W		●	●		9.525	1.6	1.2	0.27	16IR12W		●	●		9.525	1.6	1.2	0.27
16	(2.309)	11	R	16ER11W	●	●	●	●	9.525	1.6	1.2	0.29	16IR11W	●	●	●	●	9.525	1.6	1.2	0.29
16	(2.54)	10	R	16ER10W		●	●		9.525	1.6	1.2	0.32	16IR10W		●	●		9.525	1.6	1.2	0.32
16	(2.822)	9	R	16ER9W		●			9.525	1.6	1.2	0.35	16IR9W		●			9.525	1.6	1.2	0.35
16	(3.175)	8	R	16ER8W		●	●		9.525	1.6	1.2	0.4	16IR8W		●	●		9.525	1.6	1.2	0.4
22	(3.629)	7	R	22ER7W		●			12.7	2.5	1.7	0.45	22IR7W		●			12.7	2.5	1.7	0.45
22	(4.233)	6	R	22ER6W		●			12.7	2.5	1.7	0.53	22IR6W		●			12.7	2.5	1.7	0.53
22	(5.08)	5	R	22ER5W		●			12.7	2.5	1.7	0.64	22IR5W		●			12.7	2.5	1.7	0.64

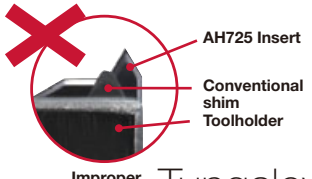
Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Coated AH725	Cermet NS9530	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Coated AH725	Cermet NS9530	IC	PDX	PDY	RE
16	(1.337)	19	R	16ER19W-B		●*		9.525	1	0.8	0.16								
16	(1.337)	19	R	16ER19W-M	●		●	9.525	0.9	0.7	0.17	16IR19W-M			●	9.525	0.9	0.7	0.17
16	(1.588)	16	R	16ER16W-B		●*		9.525	1.1	0.9	0.2	16IR16W-B		●*		9.525	1.1	0.9	0.18
16	(1.814)	14	R	16ER14W-B		●*		9.525	1.2	1	0.24	16IR14W-B		●*		9.525	1.2	1	0.21
16	(1.814)	14	R	16ER14W-M	●		●	9.525	1.6	1.2	0.23	16IR14W-M	●		●	9.525	1.6	1.2	0.23
16	(2.309)	11	R	16ER11W-B		●*		9.525	1.5	1.1	0.27	16IR11W-B		●*		9.525	1.5	1.1	0.27
16	(2.309)	11	R	16ER11W-M	●		●	9.525	1.6	1.2	0.29	16IR11W-M	●		●	9.525	1.6	1.2	0.29

- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- requires the use of dedicated shim.

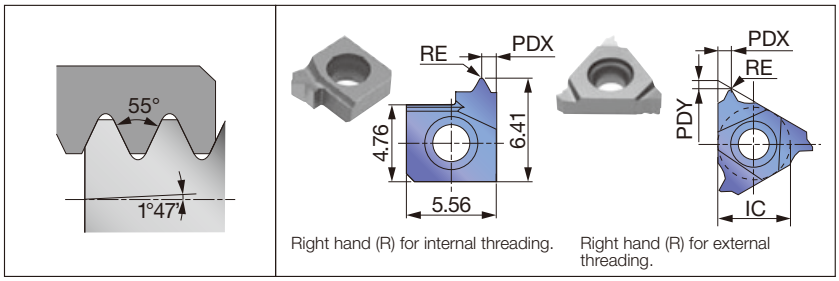
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page E069.

● : Line up / 5 pieces per package



Reference pages: External toolholders → E036 - E040
Inernal toolholders → E054 - E056

BSPT (for Pipe)



Right hand (R) for internal threading.

Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Coated AH725	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Coated AH725	Coated T313V	Uncoated TH10	IC	PDX	PDY	RE
6	(1.337)	19	R										6IR19PT	●	●		●	-	0.9	-	0.14
11	(1.337)	19	R										11IR19PT	●	●	●	●	6.35	0.9	0.7	0.14
11	(1.814)	14	R										11IR14PT	●	●	●	●	6.35	0.9	0.7	0.16
16	(0.907)	28	R	16ER28PT		●	●		9.525	0.9	0.7	0.09									
16	(1.337)	19	R	16ER19PT	●	●	●		9.525	0.9	0.7	0.14	16IR19PT		●			9.525	0.9	0.7	0.14
16	(1.814)	14	R	16ER14PT	●	●	●		9.525	1.6	1.2	0.16	16IR14PT	●	●	●	●	9.525	1.6	1.2	0.16
16	(2.309)	11	R	16ER11PT	●	●	●		9.525	1.6	1.2	0.26	16IR11PT	●	●	●	●	9.525	1.6	1.2	0.26

● : Line up / 5 pieces per package

Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated AH8015	Coated AH725	Cermet NS9530	IC	PDX	PDY	RE	Internal insert: Designation	Grade: Coated AH8015	Coated AH725	Cermet NS9530	IC	PDX	PDY	RE
16	(1.337)	19	R	16ER19PT-M			●	9.525	0.9	0.7	0.18	16IR19PT-M			●	9.525	0.9	0.7	0.18
16	(1.814)	14	R	16ER14PT-B		●*		9.525	1.2	1	0.24	16IR14PT-B		●*		9.525	1.2	1	0.21
16	(1.814)	14	R	16ER14PT-M	●		●	9.525	1.6	1.2	0.25	16IR14PT-M	●		●	9.525	1.6	1.2	0.25
16	(2.309)	11	R	16ER11PT-B		●*		9.525	1.5	1.1	0.31	16IR11PT-B		●*		9.525	1.5	1.1	0.31
16	(2.309)	11	R	16ER11PT-M	●		●	9.525	1.6	1.2	0.32	16IR11PT-M	●		●	9.525	1.6	1.2	0.32

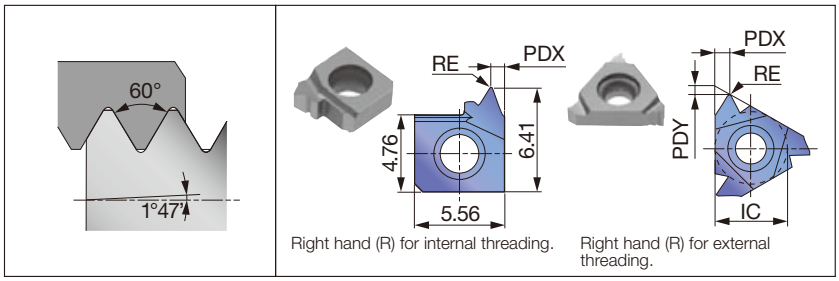
- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- requires the use of dedicated shim.
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim.
Please refer to the page E069.

● : Line up / 5 pieces per package



Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

NPT (for Pipe)



Right hand (R) for internal threading.

Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert									Internal insert								
				Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
					Coated			Uncoated						Coated			Uncoated				
					AH8015	AH725	T313V	TH10						AH8015	AH725	T313V	TH10				
6	(1.411)	18	R										6IR18NPT		●		●	-	0.9	-	0.03
16	(0.941)	27	R	16ER27NPT		●			9.525	0.5	1.2	0.02	16IR27NPT		●			9.525	0.5	1.2	0.02
16	(1.411)	18	R	16ER18NPT		●	●		9.525	0.9	0.7	0.03	16IR18NPT		●			9.525	0.9	0.7	0.03
16	(1.814)	14	R	16ER14NPT		●			9.525	1.6	1.2	0.04	16IR14NPT	●	●		●	9.525	1.6	1.2	0.04
16	(2.209)	11.5	R	16ER115NPT		●			9.525	1.6	1.2	0.05	16IR115NPT		●		●	9.525	1.6	1.2	0.05
16	(3.175)	8	R	16ER8NPT		●			9.525	1.6	1.2	0.07	16IR8NPT		●		●	9.525	1.6	1.2	0.07

● : Line up / 5 pieces per package

Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert								
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725	NS9530						AH8015	AH725	NS9530				
16	(1.411)	18	R	16ER18NPT-B		●*		9.525	1	0.8	0.05								
16	(1.411)	18	R	16ER18NPT-M	●		●	9.525	0.9	0.7	0.07	16IR18NPT-M			●	9.525	0.9	0.7	0.07
16	(1.814)	14	R	16ER14NPT-B		●*		9.525	1.2	0.9	0.05	16IR14NPT-B		●*		9.525	1.2	0.9	0.05
16	(1.814)	14	R	16ER14NPT-M	●		●	9.525	1.6	1.2	0.08	16IR14NPT-M	●		●	9.525	1.6	1.2	0.08
16	(2.209)	11.5	R	16ER115NPT-B		●*		9.525	1.5	1.1	0.09	16IR115NPT-B		●*		9.525	1.5	1.1	0.09
16	(2.209)	11.5	R	16ER115NPT-M			●	9.525	1.6	1.2	0.09	16IR115NPT-M	●		●	9.525	1.6	1.2	0.09
16	(3.175)	8	R	16ER8NPT-B		●*		9.525	1.8	1.3	0.12	16IR8NPT-B		●*		9.525	1.8	1.3	0.12

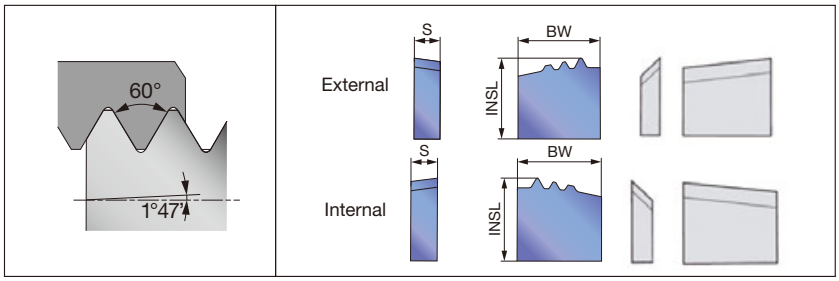
- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
- requires the use of dedicated shim.
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim.
Please refer to the page E069.

● : Line up / 5 pieces per package



Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

NPT (for Pipe)



Applicable toolholder

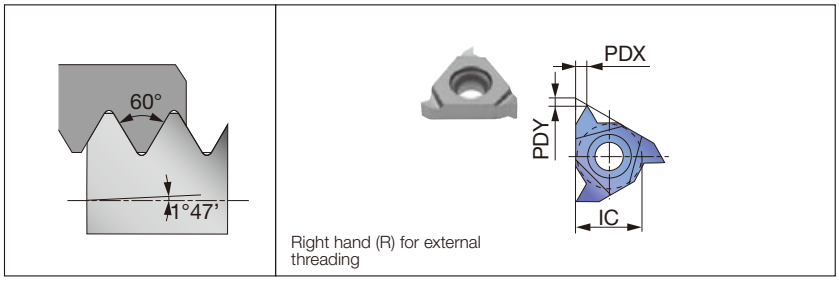
External	Internal
CLVOR-**M...	SI-CLHOR...

Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert						Internal insert					
		mm/mm	TPF	Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment	Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment
(2.209)	11.5	1/16	0.75	**CR-11.5NPT-4E**	●	16	15.7	5.2	CR-8R / 10R-3E / 4E-CB	**CR-11.5NPT-4I**	●	16	15.7	5.2	CR-8R / 10R-3I / 4I-CB
(3.175)	8	1/16	0.75	**CR-8NPT-4E**	●	16	15.7	5.2	CR-8R / 10R-3E / 4E-CB	**CR-8NPT-4I**	●	16	15.7	5.2	CR-8R / 10R-3I / 4I-CB

● : Line up / 5 pieces per package

NPTF (for Pipe)



Applicable toolholder

Insert size	External	Internal
16	CER/L**16... (C*CER/L...)	TSNR/L**16
	JSER**16...	SNR/L**16...
	JS**SEL16	TCNR/L**16...
	SER**16-CHP	CNR/L**16...
	B-SER/L**16	
	B-CER/L**16	
	BC-SER/L**16	

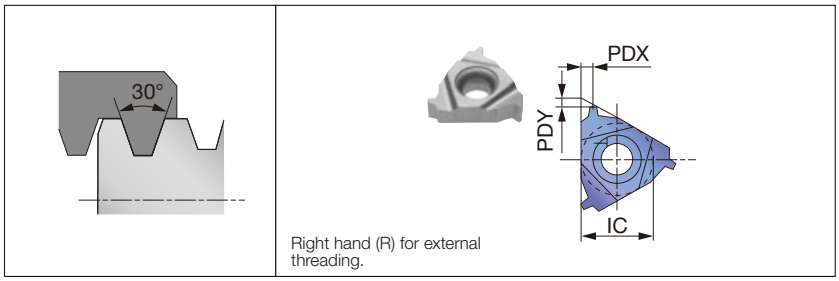
Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade Coated AH725	IC	PDX	PDY	RE	Designation	Grade Coated AH725	IC	PDX	PDY	RE
16	(0.941)	27	R	**16ER27NPTF**	●	9.525	0.5	1.2	-						
16	(1.411)	18	R	**16ER18NPTF**	●	9.525	0.9	0.7	-						
16	(1.814)	14	R	**16ER14NPTF**	●	9.525	1.6	1.2	-	**16IR14NPTF**	●	9.525	1.6	1.2	-
16	(2.209)	11.5	R	**16ER115NPTF**	●	9.525	1.6	1.2	-	**16IR115NPTF**	●	9.525	1.6	1.2	-
16	(3.175)	8	R	**16ER8NPTF**	●	9.525	1.6	1.2	-	**16IR8NPTF**	●	9.525	1.6	1.2	-

● : Line up / 5 pieces per package

Reference pages: NPT: External toolholders → E053, Internal toolholders → E066
NPTF: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

30° Trapezoidal / DIN103 (for Machine parts)



Right hand (R) for external threading.

Applicable toolholder

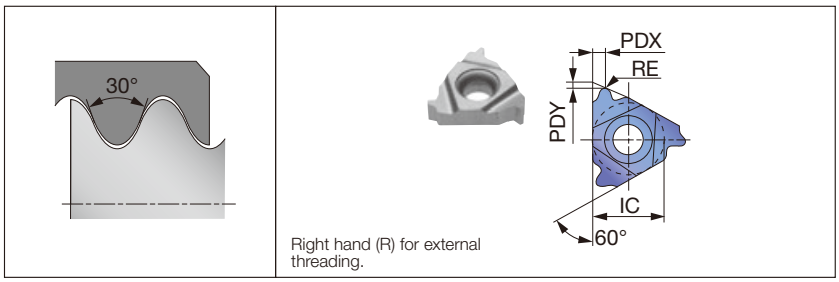
Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...
27	CER/L**27...	CNR/L**27...

With the special full-profile insert

Insert size	Pitch (Reference)	Hand of cut	External insert						Internal insert					
			Designation	Grade Coated AH725	Grade Coated T313V	IC	PDX	PDY	Designation	Grade Coated AH725	Grade Coated T313V	IC	PDX	PDY
16	1.5	R	**16ER15TR**	●		9.525	0.9	0.7	**16IR15TR**	●		9.525	0.9	0.7
16	2	R	**16ER20TR**	●	●	9.525	1.6	1.3	**16IR20TR**	●	●	9.525	1.6	1.3
16	3	R	**16ER30TR**	●	●	9.525	1.6	1.3	**16IR30TR**	●	●	9.525	1.6	1.3
22	4	R	**22ER40TR**	●	●	12.7	2.5	2	**22IR40TR**	●	●	12.7	2.5	2
22	5	R	**22ER50TR**	●	●	12.7	2.5	2	**22IR50TR**	●	●	12.7	2.5	2
27	6	R	**27ER60TR**	●	●	15.875	3.2	2.5						

● : Line up / 5 pieces per package

Round / DIN405 (for Machine parts)



Right hand (R) for external threading.

Applicable toolholder

Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

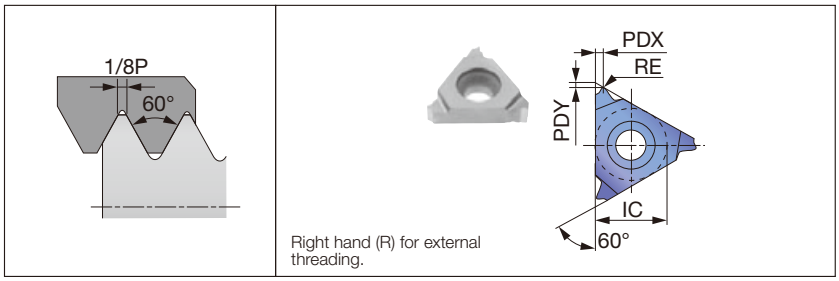
Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade Coated AH725	IC	PDX	PDY	RE	Designation	Grade Coated AH725	IC	PDX	PDY	RE
16	(3.175)	8	R	**16ER8RD-B**	●	9.525	1.3	1.4	0.75						
16	(4.233)	6	R	**16ER6RD-B**	●	9.525	1.7	1.5	1.01	**16IR6RD-B**	●	9.525	1.5	1.4	0.94

● : Line up / 5 pieces per package

Reference pages: External toolholders → E036 - E040, Inernal toolholders → E054 - E056

UNJ (for Aerospace industry)



Applicable toolholder

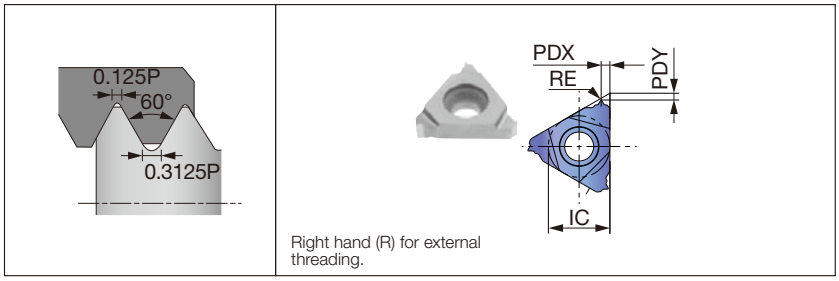
Insert size	External
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert: Designation	Grade: Coated: AH8015	Grade: Coated: AH725	IC	PDX	PDY	RE
16	(0.794)	32	R	**16ER32UNJ**	●	●	9.525	0.5	1.2	0.13
16	(0.907)	28	R	**16ER28UNJ**	●	●	9.525	0.5	1.2	0.15
16	(1.058)	24	R	**16ER24UNJ**	●	●	9.525	0.9	0.7	0.18
16	(1.27)	20	R	**16ER20UNJ**	●	●	9.525	0.9	0.7	0.21
16	(1.411)	18	R	**16ER18UNJ**	●	●	9.525	0.9	0.7	0.24
16	(1.588)	16	R	**16ER16UNJ**	●	●	9.525	0.9	0.7	0.26
16	(1.814)	14	R	**16ER14UNJ**	●	●	9.525	1.6	1.2	0.3
16	(2.117)	12	R	**16ER12UNJ**	●	●	9.525	1.6	1.2	0.35
16	(2.54)	10	R	**16ER10UNJ**	●	●	9.525	1.6	1.2	0.42
16	(3.175)	8	R	**16ER8UNJ**	●	●	9.525	1.6	1.2	0.53

● : Line up / 5 pieces per package

MJ (for Aerospace industry)



Applicable toolholder

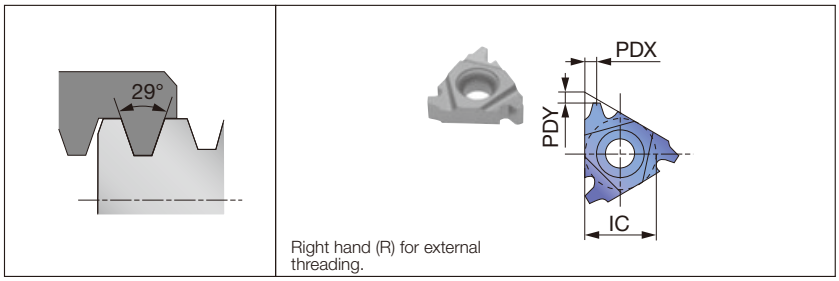
Insert size	Internal
11	SNR/L**11...

Insert size	Pitch (Reference)	Hand of cut	Internal insert: Designation	Grade: Coated: AH8015	IC	PDX	PDY	RE
11	1	R	**11IR10MJ**	●	6.35	0.9	0.7	0.05

● : Line up / 5 pieces per package

Reference pages: UNJ : External toolholders → E036 - E040
MJ : Internal toolholders → E055

29° Trapezoidal / ACME (for Machine parts, Pipe)



Right hand (R) for external threading.

Applicable toolholder

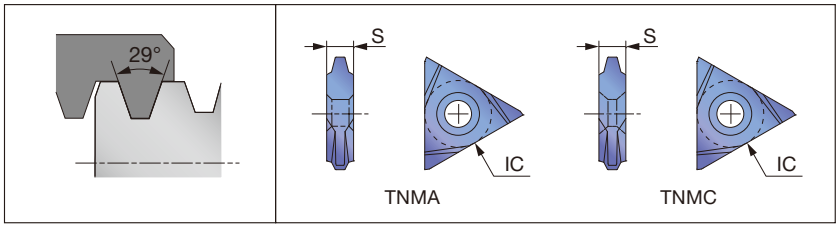
Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

With the special full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade Coated AH725	Grade Coated T313V	IC	PDX	PDY	Designation	Grade Coated AH725	Grade Coated T313V	IC	PDX	PDY
16	(2.117)	12	R	**16ER12ACME**	●		9.525	1.6	1.3	**16IR12ACME**	●		9.525	1.6	1.3
16	(2.540)	10	R	**16ER10ACME**	●		9.525	1.6	1.3	**16IR10ACME**	●		9.525	1.6	1.3
16	(3.175)	8	R	**16ER8ACME**	●	●	9.525	1.6	1.3	**16IR8ACME**	●	●	9.525	1.6	1.3
22	(4.233)	6	R	**22ER6ACME**	●	●	12.7	2.5	2	**22IR6ACME**	●	●	12.7	2.5	2
22	(5.080)	5	R	**22ER5ACME**	●	●	12.7	2.5	2	**22IR5ACME**	●	●	12.7	2.5	2

● : Line up / 5 pieces per package

29° Trapezoidal / ACME (for Machine parts, Pipe)



Applicable toolholder

External
MTVOR-**M..
STVOR-**M...

On edge

Pitch	TPI	Taper mm/mm	Taper TPF	External insert Designation	Grade Coated AH725	IC	S
(1.588)	16	-	-	**TNMA43NT16PEXT-PT**	●	12.7	4.8
(1.814)	14	-	-	**TNMA43NT14PEXT-PT**	●	12.7	4.8
(2.117)	12	-	-	**TNMA43NT12PEXT-PT**	●	12.7	4.8
(2.54)	10	-	-	**TNMA43NT10PEXT-PT**	●	12.7	4.8
(3.175)	8	-	-	**TNMA43NT8PEXT-PT**	●	12.7	4.8
(4.233)	6	-	-	**TNMA43NT6PEXT-PT**	●	12.7	4.8
(5.08)	5	-	-	**TNMA54NT5PEXT-PT**	●	15.875	6.4
(6.35)	4	-	-	**TNMA54NT4PEXT-PT**	●	15.875	6.4
(8.47)	3	-	-	**TNMA54NT3PEXT-PT**	●	15.875	6.4
(1.588)	16	-	-	**TNMC43NT16PEXT-PT**	●	12.7	4.8
(1.814)	14	-	-	**TNMC43NT14PEXT-PT**	●	12.7	4.8
(2.117)	12	-	-	**TNMC43NT12PEXT-PT**	●	12.7	4.8
(2.54)	10	-	-	**TNMC43NT10PEXT-PT**	●	12.7	4.8
(3.175)	8	-	-	**TNMC43NT8PEXT-PT**	●	12.7	4.8
(4.233)	6	-	-	**TNMC43NT6PEXT-PT**	●	12.7	4.8
(5.08)	5	-	-	**TNMC54NT5PEXT-PT**	●	15.875	6.4
(6.35)	4	-	-	**TNMC54NT4PEXT-PT**	●	15.875	6.4
(8.47)	3	-	-	**TNMC54NT3PEXT-PT**	●	15.875	6.4

● : Line up / 10 pieces per package

Reference pages: 29° Trapezoidal With the special full-profile insert : External toolholders → E036 - E040, Internal toolholders → E054 - E056
29° Trapezoidal On edge : External toolholders → E052

29° Trapezoidal/ STUB ACME (for Machine parts, Pipe)

On edge

Pitch (Reference)	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade Coated AH725	IC	S
(1.588)	16	-	-	**TNMA43NT16PSTUBE-PT**	●	12.7	4.8
(1.814)	14	-	-	**TNMA43NT14PSTUBE-PT**	●	12.7	4.8
(2.117)	12	-	-	**TNMA43NT12PSTUBE-PT**	●	12.7	4.8
(2.54)	10	-	-	**TNMA43NT10PSTUBE-PT**	●	12.7	4.8
(3.175)	8	-	-	**TNMA43NT8PSTUBE-PT**	●	12.7	4.8
(4.233)	6	-	-	**TNMA43NT6PSTUBE-PT**	●	12.7	4.8
(5.08)	5	-	-	**TNMA54NT5PSTUBE-PT**	●	15.875	6.4
(6.35)	4	-	-	**TNMA54NT4PSTUBE-PT**	●	15.875	6.4
(8.47)	3	-	-	**TNMA54NT3PSTUBE-PT**	●	15.875	6.4
(1.588)	16	-	-	**TNMC43NT16PSTUBE-PT**	●	12.7	4.8
(1.814)	14	-	-	**TNMC43NT14PSTUBE-PT**	●	12.7	4.8
(2.117)	12	-	-	**TNMC43NT12PSTUBE-PT**	●	12.7	4.8
(2.54)	10	-	-	**TNMC43NT10PSTUBE-PT**	●	12.7	4.8
(3.175)	8	-	-	**TNMC43NT8PSTUBE-PT**	●	12.7	4.8
(4.233)	6	-	-	**TNMC43NT6PSTUBE-PT**	●	12.7	4.8
(5.08)	5	-	-	**TNMC54NT5PSTUBE-PT**	●	15.875	6.4
(6.35)	4	-	-	**TNMC54NT4PSTUBE-PT**	●	15.875	6.4
(8.47)	3	-	-	**TNMC54NT3PSTUBE-PT**	●	15.875	6.4

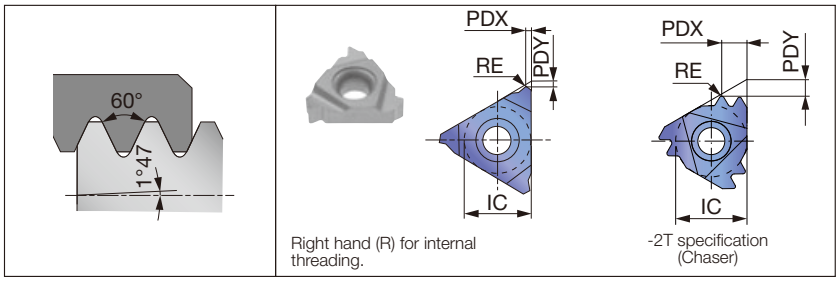
Note: ACME and STUB ACME can cut crest radius. Crest flat of ACME and STUB ACME need to be cut by another tool.

● : Line up / 10 pieces per package

Applicable toolholder

External
MTVOR-**M..
STVOR-**M...

API Round (for Energy industry)



Applicable toolholder

Insert size	External	Internal
16	CER/L**16... (C*CER/L...)	TSNR/L**16
	JSER**16...	SNR/L**16...
	JS**SEL16	TCNR/L**16...
	SER**16-CHP	CNR/L**16...
	B-SER/L**16	
	B-CER/L**16	
	BC-SER/L**16	
22	CER/L**22...	TSNR/L**22
	SER**22-CHP	SNR/L**22...
		TCNR/L**22...
		CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert							Internal insert							
				Designation	Grade Coated AH725	Grade Coated T313V	IC	PDX	PDY	RE	Designation	Grade Coated AH8015	Grade Coated AH725	Grade Coated T313V	IC	PDX	PDY	RE
16	(2.54)	10	R	**16ER10RAPI**	●		9.525	1.6	1.2	0.36	**16IR10RAPI**		●	●	9.525	1.6	1.2	0.36
16	(3.175)	8	R	**16ER8RAPI**	●		9.525	1.6	1.2	0.43	**16IR8RAPI**	●	●	●	9.525	1.6	1.2	0.43
22	(3.175)	8	R								**22IR8RAPI-2T**		●		12.7	4.5	3	0.43

● : Line up / 5 pieces per package

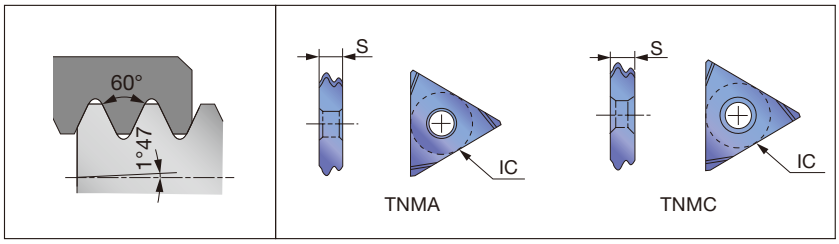
Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert						
				Designation	Grade Coated AH725	IC	PDX	PDY	RE	Designation	Grade Coated AH725	IC	PDX	PDY	RE
16	(2.54)	10	R	**16ER10RD-CB**	●	9.525	1.2	1.5	0.36	**16IR10RD-CB**	●	9.525	1.2	1.5	0.36
16	(3.175)	8	R	**16ER8RD-CB**	●	9.525	1.3	1.5	0.43	**16IR8RD-CB**	●	9.525	1.3	1.5	0.43

● : Line up / 10 pieces per package

Reference pages: 29° Trapezoidal : External toolholders → E052
API Round : External toolholders → E036 - E040, Internal toolholders → E054 - E056

API Round (for Energy)



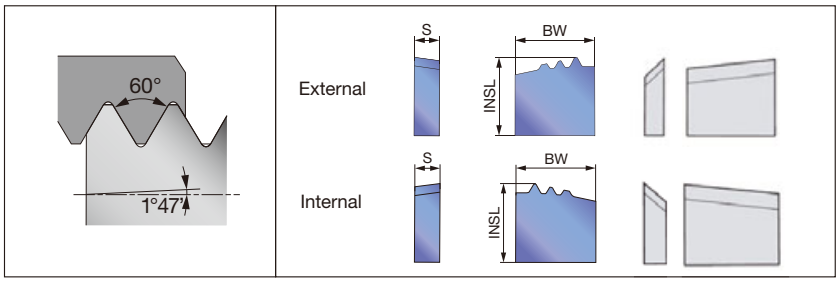
Applicable toolholder

External	Internal
MTVOR-**M.. STVOR-**M...	HS**-MTHOR...

On edge

Pitch (Reference)	TPI	Taper		External insert				Internal insert			
		mm/mm	TPF	Designation	Grade Coated AH725	IC	S	Designation	Grade Coated AH725	IC	S
(2.54)	10	1/16	0.75	**TNMA4310RDEXT**	●	12.7	4.8	**TNMA4310RDINT**	●	12.7	4.8
(3.175)	8	1/16	0.75	**TNMA438RDEXT**	●	12.7	4.8	**TNMA438RDINT**	●	12.7	4.8
(2.54)	10	1/16	0.75	**TNMC4310RDEXT**	●	12.7	4.8	**TNMC4310RDINT**	●	12.7	4.8
(3.175)	8	1/16	0.75	**TNMC438RDEXT**	●	12.7	4.8	**TNMC438RDINT**	●	12.7	4.8

● : Line up / 10 pieces per package



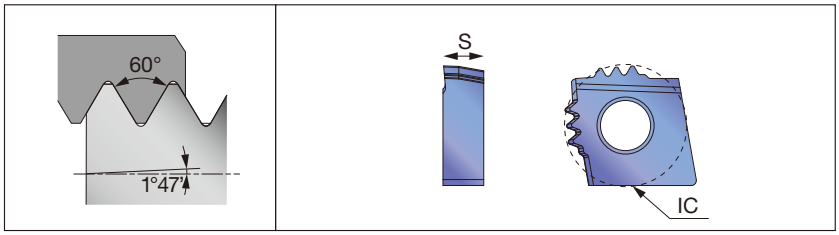
Applicable toolholder

External	Internal
CLVOR-**M...	SI-CLHOR...

Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert							Internal insert						
		mm/mm	TPF	Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment		Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment	
(3.175)	8	1/16	0.75	**CR-8R-3E**	●	16	15	5.2	CR-8R / 10R-3E / 4E-CB		**CR-8R-3I**	●	16	15	5.2	CR-8R / 10R-3I / 4I-CB	
(2.54)	10	1/16	0.75	**CR-10R-3E**	●	16	15.9	5.2	CR-8R / 10R-3E / 4E-CB		**CR-10R-3I**	●	16	15.9	5.2	CR-8R / 10R-3I / 4I-CB	

● : Line up / 10 pieces per package



Full-profile insert (chaser)

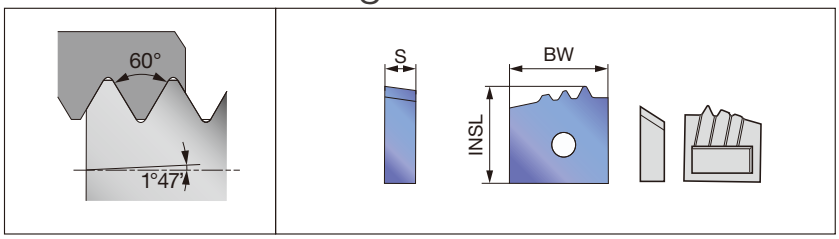
Pitch (Reference)	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade Coated AH725	IC	S
(2.54)	10	1/16	0.75	**CNGA-10R-3E**	●	19.05	6.4
(3.175)	8	1/16	0.75	**CNGA-8R-3E**	●	19.05	6.4

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

Reference pages: API Round On edge : External toolholders → E052, Internal toolholders → E065
API Round Full-profile insert : External toolholders → E053, Internal toolholders → E066

API Round (for Energy industry)
For tool-rotating machines



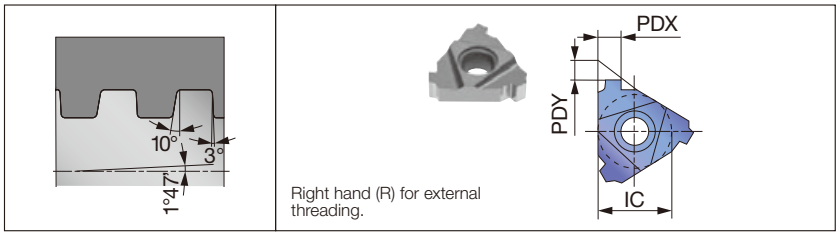
Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert					
		mm/mm	TPF	Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment
(3.175)	8	1/16	0.75	**CR-8R-3E#1**	●	16	14.7	5.2	TD39318R-1-CBW/CAVITY
(3.175)	8	1/16	0.75	**CR-8R-3E#2**	●	16	14.9	5.2	TD39328R-2-CBW/CAVITY
(3.175)	8	1/16	0.75	**CR-8R-3E#3**	●	16	15	5.2	TD39338R-3-CBW/CAVITY

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

API Buttress (for Energy industry)



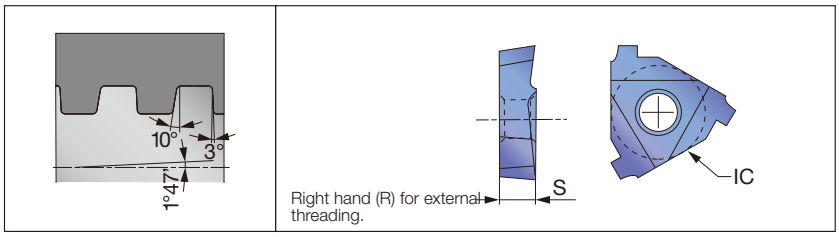
Applicable toolholder

Insert size	External	Internal
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert					Internal insert				
				Designation	Grade Coated AH725	IC	PDX	PDY	Designation	Grade Coated AH725	IC	PDX	PDY
22	(5.08)	5	R	**22ER5BAPI**	●	12.7	3.72	2.2	**22IR5BAPI**	●	12.7	3.45	2.2

● : Line up / 5 pieces per package



Applicable toolholder

External	Internal
MTVNR**M5	HS**-LNFR...

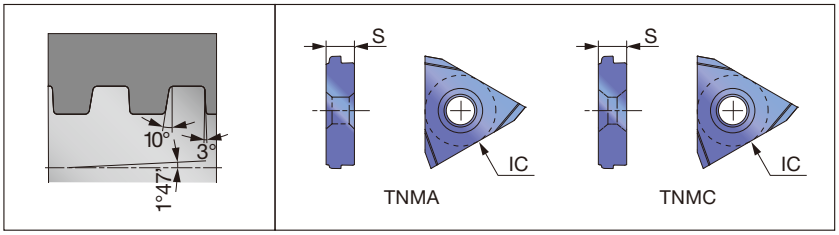
Full-profile insert (single side)

Pitch (Reference)	TPI	Taper		External insert				Internal insert			
		mm/mm	TPF	Designation	Grade Coated AH725	IC	S	Designation	Grade Coated AH725	IC	S
(5.08)	5	1/16	0.75	**L535B75EXT-FC**	●	15.875	4.8	**L535B75INT-FC**	●	15.875	4.8
(5.08)	5	1/12	1	**L535B1EXT-FC**	●	15.875	4.8	**L535B1INT-FC**	●	15.875	4.8

● : Line up / 10 pieces per package

Reference pages: API Buttress Full-profile insert : External toolholders → E036, E038, Internal toolholders → E055 - E056
API Buttress Full-profile insert (single side) : External toolholders → E051, Internal toolholders → E064

API Buttress (for Energy industry)



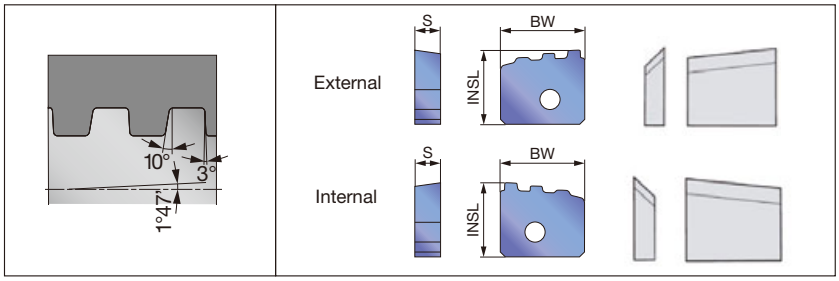
Applicable toolholder

External	Internal
MTVOR-**M.. STVOR-**M...	HS**-MTHOR...

On edge

Pitch (Reference)	TPI	Taper		External insert				Internal insert			
		mm/mm	TPF	Designation	Grade Coated AH725	IC	S	Designation	Grade Coated AH725	IC	S
(5.08)	5	1/12	1	**TNMA545B1EXT-FC**	●	15.875	6.4	**TNMA545B1INT-FC**	●	15.875	6.4
(5.08)	5	1/16	0.75	**TNMA545B75EXT-FC**	●	15.875	6.4	**TNMA545B75INT-FC**	●	15.875	6.4
(5.08)	5	1/12	1	**TNMC545B1EXT-FC**	●	15.875	6.4	**TNMC545B1INT-FC**	●	15.875	6.4
(5.08)	5	1/16	0.75	**TNMC545B75EXT-FC**	●	15.875	6.4	**TNMC545B75INT-FC**	●	15.875	6.4

● : Line up / 10 pieces per package



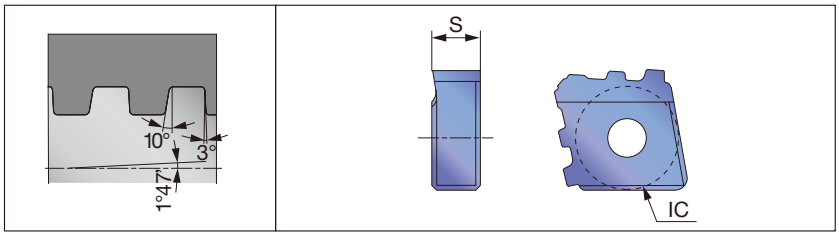
Applicable toolholder

External	Internal
CLVOR-**M...	SI-CLHOR...

Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert						Internal insert					
		mm/mm	TPF	Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment	Designation	Grade Coated AH725	BW	INSL	S	Chip breaking attachment
(5.08)	5	1/16	0.75	**CR-5B75-4E**	●	20.4	15.9	5.1	CR-5B75 / 5B1-4E-CB	**CR-5B75-3I**	●	16	15.8	5.2	CR-8R / 10R-3I / 4I-CB

● : Line up / 10 pieces per package



Full-profile insert (chaser)

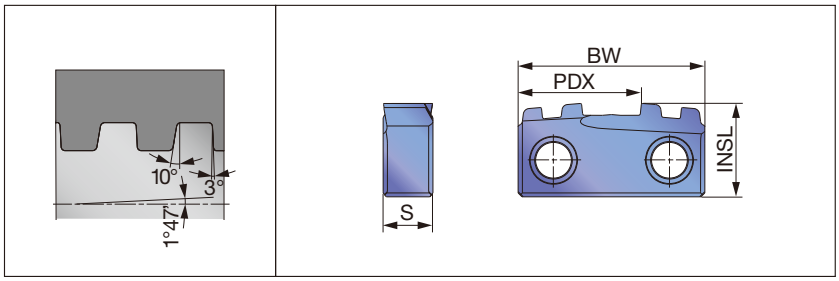
Pitch (Reference)	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade Coated AH725	IC	S
(5.08)	5	1/16	0.75	**CNGA-5B75-3E**	●	19.05	6.4

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

Reference pages: API Buttress On edge : External toolholders → E052, Internal toolholders → E065
API Buttress Full-profile insert : External toolholders → E053, Internal toolholders → E066

API Buttress (for Energy industry)



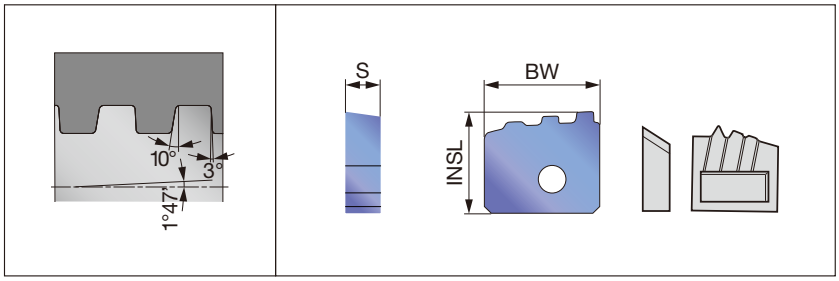
Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	Internal insert: Designation	Grade / Coated / T05HP	BW	INSL	PDX	S
22	(5.08)	5	R	**CR-5B75-2I-W24**	●	24	12	15.85	6.4

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

API Buttress (for Energy industry) For tool-rotating machines



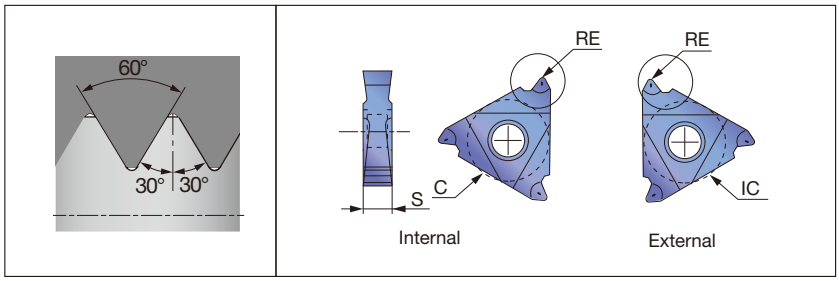
Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper: mm/mm	Taper: TPF	External insert: Designation	Grade / Coated / AH725	BW	INSL	S	RE	Chip breaking attachment
(5.08)	5	1/16	0.75	**CR-5B75-3E#1**	●	17	14.6	5.2		TD46015B75-1-CBW/CAVITY
(5.08)	5	1/16	0.75	**CR-5B75-3E#2**	●	17	14.8	5.2		TD46025B75-2-CBW/CAVITY
(5.08)	5	1/16	0.75	**CR-5B75-3E#3**	●	17	15	5.2		TD46035B75-3-CBW/CAVITY

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

API Rotary shoulder connection (for Energy industry)



Applicable toolholder

External	Internal
MTVNR-3232M54	HS**-LNFR-54API

Full-profile insert (Double side)

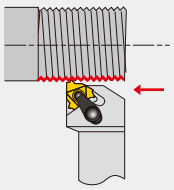
Pitch (Reference)	TPI	Connection	Taper		Designation	Grade Coated	IC	S	RE
			mm/mm	TPF		AH725			
(6.35)	4	V-0.038R	1/6	2	**LDS54428FT-CB#1**	●	15.875	6.4	0.97
(6.35)	4	V-0.038R	1/4	3	**LDS54438FT-CB#2**	●	15.875	6.4	0.97
(6.35)	4	V-0.050	1/6	2	**LDS54425FT-CB#3**	●	15.875	6.4	0.64
(6.35)	4	V-0.050	1/4	3	**LDS54435FT-CB#4**	●	15.875	6.4	0.64
(5.08)	5	V-0.040	1/4	3	**LDS54530FT-CB#5**	●	15.875	6.4	0.51

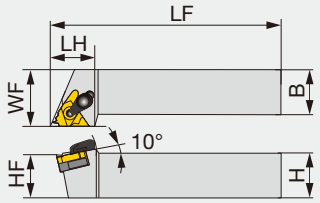
● : Line up / 10 pieces per package

Reference pages: External toolholders → E051, Inernal toolholders → E065

CER/L

External threading toolholder, alternative clamping of screw-on or clamp-on only for DT type





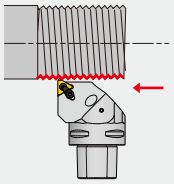
Right hand (R) shown.

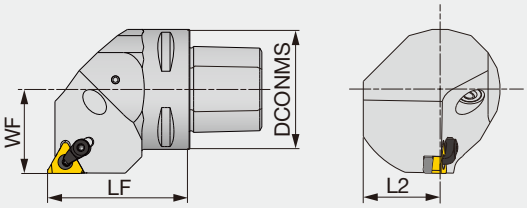
Designation	H	B	LF	LH	HF	WF	Insert
CER/L1212H16DT	12	12	100	24	12	16	16ER/L...
CER/L1616H16DT	16	16	100	24	16	20	16ER/L...
CER/L2020K16DT	20	20	125	24	20	25	16ER/L...
CER/L2525M16DT	25	25	150	28	25	32	16ER/L...
CER/L2525M22DT	25	25	150	31.3	25	32	22ER/L...
CER3232P16T	32	32	170	32	32	40	16ER...
CER3232P22T	32	32	170	32	32	40	22ER...
CER2525M27T	25	25	150	34	25	32	27ER...
CER3232P27T	32	32	170	34	32	40	27ER...

Note: A clamp set consists of a clamp and a clamping screw. A shim set consists of a shim and a shim screw to secure the shim to the shank.
Standard shims can be used on both right- and left-hand toolholders. Please use either of the sides depending on the tool hand.
When using DT type, please remove either the clamp set or the insert clamping screw.

C-CER/L

External threading toolholder, alternative clamping of screw-on or clamp-on





Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	Insert
C3CER/L22040-16ERN(2)	32	40	20	22	16ER/L...
C4CER/L27050-16ERN(2)	40	50	25	27	16ER/L...
C5CER/L35060-16ER(1)	50	60	32	35	16ER/L...
C5CER/L35060-16ERN(2)	50	60	32	35	16ER/L...
C6CER/L45065-16ER(1)	63	65	41	45	16ER/L...
C6CER/L45065-16ERN(2)	63	65	41	45	16ER/L...

(1) Applicable for 3 MPa coolant (2) Applicable for 7 MPa coolant

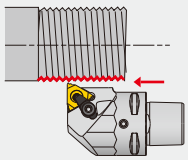
SPARE PARTS

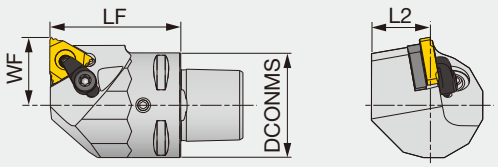
Designation	Clamp set	Clamping screw	Coolant parts	Shim screw	Shim	Shim set	Wrench 1	Wrench 2	Wrench 3
CER/L**16DT	CSP16	CSTB-3.5ST	-	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
CER/L2525M22DT	CSP22	CSTB-4ST	-	DTS6-4	GX22-1DT	-	P-4	T-15F	T-20F
CER3232P16T	CSP16	-	-	-	-	A16-1	-	T-15F	-
CER3232P22T	CSP22	-	-	-	-	NXE22-1	-	T-20F	-
CER**27T	CSP27	-	-	-	-	NXE27-1	P-4	-	-
C3CE*22040-16ERN, C4CE*27050-16ERN	CSP16	CSTB-3.5ST	SATZ-M8X1-M3	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
C5CE*35060-16ER, C6CE*45065-16ER	CSP16	CSTB-3.5ST	EZ104	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
C5CE*35060-16ERN, C6CE*45065-16ERN	CSP16	CSTB-3.5ST	SATZ-M10X1-M5	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-

Reference pages: Inserts → E010 - E011, E015, E017 - E030, E032

C-CEL-ERN-B

External threading toolholder, alternative clamping of screw-on or clamp-on





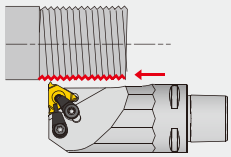
Designation	DCONMS	LF	L2	WF	Insert
C3CEL22040-16ERN-B	32	40	18	22	16ER...

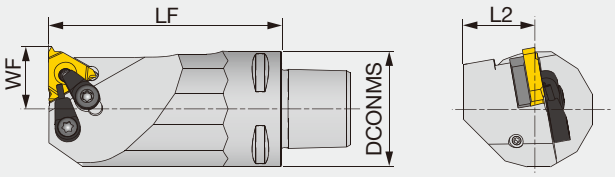
Applicable for 7 MPa coolant
Cannot be used for boring

C-CEL-ERB-CHP

Tube connection

External threading toolholder, alternative clamping of screw-on or clamp-on, with high pressure coolant capability





Designation	DCONMS	LF	L2	WF	Insert
C3CEL18065-16ERB-CHP	32	65	20	18	16ER...

Applicable for 14 MPa coolant
Cannot be used for boring

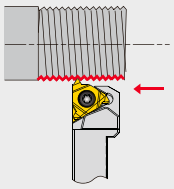
SPARE PARTS

Designation	Shim	Shim screw	Clamping screw	Clamping screw	Wrench 1	Wrench 2	Coolant parts	Coolant unit
C3CEL22040-16ERN-B	A16-1DT	DTS5-3.5	CSTB-3.5ST	CSP16	T-15F	P-3.5	SATZ-M8X1-M3	-
C3CEL18065-16ERB-CHP	A16-1DT	DTS5-3.5	CSTB-3.5ST	CSP16	T-15F	P-3.5	-	S-CU-CHP

Reference pages: Inserts → E010 - E011, E015, E017 - E030

JSE2R16-CHP

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection



Tube connection

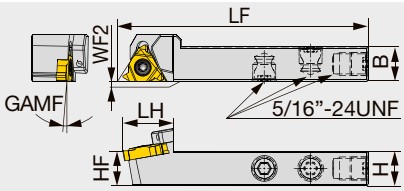


Fig. 1

Direct connection

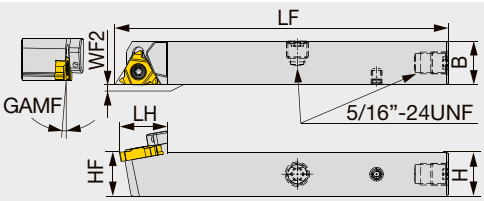


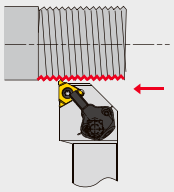
Fig. 2

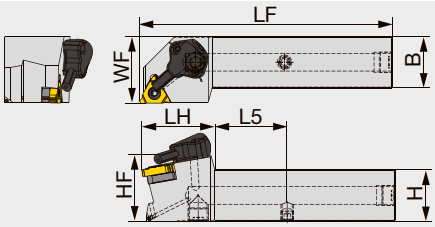
Designation	H	B	LF	LH	HF	WF2	GAMF	Fig.	Insert
JSE2R1212F16-CHP	12	12	85	19	12	0	1°	1	16ER...
JSE2R1212X16-CHP	12	12	120	19	12	0	1°	2	16ER...
JSE2R1616X16-CHP	16	16	120	19	16	0	1°	2	16ER...

SER-X-CHP-MC

Direct connection

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection





Designation	H	B	LF	LH	HF	WF	L5	Insert
SER2020X16-CHP-MC	20	20	107	36	20	25	27.9	16ER...
SER2525X16-CHP-MC	25	25	122	36	25	32	33.75	16ER...
SER2525X22-CHP-MC	25	25	122	36	25	32	33.75	22ER...

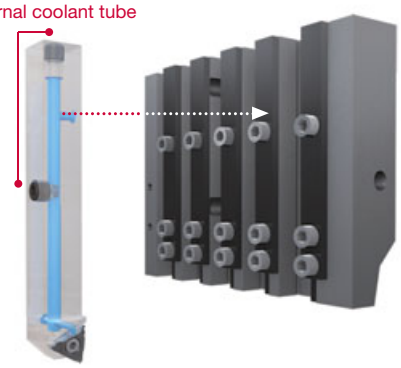
SPARE PARTS

Designation	Clamping screw	Wrench	Shim screw	Shim	Coolant unit	Coolant plug	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F	-	-	-	SR5/16UNFTL360	P-4
SER**X16-CHP-MC	CSTB-3.5ST	T-15F	DTS5-3.5	A16-1DT	CU-V-CHP	PLUGG1/8-6.5TL360	P-3.5
SER**X22-CHP-MC	CSTB-4ST	T-15F	DTS6-4	GX22-1DT	CU-CW-CHP	PLUGG1/8-6.5TL360	P-4

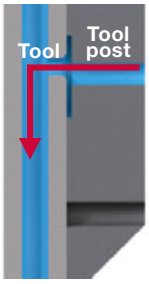
No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools

Internal thread
Optional connection with external coolant tube



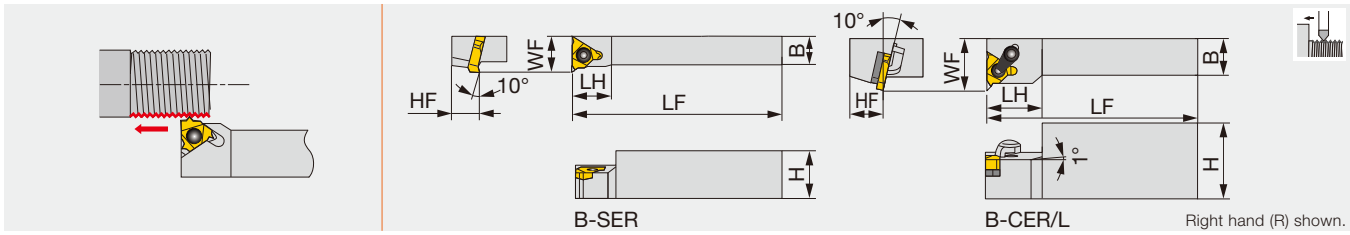
Detailed view of the coolant flow after connection



Reference pages: Inserts → E010 - E011, E015, E017 - E030, E032

B-S/CER/L

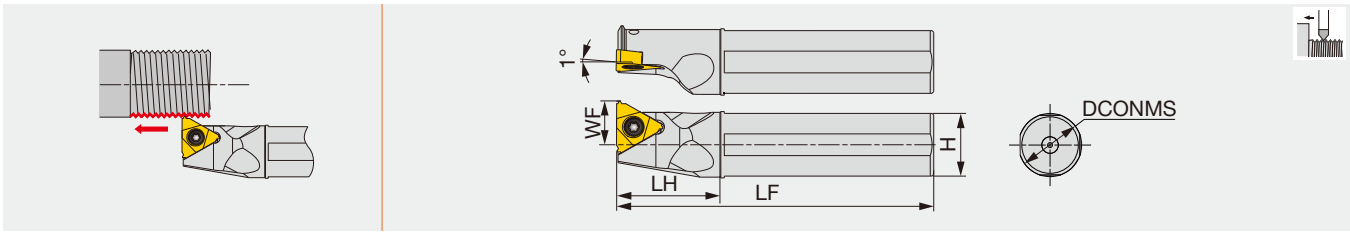
External threading toolholder for Swiss lathes



Designation	H	B	LF	LH	HF	WF	Insert
B-SER10H16	20	10	100	15	10	16	16ER...
B-SER12K16	24	12	125	18	12	18	16ER...
B-CER/L16M16	32	16	150	24	16	22	16ER/L...

JS-SEL16

External threading toolholder for Swiss lathes



Designation	DCONMS	H	LF	LH	WF	Insert
JS16F-SEL16	16	15	85	25	11	16ER...
JS19G-SEL16	19.05	18	90	30	12.5	16ER...
JS19X-SEL16	19.05	18	120	30	12.5	16ER...
JS20G-SEL16	20	19	90	30	13	16ER...
JS20X-SEL16	20	19	120	30	13	16ER...
JS25H-SEL16	25	24	100	30	15.5	16ER...
JS254X-SEL16	25.4	24	120	30	15.7	16ER...

Note: Use the right-hand insert (16ER...) for a left-hand holder (JS***-SEL...).

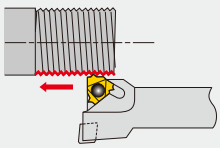
SPARE PARTS

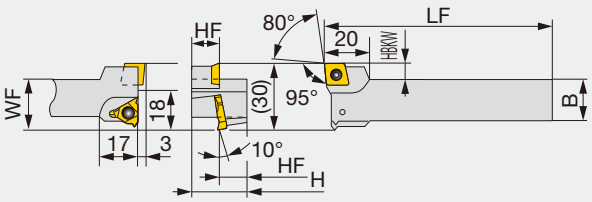
Designation	Clamp set	Shim set	Clamping screw	Wrench
B-SER**16	-	-	CSTB-3.5	T-15F
B-CER/L16M16	CSP16	A16-1	-	T-15F
JS***-SEL16	-	-	CSTB-3.5	T-15F

Reference pages: Inserts → E010 - E011, E015, E017 - E030

BC-SER

External threading toolholder for multi-functional Swiss lathes

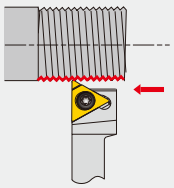


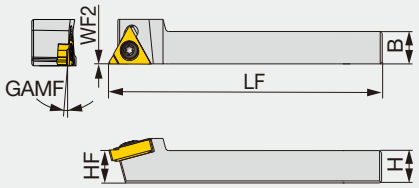


Designation	H	B	LF	HF	WF	HBKW	Insert
BC-SER12K16	24	16	125	12	23	7	16ER..., CC*T09T3...

SER

Screw-on external threading toolholders





Designation	H	B	LF	HF	WF2	GAMF	Insert
SER0808H11	8	8	100	8	0	1.5°	11ER...
SER1010H11	10	10	100	10	0	1.5°	11ER...

SPARE PARTS



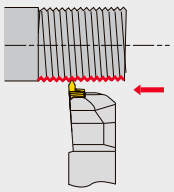


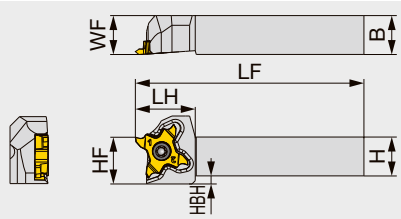
Designation	Clamping screw	Wrench
BC-SER12K16	CSTB-3.5	T-15F
SER**H11	SR M2.6-L6.7-S11	T-8/5

Reference pages: Inserts → E010 - E011, E015, E017 - E030

STCR/L-18

External grooving and threading toolholder





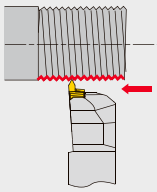
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
STCR/L1010X18	10	10	120	18.5	10	10	4.5	TCT18...	1.2
STCR/L1212F18	12	12	85	18.5	12	12	2.5	TCT18...	1.2
STCR/L1212X18	12	12	120	18.5	12	12	2.5	TCT18...	1.2
STCR/L1616X18	16	16	120	18.5	16	16	-	TCT18...	1.2
STCR/L2020H18	20	20	100	18.5	20	20	-	TCT18...	1.2
STCR/L2020X18	20	20	120	23	20	25	-	TCT18...	1.2
STCR/L2525Z18	25	25	135	23	25	30	-	TCT18...	1.2

Torque* : Recommended clamping torque (N·m)
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

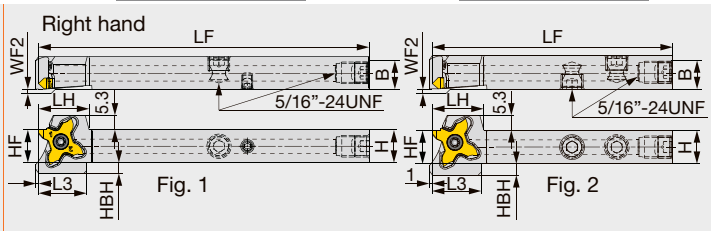
STCR/L-18-CHP

External grooving and threading toolholder, with high pressure coolant capability



Direct connection

Tube connection



STCR/L1212*18**B**-CHP

Designation	H	B	LF	LH	HBL	HF	WF2**	HBH	Fig.	Insert	Torque*
STCR/L1012H18-CHP(1)	10	12	100	17.1	10	17.1	0/12	4	1	TCT18...	1.2
STCR/L1212F18B-CHP	12	12	120	18.5	17.5	12	0/12	4	2	TCT18...	1.2
STCR/L1212X18B-CHP(1)	12	12	120	18.5	17.5	12	0/12	4	1	TCT18...	1.2
STCR/L1616X18-CHP(1)	16	16	120	18.5	-	16	0/16	-	1	TCT18...	1.2

Torque* : Recommended clamping torque (N·m)
WF2** : The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(1) Compatible to the direct internal coolant supply system without the use of external coolant hose.
Note: This toolholder can be used with threading and grooving inserts.
Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

SPARE PARTS

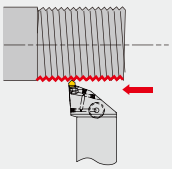
Designation	Clamping screw	Wrench
STCL..., STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR..., STCR**18-CHP	CSTC-4L100DL	T-1008/5

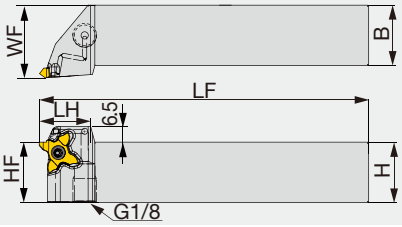
Reference pages: Inserts → E012

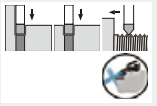
STCR/L-18-CHP

Tube connection

External theading with high pressure coolant capability







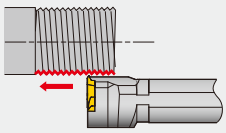
Right hand (R) shown.

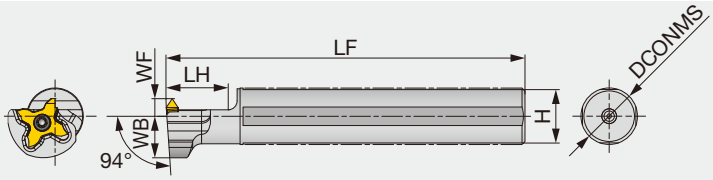
Designation	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L2020X18-CHP	20	20	120	23	-	20	25	-	TC*18...	1.2
STCR/L2525Z18-CHP	25	25	135	23	-	25	30	-	TC*18...	1.2

Torque* : Recommended clamping torque (N·m)
Note: Use the right-hand insert (TC*18R...) for a right-hand toolholders (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

JS-STCL18

External grooving and threading toolholder with round shank







Designation	DCONMS	LF	LH	H	WB	WF	Insert	Torque*
JS14H-STCL18	14	100	20	13	14	6	TCT18R...	1.2
JS159F-STCL18	15.875	85	20	15	14	6	TCT18R...	1.2
JS16F-STCL18	16	85	20	15	14	6	TCT18R...	1.2
JS19G-STCL18	19.05	90	20	18	14	6	TCT18R...	1.2
JS19X-STCL18	19.05	120	20	18	14	6	TCT18R...	1.2
JS20G-STCL18	20	90	20	19	14	6	TCT18R...	1.2
JS20X-STCL18	20	120	20	19	14	6	TCT18R...	1.2
JS22X-STCL18	22	120	20	21	12.25	10	TCT18R...	1.2
JS25H-STCL18	25	100	20	24	12.25	10	TCT18R...	1.2
JS254X-STCL18	25.4	120	20	24	12.25	10	TCT18R...	1.2

Torque* : Recommended clamping torque (N·m)
Note: Use the right-hand insert (TC*18R...) for a left-hand holder (STCL...).

SPARE PARTS



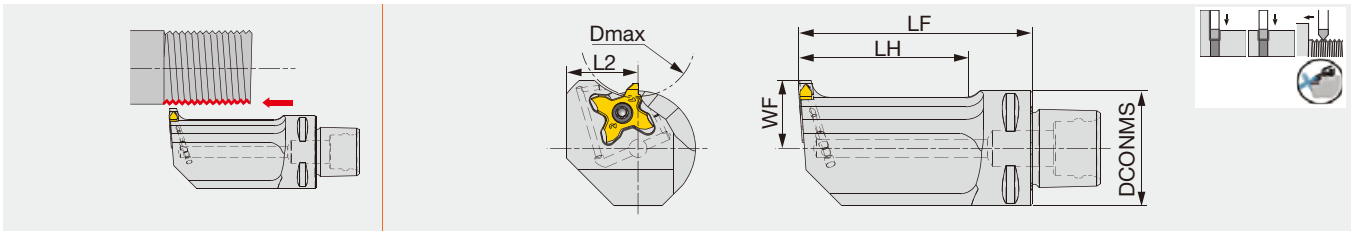


Designation	Clamping screw	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR**18-CHP, JS**STCL18	CSTC-4L100DL	T-1008/5

Reference pages: Inserts → E012

C-STCFL-18-CHP

External grooving and threading toolholder, with high pressure coolant capability

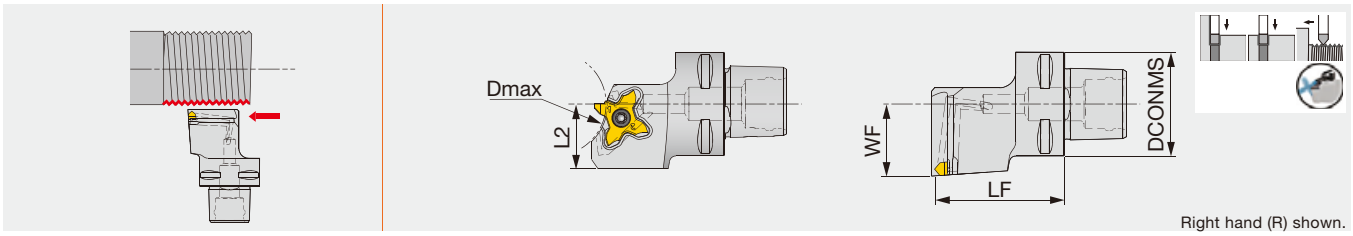


Designation	DCONMS	LF	LH	L2	WF	Dmax	Insert	Torque*
C3STCFL18040-18-CHP	32	40	21.5	20	18	32	TC*18R...	1.2
C3STCFL18065-18-CHP	32	65	46.5	20	18	32	TC*18R...	1.2

Torque* : Recommended clamping torque (N·m)
Applicable for 14 MPa coolant
Note: Use the right-hand insert (TC*18R...) for a left-hand holder (STCFL...).

C-STCR/L-18-CHP

External grooving and threading toolholder, with high pressure coolant capability



Right hand (R) shown.

Designation	DCONMS	LF	L2	WF	Dmax	Insert	Torque*
C3STCR/L22040-18-CHP	32	40	20	22	32	TC*18...	1.2
C4STCR/L27050-18-CHP	40	50	25	27	75 (1)	TC*18...	1.2

Torque* : Recommended clamping torque (N·m)
Applicable for 14 MPa coolant
(1) The value for 3.5 mm groove depth. Dmax varies according to the grooving depth required. For further information, see Tungaloy Report #416 TetraMini-Cut/TetraForce-Cut.
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

SPARE PARTS

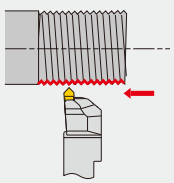


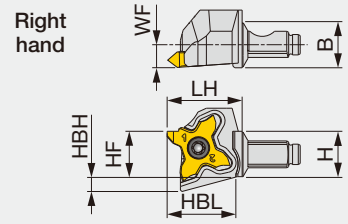

Designation	Clamping screw	Wrench
C*STCL**-18-CHP	CSTC-4L100DR	T-1008/5
C3STCFL**-18-CHP, C*STCR**-18-CHP	CSTC-4L100DL	T-1008/5

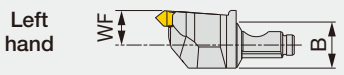
Reference pages: Inserts → E012

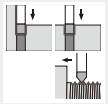
QC12-STCR/L

External grooving and threading head







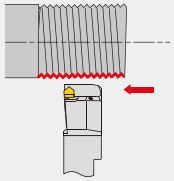


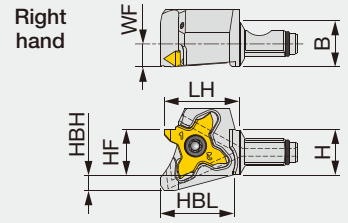
Designation	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18	12	12	19.5	12	3.9	17.9	6	TC*18R...	1.2
QC12-STCL18	12	12	21	12	3.9	18.3	9	TC*18L...	1.2

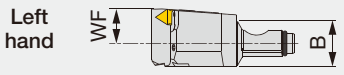
Torque* : Recommended clamping torque (N·m)
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

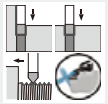
QC12-STCR/L-CHP

External grooving and threading head, with high pressure coolant capability









Designation	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18-CHP	12	12	19.5	12	4.2	19.3	6	TC*18R...	1.2
QC12-STCL18-CHP	12	12	21	12	4.2	19.3	9	TC*18L...	1.2

Torque* : Recommended clamping torque (N·m)
Through-coolant head
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

SPARE PARTS



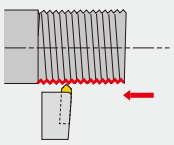


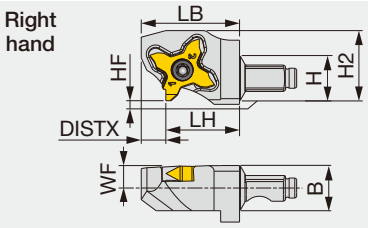
Designation	Clamping screw	Wrench	O-ring
QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

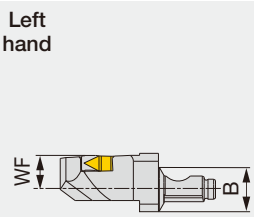
Reference pages: Inserts → E012

QC12-STCR/L-Y

Y-axis turning modular head for external grooving and threading







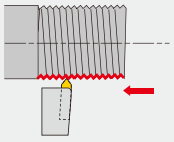


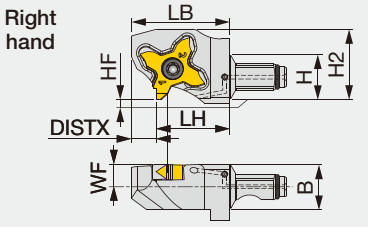
Designation	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	12	12	19.5	0	6/9	26	18.6	6.5	TC*18...	1.2

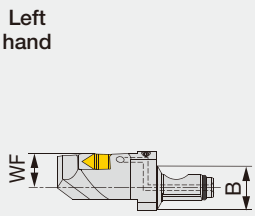
Torque* : Recommended clamping torque (N·m)
WF** : The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

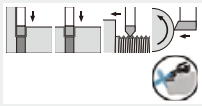
QC12-STCR/L-Y-CHP

Y-axis turning modular head for external grooving and threading, with high pressure coolant capability









Designation	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	12	12	19.5	0	6/9	26	18.6	6.5	TC*18...	1.2

Torque* : Recommended clamping torque (N·m)
WF** : The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
Through-coolant head
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

SPARE PARTS



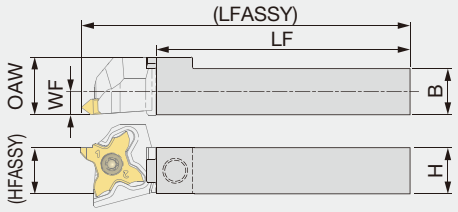


Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y	CSTC-4L100DL	T-1008/5	-
QC12-STCL18-Y	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-Y-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-Y-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

Reference pages: Inserts → E012

QC-1212

Shank for modular heads



Designation	H	B	WF	LF	OAW	HFASSY	LFASSY(1)	Torque*
QC-1212F	12	12	6	65	15	12	85	3
QC-1212X	12	12	6	100	15	12	120	3

Torque* : Recommended clamping torque (N·m)
(1) The size is true when the modular head with LH = 19.5 mm is mounted.

QC-1212-CHP

Shank for modular heads, with high pressure coolant capability

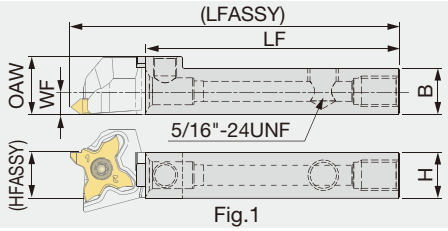


Fig.1

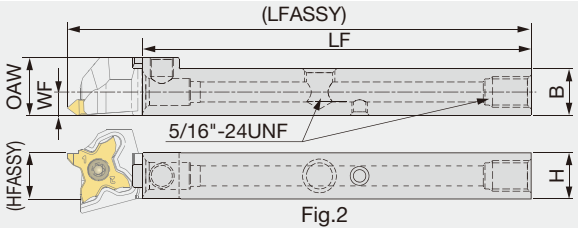


Fig.2

Designation	H	B	LF	WF	OAW	HFASSY	LFASSY(1)	Torque*	Fig.
QC-1212F-CHP	12	12	65	6	15	12	85	3	1
QC-1212X-CHP (*)	12	12	100	6	15	12	120	3	2

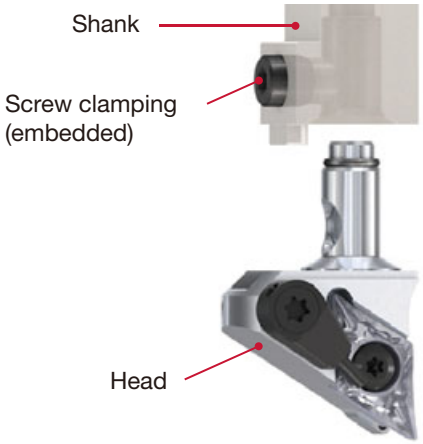
Torque* : Recommended clamping torque (N·m)
Through-coolant shank
(*) : Compatible to the direct internal coolant supply system without the use of external coolant hose.
(1) The size is true when the modular head with LH = 19.5 mm is mounted.

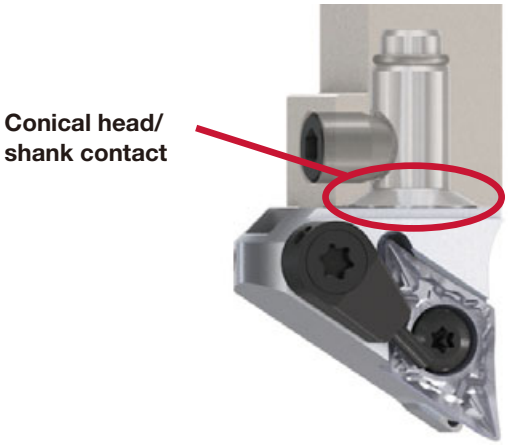
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
QC-1212*	SRM6X0.5-26977	P-3	-	-	-	-
QC-1212F-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	-	-
QC-1212X-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Unique coupling design

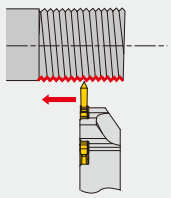
Simply loosen the clamping screw for easy tool exchanges.
Unique coupling design allows extremely high repeatability.





JSXXR/L

Threading and parting toolholder, for Swiss lathes



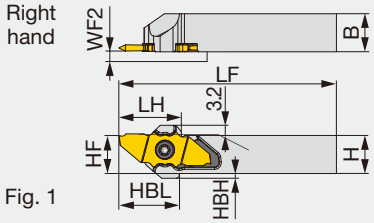


Fig. 1

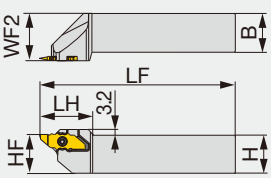
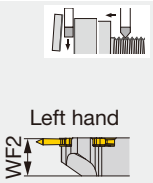


Fig. 2



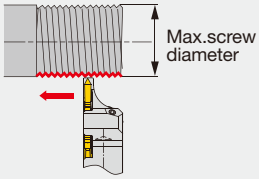
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2(1)	HBL	HBH	Insert	Torque*	Fig.
JSXXR/L1010X09	10	10	118	17.65	10	0.2/9.8	17	3	JX**12...	1.2	1
JSXXR/L1212F09	12	12	83	17.65	12	0.2/11.8	17	1.5	JX**12...	1.2	1
JSXXR/L1212X09	12	12	118	17.65	12	0.2/11.8	17	1.5	JX**12...	1.2	1
JSXXR/L1616X09	16	16	118	17.65	16	0.2/15.8	-	-	JX**12...	1.2	1
JSXXR/L2020H09	20	20	98	20.5	20	0.2/19.8	-	-	JX**12...	1.2	1
JSXXR/L2525Z09	25	25	133	32	25	30	-	-	JX**12...	1.2	2

Torque* : Recommended clamping torque (N·m)
(1) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/H/X-CHP

Parting and threading toolholder, with high pressure coolant capability



Direct connection

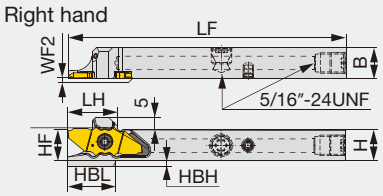


Fig. 1

Tube connection

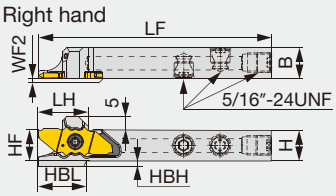
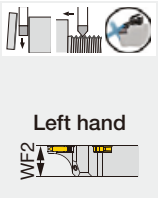


Fig. 2



Designation	H	B	LF	LH	HF	WF2(1)	HBL	HBH	Insert	Torque*	Fig.
JSXXR/L1012H09-CHP(2)	10	12	100	17.2	10	0.2/11.8	16.7	3	JX**12...	1.2	1
JSXXR/L1212F09-CHP	12	12	83	17.4	12	0.2/11.8	16.8	2	JX**12...	1.2	2
JSXXR/L1212X09-CHP(2)	12	12	118	17.4	12	0.2/11.8	16.8	2	JX**12...	1.2	1
JSXXR1616X09-CHP(2),(3)	16	16	118	17.4	16	0.2	16.7	2.5	JX**12...	1.2	1
JSXXR/L1616X09B-CHP(2)	16	16	118	17.4	16	0.2/15.8	16.7	-	JX**12...	1.2	1

Torque* : Recommended clamping torque (N·m)
(1) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(2) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(3) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS

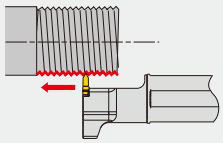
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR...	CSTC-4L100DL	T-1008/5	-	-	-	-
JSXXL...	CSTC-4L100DR	T-1008/5	-	-	-	-
JSXXR**F...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

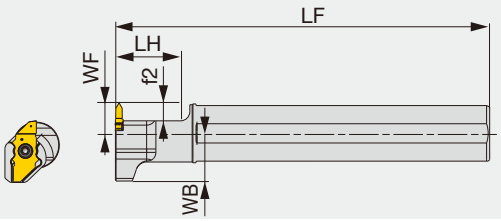
Reference pages: Inserts → E012

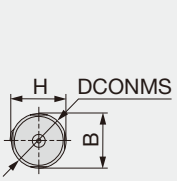
DUOJUST CUT

JS-SXXL09

External threading toolholder, for 2 corner inserts







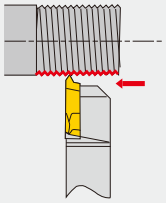
Designation	DCONMS	H	B	LF	LH	WB	WF	f2	Insert	Torque*
JS19G-SXXL09	19.05	18	18	90	21	15.43	8	4	JX**12...	1.2
JS19X-SXXL09	19.05	18	18	120	21	15.43	8	4	JX**12...	1.2
JS20G-SXXL09	20	19	19	90	21	15.4	8	4	JX**12...	1.2
JS20X-SXXL09	20	19	19	120	21	15.4	8	4	JX**12...	1.2
JS22X-SXXL09	22	21	21	120	21	15.4	8	4	JX**12...	1.2
JS25H-SXXL09	25	24	24	100	21	15.4	8	4	JX**12...	1.2
JS254X-SXXL09	25.4	24	24	120	21	15.4	8	4	JX**12...	1.2

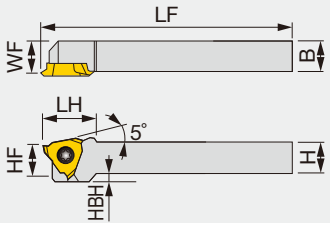
Torque* : Recommended clamping torque (N·m)

J-SERIES

JSTTR/L

External toolholder for Swiss lathes





Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L30...
JSTTR/L1212F3	12	12	85	18.5	12	11.5	-	JTTR/L30...
JSTTR/L1212X3	12	12	120	18.5	12	11.5	-	JTTR/L30...
JSTTR/L1616X3	16	16	120	16.5	16	15.5	-	JTTR/L30...

Recommended clamping torque: 1.2 N·m

SPARE PARTS





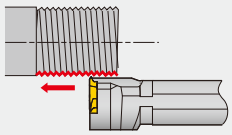


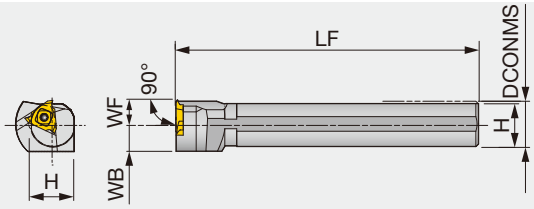
Designation	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Wrench 2 (Optional)
JSTTR/L...	-	CSTB-4SD	-	T-8F	(T-8L)
JS***-SXXL09	CSTC-4L055L	-	T-1008/5	-	-

Reference pages: DuoJust-Cut : Inserts → E012
J-Series : Inserts → E013

JS-TTL3

External toolholder for Swiss lathes



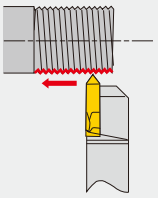


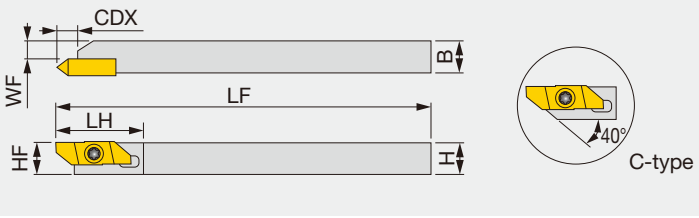
Designation	DCONMS	WF	LF	H	WB	Insert
JS19K-TTL3	19.05	10	125	18	11.5	JTTR30...
JS20K-TTL3	20	10	125	19	11.5	JTTR30...
JS22K-TTL3	22	10	125	21	11.5	JTTR30...
JS25K-TTL3	25.4	10	125	24	12.7	JTTR30...

Recommended clamping torque: 3.5 N·m

JSXBR

External threading toolholder for Swiss lathes





Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR1010K8-C	10	10	125	29	6.4	10	5.7	JXT*R...
JSXBR1212K8-C	12	12	125	29	6.4	12	7.7	JXT*R...
JSXBR1616K8	16	16	125	29	6.4	16	11.7	JXT*R...
JSXBR2020K8	20	20	125	29	6.4	20	15.7	JXT*R...
JSXBR2525K8	25	25	125	29	6.4	25	20.7	JXT*R...

Note: Can be wrenched also from the back with a double-head screw.
This toolholder can be used for JXB back-turning insert and JXT threading insert.

SPARE PARTS



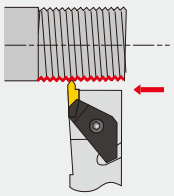


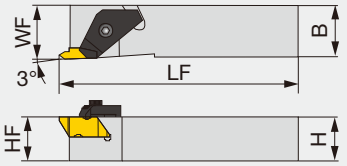
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JS**-TTL3	CSTB-4S	T-15F	-
JSXBR...	CSTB-4SD	T-8F	(T-8L)

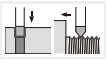
Reference pages: Inserts → E013, E016

FLASR/L

External grooving and threading toolholder, for Swiss lathes







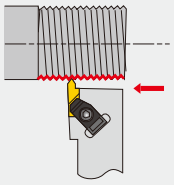
Right hand (R) shown.

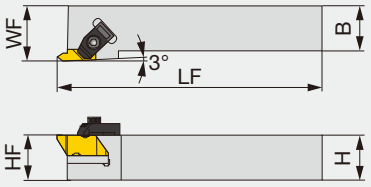
Designation	H	B	LF	HF	WF	Insert	Torque*
FLASR/L-1616M3	16	16	125	16	16	FLT-3...	3

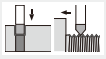
Torque* : Recommended clamping torque (N·m)
Note: Use the right-hand insert (FLT-3R...) for a right-hand holder (FLASR...); the left-hand insert (FLT-3L...) for a left-hand holder (FLASL...).

FLSR/L

External grooving and threading toolholder







Right hand (R) shown.

Designation	H	B	LF	HF	WF	Insert	Torque*
FLSR/L-2020M3	20	20	125	20	32	FLT-3...	3
FLSR/L-2525M3	25	25	150	25	32	FLT-3...	3

Torque* : Recommended clamping torque (N·m)
Note: Use the right-hand insert (FLT-3R...) for a right-hand holder (FLSR...); the left-hand insert (FLT-3L...) for a left-hand holder (FLSL...).

SPARE PARTS



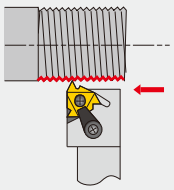


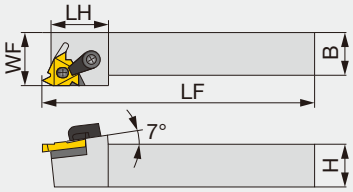
Designation	Clamp	Clamping screw	Wrench
FLASR-1616M3	TF-184	S-412	5/32HEX
FLASL-1616M3	TF-185	S-412	5/32HEX
FLSR-****M3	TF-72	S-412	5/32HEX
FLSL-****M3	TF-73	S-412	5/32HEX

Reference pages: Inserts → E014

MTVNR-5

External threading toolholder, for single-sided lay down inserts

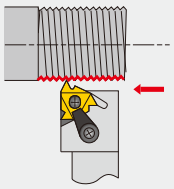


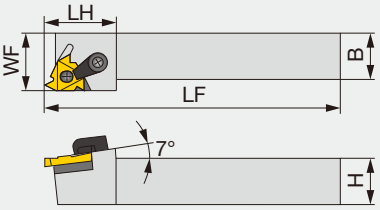


Designation	H	B	LF	LH	WF	Insert
MTVNR-2525M5	25	25	152	39	31.8	L535B**EXT-FC
MTVNR-3232M5	32	32	178	39	38.1	L535B**EXT-FC

MTVNR-54

External threading toolholder, for double-sided lay down inserts





Designation	H	B	LF	LH	WF	Insert
MTVNR-3232M54	32	32	178	39	38.1	LDS54**FT-CB#...

SPARE PARTS

Designation	Shim	Lock pin	Clamp	Clamping screw	Wrench
MTVNR..., MTVNR-3232M54	LS53NOFORMEXT	NL-58	TC-250	STC-11	1/8HEX



External, right hand

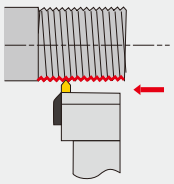
Both external and internal

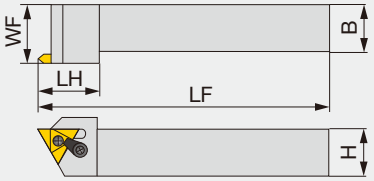
Internal, right hand

Reference pages: MTVNR-5 : Inserts → E032
MTVNR-54 : Inserts → E035

MTVOR

Multi-clamp external threading toolholder, for on edge inserts



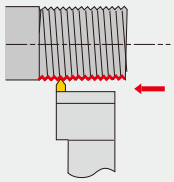


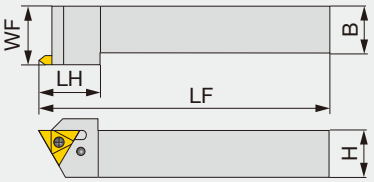
Designation	H	B	LF	LH	WF	Insert
MTVOR-2525M4	25	25	150	31	31.7	TNM*43...
MTVOR-3232M4	32	32	170	32	38.1	TNM*43...
MTVOR-2525M5	25	25	150	36	31.7	TNM*54...
MTVOR-3232M5	32	32	178	36	38.1	TNM*54...

Note: STVOR is recommended for TNMC insert although the insert can be used on multi-clamp (M type) toolholder.

STVOR

Screw-on external threading toolholder, for on edge inserts





Designation	H	B	LF	LH	WF	Insert
STVOR-2525M4	25	25	150	31	31.7	TNMC43...
STVOR-3232M4	32	32	178	31	38.1	TNMC43...
STVOR-2525M5	25	25	150	36	31.7	TNMC54...
STVOR-3232M5	32	32	178	36	38.1	TNMC54...

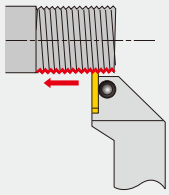
SPARE PARTS

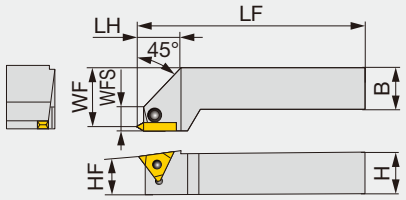
Designation	Clamping screw	Lock pin	Wrench 1	Wrench 2	Clamp (Optional)	Clamping screw (Optional)
MTVOR-**M4	-	NL-44	-	3/32HEX	TC-190	STC-5
MTVOR-**M5	-	NL-56	-	1/8HEX	TC-250	STC-11
STVOR-**M4	SD2	-	T-20TORX	3/32HEX	TC-190	STC-9
STVOR-**M5	SD3	-	T-20TORX	1/8HEX	TC-250	STC-11

Reference pages: Inserts → E029 - E031, E033

TT-R/LE

TT-type pin-lock external threading toolholder



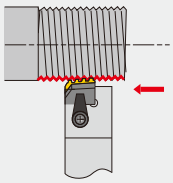


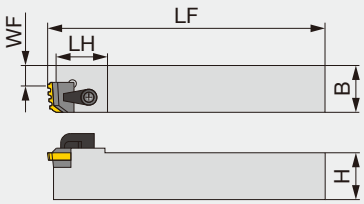
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	WFS	Insert
TT-2525R/LE	25	25	150	25	25	32	15	TTR/L42...

CLVOR

External threading toolholder, for chaser inserts





Designation	WF	LF	LH	H	B	Insert
CLVOR-25M6	16.1	177	32	25	25	CR...
CLVOR-32M6	16.1	177	32	32	32	CR...
CLVOR-40M8	21	170	38.1	40	40	CR-5B75-4E

SPARE PARTS







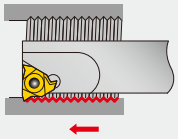


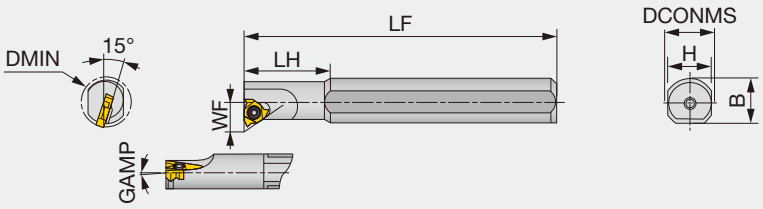
Designation	Shim	Shim screw	Clamp 1	Clamp 2	Clamping screw	Wrench 1	Wrench 2
TT-2525R/LE	-	-	CP91	-	DS-6	-	P-3
CLVOR-25M6	TF1207	SF80	-	TC-311	STC-4	T-25TORX	5/32HEX
CLVOR-32M6	TF1207	SF85	-	TC-311	STC-4	T-25TORX	5/32HEX
CLVOR-40M8	TF8132-E	SF60	-	TC-311	STC-4	T-20TORX	5/32HEX

Reference pages: TT-R/LE : Inserts → E014, E016
CLVOR : Inserts → E026, E031 - E034

SIR

Internal threading bars, Screw-on clamp





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMP	Coolant hole	Insert
SIR0005H06	STEEL	6.4	12	4.3	100	12	11	-	1.5°	Without	06IR...
SIR0007K08	STEEL	8	16	5.3	125	18	15	-	1.5°	Without	08IR...
SIR0005H06CB	CARBIDE	6.4	6	4.3	100	25	5	-	1.5°	With	06IR...
SIR0007K08CB	CARBIDE	7.8	8	5.3	125	30	7	-	1.5°	With	08IR...

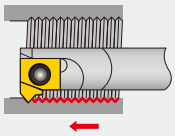
Note: Use the right-hand insert (**IR...) for a right-hand holder (SIR...).
Recommend over 1 mm clearance between internal diameter of thread and each tools DMIN.

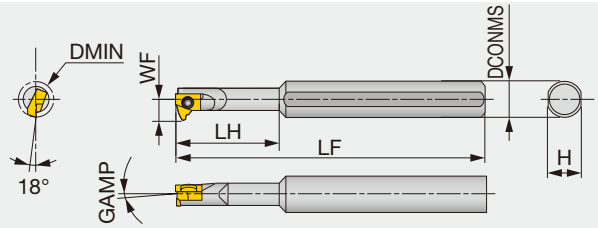
Applicable thread size

Description	ISO metric	Unified IRA60 Insert	Parallel pipe IRA55 Insert
SIR0005H06...	≥ M9	≥ 3/8-24 UNF	≥ G1/8
SIR0007K08...	≥ M11	≥ 7/16-20 UNF	≥ G1/4

SNR-2/3

Screw-on internal threading toolholder





Carbide shank

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	Insert
SNR0006H06-2	Steel	8	8	4.7	100	18	7	2°	6IR...
SNR0006H06-3	Steel	8	8	4.7	100	18	7	3°	6IR...
SNR0008H06-2	Steel	10	8	5.7	100	18	7	2°	6IR...
SNR0008H06-3	Steel	10	8	5.7	100	18	7	3°	6IR...
SNR0006K06SC-2	Carbide	8	8	4.7	125	30	7	2°	6IR...
SNR0006K06SC-3	Carbide	8	8	4.7	125	30	7	3°	6IR...
SNR0008K06SC-2	Carbide	10	8	5.7	125	18	7	2°	6IR...
SNR0008K06SC-3	Carbide	10	8	5.7	125	18	7	3°	6IR...

Note: Use the right-hand insert (6IR...) for a right-hand holder (SNR...).

SPARE PARTS



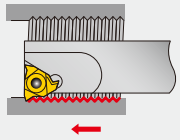


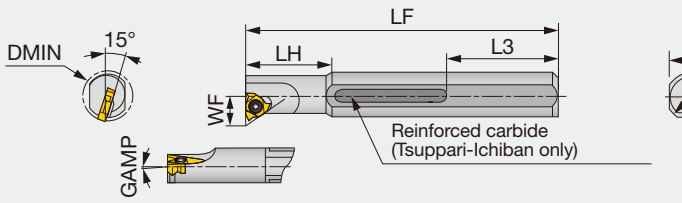
Designation	Clamping screw	Wrench
SIR0005H06...	SR 14-552	T-6F-S
SIR0007K08...	SR 14-558	T-6F-S
SNR0006H06...	CSTB-2L040	T-6F
SNR0008H06...	CSTB-2L	T-6F
SNR0006K06SC...	CSTB-2L040	T-6F
SNR0008K06SC...	CSTB-2L	T-6F

Reference pages: SIR : Inserts → E010, E015, E017
SNR-2/3 : Inserts → E010, E015, E017, E023 - E025

SNR/L

Screw-on internal threading toolholder





Right hand (R) shown.
Tsuppari-Ichiban shank.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	B	GAMP	Insert
TSNR0016Q16	Reinforced	19	16	10.6	180	40	59	15	-	1°	16IR...
TSNR0020R22	Reinforced	24	20	13.9	200	50	49	18	-	1°	22IR...
SNR/L0010K11	Steel	12	16	6.6	125	25	-	15	15.5	1°	11IR/L...
SNR0010K11-2	Steel	12	16	6.6	125	25	-	15	15.5	2°	11IR...
SNR0010K11-3	Steel	12	16	6.6	125	25	-	15	15.5	3°	11IR...
SNR/L0013L11	Steel	15	16	8.2	140	32.5	-	15	15.5	1°	11IR/L...
SNR0013L11-2	Steel	15	16	8.2	140	32.5	-	15	15.5	2°	11IR...
SNR0013L11-3	Steel	15	16	8.2	140	32.5	-	15	15.5	3°	11IR...
SNR/L0016M16	Steel	19	16	10.6	150	40	-	15	15.5	1°	16IR/L...
SNR0016M16-2	Steel	19	16	10.6	150	40	-	15	15.5	2°	16IR...
SNR0016M16-3	Steel	19	16	10.6	150	40	-	15	15.5	3°	16IR...
SNR/L0020Q22	Steel	24	20	13.9	180	50	-	18	19	1°	22IR/L...
SNR0020Q22-2	Steel	24	20	13.9	180	50	-	18	19	2°	22IR...
SNR0020Q22-3	Steel	24	20	13.9	180	50	-	18	19	3°	22IR...
SNR0010M11SC	Carbide	13	10	7.4	150	24	-	9	-	1°	11IR...
SNR0010M11SC-2	Carbide	13	10	7.4	150	24	-	9	-	2°	11IR...
SNR0010M11SC-3	Carbide	13	10	7.4	150	24	-	9	-	3°	11IR...
SNR0012P11SC	Carbide	15	12	8.5	170	28	-	11	-	1°	11IR...
SNR0012P11SC-2	Carbide	15	12	8.5	170	28	-	11	-	2°	11IR...
SNR0012P11SC-3	Carbide	15	12	8.5	170	28	-	11	-	3°	11IR...
SNR/L0016R16SC	Carbide	20	16	11.9	200	35	-	15	-	1°	16IR/L...
SNR0016R16SC-2	Carbide	20	16	11.9	200	35	-	15	-	2°	16IR...

Note: Use the right-hand insert (**IR...) for a right-hand holder (SNR...); the left-hand insert (**IL...) for a left-hand holder (SNL...).

SPARE PARTS



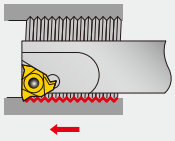

Designation	Clamping screw	Wrench
TSNR0016Q16	CSTB-3.5	T-15F
TSNR0020R22	CSTB-4	T-15F
SNR/L00**11...	CSTB-2.5	T-8F
SNR/L0016M16...	CSTB-3.5	T-15F
SNR/L0020Q22...	CSTB-4	T-15F
SNR00**11SC...	CSTB-2.5	T-8F
SNR/L0016R16SC...	CSTB-3.5	T-15F

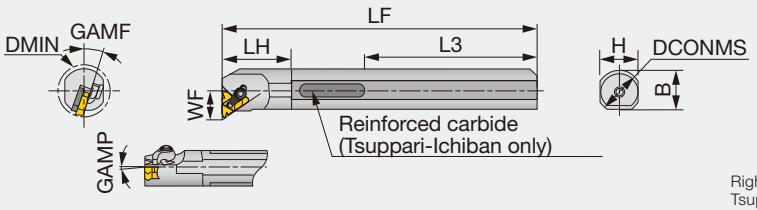
Reference pages: Inserts → E010 - E011, E015, E017 - E030, E032

TUNGTHREAD

CNR/L

Clamp-on internal threading toolholder (alternative clamping of screw-on or clamp-on only for DT type)





Right hand (R) shown.
Tsuppari-Ichiban shank.

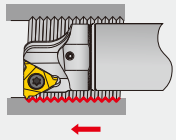
Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	B	GAMF	GAMP	Insert
TCNR0020R16DT	Reinforced	24	20	14	200	30	49	18	-	15°	1°	16IR...
TCNR0025S16DT	Reinforced	29	25	16.5	250	38	64	23	-	15°	1°	16IR...
TCNR0025S22DT	Reinforced	30	25	18.2	250	38	64	23	-	15°	1°	22IR...
CNR/L0020P16	Steel	24	20	14	170	30	-	18	19	15°	1°	16IR/L...
CNR/L0025R16	Steel	29	25	16.5	200	38	-	23	24	15°	1°	16IR/L...
CNR/L0032S16	Steel	37	32	20.1	250	48	-	30	31	15°	1°	16IR/L...
CNR/L0025R22	Steel	30	25	18.2	200	38	-	23	24	15°	1°	22IR/L...
CNR/L0032S22	Steel	38	32	21.9	250	48	-	30	31	15°	1°	22IR/L...
CNR0040T27	Steel	46	40	26.9	300	60	-	37	38.5	10°	1°	27IR...

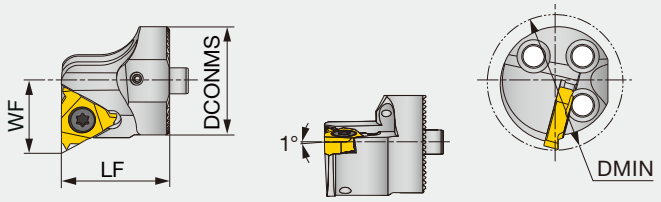
Note: A clamp set consists of a clamp and a clamping screw.
A shim set consists of a shim and a shim screw to secure the shim to the shank.
Standard shims can be used on both right- and left-hand toolholders. Please use either of the sides depending on the tool hand.
Use the right-hand insert (**IR...) for a right-hand holder (CNR...); the left-hand insert (**IL....) for a left-hand holder (CNL...).
When using DT type, please remove either the clamp set or the insert clamping screw.

BOREMEISTER

S-SNR-H

Screw-on clamp exchangeable boring head, for threading inserts





Right hand (R) shown.

Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S20-SNR16-H	25	20	14	25	D20	16IR...
S25-SNR16-H	32	25	17	25	D25	16IR...
S32-SNR16-H	40	32	22	32	D32	16IR...
S40-SNR16-H	50	40	27	32	D40, D50, D60	16IR...

SPARE PARTS

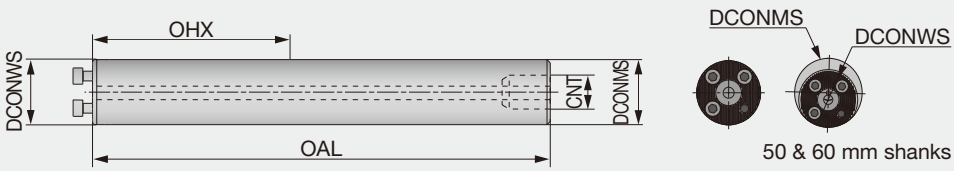
Designation	Clamp set	Clamping screw	Shim screw	Shim	Shim set R	Shim set L	Wrench 1	Wrench 2	Wrench 3
TCNR002**16DT	CSP16	CSTB-3.5ST	DTS5-3.5	A16-1DT	-	-	P-3.5	T-15F	-
TCNR0025S22DT	CSP22	CSTB-4ST	DTS6-4	GX22-1DT	-	-	P-4	T-15F	T-20F
CNR/L**16	CSP16	-	-	-	A16-1	A16-1	-	T-15F	-
CNR/L**22	CSP22	-	-	-	NXN22-1	NXE22-1	-	T-20F	-
CNR0040T27	CSP27	-	-	-	NXN27-1	NXE27-1	P-4	-	-
S**-SNR16-H	-	CSTB-3.5	-	-	-	-	-	T-15F	-

Reference pages: CNR/L : Inserts → E010 - E011, E015, E017 - E030, E032
S-SNR-H : Inserts → E010 - E011, E015, E018 - E030

BOREMEISTER

Straight Shank

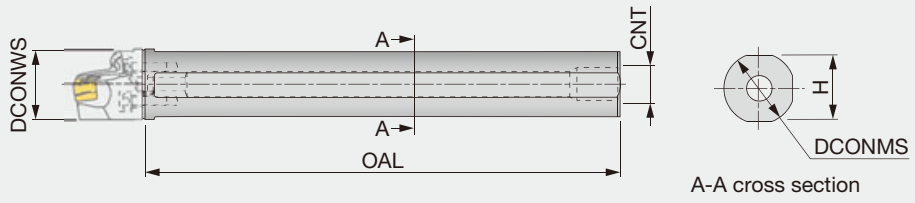
Anti-vibration bars with through coolant for interchangeable turning heads



Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

D#4D-SH

Steel shank for internal turning, with through coolant



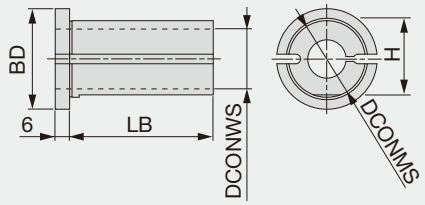
Designation	Material	DCONWS	DCONMS	OAL	CNT	H
D16-L105-4D-SH	Steel	16	16	105	UNC-2B 3/8"-16	15
D20-L140-4D-SH	Steel	20	20	140	UNFC-2B 3/8"-24	18
D25-L200-4D-SH	Steel	25	25	200	UNF-2B 1/2"-20	23
D32-L218-4D-SH	Steel	32	32	218	UNF-2B 1/2"-20	29
D40-L283-4D-SH	Steel	40	40	283	UNF-2B 1/2"-20	36

SPARE PARTS

Designation	Clamping screw	Wrench
D16-L..., G16-L..., D16**4D-SH	SRM3X10DIN912	HW2.5
D20-L..., G20-L..., D20**4D-SH	SR55-2M3.5X10	HW2.5
D25-L..., D25**4D-SH	SRM4X12DIN912	HW3.0
D32-L..., D32**4D-SH	SRM5X12DIN912	HW4.0
D40-L..., D50-L... D60-L..., D40**4D-SH	SRM6X16DIN912-12.9	HW5.0

RSL sleeve

Split sleeve for anti-vibration bar



Designation	DCONWS	DCONMS	BD	LB	H
RSL-32-16-L66	16	32	42	60	31
RSL-32-20-L66	20	32	42	60	31
RSL-32-25-L66	25	32	42	60	31
RSL-40-16-L76	16	40	50	70	38.5
RSL-40-20-L76	20	40	50	70	38.5
RSL-40-25-L76	25	40	50	70	38.5

C#-SH-CHP / C#-SH-E-CHP

PSC compatible adapter with steel or carbide core

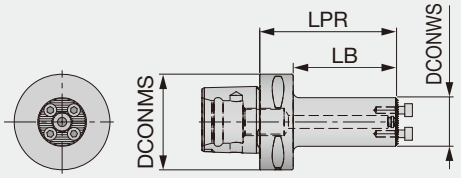


Fig. 1

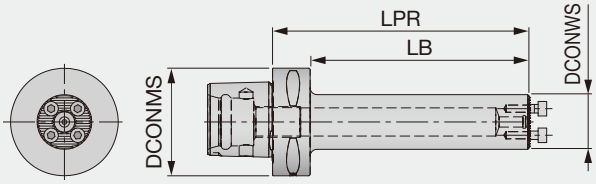


Fig. 2

Designation	Material	DCONWS	DCONMS	LPR	LB	Fig
C4-SH-D16-2.5D-CHP	Steel	16	40	40	20	1
C4-SH-D20-2.5D-CHP	Steel	20	40	50	30	1
C4-SH-D25-2.5D-CHP	Steel	25	40	55	35	1
C4-SH-D32-2.5D-CHP	Steel	32	40	75	55	1
C4-SH-D40-3D-CHP	Steel	40	40	80	80	1
C6-SH-D20-5D-E-CHP	Carbide	20	63	100	78	2
C6-SH-D25-5D-E-CHP	Carbide	25	63	115	93	2
C6-SH-D32-5D-E-CHP	Carbide	32	63	150	128	2
C6-SH-D40-5D-E-CHP	Carbide	40	63	185	163	2

SPARE PARTS

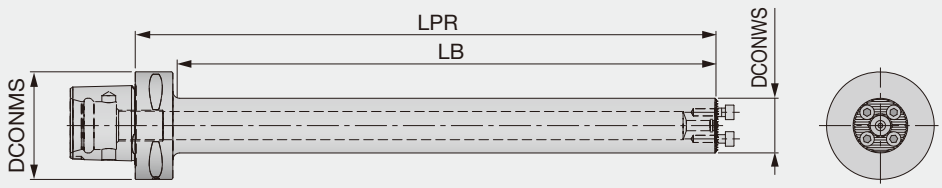



Designation	Clamping screw	Wrench
C4**D16...	SRM3X10DIN912	HW2.5
C4/C6**D20...	SR55-2M3.5X10	HW2.5
C4/C6**D25...	SRM4X12DIN912	HW3.0
C4/C6**D32...	SRM5X12DIN912	HW4.0
C4/C6**D40...	SRM6X16DIN912-12.9	HW5.0

BOREMEISTER

C6-9D-C

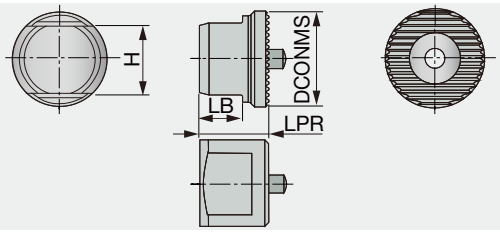
PSC adapter with anti vibration, L/D = 9



Designation	Material	DCONWS	DCONMS	LPR	LB	WT (kg)
C6-D25-L230-9D-C	Steel	25	63	230.5	200.1	1.65
C6-D32-L288-9D-C	Steel	32	63	288.5	259.5	2.73
C6-D40-L368-9D-C	Steel	40	63	368.5	339	4.45

AVC-SET

Center height set up device



Designation	DCONMS	H	LPR	LB	Applicable shank
AVC-SET 16-25	20	15	14.5	8.9	16, 20, 25
AVC-SET 32-60	29	16	17.5	11.43	32, 40, 50, 60

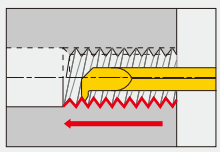
SPARE PARTS

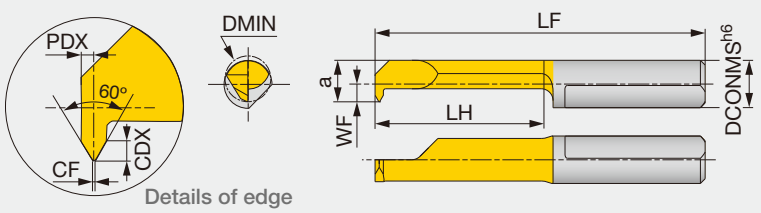
Designation	Clamping screw	Wrench
C6-D25...	SRM4X12DIN912	HW3.0
C6-D32...	SRM5X12DIN912	HW4.0
C6-D40...	SRM6X16DIN912-12.9	HW5.0

TINYMINI TURN

TBIR

Solid boring bar for internal threading



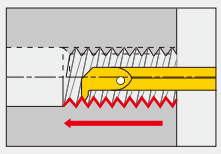


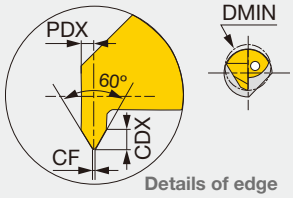
Designation	SH725	Pitch	DMIN	CF- $^{0}_{0.02}$	DCONMS	WF	a	LF	LH	CDX	PDX
TBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
TBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
TBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
TBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
TBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
TBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75

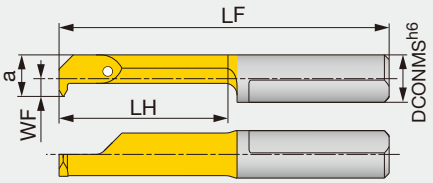
● : Line up

JBIR

Solid boring bars for threading (metric)







Right hand (R) shown.

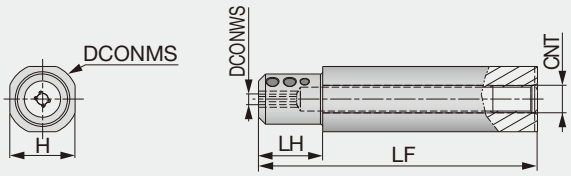
Designation	SH730	Pitch	DMIN	CF $^{0}_{-0.02}$	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
JBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
JBIR07140125-D060	●	1.25	6	0.15	7	1.8	5.3	30	14	0.7	0.65
JBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75
JBIR07140150-D070	●	1.5	7	0.18	7	2.8	6.3	30	14	0.8	0.75

● : Line up

JBBS-4N

Sleeve for internal coolant supply with 4 coolant holes





Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBS12-4-L80C-4N	12	4	80	10	10.3	Rc1/16
JBBS127-4-L80C-4N	12.7	4	80	10	11.6	Rc1/16
JBBS14-4-L80C-4N	14	4	80	10	12	Rc1/8
JBBS159-4-L100C-4N	15.875	4	100	10	14.58	Rc1/8
JBBS159-7-L100C-4N	15.875	7	100	10	14.58	Rc1/8
JBBS16-4-L100C-4N	16	4	100	10	15	Rc1/8
JBBS16-7-L100C-4N	16	7	100	10	15	Rc1/8
JBBS19-4-L100C-4N	19.05	4	100	20	17.2	Rc1/8
JBBS19-7-L100C-4N	19.05	7	100	20	17.2	Rc1/8
JBBS20-4-L100C-4N	20	4	100	20	18	Rc1/8
JBBS20-7-L100C-4N	20	7	100	20	18	Rc1/8
JBBS22-4-L100C-4N	22	4	100	20	20	Rc1/8
JBBS22-7-L100C-4N	22	7	100	20	20	Rc1/8
JBBS25-4-L100C-4N	25	4	100	23	23	Rc1/8
JBBS25-7-L100C-4N	25	7	100	23	23	Rc1/8
JBBS254-4-L100C-4N	25.4	4	100	23	23.4	Rc1/8
JBBS254-7-L100C-4N	25.4	7	100	23	23.4	Rc1/8

SPARE PARTS



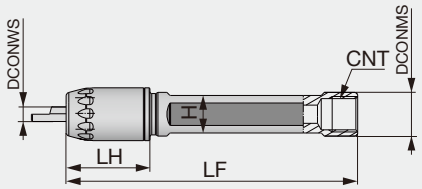


Designation	Clamping screw	Wrench
JBBS**-4-L***C-4N	SSHM5-6PF-S	P-2.5
JBBS**-7-L***C-4N	SSHM5-4PF-S	P-2.5

JBBSA-C

Collet chuck sleeve with internal coolant supply





Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBSA12-4-L80C	12	4	80	23	10.3	Rc1/8
JBBSA127-4-L80C	12.7	4	80	23	11.6	Rc1/8
JBBSA14-4-L80C	14	4	80	23	12	Rc1/8
JBBSA159-4-L100C	15.875	4	100	23	14	Rc1/8
JBBSA159-7-L100C	15.875	7	100	23	14	Rc1/8
JBBSA16-4-L100C	16	4	100	23	14	Rc1/8
JBBSA16-7-L100C	16	7	100	23	14	Rc1/8
JBBSA19-4-L120C	19.05	4	120	23	17.2	Rc1/8
JBBSA19-7-L120C	19.05	7	120	23	17.2	Rc1/8
JBBSA20-4-L120C	20	4	120	23	18	Rc1/8
JBBSA20-7-L120C	20	7	120	23	18	Rc1/8
JBBSA22-4-L135C	22	4	135	23	20	Rc1/8
JBBSA22-7-L135C	22	7	135	23	20	Rc1/8
JBBSA25-4-L135C	25	4	120	23	23	Rc1/8
JBBSA25-7-L135C	25	7	120	23	23	Rc1/8
JBBSA254-4-L120C	25.4	4	120	23	23.4	Rc1/8
JBBSA254-7-L120C	25.4	7	120	23	23.4	Rc1/8

SPARE PARTS

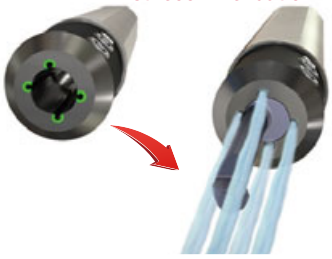
Designation	Cap	Wrench
JBBSA**-4-L...	CAP-A-4	WRENCH-A-4
JBBSA**-7-L...	CAP-A-7	WRENCH-A-7

New sleeve with four coolant holes for optimal performance

- Optimum sleeve option for all boring operations. Sleeves with four coolant holes can be used with all TinyMini-Turn tools
- 4 streams of coolant jets are directed to the cutting point, improving chip evacuation
- Sufficient coolant supply eliminates chip bird-nesting on the tools or workpiece, enabling trouble-free, unattended operation over an extended time
- Significantly prolongs tool life

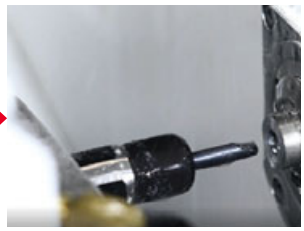
Internal coolant sleeve

First recommendation!





Excellent chip evacuation



- No chip jamming
- No machine stoppage
- No downtime

Conventional (External coolant)





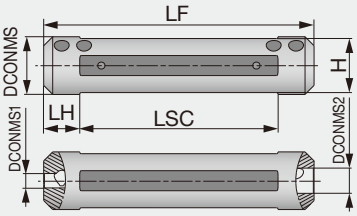


- Chip jamming
- Increased machine downtime

JBBS

Sleeve for external coolant supply





Designation	DCONMS	DCONWS1	DCONWS2	LF	LH	LSC	H
JBBS12-4-4	12	4	4	75	10	55	10.3
JBBS127-4-4	12.7	4	4	76.2	10	56.2	11.6
JBBS14-4-4	14	4	4	75	10	55	12
JBBS159-4-7	15.875	4	7	76.2	10	56.2	14
JBBS16-4-7	16	4	7	75	10	55	15
JBBS19-4-7	19.05	4	7	89	10	69	17.2
JBBS20-4-7	20	4	7	90	10	70	18
JBBS22-4-7	22	4	7	90	10	70	20
JBBS25-4-7	25	4	7	100	10	80	23
JBBS254-4-7	25.4	4	7	90	10	70	23.4

JBBS-C

Sleeve for internal coolant supply



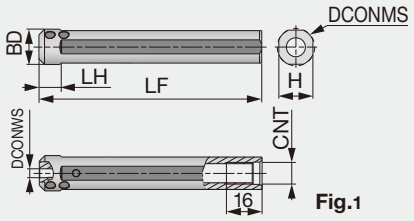


Fig.1

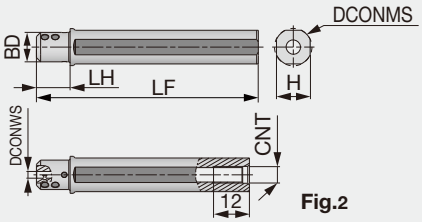


Fig.2

Designation	DCONMS	BD	DCONWS	LF	LH	H	CNT	Fig
JBBS159-4-L100C	15.875	15.875	4	100	10	14.58	Rc1/8	1
JBBS159-7-L100C	15.875	15.875	7	100	10	14.58	Rc1/8	1
JBBS16-4-L100C	16	16	4	100	10	15	Rc1/8	1
JBBS16-7-L100C	16	16	7	100	10	15	Rc1/8	1
JBBS19-4-L100C	19.05	17.5	4	100	20	17.2	Rc1/8	2
JBBS19-7-L100C	19.05	17.5	7	100	20	17.2	Rc1/8	2
JBBS20-4-L100C	20	17.5	4	100	20	18	Rc1/8	2
JBBS20-7-L100C	20	17.5	7	100	20	18	Rc1/8	2
JBBS22-4-L100C	22	17.5	4	100	20	20	Rc1/8	2
JBBS22-7-L100C	22	17.5	7	100	20	20	Rc1/8	2
JBBS25-4-L100C	25	18	4	100	23	23	Rc1/8	2
JBBS25-7-L100C	25	18	7	100	23	23	Rc1/8	2
JBBS254-4-L100C	25.4	18	4	100	23	23.4	Rc1/8	2
JBBS254-7-L100C	25.4	18	7	100	23	23.4	Rc1/8	2

SPARE PARTS



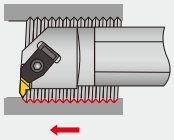


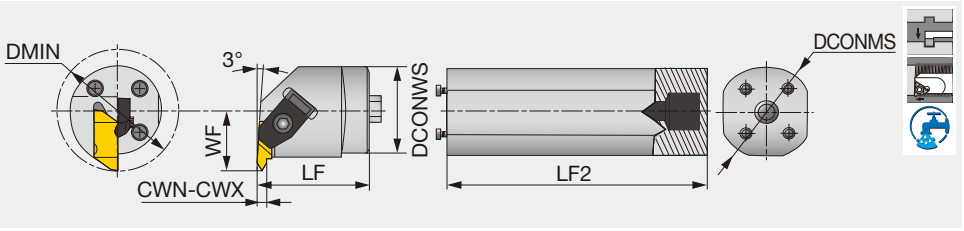
Designation	Clamping screw	Wrench
JBBS12-4-4, JBBS14-4-4 JBBS**-7-L100C	SSHM5-4PF-S	P-2.5
JBBS127-4-4, JBBS**-4-7 JBBS**-4-L100C	SSHM5-6PF-S	P-2.5

TUNGT-CLAMP

HS-FLER

Head exchangeable internal grooving and threading toolholder





Designation	DMIN	DCONWS	LF	WF	Insert	Torque*
HS40-FLER3W	56.1	40	41.3	25.4	FLT-3L...	3
HS50-FLER3W	70.1	50	41.9	35	FLT-3L...	3

Torque* : Recommended clamping torque (N·m)
Note: Use the left-hand insert (FLT-3L...) for a right-hand holder (HS**-FLER...).

SPARE PARTS

Designation	Clamp	Clamping screw 2	Wrench
HS40-FLER3W	TF-73	S-412	5/32HEX
HS50-FLER3W	TF-73	S-412	5/32HEX

Shank

Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

Spare parts

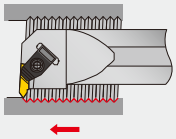
Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

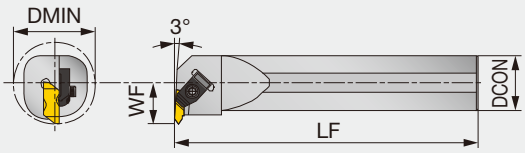
Reference pages: HS-FLER : Inserts → E014

TUNGT-CLAMP

A_M-FLER/L

Internal grooving and threading toolholder





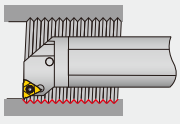
Right hand (R) shown.

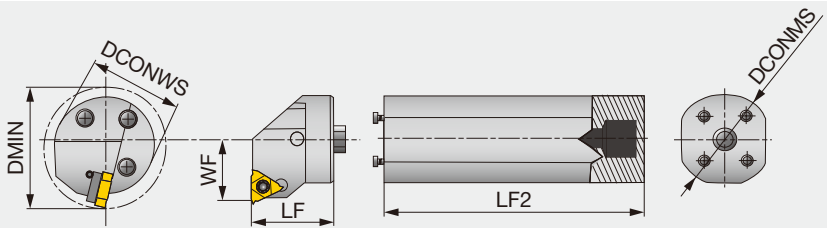
Designation	Pitch	DMIN	DCON	LF	WF	Insert
A25M-FLER/L3	2.11 - 5.08	34.9	25	300	17.7	FLT-3...
A32M-FLER/L3	2.11 - 5.08	44.5	32	350	22.1	FLT-3...
A40M-FLER3	2.11 - 5.08	50.8	40	350	24.5	FLT-3L...

TUNGTHREAD

HS-LNFR-53

Head exchangeable internal threading, for single-sided lay down inserts





Designation	DMIN	DCONWS	WF	LF	Insert
HS40-LNFR-53	50	40	28.7	41.3	L535B**INT-FC
HS50-LNFR-53	63	50	32.7	41.3	L535B**INT-FC

SPARE PARTS

Designation	Lock pin	Clamp 1	Clamp 2	Clamping screw 1	Clamping screw 2	Wrench
A**M-FLER3	-	TF-73	-	S-412	-	5/32HEX
A**M-FLEL3	-	TF-72	-	S-412	-	5/32HEX
HS**-LNFR-53	NL-56	-	TC-250	-	STC-11	1/8HEX

Shank

Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

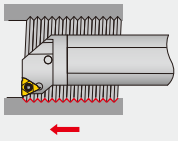
SPARE PARTS

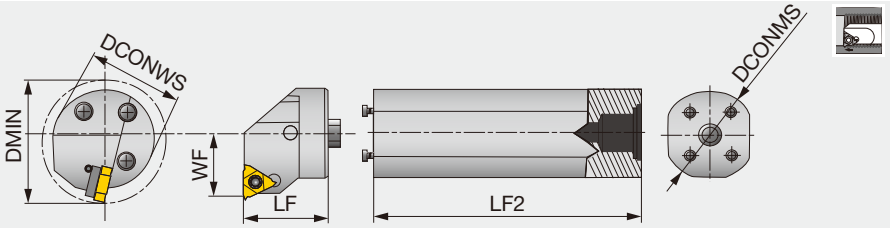
Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

Reference pages: A_M-FLER/L : Inserts → E014
HS-LNFR-53 : Inserts → E032

HS-LNFR-54API

Head exchangeable internal threading toolholder, for double-sided lay down inserts





Designation	DMIN	DCONWS	WF	LF	Insert
HS40-LNFR-54API	50	40	27	32	LDS54**FT-CB#...
HS50-LNFR-54API	63	50	35	40	LDS54**FT-CB#...

Shank

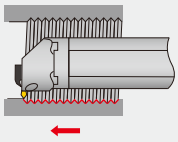
Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

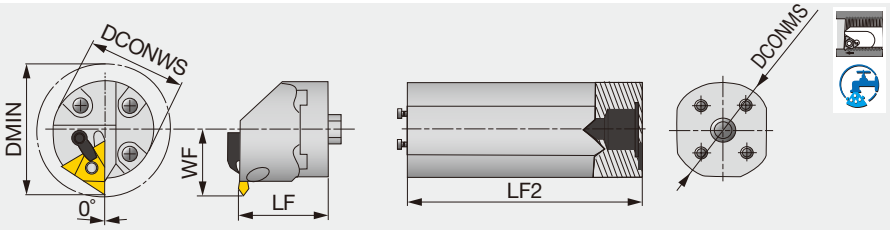
SPARE PARTS

Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

HS-MTHOR

Multi-clamp internal threading toolholder, for on edge inserts





Designation	DMIN	DCONWS	WF	LF	Insert
HS40-MTHOR-4	66.7	40	25.9	32	TNM*43...
HS50-MTHOR-4	73	50	35.9	40	TNM*43...
HS40-MTHOR-5	81.3	40	30.6	32	TNM*54...
HS50-MTHOR-5	82.6	50	35.9	40	TNM*54...

Shank

Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

SPARE PARTS

Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

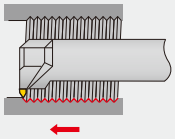
SPARE PARTS

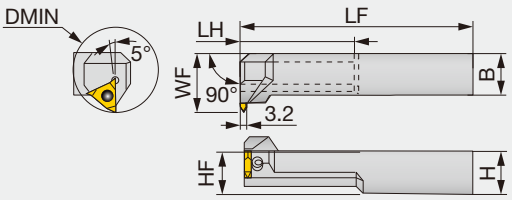
Designation	Lock pin	Clamp	Clamping screw	Wrench
HS40-LNFR-54API	H410-1	TC-250	STC-11	1/8HEX
HS50-LNFR-54API	NL-56	TC-250	STC-11	1/8HEX
HS**-MTHOR-4	NL-44	TC-190	STC-5	3/32HEX
HS**-MTHOR-5	NL-56	TC-250	STC-11	1/8HEX

Reference pages: HS-LNFR-54API : Inserts → E035
HS-MTHOR : Inserts → E029 - E031, E033

TT-RI

TT-type pin-lock internal threading toolholder



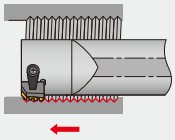


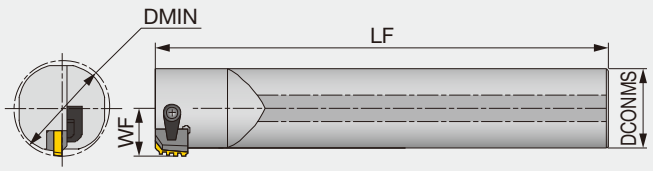
Designation	DMIN	H	B	LF	LH	HF	WF	Insert
TT-2525RI	50	25	25	200	70	25	35	TTL42...

Note: Use the left-hand insert (TTL42...) for a right-hand holder (TT-2525RI).

SI-CLHOR

Internal threading toolholder, for chaser inserts





Designation	DMIN	DCONMS	WF	LF	Insert
SI-CLHOR-40M6	50.8	40	23.16	400	CR...

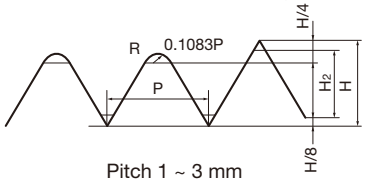
SPARE PARTS

Designation	Clamp	Clamp	Right-left screw	Wrench
TT-2525RI	CP91	-	DS-6	P-3
SI-CLHOR-40M6	-	TC-311	STC-8	5/32HEX

Reference pages: TT-RI : Inserts → E014, E016
SI-CLHOR : Inserts → E026, E031

Technical Guide

• Relationship between pitch, depth of cut and number of passes for external metric threading

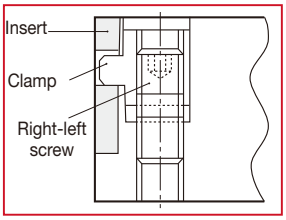


Pitch 1 ~ 3 mm

Note: Maximum machinable pitch is 3 mm.

	P	1	1.25	1.5	1.75	2	2.5	3
	H_2	0.6	0.76	0.92	1.09	1.25	1.57	1.9
	H	0.866	1.083	1.299	1.516	1.732	2.165	2.598
Number of passes	1	0.25	0.3	0.3	0.3	0.35	0.4	0.4
	2	0.15	0.2	0.25	0.25	0.25	0.3	0.35
	3	0.1	0.1	0.15	0.2	0.2	0.25	0.28
	4	0.05	0.06	0.1	0.1	0.16	0.2	0.2
	5	0.05	0.06	0.05	0.1	0.1	0.15	0.2
	6		0.06	0.05	0.07	0.07	0.1	0.13
	7			0.02	0.05	0.05	0.07	0.1
	8				0.02	0.02	0.05	0.1
	9					0.02	0.03	0.05
	10						0.02	0.05
	11							0.02
	12							0.02

Part assembly



STANDARD CUTTING CONDITIONS

TUNGTHREAD

ISO	Workpiece material	Hardness	Cutting speed: *Vc* (m/min)						
			AH8015	T05HP	AH725	T313V	NS9530	TH10	BX330
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	80 - 180	100 - 200	80 - 180	100 - 200	150 - 200	-	-
		> 200HB	60 - 160	100 - 150	60 - 160	100 - 150	100 - 170	-	-
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	50 - 130	70 - 130	50 - 130	70 - 130	-	-	-
K	Cast iron FC250, FC300, etc. 250, 300, etc.	-	60 - 150	70 - 150	50 - 100	70 - 150	-	70 - 90	-
N	Non-ferrous metal	-			-	-	-	100 - 500	-
S	Superalloys Ti-6Al-4V, Inconel718, etc.	-	20 - 80		-	-	-	10 - 40	-
H	Hardened steel	50 - 60HRC			-	-	-	10 - 30	50 - 200

TETRAMINICUT

TCT18R/L / TCT18FR

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)	Pitch (mm)	Threads per inch (TPI)
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	First choice	SH725	60 - 150	0.4 - 2.0	64 - 12
			Fracture resistance	AH725	60 - 150	0.8 - 3.0	32 - 8
		> 200HB	First choice	SH725	60 - 150	0.4 - 2.0	64 - 12
			Fracture resistance	AH725	60 - 150	0.8 - 3.0	32 - 8
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	First choice	SH725	50 - 80	0.4 - 2.0	64 - 12
		-	Fracture resistance	AH725	50 - 80	0.8 - 3.0	32 - 8
K	Cast iron FC250, FC300, etc. 250, 300, etc.	-	First choice	AH725	50 - 100	0.8 - 3.0	32 - 8
		-	Sharpness	SH725	50 - 100	0.4 - 2.0	64 - 12
S	Superalloys Ti-6Al-4V, Inconel718, etc.	-	First choice	SH725	30 - 100	0.4 - 2.0	64 - 12
		-	Fracture resistance	AH725	30 - 100	0.8 - 3.0	32 - 8

DUOJUSTCUT

ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)	Pitch (mm)	Threads per inch (TPI)
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	SH725	50 - 200	0.2 - 1.5	127 - 16
		> 200HB	SH725	50 - 200	0.2 - 1.5	127 - 16
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	SH725	50 - 200	0.2 - 1.5	127 - 16
N	Aluminium alloys A5056, A6061, etc.	-	SH725	150 - 200	0.2 - 1.5	127 - 16
	Copper alloy C2600, C280C, etc.	-	SH725	100 - 200	0.2 - 1.5	127 - 16
S	Superalloys Ti-6Al-4V, Inconel718, etc.	-	SH725	30 - 80	0.2 - 1.5	127 - 16

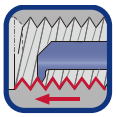
Reference pages: TungThread : Inserts → E010 - E011, E015 - E035
External toolholders → E036 - E040, E051 - E053
Internal toolholders → E054 - E056, E064 - E066
TetraMini-Cut: Inserts → E012, External toolholders → E041 - E045
DuoJust-Cut : Inserts → E012, External toolholders → E047 - E048

STANDARD CUTTING CONDITIONS

TUNGT-CLAMP

ISO	Workpiece material	Hardness	Grade	Application	Cutting speed *Vc* (m/min)	Pitch (mm)	Threads per inch (TPI)
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	AH725	Threading	80 - 180	Internal 2.11 - 5.08 External 1.27 - 4.23	Internal 5 - 12 External 6- 20
		> 200HB	AH725	Threading	60 - 160	Internal 2.11 - 5.08 External 1.27 - 4.23	Internal 5 - 12 External 6- 20
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	AH725	Threading	50 - 130	Internal 2.11 - 5.08 External 1.27 - 4.23	Internal 5 - 12 External 6- 20

TINYMINI TURN



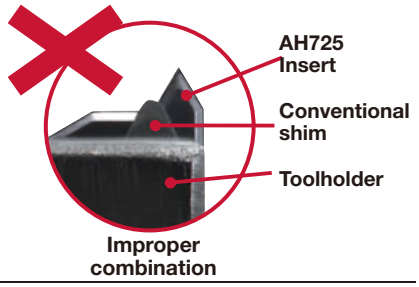
Internal threading

ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)	Number of passes Pitch (mm) 0.5	0.75	1	1.25	1.5
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
		> 200HB	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	SH730, SH725	40 - 140	8	10	12	15	18
K	Cast iron FC250, FC300, etc. 250, 300, etc.	-	SH730, SH725	30 - 100	7	9	12	14	17
N	Aluminium alloys, Copper alloy Si < 12%	-	SH730, SH725	90 - 200	6	8	10	12	15

Reference pages: TungT-Clamp : Inserts → E014, External toolholders → E050
Internal toolholders → E063 - E064
TinyMini-Turn: Solid carbide boring bars → E059

IMPORTANT - Replacement of shim

AH725 insert has 2 types of shims according to the chipbreaker geometry. Please find an appropriate shim in the table below. When using a wrong shim, the insert seating may become unstable or the tool life may be shortened.



Improper combination

Interchangeable shim (Insert size: 16)

Toolholder screw type	Lead angle	External		Internal	
		① Conventional shim	❶ Standard (New)	② Conventional shim	❷ Standard (New)
Dual clamping methods of screw-on and clamp-on	4°	GXE16-4DT	AE16-4DT	GXN16-4DT	AN16-4DT
	3°	GXE16-3DT	AE16-3DT	GXN16-3DT	AN16-3DT
	2°	GXE16-2DT	AE16-2DT	GXN16-2DT	AN16-2DT
	1° (Standard)	GX16-1DT	A16-1DT	GX16-1DT	A16-1DT
	0°	GXE16-0DT	AE16-0DT	GXN16-0DT	AN16-0DT
	-1°	GXE16-99DT	AE16-99DT	GXN16-99DT	AN16-99DT
	-2°	GXE16-98DT	AE16-98DT	GXN16-98DT	AN16-98DT
Clamp-on	4°	GXE16-4	AE16-4	GXN16-4	AN16-4
	3°	GXE16-3	AE16-3	GXN16-3	AN16-3
	2°	GXE16-2	AE16-2	GXN16-2	AN16-2
	1° (Standard)	GXE16-1	A16-1	GXN16-1	A16-1
	0°	GXE16-0	AE16-0	GXN16-0	AN16-0
	-1°	GXE16-99	AE16-99	GXN16-99	AN16-99
	-2°	GXE16-98	AE16-98	GXN16-98	AN16-98

Shim to be replaced (Insert size: 16)

Thread	External			Internal		
	Designation	Grade	Replacement	Designation	Grade	Replacement
ISO			① Conventional shim → ❶ Standard (New)	16IR15ISO-B	AH725	② Conventional shim → ❷ Standard (New)
				16IR175ISO-B	AH725	
				16IR20ISO-B	AH725	
55°	16ERAG55-B	AH725		16IRAG55-B	AH725	
				16IRG55-B	AH725	
60°	16ERA60-B	AH725		16IRAG60-B	AH725	
				16IRA60-B	AH725	
				16IRG60-B	AH725	
UN				16IR18UN-B	AH725	
				16IR16UN-B	AH725	
				16IR14UN-B	AH725	
W				16IR16W-B	AH725	
				16IR14W-B	AH725	
PT				16IR14PT-B	AH725	
NPT	16ER8NPT-B	AH725		16IR14NPT-B	AH725	
				16IR115NPT-B	AH725	

Want to learn more about threads and thread machining?

Visit this special website for the latest information on thread machining.

The website provides information on:

- Basic knowledge on threads and thread machining
- Threading tool selection guide and the latest machining techniques
- F.A.Q. and troubleshooting guide



Scan this QR code to access the website

Reference pages: E011, E015, E019, E022 - E025

MEMO

Parting, Grooving



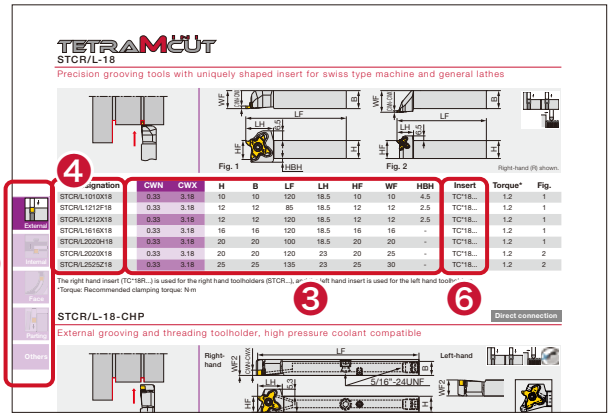
Parting, Grooving - Content structure

- Products are listed by application.
- Each item is listed by product series.
- Internal grooving tools are listed according to the order of the minimum machining diameter (from small to larger).

How to use the page

Method ①

Select the application (❶) at the left end of each page and choose a designation you need (❹) in the dimension table (❸). Applicable inserts are shown in (❻).



Method ②

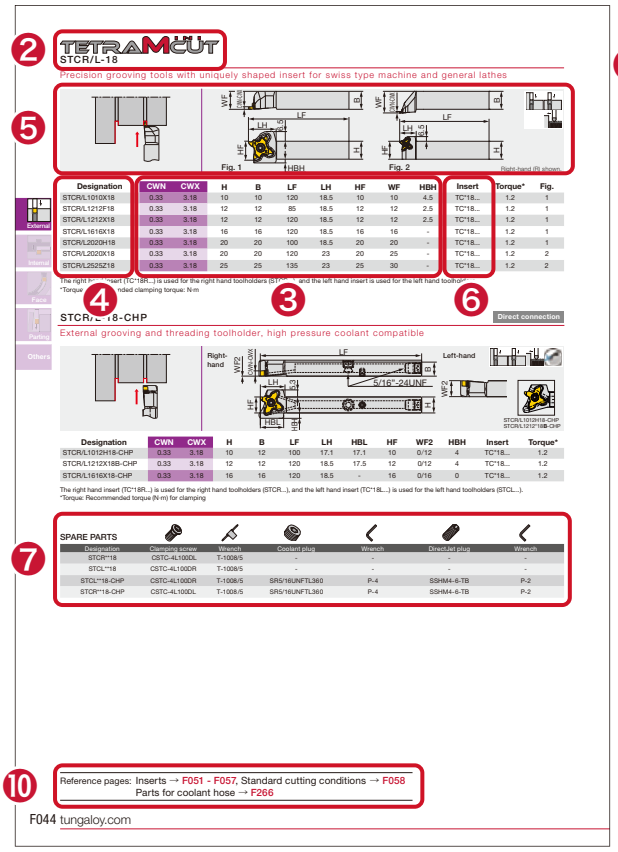
Select the tool series name on F004 - F005 and check the details on the product page.



Method ③

Select the tool series or the tool specification from Quick Guide on F006 - F007 and see the details on each page.





❷ TETRAMICUT STCR/L-18

Precision grooving tools with uniquely shaped insert for swiss type machine and general lathes

❺

Fig. 1 Fig. 2 Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	100	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2
STCR/L2525Z18	0.33	3.18	25	25	135	23	25	30	-	TC*18...	1.2	2

The right-hand insert (TC*18R...) is used for the right hand toolholders (STCR...) and the left hand insert is used for the left hand toolholders (STCL...).
*Torque: Recommended clamping torque: N·m

❹ ❸ ❻

STCR/L 18-CHP

Direct connection

External grooving and threading toolholder, high pressure coolant compatible

Right-hand Left-hand 5/16"-24UNF

STCR/L1012H18-CHP STCR/L1212*18B-CHP

Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.33	3.18	10	12	100	17.1	17.1	10	0/12	4	TC*18...	1.2
STCR/L1212X18B-CHP	0.33	3.18	12	12	120	18.5	17.5	12	0/12	4	TC*18...	1.2
STCR/L1616X18-CHP	0.33	3.18	16	16	120	18.5	-	16	0/16	0	TC*18...	1.2

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).
*Torque: Recommended torque (N·m) for clamping

❼ SPARE PARTS

Tool holder	Clamp screw	Wrench	Coolant plug	Wrench	Directjet plug	Wrench
STCR*18	CSTC-4L100DL	T-1008/5	-	-	-	-
STCL*18	CSTC-4L100DR	T-1008/5	-	-	-	-
STCL*18-CHP	CSTC-4L100DR	T-1008/5	SRS/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCR*18-CHP	CSTC-4L100DL	T-1008/5	SRS/16UNFTL360	P-4	SSHM4-6-TB	P-2

❿ Reference pages: Inserts → F051 - F057, Standard cutting conditions → F058
Parts for coolant hose → F266

❽ INSERTS

TCS18R/L (3D chipbreaker, honed edge)

CW RE CDX

Right-hand (R) shown.

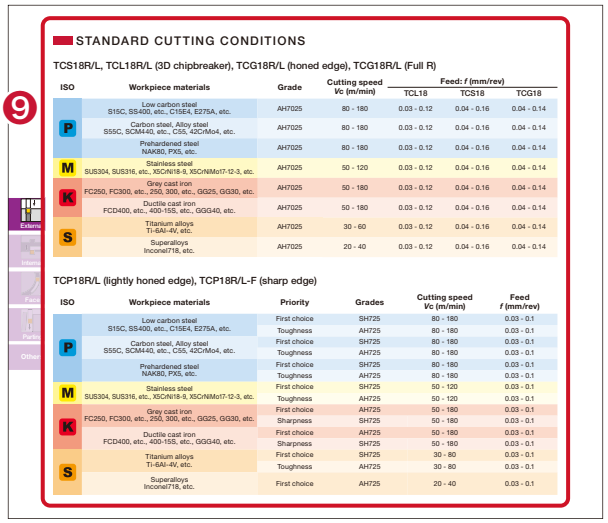
P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCS18R100-010	R	1	0.1	●	2
TCS18L100-010	L	1	0.1	●	2
TCS18R120-010	R	1.2	0.1	●	2
TCS18L120-010	L	1.2	0.1	●	2
TCS18R125-010	R	1.25	0.1	●	2
TCS18L125-010	L	1.25	0.1	●	2
TCS18R125-020	R	1.25	0.2	●	2
TCS18L125-020	L	1.25	0.2	●	2
TCS18R130-020	R	1.3	0.2	●	3.5
TCS18L130-020	L	1.3	0.2	●	3.5
TCS18R140-010	R	1.4	0.1	●	3.5
TCS18L140-010	L	1.4	0.1	●	3.5
TCS18R140-020	R	1.4	0.2	●	3.5
TCS18L140-020	L	1.4	0.2	●	3.5
TCS18R145-010	R	1.45	0.1	●	3.5
TCS18L145-010	L	1.45	0.1	●	3.5
TCS18R150-010	R	1.5	0.1	●	3.5
TCS18L150-010	L	1.5	0.1	●	3.5
TCS18R150-020	R	1.5	0.2	●	3.5
TCS18L150-020	L	1.5	0.2	●	3.5
TCS18R160-020	R	1.6	0.2	●	3.5
TCS18L160-020	L	1.6	0.2	●	3.5
TCS18R170-020	R	1.7	0.2	●	3.5
TCS18L170-020	L	1.7	0.2	●	3.5
TCS18R175-010	R	1.75	0.1	●	3.5
TCS18L175-010	L	1.75	0.1	●	3.5
TCS18R175-020	R	1.75	0.2	●	3.5
TCS18L175-020	L	1.75	0.2	●	3.5
TCS18R185-020	R	1.85	0.2	●	3.5
TCS18L185-020	L	1.85	0.2	●	3.5
TCS18R195-020	R	1.95	0.2	●	3.5
TCS18L195-020	L	1.95	0.2	●	3.5
TCS18R200-010	R	2	0.1	●	3.5
TCS18L200-010	L	2	0.1	●	3.5
TCS18R200-020	R	2	0.2	●	3.5
TCS18L200-020	L	2	0.2	●	3.5
TCS18R225-020	R	2.25	0.2	●	3.5
TCS18L225-020	L	2.25	0.2	●	3.5
TCS18R230-020	R	2.3	0.2	●	3.5
TCS18L230-020	L	2.3	0.2	●	3.5
TCS18R250-010	R	2.5	0.1	●	3.5
TCS18L250-010	L	2.5	0.1	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058



❾ STANDARD CUTTING CONDITIONS

TCS18R/L, TCL18R/L (3D chipbreaker), TCG18R/L (honed edge), TCG18R/L (Full R)

ISO	Workpiece materials	Grade	Cutting speed Vc (m/min)	Feed: f (mm/rev) TCL18	TCS18	TCG18
P	Low carbon steel S15C, SS400, etc., C15E4, E275A, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Carbon steel, Alloy steel S55C, SCM440, etc., C55, 42CrMo4, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
M	Stainless steel SUS304, SUS316, etc., X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
K	Grey cast iron FC250, FC300, etc., 250, 300, etc., GG25, GG30, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Ductile cast iron FCD400, etc., 400-15S, etc., GGG40, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 60	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Superalloys Inconel718, etc.	AH7025	20 - 40	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14

TCP18R/L (lightly honed edge), TCP18R/L-F (sharp edge)

ISO	Workpiece materials	Priority	Grades	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Low carbon steel S15C, SS400, etc., C15E4, E275A, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Carbon steel, Alloy steel S55C, SCM440, etc., C55, 42CrMo4, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
M	Stainless steel SUS304, SUS316, etc., X5CrNi18-9, X5CrNiMo17-12-3, etc.	First choice	SH725	50 - 120	0.03 - 0.1
		Toughness	AH725	50 - 120	0.03 - 0.1
K	Grey cast iron FC250, FC300, etc., 250, 300, etc., GG25, GG30, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
	Ductile cast iron FCD400, etc., 400-15S, etc., GGG40, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 80	0.03 - 0.1
		Toughness	AH725	30 - 80	0.03 - 0.1
	Superalloys Inconel718, etc.	First choice	AH725	20 - 40	0.03 - 0.1

❶ : Application
❷ : Tool series name
❸ : Dimension table
❹ : Toolholder designation
e.g. right-hand, 12x12 mm square shank
→ STC**R** **1212** **F18**
❺ : Dimension (conforming to ISO13399)
❻ : Applicable insert
❼ : Spare parts
❽ : Insert
❾ : Standard cutting conditions
❿ : Reference pages

When ordering
- Please specify the designation and quantity for toolholders.
  e.g. **CTER2020-4T25 ...** 1
- Please specify the designation and quantity for shank and adapter set when ordering both.
  e.g. **CHSR2020-CHP ...** 1, **CAER-3T20-CHP...** 1 (one shank per package, one adapter per package)
  * Clamp screw for adapter is included.
- Please specify the designation, grade, and quantity for inserts.
  e.g. **DGS3-020 AH7025 ...** 10 (10 inserts per package)
  * You will find a note if the number per package is not 10.

External grooving

F012 page

Max. groove depth: 6.4 mm

Economy TETRAMINICUT F044 page

Economy TETRAFORCECUT F059 page

GBR/L F099 page



Max. groove depth: 50 mm

First choice TUNGCUT F014 page

ADDFORCECUT F012 page

DUOJUSTCUT F071 page

TUNGHEAVYGROOVE F095 page

MY-T SERIES F077 page



Internal grooving

F120 page

General internal grooving and turning

First choice ADDINTERNALCUT F120 page

TUNGCUT F126 page

ADDFORCECUT F122 page

MY-T SERIES F146 page

GBR/L F156 page

SNG / CNG F159 page



Face grooving

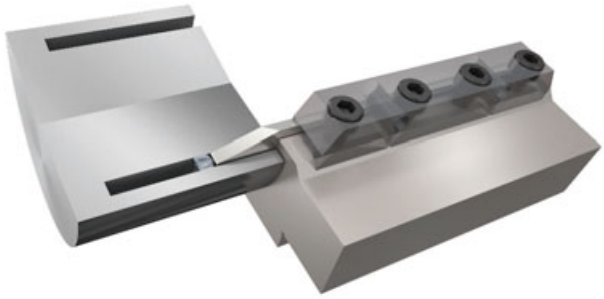
F168 page

First choice TUNGCUT F172 page

EASYMCUT F168 page

Economy TETRAMINICUT F199 page

MY-T SERIES F214 page



Parting

F224 page

General parting

First choice ADDFORCECUT F224 page

TUNGCUT F229 page

Economy TETRAFORCECUT F059 page

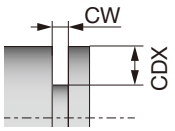
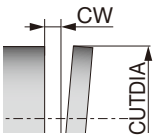
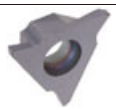
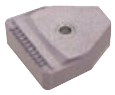
Economy TETRAMINICUT F044 page

DUOJUSTCUT F247 page

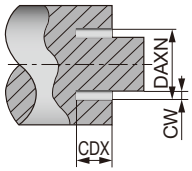
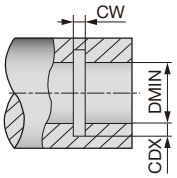
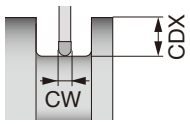
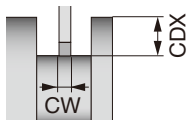
MY-T SERIES F252 page



Quick Guide

Series	Insert shape	External grooving				Parting			
									
		CW (mm)	CDX (mm)	Priority	Page	CW (mm)	CUTDIA (mm)	Priority	Page
ADDFORCECUT		2 - 5	33	◎	F012	2 - 5	120	First choice ◎	F224
ADDINTERNALCUT									
TUNGCUT		1.2 - 8	35	First choice ◎	F014	1.2 - 8	120	◎	F229
TETRAFORCECUT		0.5 - 4	10	Economy ◎	F059	0.5 - 4	20	Economy ◎	F059
TETRAMINICUT		0.33 - 3	3.5	Economy ◎	F044	0.33 - 3	7	Economy ◎	F044
DUOJUSTCUT		0.6 - 2.5	10.5	◎	F071	0.6 - 2	20	◎	F247
GBR/L		0.33 - 4.5	5	○	F099				
MY-T SERIES		2 - 5	25	○	F077	2 - 5	120	○	F252
EASYMULTICUT									
TUNGHEAVYGROOVE		10 - 25	50	◎	F095				
SNG / CNG									
XG/XN		1 - 4.5 (XGR/L)	6	○	F105				
Other		1 - 3 (FLG-CB)	4.07	○	F091				
		1 - 2.25 (GTGN)	1.8	○	F093				
		1.15 - 4.2 (GLR/L)	4	○	F103				

◎ : First choice
○ : Usable

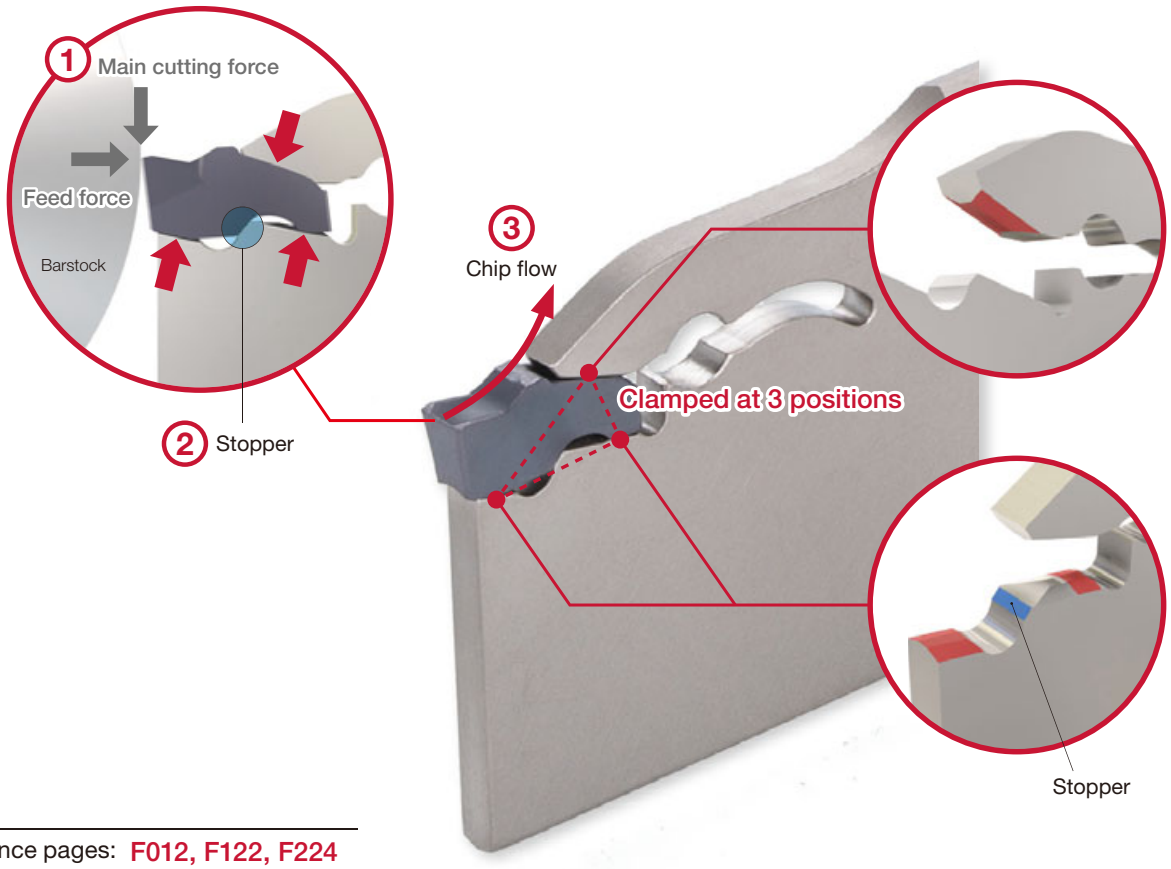
	Face grooving					Internal grooving					Profiling (Full-R)				Turning			
																		
	CW (mm)	CDX (mm)	DAXN (mm)	Priority	Page	CW (mm)	CDX (mm)	DMIN (mm)	Priority	Page	CW (mm)	CDX (mm)	Priority	Page	CW (mm)	CDX (mm)	Priority	Page
						2 - 4	32	55	◎	F122								
						0.5 - 3	3	10.5	First choice ◎	F120								
	2 - 6	25	25	First choice ◎	F172	2 - 8	10	25	◎	F126	2 - 8	35	First choice ◎	F014 F262	2 - 8	35	First choice ◎	F014
											1.57 - 3	6.4	Economy ◎	F059				
	0.33 - 3	3	6	Economy ◎	F199						1 - 3.18	3.5	Economy ◎	F044				
															2 - 2.5 (JXDX)	6	◎	F071
						0.33 - 4.5	2.5	35	○	F156	1 - 4	5	○	F099				
	3 - 5	22	30	○	F214	3 - 5	6	25	○	F146	3 - 5	25	○	F077	3 - 5	25	○	F077
	4 - 6	65	30	◎	F168													
						1 - 3.5	3	8	○	F159								
	1 - 4.5 (XNR/L)	6	55	○	F222	1 - 4.5 (XGR/L)	6	55	○	F166								
						1 - 3 (FLG-CB)	4.07	34.9	○	F152								
						1 - 2.25 (GTGN)	1.8	24	○	F154								

ADDFORCE CUT



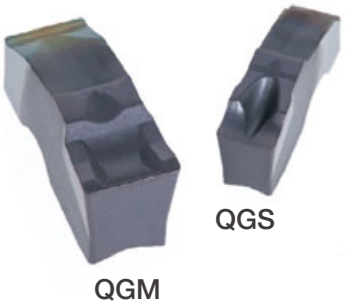
Highly rigid self-clamping system improves productivity for deep grooving and parting-off operations

1. The stopper supporting the insert bottom ensures secure edge position for excellent repeatability
2. The pocket is designed to securely spring-clamp the insert with three contact faces for stability
3. Smooth uninterrupted chip flow is possible thanks to two variations of effective 3D chipbreakers



Reference pages: F012, F122, F224





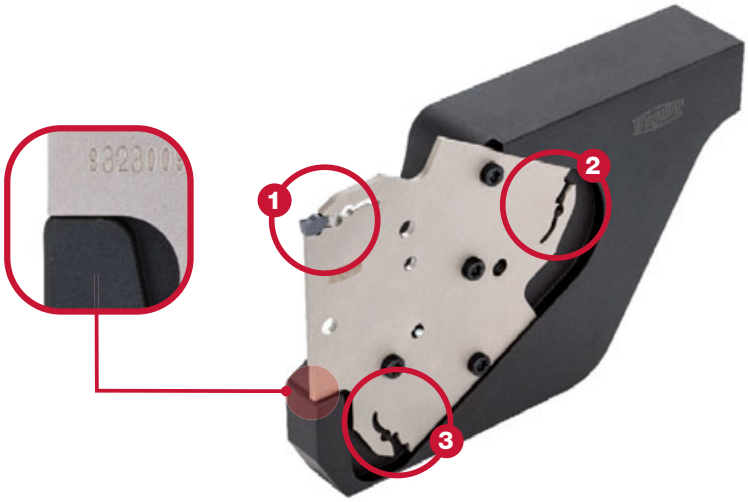
Strong holder design ensures tool stability and productivity gains during demanding cutting conditions

The blade provides reduced tooling cost with three insert pockets, while its strong backing beneath the insert withstands heavy cutting loads during machining.

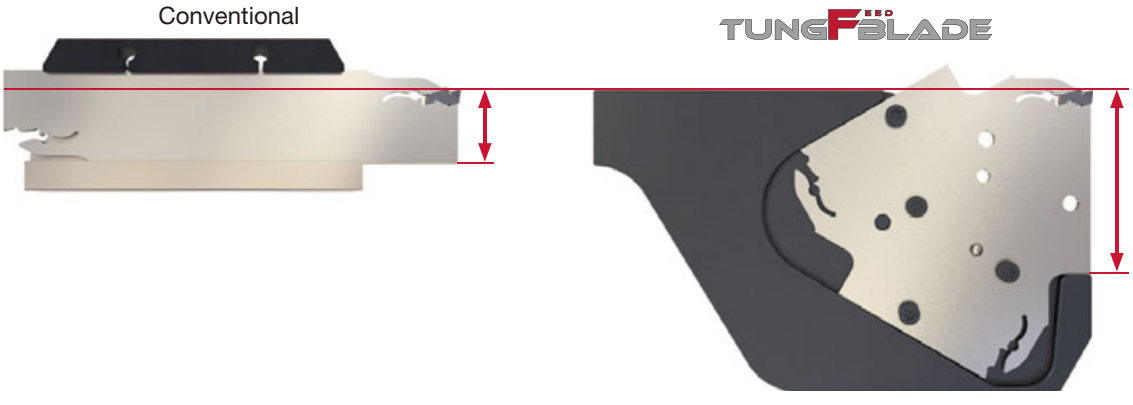
Economical blade with three insert pockets.

Specially designed tool block has two contact faces to provide enhanced tool rigidity.





With much thicker support than existing grooving blades, tool deflection and chatter are minimized even at higher feed rates.



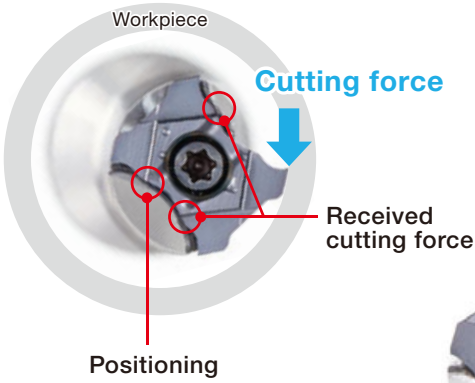
QSG blade + **CHTBR/L** tool block

Reference pages: F226, F234, F235

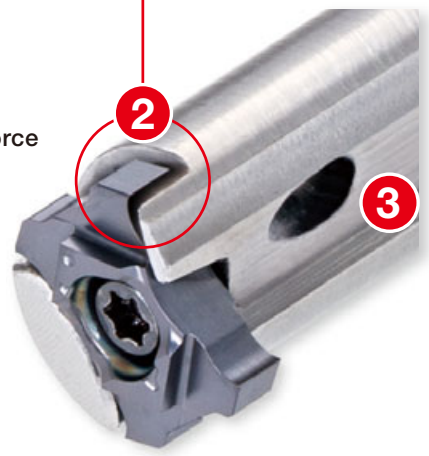


Unique insert clamping system ensures high indexing repeatability and clamping rigidity

1 The insert is supported at three optimized positions for rigid clamping and superior repeatability

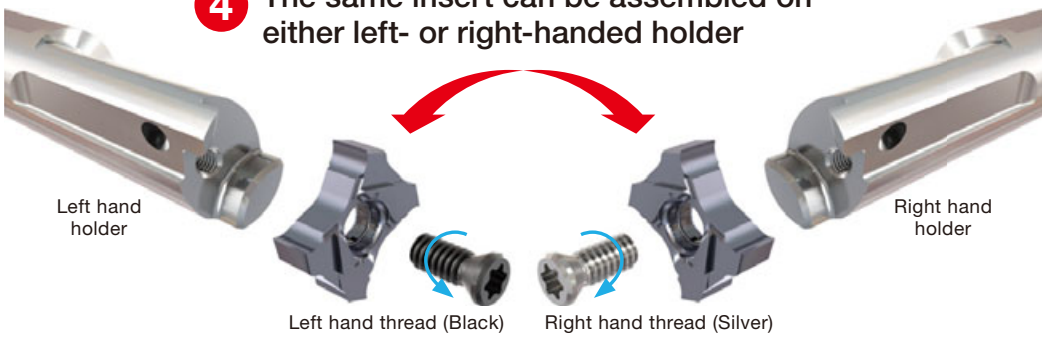


Protective pocket design for un-used cutting edges



Through coolant

4 The same insert can be assembled on either left- or right-handed holder



Prevents the screw from loosening while machining

Reference pages: F120

TUNGCUT

Multi-functional grooving tool series with excellent versatility



New modular holder system enhances versatility of existing monoblock holder and TungCap (PSC) lines.

High-pressure coolant system improves chip flow and tool life.

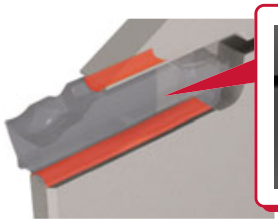
High clamping rigidity

For stable tool life and accuracy

Clamping system

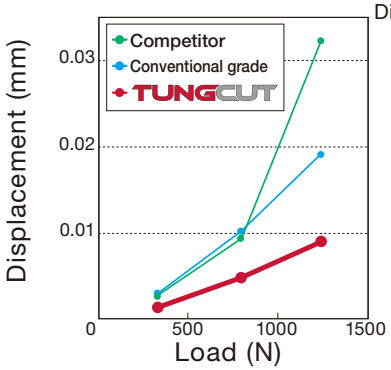


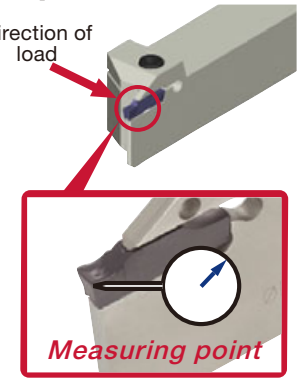
Stable and safe contact areas



High repeatability and durability due to long pocket!

Minimizes cutting edge displacement





Excellent chip control at low feed rates

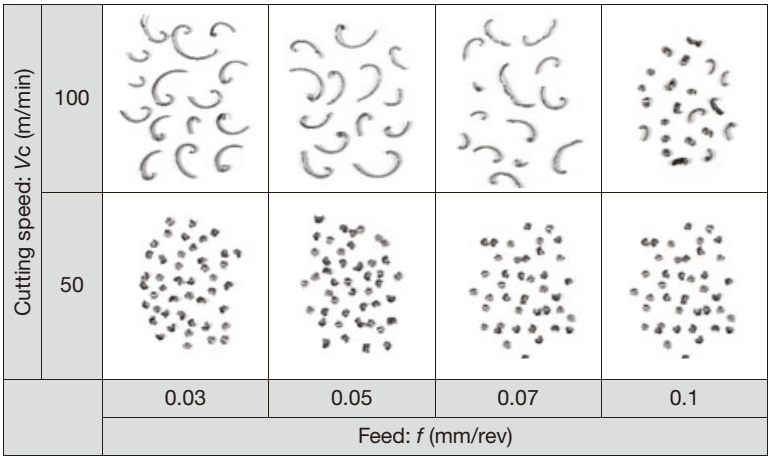
P **Bearing steel (B1/52100/SUJ2)**

First choice chipbreaker for bearing steel.
Excellent chip control at low feed rates.



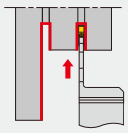
DGL

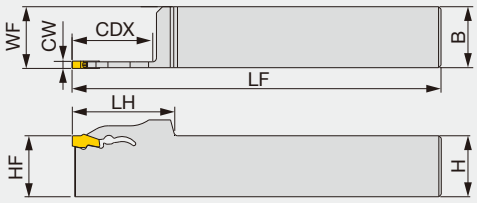
Workpiece material : SUJ2
Toolholder : CTER2525-3T09
Insert : DGL3-025
Cutting speed : *Vc* = 50, 100 m/min
Groove width : 3 mm



Reference pages: F014, F126, F172, F229, F262

External toolholders for grooving and parting







Right hand (R) shown.

Designation	CW	CDX	Seat size	H	B	LF	LH	HF	WF
QSER/L2020-2T26	2	26	2	20	20	125	36	20	20.1
QSER/L2020-2T33	2	33	2	20	20	125	42	20	20.1
QSER/L2525-2T26	2	26	2	25	25	150	36	25	25.1
QSER/L2525-2T33	2	33	2	25	25	150	42	25	25.1
QSER/L2020-3T26	3	26	3	20	20	125	36	20	20.3
QSER/L2020-3T33	3	33	3	20	20	125	42	20	20.3
QSER/L2525-3T26	3	26	3	25	25	150	36	25	25.3
QSER/L2525-3T33	3	33	3	25	25	150	42	25	25.3
QSER/L2020-4T33	4	33	4	20	20	125	42	20	20.4
QSER/L2525-4T33	4	33	4	25	25	150	42	25	25.4
QSER/L2525-5T33	5	33	5	25	25	150	42	25	25.5

SPARE PARTS



Designation	Wrench
QSER/L...	QL-39

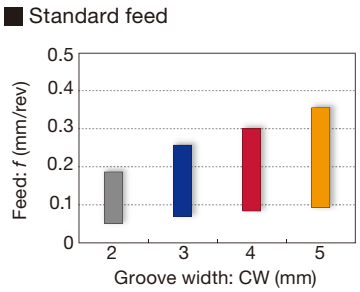
CHIPBREAKER GUIDE

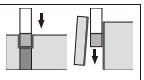
QGM



First choice for grooving and parting

Smooth chip evacuation
Well-designed edge with high strength
CW = 2 - 5 mm



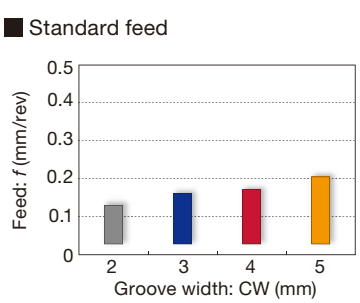


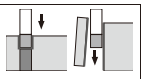
QGS



Lower cutting force and superior sharpness

Uniquely designed edge and chipbreaker
CW = 2 - 5 mm



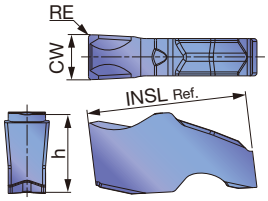


INSERTS

QGM

External deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

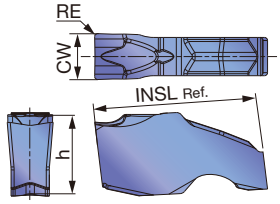
Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGM2-020	2	2	0.2	●	11	5.3
QGM3-020	3	3	0.2	●	11	5.3
QGM4-030	4	4	0.3	●	13	7.3
QGM5-030	5	5	0.3	●	13	7.3

●: Line up

QGS

External deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGS2-020	2	2	0.2	●	11	5.3
QGS3-020	3	3	0.2	●	11	5.3
QGS4-030	4	4	0.3	●	13	7.3
QGS5-030	5	5	0.3	●	13	7.3

●: Line up

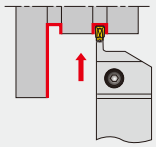
STANDARD CUTTING CONDITIONS

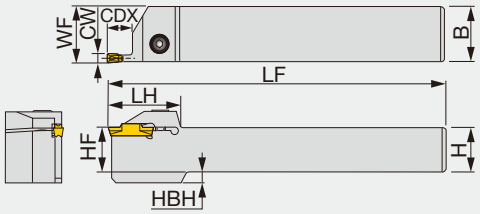
ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)
P	Steels C45, 34CrMo4, etc.	< 300 HB	AH7025	50 - 180
M	Stainless steel X10CrNiS18-9, etc.	< 200 HB	AH7025	50 - 120
K	Gray cast iron GG25, 250, etc.	-	AH7025	50 - 180
	Ductile cast irons GGG45, 450-10S, etc.	-	AH7025	50 - 120
S	Superalloys Inconel718, etc.	< HRC 40	AH7025	20 - 60
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	AH7025	20 - 80

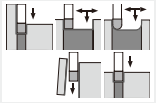
Please see page **F012** for feed: *f* (mm/rev).

CTER/L

External grooving, parting and turning toolholder







Right hand (R) shown.

Designation	CW	Seat size	CDX	H	B	LF	LH	HF	WF (1)	HBH	Torque*
CTER/L1616-2T08	2	2	8	16	16	110	33	16	16.1	4	5
CTER/L2020-2T08	2	2	8	20	20	125	33	20	20.1	-	5
CTER/L2525-2T08	2	2	8	25	25	150	33	25	25.1	-	5
CTER/L1616-2T12	2	2	12	16	16	110	32	16	16.1	4	5
CTER/L2020-2T12	2	2	12	20	20	125	32	20	20.1	-	5
CTER/L2525-2T12	2	2	12	25	25	150	32	25	25.1	-	5
CTER/L1616-2T17	2	2	17	16	16	110	37	16	16.1	4	5
CTER/L2020-2T17	2	2	17	20	20	125	37	20	20.1	-	5
CTER/L2525-2T17	2	2	17	25	25	150	37	25	25.1	-	5
CTER/L2525-2T20	2	2	20	25	25	150	38.5	25	25.1	-	5
CTER/L1616-3T09	3	3	9	16	16	110	32	16	16.3	4	5
CTER/L2020-3T09	3	3	9	20	20	125	32	20	20.3	-	5
CTER/L2525-3T09	3	3	9	25	25	150	32	25	25.3	-	5
CTER/L1616-3T12	3	3	12	16	16	110	32	16	16.3	4	5
CTER/L2020-3T12	3	3	12	20	20	125	32	20	20.3	-	5
CTER/L2525-3T12	3	3	12	25	25	150	32	25	25.3	-	5
CTER/L1616-3T20	3	3	20	16	16	110	38.5	16	16.3	4	5
CTER/L2020-3T20	3	3	20	20	20	125	38.5	20	20.3	-	5
CTER/L2525-3T20	3	3	20	25	25	150	38.5	25	25.3	-	5
CTER/L2525-3T25	3	3	25	25	25	150	44.5	25	25.3	-	5
CTER/L1616-4T10	4	4	10	16	16	110	32	16	16.5	4	8.5
CTER/L2020-4T10	4	4	10	20	20	125	32	20	20.5	-	8.5
CTER/L2525-4T10	4	4	10	25	25	150	32	25	25.5	-	8.5
CTER/L2020-4T15	4	4	15	20	20	125	33	20	20.5	-	8.5
CTER/L2525-4T15	4	4	15	25	25	150	33	25	25.5	-	8.5
CTER/L1616-4T25	4	4	25	16	16	110	45	16	16.5	4	8.5
CTER/L2020-4T25	4	4	25	20	20	125	45	20	20.5	-	8.5
CTER/L2525-4T25	4	4	25	25	25	150	45	25	25.5	-	8.5
CTER/L3232-4T25	4	4	25	32	32	170	45	32	32.5	-	8.5
CTER/L2020-5T12	5	5	12	20	20	125	37	20	20.6	-	8.5
CTER/L2525-5T12	5	5	12	25	25	150	37	25	25.6	-	8.5
CTER/L2525-5T17	5	5	17	25	25	150	37	25	25.6	-	8.5
CTER/L2525-5T20	5	5	20	25	25	150	37	25	25.6	-	8.5
CTER/L2525-5T32	5	5	32	25	25	150	56	25	25.6	-	8.5
CTER/L3232-5T32	5	5	32	32	32	170	56	32	32.6	-	8.5
CTER/L2020-6T12	6	6	12	20	20	125	37	20	20.6	-	12
CTER/L2525-6T12	6	6	12	25	25	150	37	25	25.6	7	12
CTER/L2525-6T16	6	6	16	25	25	150	39	25	25.6	7	12
CTER/L2525-6T20	6	6	20	25	25	150	41	25	25.6	7	12
CTER/L2525-6T25	6	6	25	25	25	150	47	25	25.6	7	12
CTER/L2525-6T32	6	6	32	25	25	150	56	25	25.6	7	12
CTER/L3232-6T32	6	6	32	32	32	170	56	32	32.6	-	12
CTER/L2525-8T16	8	8	16	25	25	150	47	25	26.1	7	12
CTER/L2525-8T25	8	8	25	25	25	150	47	25	26.1	7	12
CTER/L3232-8T25	8	8	25	32	32	170	47	32	33.1	-	12
CTER/L3232-8T32	8	8	32	32	32	170	56	32	33.1	-	12
CTER/L2525-8T36	8	8	36	25	25	150	60	25	26.1	7	12
CTER/L3232-8T36	8	8	36	32	32	170	60	32	33.1	-	12

When groove depth is larger than (insert length - 1.5 mm), please use 1-cornered insert.
(1) "WF" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS



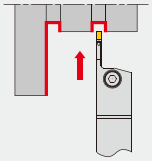

Designation	Clamping screw	Wrench
CTER/L1616-2T08	CM5X0.8X16-A	P-4
CTER/L2020-2T08	CM5X0.8X20-A	P-4
CTER/L2525-2T08	CM5X0.8X25-A	P-4
CTER/L1616-2T12	CM5X0.8X16-A	P-4
CTER/L2020-2T12	CM5X0.8X20-A	P-4
CTER/L2525-2T12	CM5X0.8X25-A	P-4
CTER/L1616-2T17	CM5X0.8X16-A	P-4
CTER/L2020-2T17	CM5X0.8X20-A	P-4
CTER/L2525-2T17	CM5X0.8X25-A	P-4
CTER/L2525-2T20	CM5X0.8X25-A	P-4
CTER/L1616-3T09	CM5X0.8X16-A	P-4
CTER/L2020-3T09	CM5X0.8X20-A	P-4
CTER/L2525-3T09	CM5X0.8X25-A	P-4
CTER/L1616-3T12	CM5X0.8X16-A	P-4
CTER/L2020-3T12	CM5X0.8X20-A	P-4
CTER/L2525-3T12	CM5X0.8X25-A	P-4
CTER/L1616-3T20	CM5X0.8X16-A	P-4
CTER/L2020-3T20	CM5X0.8X20-A	P-4
CTER/L2525-3T20	CM5X0.8X25-A	P-4
CTER/L2525-3T25	CM5X0.8X25-A	P-4
CTER/L1616-4T10	CM6X1X16-A	P-5
CTER/L2020-4T10	CM6X1X20-A	P-5
CTER/L2525-4T10	CM6X1X25-A	P-5
CTER/L2020-4T15	CM6X1X20-A	P-5
CTER/L2525-4T15	CM6X1X25-A	P-5
CTER/L1616-4T25	CM6X1X16-A	P-5
CTER/L2020-4T25	CM6X1X20-A	P-5
CTER/L2525-4T25	CM6X1X25-A	P-5
CTER/L3232-4T25	CM6X1X25-A	P-5
CTER/L2020-5T12	CM6X1X20-A	P-5
CTER/L2525-5T12	CM6X1X25-A	P-5
CTER/L2525-5T17	CM6X1X25-A	P-5
CTER/L2525-5T20	CM6X1X25-A	P-5
CTER/L2525-5T32	CM6X1X25-A	P-5
CTER/L3232-5T32	CM6X1X25-A	P-5
CTER/L2020-6T12	CM8X1.25X20-A	P-6
CTER/L2525-6T12	CM8X1.25X25-A	P-6
CTER/L2525-6T16	CM8X1.25X25-A	P-6
CTER/L2525-6T20	CM8X1.25X25-A	P-6
CTER/L2525-6T25	CM8X1.25X25-A	P-6
CTER/L2525-6T32	CM8X1.25X25-A	P-6
CTER/L3232-6T32	CM8X1.25X25-A	P-6
CTER/L2525-8T16	CM8X1.25X25-A	P-6
CTER/L2525-8T25	CM8X1.25X25-A	P-6
CTER/L3232-8T25	CM8X1.25X25-A	P-6
CTER/L3232-8T32	CM8X1.25X25-A	P-6
CTER/L2525-8T36	CM8X1.25X25-A	P-6
CTER/L3232-8T36	CM8X1.25X25-A	P-6

Reference pages: Inserts → F028 - F042, Standard cutting conditions → F043

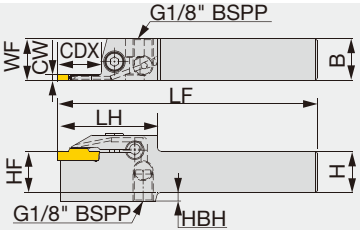
CTER/L-CHP

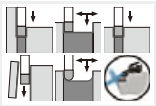
Tube connection

External grooving and parting toolholder, with high pressure coolant capability









Right hand (R) shown.

Designation	CW	Seat size	CDX	H	B	LF	LH	HF	WF (1)	HBH	Torque*
CTER/L2020-2T17-CHP	2	2	17	20	20	125	45	20	20.1	4	5.5
CTER/L2525-2T17-CHP	2	2	17	25	25	150	45	25	25.1	-	5.5
CTER/L2020-3T20-CHP	3	3	20	20	20	125	48	20	20.3	4	5.5
CTER/L2525-3T20-CHP	3	3	20	25	25	150	48	25	25.3	-	5.5
CTER/L2525-3T25-CHP	3	3	25	25	25	150	51	25	25.3	-	5.5
CTER/L2525-4T25-CHP	4	4	25	25	25	150	55	25	25.5	-	8
CTER/L2525-5T20-CHP	5	5	20	25	25	150	49	25	25.58	-	8
CTER/L2525-6T20-CHP	6	6	20	25	25	150	52	25	25.58	7	12

When groove depth is larger than (insert length - 1.5 mm), please use 1-cornered insert.
(1) "WF" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS



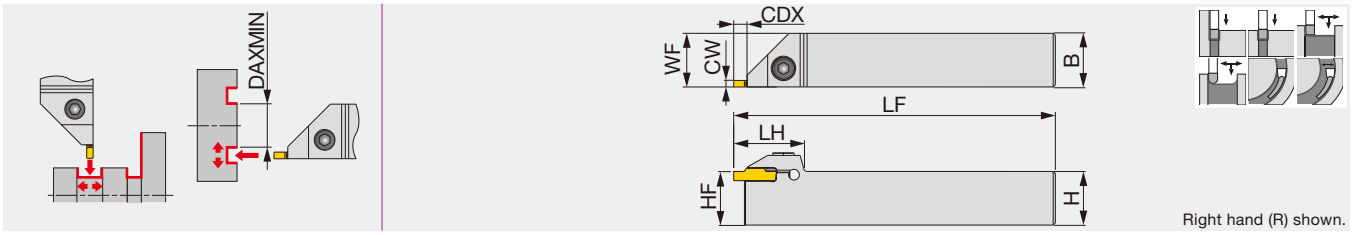


Designation	Clamping screw	Wrench
CTER/L2020-2T17-CHP	CM5x0.8x20-A	P-4
CTER/L2525-2T17-CHP	CM5x0.8x25-A	P-4
CTER/L2020-3T20-CHP	CM5x0.8x20-A	P-4
CTER/L2525-3T20-CHP	CM5x0.8x25-A	P-4
CTER/L2525-3T25-CHP	CM5x0.8x25-A	P-4
CTER/L2525-4T25-CHP	CM6x1x16-A	P-5
CTER/L2525-5T20-CHP	CM6x1x16-A	P-5
CTER/L2525-6T20-CHP	CM8x1.25x20-A	P-6

Reference pages: Inserts → F028 - F042, Standard cutting conditions → F043
Parts for coolant hose → F266

CTEFR/L

External face grooving and turning toolholder



Designation	CW	Seat size	CDX	H	B	LF	LH	HF	WF (1)	Torque*
CTEFR/L2020-4T04	4	2, 3, 4	4.8	20	20	125	33	20	20.5	8.5
CTEFR/L2525-4T04	4	2, 3, 4	4.8	25	25	150	33	25	25.5	8.5
CTEFR/L2020-6T04	6	5, 6	4.8	20	20	125	37	20	20.6	8.5
CTEFR/L2525-6T04	6	5, 6	4.8	25	25	150	37	25	25.6	8.5

Use the right-hand insert for the right-hand holder with DTF insert.
(1) "WF" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS




Designation	Clamping screw	Wrench
CTEFR/L2020-4T04	CM6X1X20-A	P-5
CTEFR/L2525-4T04	CM6X1X25-A	P-5
CTEFR/L2020-6T04	CM6X1X20-A	P-5
CTEFR/L2525-6T04	CM6X1X25-A	P-5

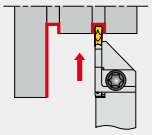
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	2	295
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTX / DTM / DTR	2	295
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61

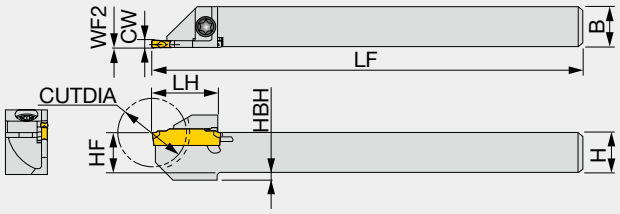
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

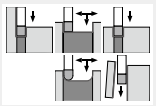
Reference pages: Inserts → F028 - F042, Standard cutting conditions → F043

JCTER/L

External grooving and parting toolholder, for Swiss lathes







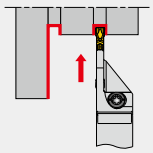
Right hand (R) shown.

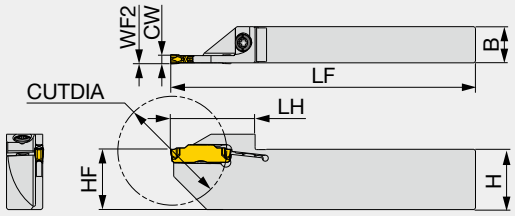
Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JCTER/L1010X1.4T10	1.4	1	20	10	10	120	18	10	0.2/10.2	-	3
JCTER/L1212F1.4T12	1.4	1	24	12	12	85	19.5	12	0.2/12.2	-	3
JCTER/L1212X1.4T12	1.4	1	24	12	12	120	19.5	12	0.2/12.2	-	3
JCTER/L1414-1.4T12	1.4	1	24	14	14	125	19.5	14	0.2/14.2	-	3
JCTER/L1616X1.4T16	1.4	1	32	16	16	120	24	16	0.2/16.2	-	3
JCTER/L1010X2T10	2	2	20	10	10	120	19	10	0.1/10.1	2	3
JCTER/L1212F2T12	2	2	24	12	12	85	19	12	0.1/12.1	2	3
JCTER/L1212X2T12	2	2	24	12	12	120	19	12	0.1/12.1	2	3
JCTER/L1414-2T12	2	2	24	14	14	125	19	14	0.1/14.1	-	3
JCTER/L1616X2T16	2	2	32	16	16	120	24	16	0.1/16.1	-	3
JCTER/L1212F3T12	3	3	24	12	12	85	19	12	0.3/12.3	2	3
JCTER/L1212X3T12	3	3	24	12	12	120	19	12	0.3/12.3	2	3
JCTER/L1616X3T16	3	3	32	16	16	120	24	16	0.3/16.3	-	3
JCTER/L2020H3T16	3	3	32	20	20	100	24	20	0.3/20.3	-	3

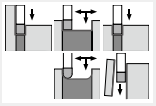
(1) "WF2" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

JCTER/L2012

External grooving and parting toolholder, for Swiss lathes, with 20 mm shank height







Right hand (R) shown.

Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	Torque*
JCTER/L2012H2T18	2	2	36	20	12	100	25	20	0.1/12.1	3
JCTER/L2012H3T21	3	3	42	20	12	100	28	20	0.3/12.3	3

(1) "WF2" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS





Designation	Clamping screw	Wrench
JCTER/L...	CSHB-4-A	T-15F

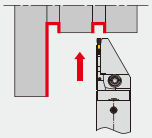
External
Internal
Face
Parting
Others

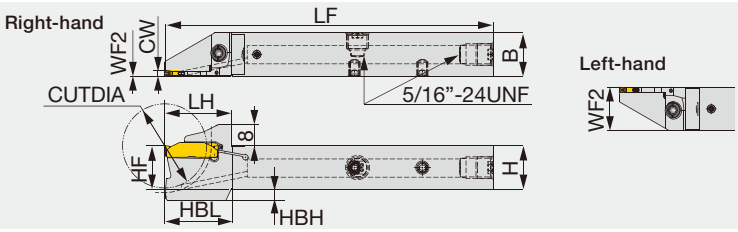
Reference pages: Inserts → F028 - F042, Standard cutting conditions → F043

JCTER/L-CHP

Direct connection

External grooving and parting toolholder, with high pressure coolant capability





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	HBL	Torque*
JCTER/L1212X2T12-CHP	2	2	25	12	12	120	24.7	12	0/12	5	24.7	3
JCTER/L1616X2T12-CHP	2	2	25	16	16	120	24.7	16	0/16	1	24.5	3
JCTER/L1616X2T16-CHP	2	2	32	16	16	120	24.7	16	0/16	4	24.7	3
JCTER/L2020X2T16-CHP	2	2	32	20	20	120	24.7	20	0/20	-	-	3

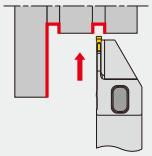
(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Torque*: Recommended clamping torque (N·m)

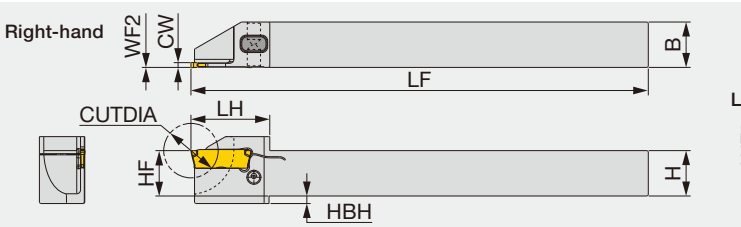
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JCTER/L...	CSHB-4-A	T-15F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

JTTER/L

External grooving and parting toolholder, for Swiss lathes





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JTTER/L1010H1.2D12	1.2	0.9	12	10	10	100	17	10	0/10	-	1.5
JTTER/L1212F1.2D16	1.2	0.9	16	12	12	85	19	12	0/12	-	1.5
JTTER/L1212X1.2D16	1.2	0.9	16	12	12	120	19	12	0/12	-	1.5
JTTER/L1212X1.2D20	1.2	0.9	20	12	12	120	21	12	0/12	2	1.5
JTTER/L1616X1.2D20	1.2	0.9	20	16	16	120	21	16	0/16	-	2

(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Torque*: Recommended clamping torque (N·m)

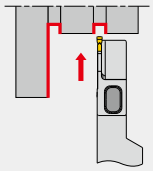
SPARE PARTS

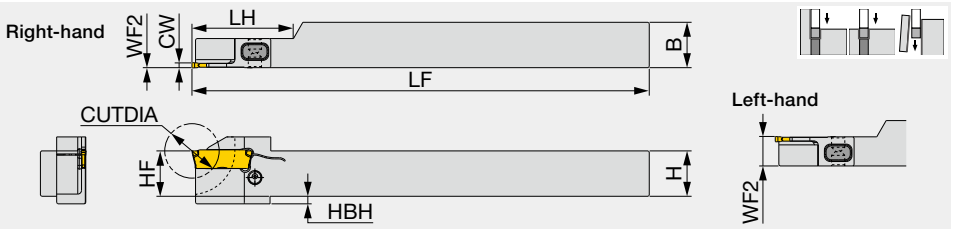
Designation	Clamping screw	Clamping pin	Wrench
JTTER/L1010...	SSM3.5x0.35	PIN-SL-TC	P-2F
JTTER/L1212...	SSM3.5x0.35	PIN-SL-TC	P-2F
JTTER/L1616...	SRM5-24145-RL	PIN-32121	P-2.5F

Reference pages: Inserts → F028 - F042, Standard cutting conditions → F043
Parts for coolant hose → F266

JTTER/L-S

External grooving and parting toolholder, for Swiss lathes (for sub spindle)





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JTTER/L1010H1.2D12-S	1.2	0.9	12	10	10	100	22.8	10	0/7.7	-	1.5
JTTER1212F1.2D16-S (2)	1.2	0.9	16	12	12	85	22.8	12	0	-	1.5
JTTER/L1212X1.2D16-S	1.2	0.9	16	12	12	120	26.8	12	0/7.7	-	1.5
JTTER/L1212X1.2D20-S	1.2	0.9	20	12	12	120	26.8	12	0/7.7	2	1.5
JTTER/L1616X1.2D20-S	1.2	0.9	20	16	16	120	26.8	16	0/7.7	-	1.5

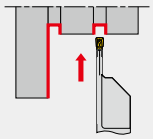
(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(2) No clamping screw from the insert side.
Torque*: Recommended clamping torque (N·m)

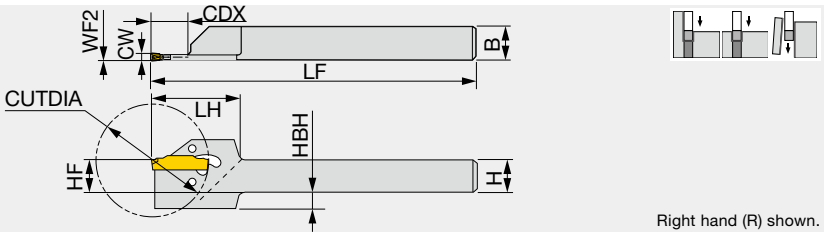
SPARE PARTS

Designation	Clamping screw	Clamping pin	Wrench
JTTER/L**-S	SSM3.5x0.35	PIN-SL-TC	P-2F

CGER/L

External deep grooving and parting toolholder, for Swiss lathes





Right hand (R) shown.

Designation	CW	Seat size	CUTDIA(1)	CDX	H	B	LF	LH	HF	WF2 (2)	HBH
CGER/L2020-1.4T14	1.4	1	29/29	9.7	20	20	125	31	20	0.2/20.2	-
CGER/L1212-2T17	2	2	35/35	11.8	12	12	150	31	12	0.1/12.1	6
CGER/L1616-2T17	2	2	35/35	11.8	16	16	150	31	16	0.1/16.1	2
CGER/L2020-2T17	2	2	35/35	9.8	20	20	125	31	20	0.1/20.1	-
CGER/L1212-3T19	3	3	38/40	12	12	12	150	31	12	0.3/12.3	6
CGER/L1616-3T19	3	3	38/45	14.9	16	16	150	31	16	0.3/16.3	2
CGER/L2020-3T19	3	3	38/45	13.2	20	20	125	31	20	0.3/20.3	-
CGER/L2020-4T19	4	4	38/55	20.3	20	20	125	33	20	0.4/20.4	-

Wrench (CRW**) is not included. Please order it separately. Insert is clamped by the elastic deformation of the upper jaw.
(1) DG*/SG* maximum parting diameter will depend on the insert.
(2) "WF2" value is calculated with groove width "CW" shown in the table.

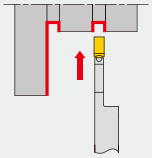
SPARE PARTS

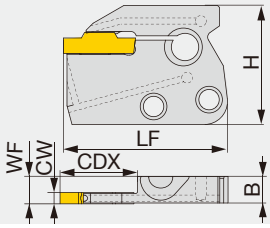
Designation	Wrench (Option)
CGER/L2020-1.4T14	CRW23
CGER/L****-2T17 - 4T19	CRW33

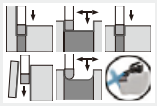
Reference pages: Inserts → F028 - F042, Standard cutting conditions → F043

CAER/L-CHP

External grooving and parting adapter, with high pressure coolant capability







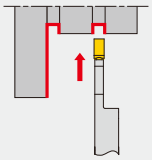
Right hand (R) shown.

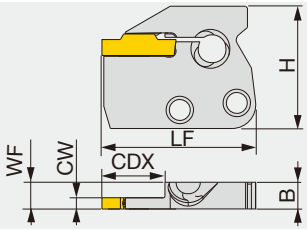
Designation	CW	Seat size	CDX	H	B	LF	WF (1)
CAER/L-2T16-CHP	2	2	16	33	7.2	41.5	7.3
CAER/L-2T20-CHP	2	2	20	33	7.2	45.5	7.3
CAER/L-3T16-CHP	3	3	16	33	7.2	41.5	7.4
CAER/L-3T20-CHP	3	3	20	33	7.2	45.5	7.5
CAER/L-4T16-CHP	4	4	16	33	7.2	41.5	7.7
CAER/L-4T20-CHP	4	4	20	33	7.2	45.5	7.7
CAER/L-5T20-CHP	5	5	20	33	7.2	46.3	7.8
CAER/L-6T20-CHP	6	6	20	33	7.2	46.3	7.8
CAER/L-8T25-CHP	8	8	25	33	7.2	51.1	8.3

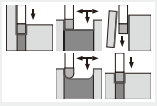
When groove depth is larger than (insert length - 1.5 mm), please use 1-cornered insert.
(1) WF is calculated with the groove width (CW) in the above table.

CAER/L-MD

External grooving and parting adapter







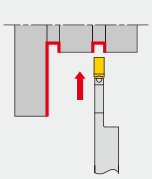
Right hand (R) shown.

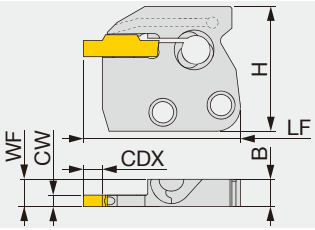
Designation	CW	Seat size	CDX	H	B	LF	WF (1)
CAER/L-2T16-MD	2	2	16	33	7.2	41.5	7.3
CAER/L-3T16-MD	3	3	16	33	7.2	41.5	7.4
CAER/L-4T16-MD	4	4	16	33	7.2	41.5	7.7
CAER/L-5T20-MD	5	5	20	33	7.2	46.3	7.8
CAER/L-6T20-MD	6	6	20	33	7.2	46.3	7.8
CAER/L-8T25-MD	8	8	25	33	7.2	51.1	8.3

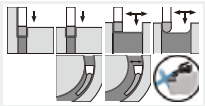
(1) WF is calculated with the groove width (CW) in the above table.

CAEFR/L-CHP

Face and external grooving adapter, with high pressure coolant capability







Right hand (R) shown.

Designation	CW	Seat size	CDX	H	B	LF	WF (1)
CAEFR/L-4T04-CHP	4	2,3,4	4.8	33	7.2	41.5	7.7
CAEFR/L-6T04-CHP	6	5,6	4.8	33	7.2	46.3	7.8

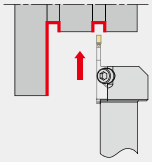
Use the right-hand insert for the right-hand holder with DTF insert.
(1) "WF" value is calculated with groove width "CW" shown in the table.

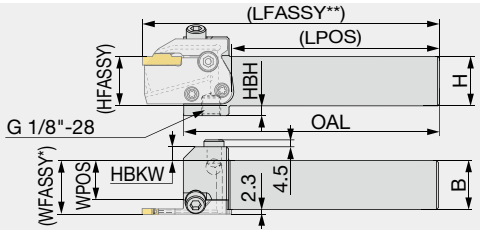
Reference pages: Inserts → F028 - F042, Shanks and toolholders → F022 - F024
Standard cutting conditions → F043, Technical Reference → L053

CHSR/L-CHP

Tube connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

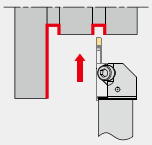
Designation	H	B	OAL	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP	20	20	130	105.5	15.1	12	20	10	CAE*R/L**-CHP, -MD	6.5
CHSR/L2525-CHP	25	25	130	105.5	20.1	7	25	5	CAE*R/L**-CHP, -MD	6.5

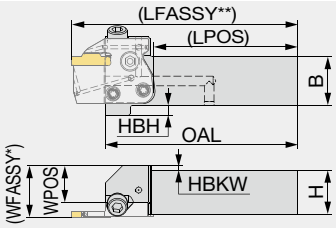
WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

CHSR/L-CHP-MC

Direct connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

Designation	H	B	OAL	LPOS	WPOS	HBKW	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP-MC	20	20	98	73.5	14	6	10	CAE*R/L**-CHP, -MD	6.5
CHSR/L2525-CHP-MC	25	25	98	73.5	19	-	5	CAE*R/L**-CHP, -MD	6.5

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHSR/L**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179
CHSR/L**-CHP-MC	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	-

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

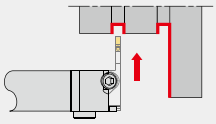
Shank	External grooving adapter		Face grooving adapter		External and face grooving adapter	
	CAER**-CHP, -MD	CAEL**-CHP, -MD	CAFR**-CHP	CAFL**-CHP	CAEFR**-CHP	CAEFL**-CHP
CHSR**-CHP (-MC)	●			●	●	
CHSL**-CHP (-MC)		●	●			●

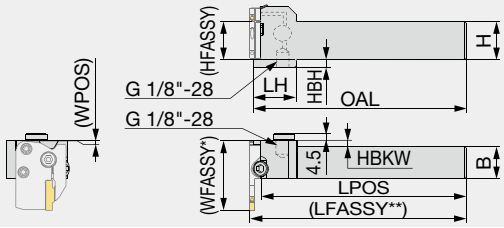
● : Corresponding

Reference pages: Inserts → F028 - F042, Adapters → F021, Standard cutting conditions → F043
Parts for coolant hose → F266, Technical Reference → L053

CHFVR/L-CHP

Shank for perpendicularly-mounted adapter, with high pressure coolant capability





Right hand (R)
with left-hand adapter shown.

Designation	H	B	OAL	LH	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHFVR/L2020-CHP	20	20	140	28	135.1	0.5	5	20	10	CAE*L/R**-CHP, -MD	6.5
CHFVR/L2525-CHP	25	25	140	28	135.1	0.5	0	25	5	CAE*L/R**-CHP, -MD	6.5

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHFVR/L...	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

Shank	External grooving adapter		Face grooving adapter		External and face grooving adapter	
	CAER**-CHP, -MD	CAEL**-CHP, -MD	CAFR**-CHP	CAFL**-CHP	CAEFR**-CHP	CAEFL**-CHP
CHFVR**-CHP		●	●			●
CHFVL**-CHP	●			●	●	

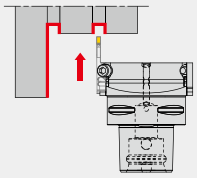
● : Corresponding

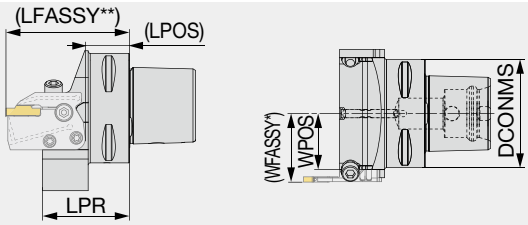
Reference pages: Inserts → F028 - F042, Adapters → F021, Standard cutting conditions → F043
Parts for coolant hose → F266, Technical Reference → L053

C*CHSN-CHP

Direct connection

Toolholder with TungCap connection, for adapter, with high pressure coolant capability





Right-hand (R) adapter shown.

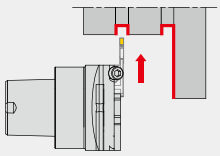
Designation	DCONMS	LPR	LPOS	WPOS	Adapter (Option)	Torque*
C3CHSN19045-CHP	32	45	17.5	18.5	CAE*R/L**-CHP, -MD	6.5
C4CHSN21047-CHP	40	46.5	21.5	21	CAE*R/L**-CHP, -MD	6.5
C5CHSN26047-CHP	50	47	22.5	26	CAE*R/L**-CHP, -MD	6.5
C6CHSN33050-CHP	63	50	24.5	32.5	CAE*R/L**-CHP, -MD	6.5

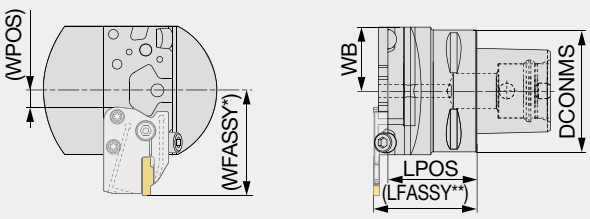
WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

C*CHFVN-CHP

Direct connection

Toolholder with TungCap connection, for perpendicularly-mounted adapter, with high pressure coolant capability





Left-hand (L) adapter shown.

Designation	DCONMS	LPOS	WB	WPOS	Adapter (Option)	Torque*
C3CHFVN26040-CHP	32	40	26	1.5	CAE*R/L**-CHP, -MD	6.5
C4CHFVN26046-CHP	40	46	26	1.5	CAE*R/L**-CHP, -MD	6.5
C5CHFVN26046-CHP	50	46	26	1.5	CAE*R/L**-CHP, -MD	6.5
C6CHFVN33046-CHP	63	46	33	8.5	CAE*R/L**-CHP, -MD	6.5

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring
C*CH**N**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N

Recommended clamping torque (N·m)

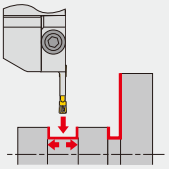
Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

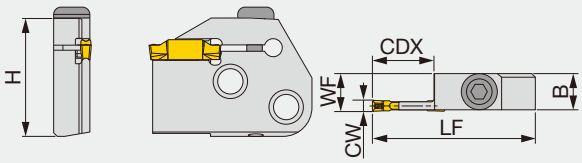
External
Internal
Face
Parting
Others

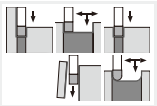
Reference pages: Inserts → F028 - F042, Adapters → F021, Standard cutting conditions → F043
Technical Reference → L053

CAER/L

External grooving, parting and turning adapter







Right hand (R) shown.

Designation	CW	Seat size	CDX	H	B	LF	WF	Torque*
CAER/L-3T16	3	3	16	32.7	10	45	10.4	5
CAER/L-4T16	4	4	16	32.7	10	45	10.5	5
CAER/L-5T20	5	5	20	32.7	10	49	10.5	5
CAER/L-6T20	6	6	20	32.7	10	49	10.5	5

Torque*: Recommended clamping torque (N·m)
Not compatible with TungModularSystem
When groove depth is larger than insert length - 1.5 mm, please use 1-cornered insert.

SPARE PARTS



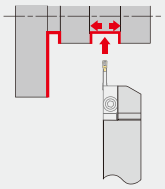


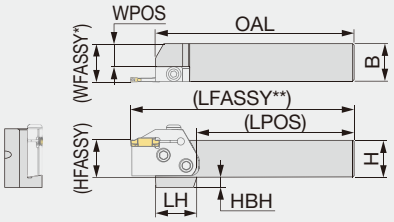
Designation	Clamping screw	Wrench
CAER/L...	BHM6-20-A	P-4

Reference pages: Inserts → F028 - F042, Shanks and toolholders → F026, F027
Standard cutting conditions → F043

CHSR/L

Shank for adapter





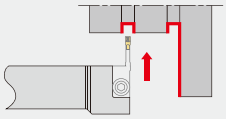
Right hand (R)
with right-hand adapter shown.

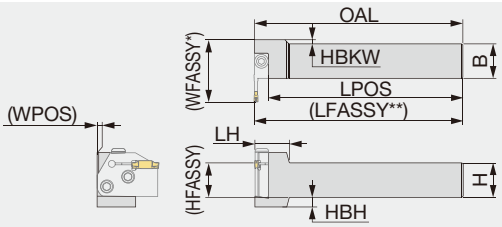
Designation	H	B	OAL	LPOS	LH	WPOS	HFASSY	HBH	Adapter (Option)
CHSR/L2020	20	20	133	105	35	10	20	12	CAER/L...
CHSR/L2525	25	25	133	105	28	15	25	7	CAER/L...
CHSR/L3232	32	32	153	125	-	22	32	-	CAER/L...

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Not compatible with TungModularSystem

CHFVR/L

Shank for adapter, perpendicularly mounted





Right hand (R)
with left-hand adapter shown.

Designation	H	B	OAL	LPOS	LH	WPOS	HBKW	HFASSY	HBH	Adapter (Option)
CHFVR/L2020	20	20	150	140	25	0	8	20	12	CAEL/R...
CHFVR/L2525	25	25	150	140	25	0	3	25	7	CAEL/R...
CHFVR/L3232	32	32	170	160	25	4	-	32	-	CAEL/R...

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Not compatible with TungModularSystem

SPARE PARTS





Designation	Clamping screw	Wrench
CH**R/L...	CSHB-6-A	P-4

Combination of adapter and shank

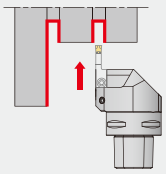
Shank	External grooving adapter		Face grooving adapter	
	CAER...	CAEL...	CAFR...	CAFL...
CHSR...	●			●
CHSL...		●	●	
CHFVR...		●	●	
CHFVL...	●			●

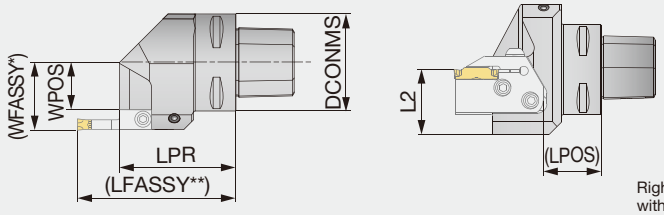
● : Corresponding

Reference pages: Inserts → F028 - F042, Adapters → F025, Standard cutting conditions → F043

C-CHSR/L

Toolholder with TungCap connection for adapter





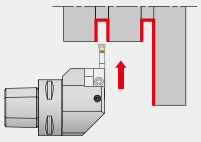
Right hand (R)
with right-hand adapter shown.

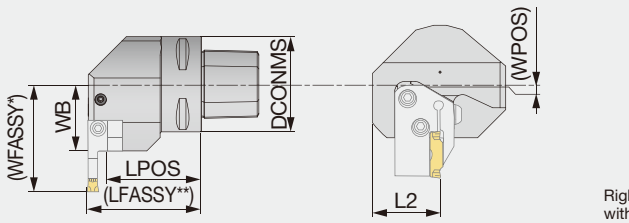
Designation	DCONMS	LPR	LPOS	L2	WPOS	Adapter (Option)
C3CHSR/L22050N	32	50	22.1	35	11.5	CAER/L...
C4CHSR/L27050N	40	50	22.1	36	16.5	CAER/L...
C5CHSR/L35060N	50	60	32.1	36	24.5	CAER/L...
C6CHSR/L45065N	63	65	32.1	41	34.5	CAER/L...

WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change. If needed, the coolant direction can be adjusted by the nozzle.
Applicable for 7 MPa coolant. Not compatible with TungModularSystem.

C-CHFVR/L

Toolholder with TungCap connection for adapter, perpendicularly mounted





Right hand (R)
with left-hand adapter shown.

Designation	DCONMS	LPOS	L2	WB	WPOS	Adapter (Option)
C3CHFVR/L22040N	32	32.5	35	22	-5.9	CAEL/R...
C4CHFVR/L27050N	40	42.5	36	27	-0.9	CAEL/R...
C5CHFVR/L35060N	50	49.5	36	35	7.1	CAEL/R...
C6CHFVR/L45065N	63	54.5	41	45	17.1	CAEL/R...

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change. If needed, the coolant direction can be adjusted by the nozzle.
Applicable for 7 MPa coolant. Not compatible with TungModularSystem.

SPARE PARTS

Designation	Coolant parts	Clamping screw	Wrench
C3CH**R/L...	SATZ-M8X1-M3	CSHB-6-A	P-4
C4CH**R/L...	SATZ-M8X1-M3	CSHB-6-A	P-4
C5CH**R/L...	SATZ-M10X1-M5	CSHB-6-A	P-4
C6CH**R/L...	SATZ-M10X1-M5	CSHB-6-A	P-4

Combination of adapter and toolholder

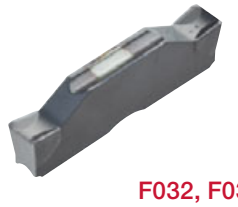
Toolholder	External grooving adapter		Face grooving adapter	
	CAER...	CAEL...	CAFR...	CAFL...
C*CHSR...	●			●
C*CHSL...		●	●	
C*CHFVR...		●	●	
C*CHFVL...	●			●

● : Corresponding

Reference pages: Inserts → F028 - F042, Adapters → F025, Standard cutting conditions → F043

External grooving and parting

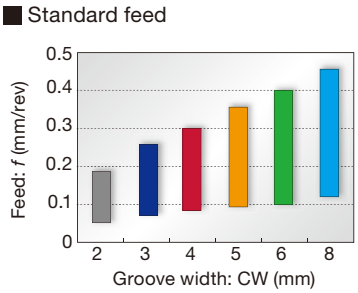
DGM type (2 corners) SGM type (1 corner)

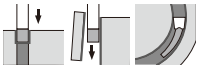


F032, F033

1st choice for grooving and parting

Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 2 - 8 mm





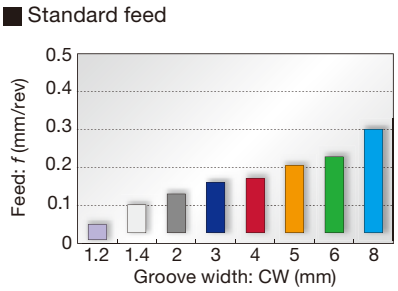
DGS type (2 corners) SGS type (1 corner)

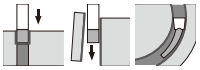


F034, F035

Lower cutting force and superior sharpness

Unique-designed edge and chipbreaker
Handed insert available
CW = 1.2 - 8 mm





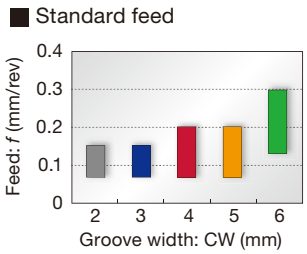
DGL type (2 corners)

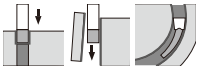


F035

1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often gives difficulties in chip control
CW = 2 - 6 mm





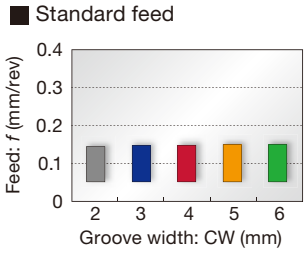
DGG type (2 corners)

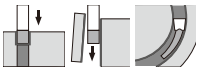


F036

For non-ferrous materials and titanium

Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 2 - 6 mm





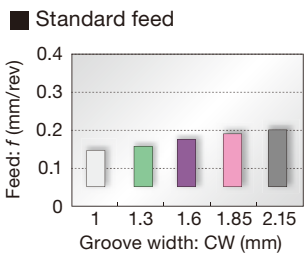
DGE type (2 corners)



F036

For high accurate and shallow groove

Excellent chip control
CW = 1 - 2.15 mm





External
Internal
Face
Parting
Others

Please see page F*** for the product details.

External and face grooving, and turning

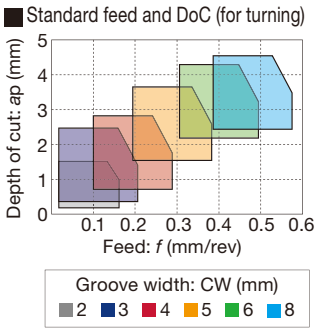
DTM type (2 corners)

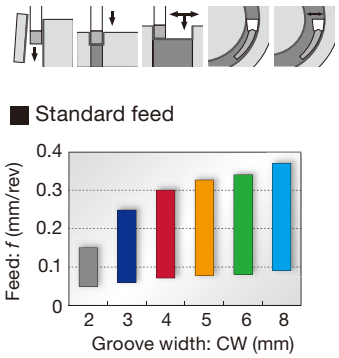


F037

General purpose

1st choice for grooving and turning
Suitable for light to medium cutting
Excellent chip control in machining steel, alloy steel, stainless steel, and heat-resistant alloy
CW = 2 - 8 mm





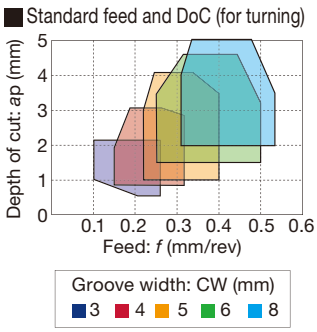
DTE type (2 corners)

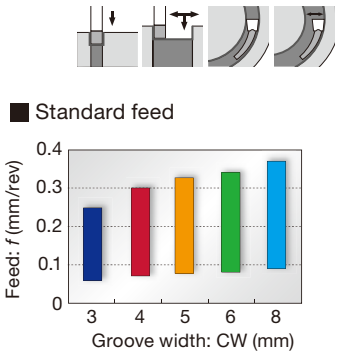


F037, F038

General purpose

Unique chipbreaker makes chips shorter
Molded and ground insert available
CW = 2.65 - 8 mm





External, internal and face grooving, and turning

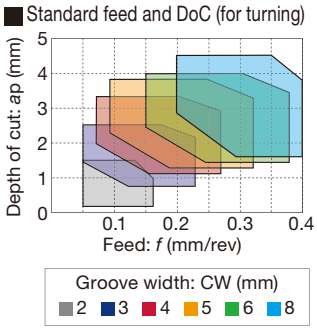
DTX type (2 corners)

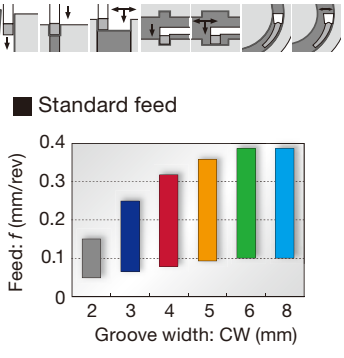


F038

Multi-functional type

Well balanced sharpness and strength
Multi-functional insert
CW = 2 - 8 mm





Please see page F*** for the product details.

Profiling and undercutting

DTR type (2 corners)
STR type (1 corner)

Molded
DTR, STR



Ground
DTR

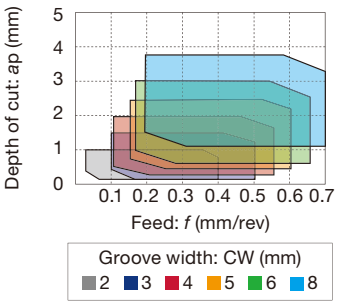


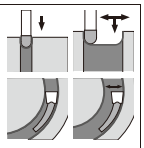
F039, F040

Full radius type

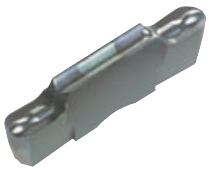
Excellent chip control
Molded and ground inserts available
CW = 2 - 8 mm

■Standard feed and DoC (for turning)





DTIU type
(2 corners)

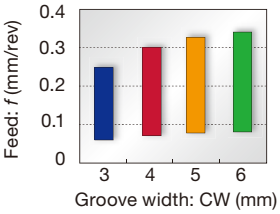


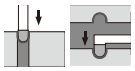
F040

Full radius type

Excellent chip control for undercutting
CW = 3 - 6 mm

■Standard feed and DoC





Aluminium wheel machining

DTA type
(2 corners)

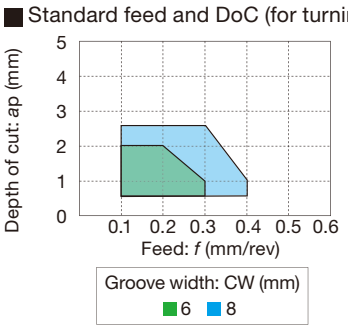


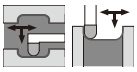
F041

Full radius type

Excellent chip control
For aluminium wheel profiling
Ground insert
CW = 6 - 8 mm

■Standard feed and DoC (for turning)





For high feed external and face turning of hardened steel parts

STH type
(1 corner)

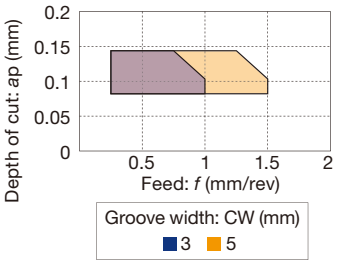


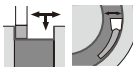
F041

External and face turning of hardened steel parts

High efficiency machining using light D.O.C. and increased feeds
CW = 3, 5 mm

■Standard feed and DoC (for turning)





External grooving of hardened steel

SGN-CBN type
(1 corner)

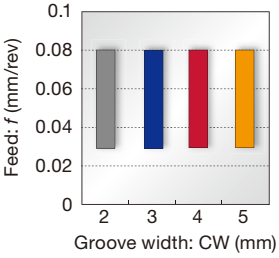


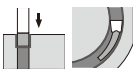
F042

For hardened steel cutting

Optimum cutting edge shape for grooving of hardened steels
High tolerance width for finishing
CW = 2 - 5 mm
(CW = ±0.025 mm)

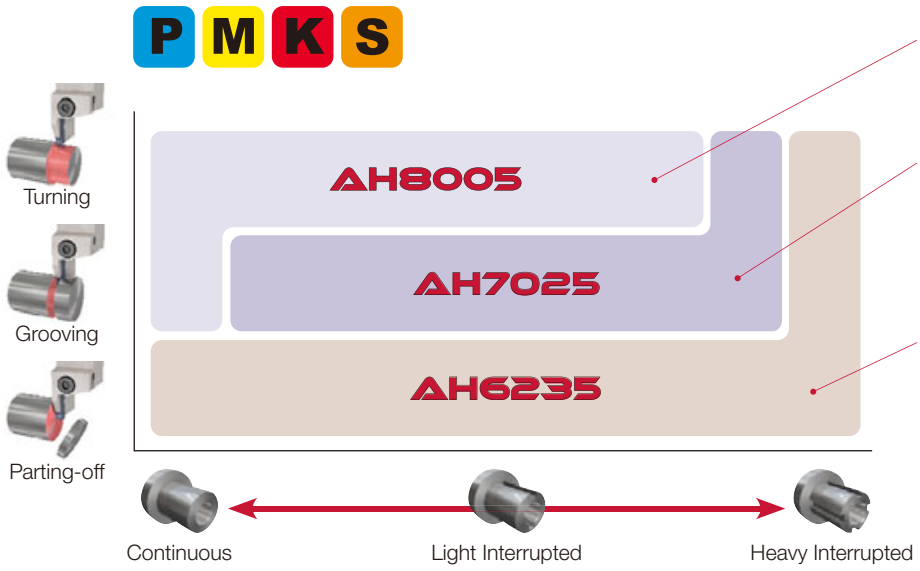
■Standard feed





Please see page F*** for the product details.

GRADE SELECTION



AH8005
- Continuous cutting, First choice
- External and Internal, Turning

AH7025
- Light interrupted cutting, First choice
- A mix of continuous and interrupted cuts

AH6235
- Heavy interrupted cutting, First choice
- Facing, Parting

GRADES

AH8005 P M K S
- First choice for external, internal, and side-turning, continuous cuts

AH7025 P M K S
- First choice for light interrupted cuts or a mix of continuous and interrupted cuts
- New PVD coating with high Al content provides excellent adhesion strength
- Improved wear and chipping resistance

AH6235 P M K
- First choice for heavy interrupted cuts, as well as parting and facing applications

AH725 P M S
- General purpose PVD grade for high fracture resistance

T515 K
- First recommended grade for cast iron
- Exellent wear resistance in high speed machining

T9225 P
- Suitable for steel machining at high speeds
- New CVD coating and substrate deliver an outstanding balance of wear and chipping resistance

NS9530 P
- Advanced cermet for finish cutting of steel
- Innovative grade with incredible fracture and high wear resistance

GH130 P M K
- Recommended for interrupted machining
- TiCNO PVD coating layer with high wear resistance
- High hardness wear resistance

AH905 S
- Remarkable for machining of heat resistant alloys
- Exclusive coating layer improves adhesion strength and wear resistance

KS05F N S
- Recommended for non-ferrous materials and titanium

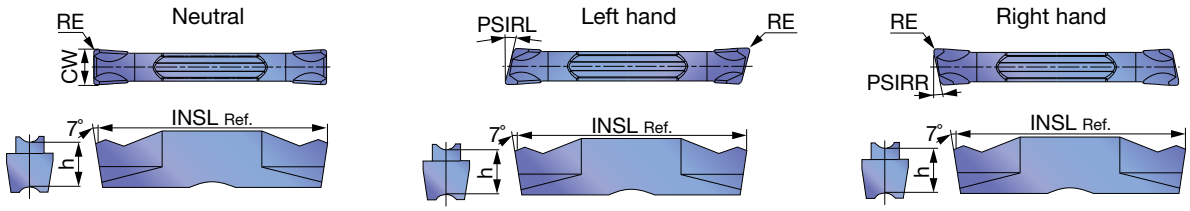
TH10 N
- Recommended for non-ferrous materials

BXA10 H
- Coated CBN grade designed for turning hardened steel parts

BX360 H
- Developed for grooving applications of hardened steel parts

DGM

External grooving and parting



P	Steel	★	★	☆	★		☆	★		★					
M	Stainless		★	☆	★		★	★							
K	Cast iron		★		★	☆	☆	★		☆			☆		
N	Non-ferrous												☆		
S	Superalloys		★	☆	★	★							★		
H	Hard materials														

★ : First choice
☆ : Second choice

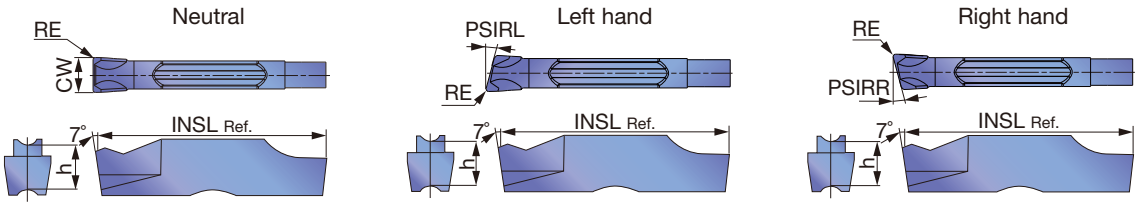
Designation	Seat size	HAND	CW±0.05	RE	Coated							Cermet		Uncoated					
					T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F			INSL	h	PSIRL	PSIRR
DGM2-020	2	N	2	0.2	●	●	●	●		●	●	●		●			20	5	0°	0°
DGM2-020-6R	2	R	2	0.2		●	●			●							20	5	0°	6°
DGM2-020-6L	2	L	2	0.2		●	●			●							20	5	6°	0°
DGM2-020-8R	2	R	2	0.2		●	●			●							20	5	0°	8°
DGM2-020-8L	2	L	2	0.2		●	●			●							20	5	8°	0°
DGM2-020-15R	2	R	2	0.2		●	●			●							20	5	0°	15°
DGM2-020-15L	2	L	2	0.2		●	●			●							20	5	15°	0°
DGM2-002-15R	2	R	2	0.02			●			●							19.35	5	0°	15°
DGM2-002-15L	2	L	2	0.02			●			●							19.35	5	15°	0°
DGM2.39-020	2	N	2.39	0.2		●		●			●						20	5	0°	0°
DGM3-020	3	N	3	0.2	●	●	●	●	●	●	●	●		●			20	5	0°	0°
DGM3-020-6R	3	R	3	0.2		●	●			●							20	5	0°	6°
DGM3-020-6L	3	L	3	0.2		●	●			●							20	5	6°	0°
DGM3-002-6R	3	R	3	0.02			●			●							19.45	5	0°	6°
DGM3-002-6L	3	L	3	0.02			●			●							19.45	5	6°	0°
DGM3-020-15R	3	R	3	0.2		●	●			●							20	5	0°	15°
DGM3-020-15L	3	L	3	0.2		●	●			●							20	5	15°	0°
DGM3.18-020	3	N	3.18	0.2		●		●			●						20	5	0°	0°
DGM4-030	4	N	4	0.3	●	●	●	●	●	●	●	●		●			20	5	0°	0°
DGM4-030-4R	4	R	4	0.3		●	●			●							20	5	0°	4°
DGM4-030-4L	4	L	4	0.3		●	●			●							20	5	4°	0°
DGM4-030-15R	4	R	4	0.3		●	●			●							20	5	0°	15°
DGM4-030-15L	4	L	4	0.3		●	●			●							20	5	15°	0°
DGM4.76-040	5	N	4.76	0.4		●		●			●						25	5.5	0°	0°
DGM5-030	5	N	5	0.3	●	●	●	●	●	●	●	●		●			25	5.5	0°	0°
DGM5-030-4R	5	R	5	0.3		●	●			●							25	5.5	0°	4°
DGM6-030	6	N	6	0.3	●	●	●	●	●	●	●			●			25	5.5	0°	0°
DGM6.35-040	6	N	6.35	0.4		●		●			●						25	5.5	0°	0°
DGM8-040	8	N	8	0.4	●	●	●	●		●	●			●			30	6.7	0°	0°

● : Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

SGM

External deep grooving and parting



P	Steel	★	☆	★	☆	★							
M	Stainless	★	☆	★	★	★							
K	Cast iron	★		★	☆	★		☆					
N	Non-ferrous							☆					
S	Superalloys	★	☆	★				★					
H	Hard materials												

★ : First choice
☆ : Second choice

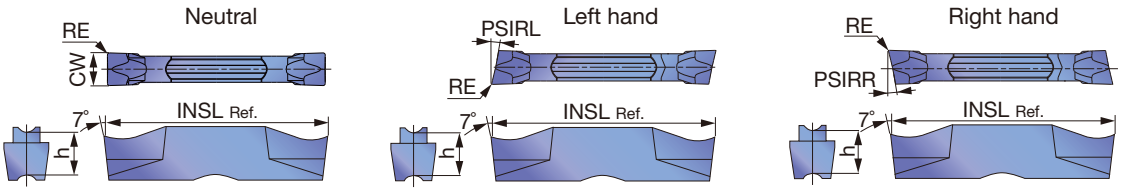
Designation	Seat size	HAND	CW±0.05	RE	Coated					Uncoated					INSL	h	PSIRL	PSIRR
					AH7025	AH725	AH8005	GH130	AH6235	KS05F								
SGM2-020	2	N	2	0.2	●	●	●	●	●	●					20	5	0°	0°
SGM2-020-6R	2	R	2	0.2	●	●		●							20	5	0°	6°
SGM2-020-6L	2	L	2	0.2	●	●		●							20	5	6°	0°
SGM3-020	3	N	3	0.2	●	●	●	●	●	●					20	5	0°	0°
SGM3-020-6R	3	R	3	0.2	●	●		●							20	5	0°	6°
SGM3-020-6L	3	L	3	0.2	●	●		●							20	5	6°	0°
SGM3-020-15R	3	R	3	0.2	●	●		●							20	5	0°	15°
SGM3-020-15L	3	L	3	0.2	●	●		●							20	5	15°	0°
SGM4-030	4	N	4	0.3	●	●	●	●	●	●					20	5	0°	0°
SGM4-030-4R	4	R	4	0.3	●	●		●							20	5	0°	4°
SGM4-030-4L	4	L	4	0.3	●	●		●							20	5	4°	0°
SGM5-030	5	N	5	0.3	●	●	●	●	●	●					25	5.5	0°	0°
SGM6-030	6	N	6	0.3	●	●	●	●	●	●					25	5.5	0°	0°
SGM8-040	8	N	8	0.4	●		●		●	●					30	6.7	0°	0°

● : Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

DGS

External grooving and parting



		T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530	KS05F
P	Steel	★	★	☆	★	☆	★	★	
M	Stainless		★	☆	★	★	★		
K	Cast iron		★		★	☆	★	☆	☆
N	Non-ferrous								☆
S	Superalloys		★	☆	★				★
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated						Cermet		Uncoated				INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530		KS05F							
DGS1.2-003	0.9	N	1.2	0.03			●										16	4.7	0°	0°
DGS1.4-005	1	N	1.4	0.05			●										16	4.3	0°	0°
DGS1.4-010	1	N	1.4	0.1			●										16	4.3	0°	0°
DGS1.4-016	1	N	1.4	0.16		●	●		●								16	4.3	0°	0°
DGS2-005	2	N	2	0.05			●										20	5	0°	0°
DGS2-010	2	N	2	0.1			●										20	5	0°	0°
DGS2-020	2	N	2	0.2	●	●	●	●	●	●	●		●				20	5	0°	0°
DGS2-020-6R	2	R	2	0.2		●	●		●								20	5	0°	6°
DGS2-020-6L	2	L	2	0.2		●	●		●								20	5	6°	0°
DGS2-002-6R	2	R	2	0.02			●		●								19.5	5	0°	6°
DGS2-002-6L	2	L	2	0.02			●		●								19.5	5	6°	0°
DGS2-020-15R	2	R	2	0.2		●	●		●								20	5	0°	15°
DGS2-020-15L	2	L	2	0.2		●	●		●								20	5	15°	0°
DGS2-002-15R	2	R	2	0.02			●		●								19.5	5	0°	15°
DGS2-002-15L	2	L	2	0.02			●		●								19.5	5	15°	0°
DGS2.39-020	2	N	2.39	0.2		●		●		●							20	5	0°	0°
DGS3-020	3	N	3	0.2	●	●	●	●	●	●	●		●				20	5	0°	0°
DGS3-020-6R	3	R	3	0.2		●	●		●								20	5	0°	6°
DGS3-020-6L	3	L	3	0.2		●	●		●								20	5	6°	0°
DGS3-002-6R	3	R	3	0.02			●		●								19.45	5	0°	6°
DGS3-002-6L	3	L	3	0.02			●		●								19.45	5	6°	0°
DGS3-020-15R	3	R	3	0.2		●	●		●								20	5	0°	15°
DGS3-020-15L	3	L	3	0.2		●	●		●								20	5	15°	0°
DGS3-002-15R	3	R	3	0.02			●		●								19.45	5	0°	15°
DGS3-002-15L	3	L	3	0.02			●		●								19.45	5	15°	0°
DGS3.18-020	3	N	3.18	0.2		●		●		●							20	5	0°	0°
DGS4-030	4	N	4	0.3	●	●	●	●	●	●	●		●				20	5	0°	0°
DGS4-030-4R	4	R	4	0.3		●	●		●								20	5	0°	4°
DGS4-030-4L	4	L	4	0.3		●	●		●								20	5	4°	0°
DGS4.76-040	5	N	4.76	0.4		●		●		●							25	5.5	0°	0°
DGS5-030	5	N	5	0.3	●	●	●	●	●	●	●		●				25	5.5	0°	0°
DGS6-030	6	N	6	0.3	●	●	●	●	●	●			●				25	5.5	0°	0°
DGS6.35-040	6	N	6.35	0.4		●		●		●							25	5.5	0°	0°
DGS8-040	8	N	8	0.4		●		●		●			●				30	6.7	0°	0°

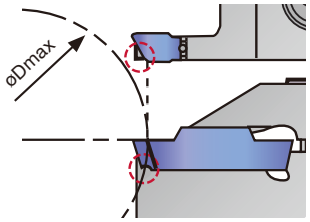
● : Line up

Caution

The tool will interfere with the workpiece when grooving larger diameters than øDmax.

Designation	øDmax (mm)
DGM2-002-15R/L	28
DGM3-002-15R/L	29
DGM4-030-15R/L	30
SGM3-020-15R/L	103

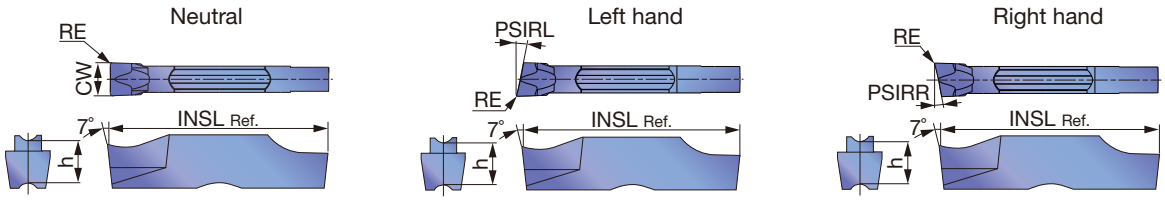
Designation	øDmax (mm)
DGS2-002-15R/L	28
DGS3-002-15R/L	29
SGS3-020-15R/L	103
SGS3-002-15R/L	34



Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

SGS

External deep grooving and parting



P	Steel	★	☆	★	☆	★						
M	Stainless	★	☆	★	★	★						
K	Cast iron	★		★	☆	★		☆				
N	Non-ferrous							☆				
S	Superalloys	★	☆	★				★				
H	Hard materials											

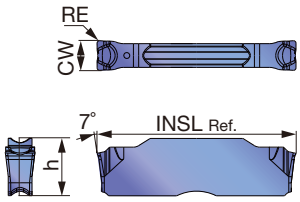
★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated					Uncoated							INSL	h	PSIRL	PSIRR
					AH7025	AH725	AH8005	GH130	AH6235	KS05F										
SGS2-020	2	N	2	0.2	●	●	●	●	●	●							20	5	0°	0°
SGS2-020-6R	2	R	2	0.2	●	●		●									20	5	0°	6°
SGS2-020-6L	2	L	2	0.2	●	●		●									20	5	6°	0°
SGS2-020-15R	2	R	2	0.2	●	●		●									20	5	0°	15°
SGS2-020-15L	2	L	2	0.2	●	●		●									20	5	15°	0°
SGS3-020	3	N	3	0.2	●	●	●	●	●	●							20	5	0°	0°
SGS3-020-6R	3	R	3	0.2	●	●		●									20	5	0°	6°
SGS3-020-6L	3	L	3	0.2	●	●		●									20	5	6°	0°
SGS3-002-6R	3	R	3	0.02		●		●									19.8	5	0°	6°
SGS3-002-6L	3	L	3	0.02		●		●									19.8	5	6°	0°
SGS3-020-15R	3	R	3	0.2	●	●		●									20	5	0°	15°
SGS3-020-15L	3	L	3	0.2	●	●		●									20	5	15°	0°
SGS3-002-15R	3	R	3	0.02		●		●									19.8	5	0°	15°
SGS3-002-15L	3	L	3	0.02		●		●									19.8	5	15°	0°
SGS4-030	4	N	4	0.3	●	●	●	●	●	●							20	5	0°	0°
SGS5-030	5	N	5	0.3	●	●	●	●	●	●							25	5.5	0°	0°
SGS6-030	6	N	6	0.3	●	●	●	●	●	●							25	5.5	0°	0°
SGS8-040	8	N	8	0.4	●		●		●								30	6.7	0°	0°

● : Line up

DGL

External grooving and parting



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

★ : First choice
☆ : Second choice

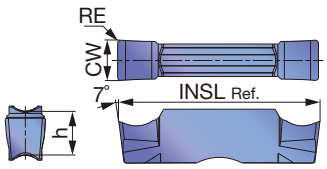
Designation	Seat size	CW±0.05	RE	Coated			INSL	h
				AH7025	AH8005	AH6235		
DGL2-020	2	2	0.2	●	●	●	20	5
DGL3-025	3	3	0.25	●	●	●	20	5
DGL4-030	4	4	0.3	●	●	●	20	5
DGL5-030	5	5	0.3	●	●	●	25	5.5
DGL6-080	6	6	0.8	●	●	●	25	5.5

● : Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

DGG

External grooving (for high precision)



P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	☆
N	Non-ferrous			★
S	Superalloys	★		☆
H	Hard materials			

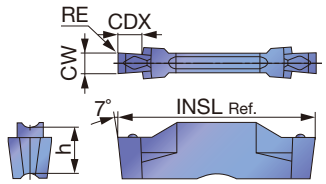
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated	Cermet	Uncoated	INSL	h
				AH7025	NS9530	KS05F		
DGG200-020	2	2	0.2	●	●	●	20	5
DGG300-020	3	3	0.2	●	●	●	20	5
DGG400-040	4	4	0.4	●	●	●	20	5
DGG500-040	5	5	0.4	●	●	●	25	5.5
DGG600-040	6	6	0.4	●	●	●	25	5.5

●: Line up

DGE

External grooving (for high precision)



P	Steel	★	☆	☆
M	Stainless	★	☆	★
K	Cast iron	★		☆
N	Non-ferrous			
S	Superalloys	★	☆	
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated			Cermet	CDX	INSL	h
				AH7025	AH725	GH130	NS9530			
DGE100-000	2	1	0		●	●	●	2.5	20	5
DGE130-000	2	1.3	0		●	●	●	2.5	20	5
DGE160-010	2	1.6	0.1	●	●	●	●	2.5	20	5
DGE185-010	2	1.85	0.1	●	●	●	●	3.5	20	5
DGE215-015	2	2.15	0.15	●	●	●	●	3.5	20	5

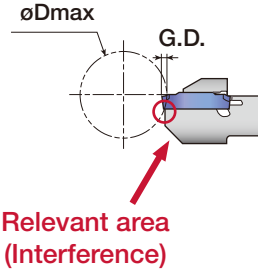
●: Line up

Caution

øDmax is limited as shown in the picture to the right according to the groove depth, G.D. Please refer to the following table.

G.D = Groove depth

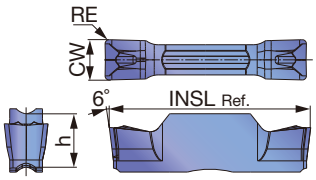
Designation	Max. groove depth (mm)	øDmax (mm)				
		G.D. = 1	G.D. = 1.5	G.D. = 2	G.D. = 2.5	G.D. = 3
DGE100-000	2	∞	18.6	11.5	-	-
DGE130-000						
DGE160-010						
DGE185-010	3				8.8	7
DGE215-015						



Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

DTM

External face grooving and turning



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

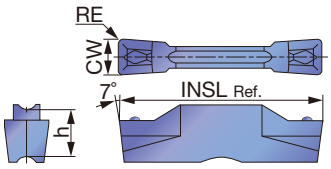
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	Coated AH8005	Coated AH6235	INSL	h
DTM2-020	2	2	0.2	●	●	●	20	5
DTM3-030	3	3	0.3	●	●	●	20	5
DTM4-040	4	4	0.4	●	●	●	20	5
DTM4-080	4	4	0.8	●	●	●	20	5
DTM5-080	5	5	0.8	●	●	●	25	5.5
DTM6-080	6	6	0.8	●	●	●	25	5.5
DTM8-080	8	8	0.8	●	●	●	30	6.7

● : Line up

DTE

External face grooving and turning (for high precision)



P	Steel	★	★	☆	☆		★
M	Stainless		★	☆	★		
K	Cast iron		★		☆		
N	Non-ferrous						
S	Superalloys		★	☆			
H	Hard materials						

★ : First choice
☆ : Second choice

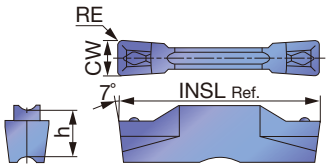
Designation	Seat size	CW±0.02	RE	Coated T9225	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	INSL	h
DTE265-015	3	2.65	0.15	●	●	●	●	●	20	5
DTE300-020	3	3	0.2	●	●	●	●	●	20	5
DTE300-040	3	3	0.4	●	●	●	●	●	20	5
DTE315-015	3	3.15	0.15	●	●	●	●	●	20	5
DTE400-040	4	4	0.4	●	●	●	●	●	20	5
DTE400-080	4	4	0.8	●	●	●	●	●	20	5
DTE415-015	4	4.15	0.15	●	●	●	●	●	20	5
DTE478-055	5	4.78	0.55	●	●	●	●	●	25	5.5
DTE500-040	5	5	0.4	●	●	●	●	●	25	5.5
DTE500-080	5	5	0.8	●	●	●	●	●	25	5.5
DTE515-015	5	5.15	0.15	●	●	●	●		25	5.5
DTE600-080	6	6	0.8	●	●	●	●		25	5.5
DTE600-120	6	6	1.2	●	●	●	●		25	5.5
DTE800-080	8	8	0.8	●	●	●	●		30	6.7
DTE800-120	8	8	1.2	●	●	●	●		30	6.7

●: Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

DTE

External face grooving and turning



P	Steel	★		★	☆	★	☆	★		★			
M	Stainless			★	☆	★	★	★					
K	Cast iron		★	★		★	☆	★					
N	Non-ferrous												
S	Superalloys			★	☆	★							
H	Hard materials												

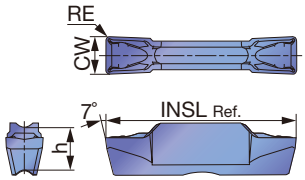
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated							Cermet						INSL	h
				T9225	T515	AH7025	AH725	AH8005	GH130	AH6235	NS9530							
DTE3-020	3	3	0.2			●		●		●							20	5
DTE3-040	3	3	0.4	●	●	●	●	●	●	●	●						20	5
DTE4-040	4	4	0.4	●	●	●	●	●	●	●	●						20	5
DTE4-080	4	4	0.8			●		●		●							20	5
DTE5-040	5	5	0.4		●	●		●		●							25	5.5
DTE5-080	5	5	0.8			●		●		●							25	5.5
DTE6-080	6	6	0.8		●	●		●		●							25	5.5

● : Line up

DTX

External, internal and face grooving, and turning



P	Steel	★	★	☆	★	☆	★		★				
M	Stainless		★	☆	★	★	★						
K	Cast iron		★		★	☆	★		☆			☆	
N	Non-ferrous											☆	
S	Superalloys		★	☆	★							★	
H	Hard materials												

★ : First choice
☆ : Second choice

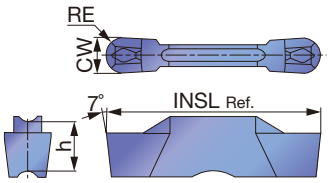
Designation	Seat size	CW±0.05	RE	Coated						Cermet				Uncoated				INSL	h
				T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530				KS05F					
DTX2-020	2	2	0.2		●		●		●					●				20	5
DTX3-030	3	3	0.3	●	●	●	●	●	●	●				●				20	5
DTX4-040	4	4	0.4	●	●	●	●	●	●	●				●				20	5
DTX5-040	5	5	0.4	●	●	●	●	●	●	●				●				25	5.5
DTX6-080	6	6	0.8		●	●	●	●	●					●				25	5.5
DTX8-080	8	8	0.8		●		●		●					●				30	6.7

● : Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

DTR

Profiling and undercutting (for high precision)



		T9225	AH7025	AH725	GH130	NS9530
P	Steel	★	★	☆	☆	★
M	Stainless		★	☆	★	
K	Cast iron		★		☆	☆
N	Non-ferrous					
S	Superalloys		★	☆		
H	Hard materials					

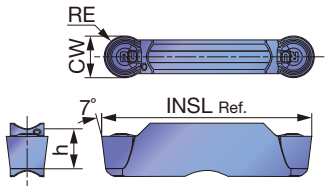
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated							Cermet						INSL	h
				T9225	AH7025	AH725	GH130				NS9530							
DTR300-150	3	3	1.5	●	●	●	●				●						20	5
DTR400-200	4	4	2	●	●	●	●				●						20	5
DTR478-239	5	4.78	2.39	●	●	●	●				●						25	5.5
DTR500-250	5	5	2.5	●	●	●	●				●						25	5.5
DTR600-300	6	6	3	●	●	●	●										25	5.5

●: Line up

DTR

Profiling and undercutting



		T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530	KS05F
P	Steel	★	★	☆	★		☆	★	★	
M	Stainless		★	☆	★		★	★		
K	Cast iron		★		★	☆	☆	★	☆	☆
N	Non-ferrous									☆
S	Superalloys		★	☆	★	★				★
H	Hard materials									

★ : First choice
☆ : Second choice

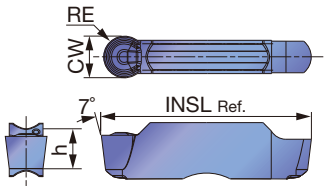
Designation	Seat size	CW±0.05	RE	Coated							Cermet			Uncoated			INSL	h
				T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530			KS05F				
DTR2-100	2	2	1		●		●			●				●			20	5
DTR3-150	3	3	1.5	●	●	●	●	●	●	●	●			●			20	5
DTR4-200	4	4	2	●	●	●	●	●	●	●	●			●			20	5
DTR5-250	5	5	2.5	●	●	●	●	●	●	●	●			●			25	5.5
DTR6-300	6	6	3	●	●	●	●		●	●				●			25	5.5
DTR8-400	8	8	4	●	●	●	●		●	●				●			30	6.7

● : Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

STR

Profiling and undercutting



P	Steel	★	★											
M	Stainless	★	★											
K	Cast iron	★	★							☆				
N	Non-ferrous									☆				
S	Superalloys	★	★							★				
H	Hard materials													

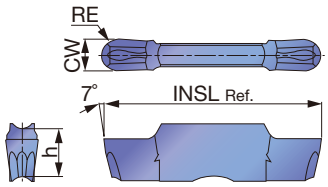
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated						Uncoated						INSL	h
				AH7025	AH8005					KS05F							
STR2-100	2	2	1	●	●					●						20	5
STR3-150	3	3	1.5	●	●					●						20	5
STR4-200	4	4	2	●	●					●						20	5
STR5-250	5	5	2.5	●	●					●						25	5.5
STR6-300	6	6	3	●	●					●						25	5.5
STR8-400	8	8	4	●	●					●						30	6.7

●: Line up

DTIU

Profiling and undercutting (for high precision)



P	Steel	★	☆	☆										
M	Stainless	★	☆	★										
K	Cast iron	★		☆										
N	Non-ferrous													
S	Superalloys	★	☆											
H	Hard materials													

★ : First choice
☆ : Second choice

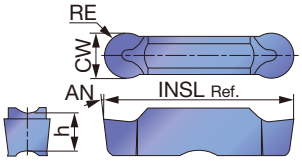
Designation	Seat size	CW±0.02	RE	Coated												INSL	h
				AH7025	AH725	GH130											
DTIU300-150	3	3	1.5	●	●	●										20	5
DTIU400-200	4	4	2	●	●	●										20	5
DTIU500-250	5	5	2.5	●	●	●										25	5.5
DTIU600-300	6	6	3	●	●	●										25	5.5

●: Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

DTA

Aluminium wheel machining (for high precision)



P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous ★
S	Superalloys
H	Hard materials

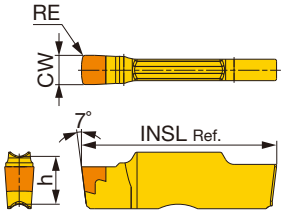
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Uncoated TH10	INSL	h	AN
DTA600-300	6	6	3	●	25	5.5	7°
DTA800-400	8	8	4	●	30	6.7	10°

●: Line up

STH

External and face turning



P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous
S	Superalloys
H	Hard materials ★

★ : First choice

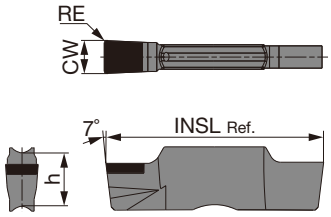
Designation	Seat size	CW±0.025	RE	CBN BXA10	INSL	h
STH300-SR	3	3	0.3	●	20	5
STH500-SR	5	5	0.3	●	25	5.5

●: Line up

Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

SGN

External grooving



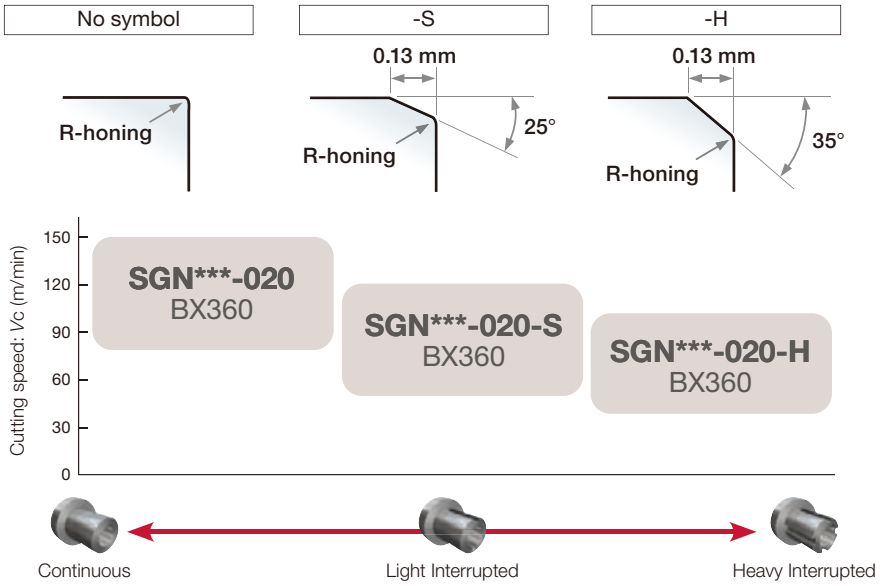
P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous
S	Superalloys
H	Hard materials

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.025	RE	CBN	INSL	h	Condition		
				BX360			Continuous	Light interrupted	Heavy interrupted
SGN200-020	2	2	0.2	●	20	5	○		
SGN200-020-S	2	2	0.2	●	20	5		○	
SGN200-020-H	2	2	0.2	●	20	5			○
SGN300-020	3	3	0.2	●	20	5	○		
SGN300-020-S	3	3	0.2	●	20	5		○	
SGN300-020-H	3	3	0.2	●	20	5			○
SGN400-020	4	4	0.2	●	20	5	○		
SGN400-020-S	4	4	0.2	●	20	5		○	
SGN400-020-H	4	4	0.2	●	20	5			○
SGN500-020-S	5	5	0.2	●	25	5.5		○	
SGN500-020-H	5	5	0.2	●	25	5.5			○

●: Line up

Edge preparations



Reference pages: Toolholders → F014 - F027, Standard cutting conditions → F043

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Wear resistance	T9225, AH8005	80 - 300
		< 300 HB	Impact resistance	AH6235, GH130	50 - 120
		< 300 HB	Surface quality	NS9530	80 - 220
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Wear resistance	AH8005	50 - 120
		< 200 HB	Impact resistance	AH6235, GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	T515	150 - 700
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	T515	150 - 300
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
		-	First choice	KS05F	100 - 600
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	20 - 60
		< HRC 40	Impact resistance	AH7025, AH725, AH6235	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	20 - 100
		< HRC 40	Impact resistance	AH7025, AH725	20 - 80

Please see page F028 - F030 for feed: *f* (mm/rev).

STH

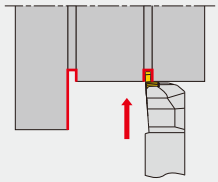
ISO	Grade	CW	Application	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
H	BXA10	3	External turning	100 - 230	0.08 - 0.12	0.4 - 1
			Face turning	100 - 230	0.08 - 0.12	0.4 - 0.8
		5	External turning	100 - 230	0.08 - 0.12	0.5 - 1.5
			Face turning	100 - 230	0.08 - 0.12	0.5 - 0.8

SGN

ISO	Grade	Edge preparation	Workpiece condition	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
H	BX360	No symbol	Continuous	80 - 150	0.03 - 0.08
		-S	Light interrupted	50 - 120	0.03 - 0.08
		-H	Heavy interrupted	40 - 100	0.03 - 0.06

STCR/L-18

Precision grooving tools with uniquely shaped insert for swiss type machine and general lathes



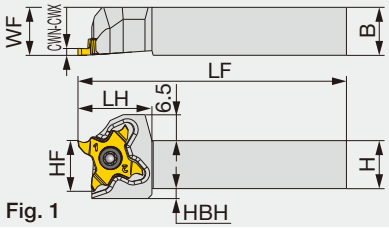


Fig. 1

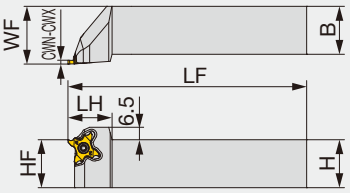
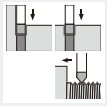


Fig. 2



Right-hand (R) shown.

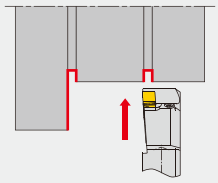
Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2
STCR/L2525Z18	0.33	3.18	25	25	135	23	25	30	-	TC*18...	1.2	2

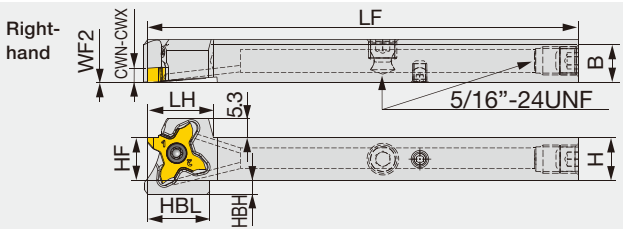
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert is used for the left hand toolholders (STCL...).
*Torque: Recommended clamping torque: N·m

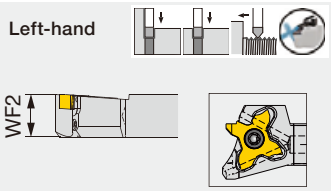
STCR/L-18-CHP

Direct connection

External grooving and threading toolholder, high pressure coolant compatible







STCR/L1012H18-CHP
STCR/L1212*18**B**-CHP

Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.33	3.18	10	12	100	17.1	17.1	10	0/12	4	TC*18...	1.2
STCR/L1212X18B-CHP	0.33	3.18	12	12	120	18.5	17.5	12	0/12	4	TC*18...	1.2
STCR/L1616X18-CHP	0.33	3.18	16	16	120	18.5	-	16	0/16	0	TC*18...	1.2

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).
*Torque: Recommended torque (N·m) for clamping

SPARE PARTS

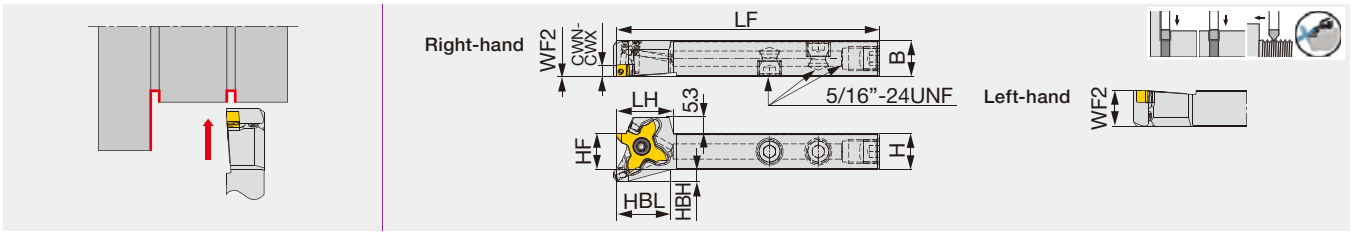
Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCR**18	CSTC-4L100DL	T-1008/5	-	-	-	-
STCL**18	CSTC-4L100DR	T-1008/5	-	-	-	-
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: Inserts → F051 - F057, Standard cutting conditions → F058
Parts for coolant hose → F266

STCR/L-18-CHP

Tube connection

External grooving and threading toolholder. High pressure coolant capability.



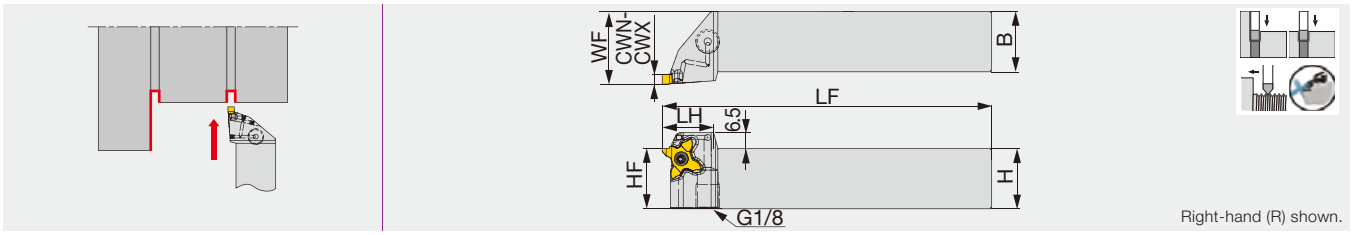
Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2(1)	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.33	3.18	12	12	85	18.5	17.5	12	0/12	4	TC*18...	1.2

The right hand insert (TC*18R***) is used for the right hand toolholders (STCR***), and the left hand insert (TC*18L***) is used for the left hand toolholders (STCL***).
(1) "0/12" for the WF2 dimension indicates WF2 = 0 for the right handed tool, WF2 = 12 for the left handed tool.
*Torque: Recommended torque (N·m) for clamping

STCR/L-18-CHP

Tube connection

Threading tool - for external theading with high pressure coolant capability



Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L2020X18-CHP	0.33	3.18	20	20	120	23	-	20	25	-	TC*18...	1.2
STCR/L2525Z18-CHP	0.33	3.18	25	25	135	23	-	25	30	-	TC*18...	1.2

Use the right hand insert (TC*18R...) with the right hand toolholders (STCR...). Use the left hand insert (TC*18L...) with the left hand holder (STCL...).
*Torque: Recommended torque (N·m) for clamping

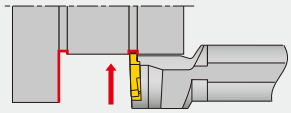
SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench
STCL**F18B-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4
STCR**F18B-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
STCL**18-CHP	CSTC-4L100DR	T-1008/5	-	-
STCR**18-CHP	CSTC-4L100DL	T-1008/5	-	-

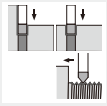
Reference pages: Inserts → F051 - F057, Standard cutting conditions → F058
Parts for coolant hose → F266

JS-STCL18

External grooving and threading toolholder with round shank, for Swiss lathes







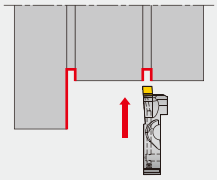
Left-hand (L) shown.

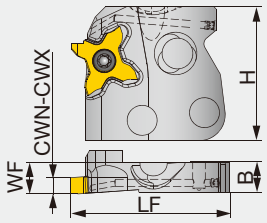
Designation	CWN	CWX	DCONMS	LF	LH	H	WB	WF	Insert	Torque*
JS14H-STCL18	0.33	3.18	14	100	20	13	14	6	TC*18R...	1.2
JS159F-STCL18	0.33	3.18	15.875	85	20	15	14	6	TC*18R...	1.2
JS16F-STCL18	0.33	3.18	16	85	20	15	14	6	TC*18R...	1.2
JS19G-STCL18	0.33	3.18	19.05	90	20	18	14	6	TC*18R...	1.2
JS19X-STCL18	0.33	3.18	19.05	120	20	18	14	6	TC*18R...	1.2
JS20G-STCL18	0.33	3.18	20	90	20	19	14	6	TC*18R...	1.2
JS20X-STCL18	0.33	3.18	20	120	20	19	14	6	TC*18R...	1.2
JS22X-STCL18	0.33	3.18	22	120	20	21	12.25	10	TC*18R...	1.2
JS25H-STCL18	0.33	3.18	25	100	20	24	12.25	10	TC*18R...	1.2
JS254X-STCL18	0.33	3.18	25.4	120	20	24	12.25	10	TC*18R...	1.2

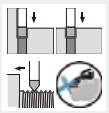
The left hand toolholder (STCL...) is used with the right hand inserts (TC*18R...)
*Torque: Recommended clamping torque: N·m

STCAR/L18-CHP

External grooving and threading adapter, with high pressure coolant capability







Right-hand (R) shown.

Designation	CWN	CWX	WF	H	LF	B	Insert	Torque*
STCAR/L18-CHP	0.33	3.18	7.5	33	38	7.2	TC*18...	1.2

Use the right hand insert (TC*18R...) with the right hand adapter (STCAR...). Use the left hand insert (TC*18L...) with the left hand adapter (STCAL...).
*Torque: Recommended torque (N·m) for clamping

SPARE PARTS





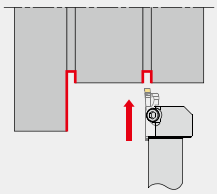
Designation	Clamping screw	Wrench
JS**STCL18	CSTC-4L100DL	T-1008/5
STCAL18-CHP	CSTC-4L100DR	T-1008/5
STCAR18-CHP	CSTC-4L100DL	T-1008/5

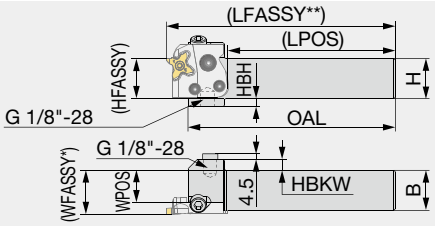
Reference pages: JS-STCL18: Inserts → F051 - F057, Standard cutting conditions → F058
STCAR/L18-CHP: Inserts → F051 - F057, Shanks and toolholders → F047 - F049
Standard cutting conditions → F058, Technical Reference → L053

CHSR/L-CHP

Tube connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

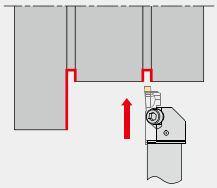
Designation	H	B	OAL	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP	20	20	130	105.5	15.1	12	20	10	STCAR/L18-CHP	6.5
CHSR/L2525-CHP	25	25	130	105.5	20.1	7	25	5	STCAR/L18-CHP	6.5

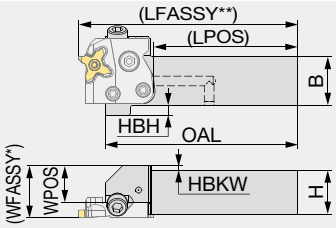
WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

CHSR/L-CHP-MC

Direct connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

Designation	H	B	OAL	LPOS	WPOS	HBKW	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP-MC	20	20	98	73.5	14	6	10	STCAR/L18-CHP	6.5
CHSR/L2525-CHP-MC	25	25	98	73.5	19	-	5	STCAR/L18-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHSR/L**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179
CHSR/L**-CHP-MC	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	-

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

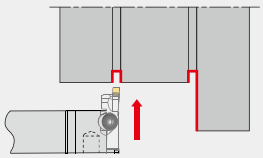
Combination of adapter and shank

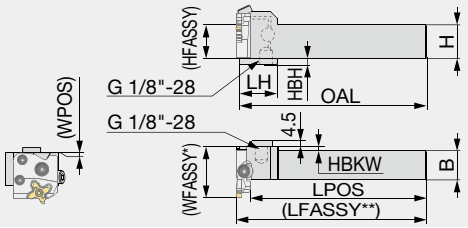
Shank	Adapter	
	STCAR18-CHP	STCAL18-CHP
CHSR**-CHP (-MC)	●	
CHSL**-CHP (-MC)		●
CHFVR**-CHP		●
CHFVL**-CHP	●	

● : Corresponding

Reference pages: Inserts → F051 - F057, Adapters → F046, Standard cutting conditions → F058
Parts for coolant hose → F266, Technical Reference → L053

Shank for perpendicularly-mounted adapter, with high pressure coolant capability





Right hand (R)
with left-hand adapter shown.

Designation	H	B	OAL	LH	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHFVR/L2020-CHP	20	20	140	28	135.1	0.5	5	20	10	STCAL/R18-CHP	6.5
CHFVR/L2525-CHP	25	25	140	28	135.1	0.5	0	25	5	STCAL/R18-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHFVR/L...	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

Shank	Adapter	
	STCAR18-CHP	STCAL18-CHP
CHSR**-CHP (-MC)	●	
CHSL**-CHP (-MC)		●
CHFVR**-CHP		●
CHFVL**-CHP	●	

● : Corresponding

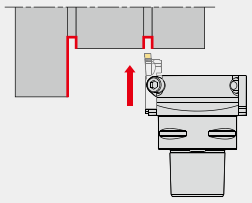
External
Internal
Face
Parting
Others

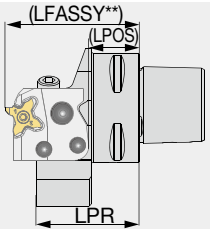
Reference pages: Inserts → F051 - F057, Adapters → F046, Standard cutting conditions → F058
Parts for coolant hose → F266, Technical Reference → L053

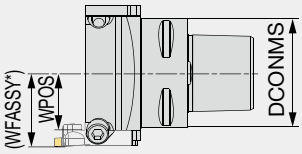
C*CHSN-CHP

Direct connection

Toolholder with TungCap connection, for adapter, with high pressure coolant capability







Right-hand (R) adapter shown.

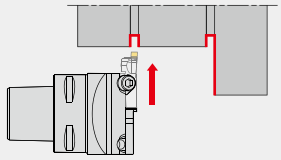
Designation	DCONMS	LPR	LPOS	WPOS	Adapter (Option)	Torque*
C3CHSN19045-CHP	32	45	17.5	18.5	STCAR/L18-CHP	6.5
C4CHSN21047-CHP	40	46.5	21.5	21	STCAR/L18-CHP	6.5
C5CHSN26047-CHP	50	47	22.5	26	STCAR/L18-CHP	6.5
C6CHSN33050-CHP	63	50	24.5	32.5	STCAR/L18-CHP	6.5

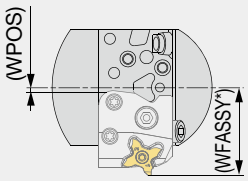
WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

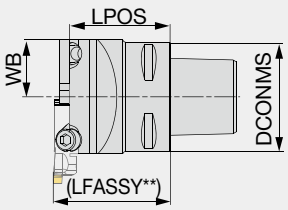
C*CHFVN-CHP

Direct connection

Toolholder with TungCap connection, for perpendicularly-mounted adapter, with high pressure coolant capability







Left-hand (L) adapter shown.

Designation	DCONMS	LPOS	WB	WPOS	Adapter (Option)	Torque*
C3CHFVN26040-CHP	32	40	26	1.5	STCAR/L18-CHP	6.5
C4CHFVN26046-CHP	40	46	26	1.5	STCAR/L18-CHP	6.5
C5CHFVN26046-CHP	50	46	26	1.5	STCAR/L18-CHP	6.5
C6CHFVN33046-CHP	63	46	33	8.5	STCAR/L18-CHP	6.5

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS








Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring
C*CH**N**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N

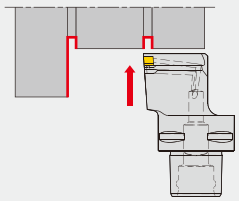
Recommended clamping torque (N·m)

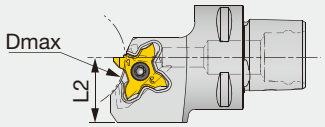
Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

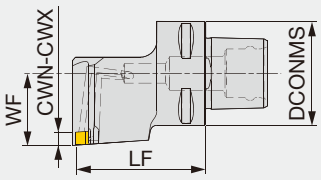
Reference pages: Inserts → F051 - F057, Adapters → F046, Standard cutting conditions → F058
Technical Reference → L053

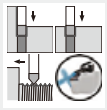
C-STCR/L-18-CHP

External grooving and threading toolholder, with high pressure coolant capability









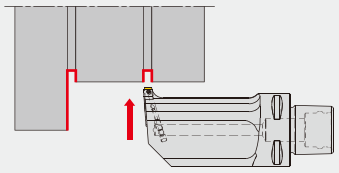
Right hand (R) shown.

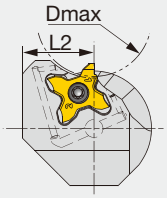
Designation	CWN	CWX	DCONMS	LF	L2	WF	Dmax	Insert	Torque*
C3STCR/L22040-18-CHP	0.33	3.18	32	40	20	22	32	TC*18...	1.2
C4STCR/L27050-18-CHP	0.33	3.18	40	50	25	27	75 (1)	TC*18...	1.2

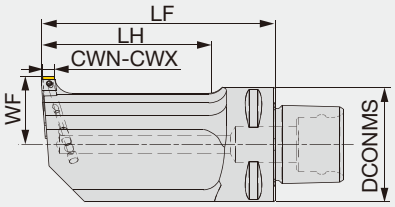
Applicable for 14 MPa coolant
Use the right hand insert (TC*18R...) with the right hand holder (STCR...). Use the left hand insert (TC*18L...) with the left hand holder (STCL...).
(1) The value for 3.5 mm groove depth. *Dmax* varies according to the grooving depth required.
*Torque: Recommended clamping torque (N·m)

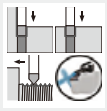
C-STCFL-18-CHP

External grooving and threading toolholder, with high pressure coolant capability









Left hand (L) shown.

Designation	CWN	CWX	DCONMS	LF	LH	L2	WF	Dmax	Insert	Torque*
C3STCFL18040-18-CHP	0.33	3.18	32	40	21.5	20	18	32	TC*18R...	1.2
C3STCFL18065-18-CHP	0.33	3.18	32	65	46.5	20	18	32	TC*18R...	1.2

Applicable for 14 MPa coolant
Use the right hand insert (TC*18R...) with the left hand holder (STCFL...).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS





Designation	Clamping screw	Wrench
C*STCL**-18-CHP	CSTC-4L100DR	T-1008/5
C*STCR**-18-CHP	CSTC-4L100DL	T-1008/5
C3STCFL**-18-CHP	CSTC-4L100DL	T-1008/5

External
Internal
Face
Parting
Others

Reference pages: Inserts → F051 - F057, Standard cutting conditions → F058

External grooving

TCS18 (4 corners)



F052, F053

First choice for O.D. grooving

General-purpose pressed-in 3D chipbreaker for smooth chip control

CW = 1 - 3 mm
CDX = 3.5 mm



TCL18 (4 corners)



F053

For lighter cutting action

Features pressed-in 3D chipbreaker with sharp cutting edge for light cutting action. Provides excellent chip control at low feed rates.

CW = 1.5 - 3 mm
CDX = 3.5 mm



TCG18 (4 corners)



F054, F055

For better chipping resistance

Features an optimum rake angle and edge preparation for a good balance of light cutting action and fracture resistance.

CW = 1 - 3.18 mm
CDX = 3.5 mm



TCP18 (4 corners)



F056, F057

For higher surface quality

Featuring a large rake angle, providing light cutting action and better surface finish. TCP-F style insert is also available for sharp cutting edge.

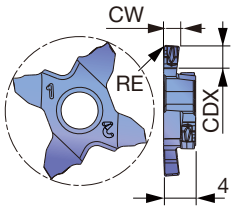
CW = 0.33 - 3 mm
CDX = 3.5 mm



Please see page F*** for the product details.

TCS18R/L (3D chipbreaker, honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCS18R100-010	R	1	0.1	●	2
TCS18L100-010	L	1	0.1	●	2
TCS18R120-010	R	1.2	0.1	●	2
TCS18L120-010	L	1.2	0.1	●	2
TCS18R125-010	R	1.25	0.1	●	2
TCS18L125-010	L	1.25	0.1	●	2
TCS18R125-020	R	1.25	0.2	●	2
TCS18L125-020	L	1.25	0.2	●	2
TCS18R130-020	R	1.3	0.2	●	3.5
TCS18L130-020	L	1.3	0.2	●	3.5
TCS18R140-010	R	1.4	0.1	●	3.5
TCS18L140-010	L	1.4	0.1	●	3.5
TCS18R140-020	R	1.4	0.2	●	3.5
TCS18L140-020	L	1.4	0.2	●	3.5
TCS18R145-010	R	1.45	0.1	●	3.5
TCS18L145-010	L	1.45	0.1	●	3.5
TCS18R150-010	R	1.5	0.1	●	3.5
TCS18L150-010	L	1.5	0.1	●	3.5
TCS18R150-020	R	1.5	0.2	●	3.5
TCS18L150-020	L	1.5	0.2	●	3.5
TCS18R160-020	R	1.6	0.2	●	3.5
TCS18L160-020	L	1.6	0.2	●	3.5
TCS18R170-020	R	1.7	0.2	●	3.5
TCS18L170-020	L	1.7	0.2	●	3.5
TCS18R175-010	R	1.75	0.1	●	3.5
TCS18L175-010	L	1.75	0.1	●	3.5
TCS18R175-020	R	1.75	0.2	●	3.5
TCS18L175-020	L	1.75	0.2	●	3.5
TCS18R185-020	R	1.85	0.2	●	3.5
TCS18L185-020	L	1.85	0.2	●	3.5
TCS18R195-020	R	1.95	0.2	●	3.5
TCS18L195-020	L	1.95	0.2	●	3.5
TCS18R200-010	R	2	0.1	●	3.5
TCS18L200-010	L	2	0.1	●	3.5
TCS18R200-020	R	2	0.2	●	3.5
TCS18L200-020	L	2	0.2	●	3.5
TCS18R225-020	R	2.25	0.2	●	3.5
TCS18L225-020	L	2.25	0.2	●	3.5
TCS18R230-020	R	2.3	0.2	●	3.5
TCS18L230-020	L	2.3	0.2	●	3.5
TCS18R250-010	R	2.5	0.1	●	3.5
TCS18L250-010	L	2.5	0.1	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

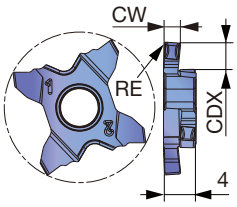
★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCS18R250-020	R	2.5	0.2	●	3.5
TCS18L250-020	L	2.5	0.2	●	3.5
TCS18R250-030	R	2.5	0.3	●	3.5
TCS18L250-030	L	2.5	0.3	●	3.5
TCS18R265-030	R	2.65	0.3	●	3.5
TCS18L265-030	L	2.65	0.3	●	3.5
TCS18R280-030	R	2.8	0.3	●	3.5
TCS18L280-030	L	2.8	0.3	●	3.5
TCS18R300-010	R	3	0.1	●	3.5
TCS18L300-010	L	3	0.1	●	3.5
TCS18R300-020	R	3	0.2	●	3.5
TCS18L300-020	L	3	0.2	●	3.5
TCS18R300-030	R	3	0.3	●	3.5
TCS18L300-030	L	3	0.3	●	3.5

5 pieces per package
● : Line up

TCL18R/L (3D chipbreaker, honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

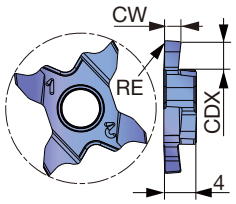
Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCL18R150-010	R	1.5	0.1	●	3.5
TCL18L150-010	L	1.5	0.1	●	3.5
TCL18R150-020	R	1.5	0.2	●	3.5
TCL18L150-020	L	1.5	0.2	●	3.5
TCL18R175-020	R	1.75	0.2	●	3.5
TCL18L175-020	L	1.75	0.2	●	3.5
TCL18R200-010	R	2	0.1	●	3.5
TCL18L200-010	L	2	0.1	●	3.5
TCL18R200-020	R	2	0.2	●	3.5
TCL18L200-020	L	2	0.2	●	3.5
TCL18R250-030	R	2.5	0.3	●	3.5
TCL18L250-030	L	2.5	0.3	●	3.5
TCL18R300-010	R	3	0.1	●	3.5
TCL18L300-010	L	3	0.1	●	3.5
TCL18R300-020	R	3	0.2	●	3.5
TCL18L300-020	L	3	0.2	●	3.5
TCL18R300-030	R	3	0.3	●	3.5
TCL18L300-030	L	3	0.3	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058

TCG18R/L (honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCG18R100-010	R	1	0.1	●	2
TCG18L100-010	L	1	0.1	●	2
TCG18R120-010	R	1.2	0.1	●	2
TCG18L120-010	L	1.2	0.1	●	2
TCG18R125-010	R	1.25	0.1	●	2
TCG18L125-010	L	1.25	0.1	●	2
TCG18R125-020	R	1.25	0.2	●	2
TCG18L125-020	L	1.25	0.2	●	2
TCG18R130-020	R	1.3	0.2	●	2
TCG18L130-020	L	1.3	0.2	●	2
TCG18R140-010	R	1.4	0.1	●	3.5
TCG18L140-010	L	1.4	0.1	●	3.5
TCG18R140-020	R	1.4	0.2	●	3.5
TCG18L140-020	L	1.4	0.2	●	3.5
TCG18R145-010	R	1.45	0.1	●	3.5
TCG18L145-010	L	1.45	0.1	●	3.5
TCG18R145-020	R	1.45	0.2	●	3.5
TCG18L145-020	L	1.45	0.2	●	3.5
TCG18R150-010	R	1.5	0.1	●	3.5
TCG18L150-010	L	1.5	0.1	●	3.5
TCG18R150-020	R	1.5	0.2	●	3.5
TCG18L150-020	L	1.5	0.2	●	3.5
TCG18R160-020	R	1.6	0.2	●	3.5
TCG18L160-020	L	1.6	0.2	●	3.5
TCG18R170-020	R	1.7	0.2	●	3.5
TCG18L170-020	L	1.7	0.2	●	3.5
TCG18R175-010	R	1.75	0.1	●	3.5
TCG18L175-010	L	1.75	0.1	●	3.5
TCG18R175-020	R	1.75	0.2	●	3.5
TCG18L175-020	L	1.75	0.2	●	3.5
TCG18R185-020	R	1.85	0.2	●	3.5
TCG18L185-020	L	1.85	0.2	●	3.5
TCG18R195-020	R	1.95	0.2	●	3.5
TCG18L195-020	L	1.95	0.2	●	3.5
TCG18R200-010	R	2	0.1	●	3.5
TCG18L200-010	L	2	0.1	●	3.5
TCG18R200-020	R	2	0.2	●	3.5
TCG18L200-020	L	2	0.2	●	3.5
TCG18R225-020	R	2.25	0.2	●	3.5
TCG18L225-020	L	2.25	0.2	●	3.5
TCG18R230-020	R	2.3	0.2	●	3.5
TCG18L230-020	L	2.3	0.2	●	3.5
TCG18R250-010	R	2.5	0.1	●	3.5
TCG18L250-010	L	2.5	0.1	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

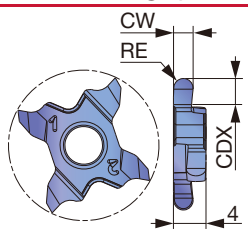
★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCG18R250-020	R	2.5	0.2	●	3.5
TCG18L250-020	L	2.5	0.2	●	3.5
TCG18R250-030	R	2.5	0.3	●	3.5
TCG18L250-030	L	2.5	0.3	●	3.5
TCG18R265-030	R	2.65	0.3	●	3.5
TCG18L265-030	L	2.65	0.3	●	3.5
TCG18R280-030	R	2.8	0.3	●	3.5
TCG18L280-030	L	2.8	0.3	●	3.5
TCG18R300-010	R	3	0.1	●	3.5
TCG18L300-010	L	3	0.1	●	3.5
TCG18R300-020	R	3	0.2	●	3.5
TCG18L300-020	L	3	0.2	●	3.5
TCG18R300-030	R	3	0.3	●	3.5
TCG18L300-030	L	3	0.3	●	3.5

5 pieces per package
● : Line up

TCG18R/L (Full R, honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

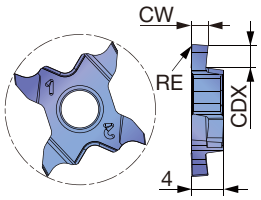
Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCG18R100-050	R	1	0.5	●	2
TCG18L100-050	L	1	0.5	●	2
TCG18R158-079	R	1.58	0.79	●	3.5
TCG18L158-079	L	1.58	0.79	●	3.5
TCG18R200-100	R	2	1	●	3.5
TCG18L200-100	L	2	1	●	3.5
TCG18R239-120	R	2.39	1.2	●	3.5
TCG18L239-120	L	2.39	1.2	●	3.5
TCG18R300-150	R	3	1.5	●	3.5
TCG18L300-150	L	3	1.5	●	3.5
TCG18R318-159	R	3.18	1.59	●	3.5
TCG18L318-159	L	3.18	1.59	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058

TCP18R/L (lightly honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

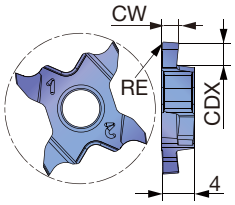
Designation	HAND	CW±0.02	RE	Coated	CDX
				AH725	
TCP18R033-005	R	0.33	0.05	●	0.8
TCP18L033-005	L	0.33	0.05	●	0.8
TCP18R043-005	R	0.43	0.05	●	1.2
TCP18L043-005	L	0.43	0.05	●	1.2
TCP18R050-005	R	0.5	0.05	●	1.2
TCP18L050-005	L	0.5	0.05	●	1.2
TCP18R075-005	R	0.75	0.05	●	2
TCP18L075-005	L	0.75	0.05	●	2
TCP18R095-005	R	0.95	0.05	●	2
TCP18L095-005	L	0.95	0.05	●	2
TCP18R100-010	R	1	0.1	●	2
TCP18L100-010	L	1	0.1	●	2
TCP18R120-010	R	1.2	0.1	●	2
TCP18L120-010	L	1.2	0.1	●	2
TCP18R125-010	R	1.25	0.1	●	2
TCP18L125-010	L	1.25	0.1	●	2
TCP18R140-010-35	R	1.4	0.1	●	3.5
TCP18L140-010-35	L	1.4	0.1	●	3.5
TCP18R145-010	R	1.45	0.1	●	2
TCP18L145-010	L	1.45	0.1	●	2
TCP18R145-010-35	R	1.45	0.1	●	3.5
TCP18L145-010-35	L	1.45	0.1	●	3.5
TCP18R150-010	R	1.5	0.1	●	2
TCP18L150-010	L	1.5	0.1	●	2
TCP18R150-010-35	R	1.5	0.1	●	3.5
TCP18L150-010-35	L	1.5	0.1	●	3.5
TCP18R175-010	R	1.75	0.1	●	2
TCP18L175-010	L	1.75	0.1	●	2
TCP18R175-010-35	R	1.75	0.1	●	3.5
TCP18L175-010-35	L	1.75	0.1	●	3.5
TCP18R200-010	R	2	0.1	●	2.5
TCP18L200-010	L	2	0.1	●	2.5
TCP18R200-010-35	R	2	0.1	●	3.5
TCP18L200-010-35	L	2	0.1	●	3.5
TCP18R250-010	R	2.5	0.1	●	2.5
TCP18L250-010	L	2.5	0.1	●	2.5
TCP18R250-010-35	R	2.5	0.1	●	3.5
TCP18L250-010-35	L	2.5	0.1	●	3.5
TCP18R300-010	R	3	0.1	●	2.5
TCP18L300-010	L	3	0.1	●	2.5
TCP18R300-010-35	R	3	0.1	●	3.5
TCP18L300-010-35	L	3	0.1	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058

TCP18R/L-F (sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated	CDX
				SH725	
TCP18R033F-005	R	0.33	0.05	●	0.8
TCP18L033F-005	L	0.33	0.05	●	0.8
TCP18R043F-005	R	0.43	0.05	●	1.2
TCP18L043F-005	L	0.43	0.05	●	1.2
TCP18R050F-005	R	0.5	0.05	●	1.2
TCP18L050F-005	L	0.5	0.05	●	1.2
TCP18R075F-005	R	0.75	0.05	●	2
TCP18L075F-005	L	0.75	0.05	●	2
TCP18R095F-005	R	0.95	0.05	●	2
TCP18L095F-005	L	0.95	0.05	●	2
TCP18R100F-005	R	1	0.05	●	2
TCP18R100F-010	R	1	0.1	●	2
TCP18L100F-010	L	1	0.1	●	2
TCP18R120F-005	R	1.2	0.05	●	2
TCP18R120F-010	R	1.2	0.1	●	2
TCP18L120F-010	L	1.2	0.1	●	2
TCP18R125F-005	R	1.25	0.05	●	2
TCP18R125F-010	R	1.25	0.1	●	2
TCP18L125F-010	L	1.25	0.1	●	2
TCP18R140F-010-35	R	1.4	0.1	●	3.5
TCP18R145F-005-35	R	1.45	0.05	●	3.5
TCP18R145F-010	R	1.45	0.1	●	2
TCP18L145F-010	L	1.45	0.1	●	2
TCP18R145F-010-35	R	1.45	0.1	●	3.5
TCP18L145F-010-35	L	1.45	0.1	●	3.5
TCP18R150F-005-35	R	1.5	0.05	●	3.5
TCP18R150F-010	R	1.5	0.1	●	2
TCP18L150F-010	L	1.5	0.1	●	2
TCP18R150F-010-35	R	1.5	0.1	●	3.5
TCP18L150F-010-35	L	1.5	0.1	●	3.5
TCP18R175F-005-35	R	1.75	0.05	●	3.5
TCP18R175F-010	R	1.75	0.1	●	2
TCP18L175F-010	L	1.75	0.1	●	2
TCP18R175F-010-35	R	1.75	0.1	●	3.5
TCP18L175F-010-35	L	1.75	0.1	●	3.5
TCP18R200F-005-35	R	2	0.05	●	3.5
TCP18R200F-010	R	2	0.1	●	2.5
TCP18L200F-010	L	2	0.1	●	2.5
TCP18R200F-010-35	R	2	0.1	●	3.5
TCP18L200F-010-35	L	2	0.1	●	3.5
TCP18R250F-010	R	2.5	0.1	●	2.5
TCP18L250F-010	L	2.5	0.1	●	2.5
TCP18R250F-010-35	R	2.5	0.1	●	3.5
TCP18L250F-010-35	L	2.5	0.1	●	3.5
TCP18R300F-010	R	3	0.1	●	2.5
TCP18L300F-010	L	3	0.1	●	2.5
TCP18R300F-010-35	R	3	0.1	●	3.5
TCP18L300F-010-35	L	3	0.1	●	3.5

5 pieces per package
● : Line up

Reference pages: Toolholders → F044 - F050, Standard cutting conditions → F058

STANDARD CUTTING CONDITIONS

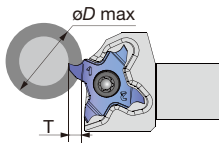
TCS18R/L, TCL18R/L (3D chipbreaker), TCG18R/L (honed edge), TCG18R/L (Full R)

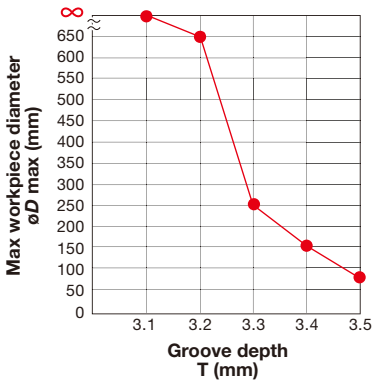
ISO	Workpiece materials	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)		
				TCL18	TCS18	TCG18
P	Low carbon steel S15C, SS400, etc., C15E4, E275A, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
P	Carbon steel, Alloy steel S55C, SCM440, etc., C55, 42CrMo4, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
P	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
M	Stainless steel SUS304, SUS316, etc., X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
K	Grey cast iron FC250, FC300, etc., 250, 300, etc., GG25, GG30, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
K	Ductile cast iron FCD400, etc., 400-15S, etc., GGG40, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 60	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
S	Superalloys Inconel718, etc.	AH7025	20 - 40	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14

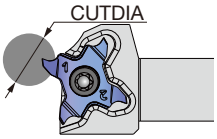
TCP18R/L (lightly honed edge), TCP18R/L-F (sharp edge)

ISO	Workpiece materials	Priority	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel S15C, SS400, etc., C15E4, E275A, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
P	Carbon steel, Alloy steel S55C, SCM440, etc., C55, 42CrMo4, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
P	Prehardened steel NAK80, PX5, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
M	Stainless steel SUS304, SUS316, etc., X5CrNi18-9, X5CrNiMo17-12-3, etc.	First choice	SH725	50 - 120	0.03 - 0.1
		Toughness	AH725	50 - 120	0.03 - 0.1
K	Grey cast iron FC250, FC300, etc., 250, 300, etc., GG25, GG30, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
K	Ductile cast iron FCD400, etc., 400-15S, etc., GGG40, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 80	0.03 - 0.1
		Toughness	AH725	30 - 80	0.03 - 0.1
S	Superalloys Inconel718, etc.	First choice	AH725	20 - 40	0.03 - 0.1

Precautions of processing







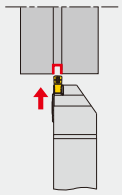
Max workpiece diameter CUTDIA (mm)
7

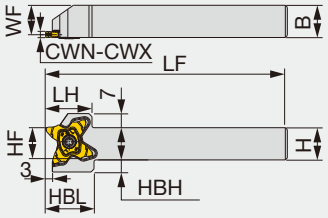
***Groove depth and max workpiece diameter (øDmax)**

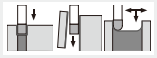
Maximum workpiece diameter is limited relative to depth of cut in order to avoid collision between insert and workpiece.

STCR/L-27

External toolholders for grooving, parting







Right-hand (R) shown.

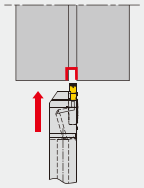
Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L1010-27	0.5	3.18	10	10	120	23	24	10	8.5	9.5	TC*27...	2.5
STCR/L1212-27	0.5	3.18	12	12	120	23	24	12	10.5	8	TC*27...	2.5
STCR/L1616-27	0.5	3.18	16	16	120	23	24	16	14.5	6	TC*27...	2.5
STCR/L2020-27	0.5	3.18	20	20	120	23	24	20	18.5	2	TC*27...	2.5
STCR/L2525-27	0.5	3.18	25	25	135	23	-	25	23.5	-	TC*27...	2.5

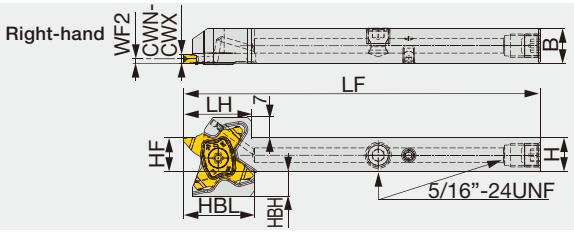
*Torque: Recommended clamping torque: N·m

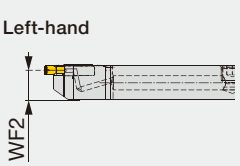
STCR/L-27-CHP

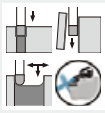
Direct connection

Grooving and parting-off toolholder. High pressure coolant capability.









Designation	CWN	CWX	H	B	LF	LH	HF	WF2(1)	HBH	HBL	Insert	Torque*
STCR/L1212-27-CHP	0.5	3.18	12	12	120	23	12	1.5/10.5	8	24	TC*27...	2.5

- Make sure to avoid tool interferences when used on Swiss machines
(1) The above WF2 value is valid when an insert width of CW=3 is mounted.
*Torque: Recommended torque (N·m) for clamping

SPARE PARTS

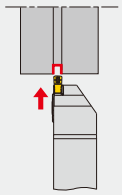
Designation	Screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCR**-27	SR16-212-01397L	T-2010/5	-	-	-	-
STCL**-27	SR16-212-01397	T-2010/5	-	-	-	-
STCR1212-27-CHP	SR16-212-01397L	T-2010/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCL1212-27-CHP	SR16-212-01397	T-2010/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

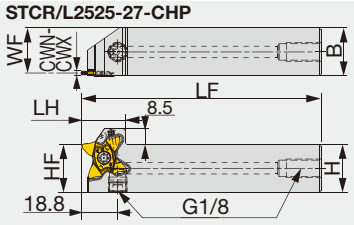
Reference pages: Inserts → F065 - F069, Standard cutting conditions → F070
Parts for coolant hose → F266

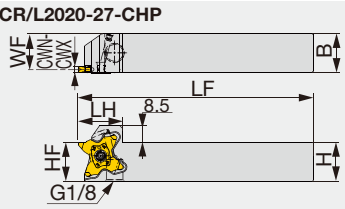
STCR/L-27-CHP

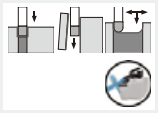
Tube connection

External grooving and parting toolholder, with high pressure coolant capability









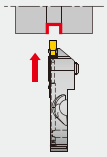
Right-hand (R) shown.

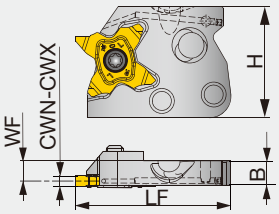
Designation	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque*
STCR/L2020-27-CHP	0.5	3.18	20	20	120	23	20	18.5	TC*27...	2.5
STCR/L2525-27-CHP	0.5	3.18	25	25	125	23	25	23.5	TC*27...	2.5

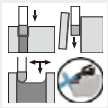
*Torque: Recommended torque (N·m) for clamping

STCAR/L27-CHP

External grooving and parting adapter, with high pressure coolant capability







Right-hand (R) shown.

Designation	CWN	CWX	WF	H	LF	B	Insert	Torque*
STCAR/L27-CHP	0.5	3.18	6	33	46	7.2	TC*27...	2.5

*Torque: Recommended torque (N·m) for clamping

SPARE PARTS





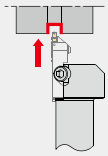
Designation	Screw	Wrench
STCR**-27-CHP	SR16-212-01397L	T-2010/5
STCL**-27-CHP	SR16-212-01397	T-2010/5
STCAR27-CHP	SR16-212-01397L	T-2010/5
STCAL27-CHP	SR16-212-01397	T-2010/5

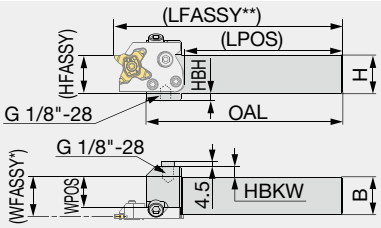
Reference pages: STCR/L-27-CHP: Inserts → F065 - F069, Standard cutting conditions → F070
Parts for coolant hose → F266
STCAR/L27-CHP: Inserts → F065 - F069, Shanks and toolholders → F061 - F063
Standard cutting conditions → F070, Technical Reference → L053

CHSR/L-CHP

Tube connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

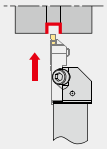
Designation	H	B	OAL	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP	20	20	130	105.5	15.1	12	20	10	STCAR/L27-CHP	6.5
CHSR/L2525-CHP	25	25	130	105.5	20.1	7	25	5	STCAR/L27-CHP	6.5

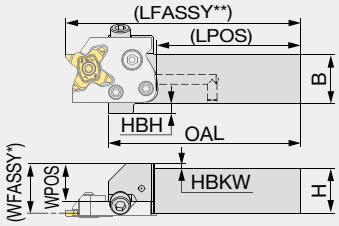
WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

CHSR/L-CHP-MC

Direct connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

Designation	H	B	OAL	LPOS	WPOS	HBKW	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP-MC	20	20	98	73.5	14	6	10	STCAR/L27-CHP	6.5
CHSR/L2525-CHP-MC	25	25	98	73.5	19	-	5	STCAR/L27-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHSR/L**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179
CHSR/L**-CHP-MC	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	-

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	5
SR M6X12DIN6912	8.5
SR M6X20-XT	8.5

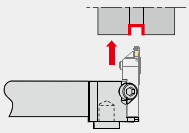
Combination of adapter and shank

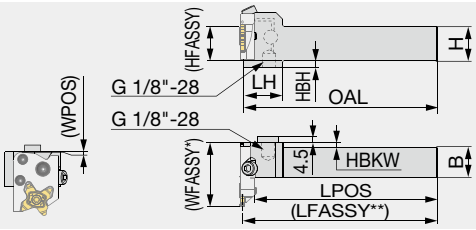
Shank	Adapter	
	STCAR27-CHP	STCAL27-CHP
CHSR**-CHP (-MC)	●	
CHSL**-CHP (-MC)		●
CHFVR**-CHP		●
CHFVL**-CHP	●	

● : Corresponding

Reference pages: Inserts → F065 - F069, Adapters → F060, Standard cutting conditions → F070
Parts for coolant hose → F266, Technical Reference → L053

Shank for perpendicularly-mounted adapter, with high pressure coolant capability





Right hand (R)
with left-hand adapter shown.

Designation	H	B	OAL	LH	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHFVR/L2020-CHP	20	20	140	28	135.1	0.5	5	20	10	STCAL/R27-CHP	6.5
CHFVR/L2525-CHP	25	25	140	28	135.1	0.5	0	25	5	STCAL/R27-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHFVR/L...	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

Shank	Adapter	
	STCAR27-CHP	STCAL27-CHP
CHSR**-CHP (-MC)	●	
CHSL**-CHP (-MC)		●
CHFVR**-CHP		●
CHFVL**-CHP	●	

● : Corresponding

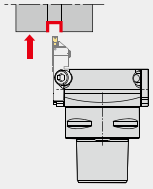
External
Internal
Face
Parting
Others

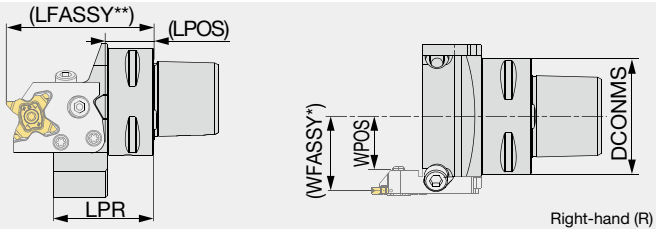
Reference pages: Inserts → F065 - F069, Adapters → F060, Standard cutting conditions → F070
Parts for coolant hose → F266, Technical Reference → L053

C*CHSN-CHP

Direct connection

Toolholder with TungCap connection, for adapter, with high pressure coolant capability





Right-hand (R) adapter shown.

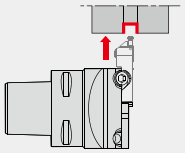
Designation	DCONMS	LPR	LPOS	WPOS	Adapter (Option)	Torque*
C3CHSN19045-CHP	32	45	17.5	18.5	STCAR/L27-CHP	6.5
C4CHSN21047-CHP	40	46.5	21.5	21	STCAR/L27-CHP	6.5
C5CHSN26047-CHP	50	47	22.5	26	STCAR/L27-CHP	6.5
C6CHSN33050-CHP	63	50	24.5	32.5	STCAR/L27-CHP	6.5

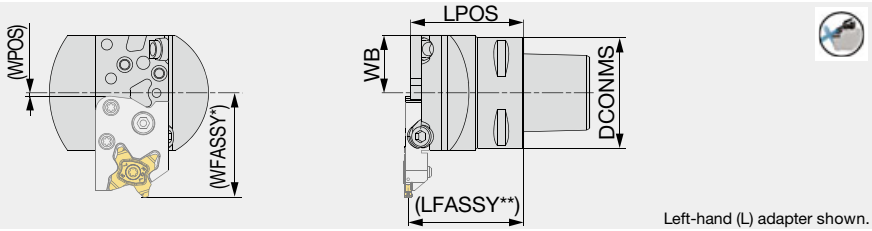
WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

C*CHFVN-CHP

Direct connection

Toolholder with TungCap connection, for perpendicularly-mounted adapter, with high pressure coolant capability





Left-hand (L) adapter shown.

Designation	DCONMS	LPOS	WB	WPOS	Adapter (Option)	Torque*
C3CHFVN26040-CHP	32	40	26	1.5	STCAR/L27-CHP	6.5
C4CHFVN26046-CHP	40	46	26	1.5	STCAR/L27-CHP	6.5
C5CHFVN26046-CHP	50	46	26	1.5	STCAR/L27-CHP	6.5
C6CHFVN33046-CHP	63	46	33	8.5	STCAR/L27-CHP	6.5

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring
C*CH**N**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N

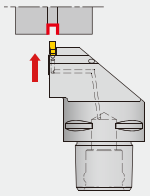
Recommended clamping torque (N·m)

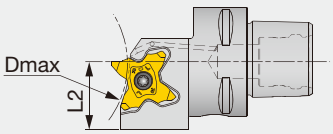
Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

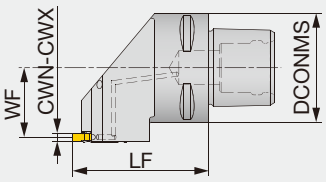
Reference pages: Inserts → F065 - F069, Adapters → F060, Standard cutting conditions → F070
Technical Reference → L053

C-STCR/L-27-CHP

External grooving toolholder, with high pressure coolant capability







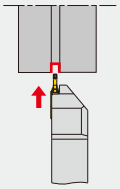
Right hand (R) shown.

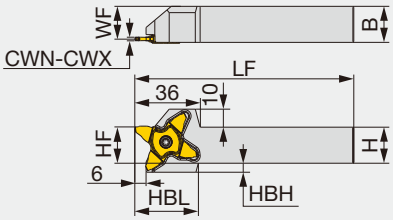
Designation	CWN	CWX	DCONMS	LF	L2	WF	Dmax	Insert	Torque*
C4STCR/L27050-27-CHP	0.5	3.18	40	50	25	25.5	68 (1)	TC*27R/L...	2.5

Applicable for 14 MPa coolant
(1) The value for 6.4 mm groove depth. *Dmax* varies according to the grooving depth required.
*Torque: Recommended clamping torque (N·m)

STCR/L-38

External grooving and parting toolholder





Right hand (R) shown.

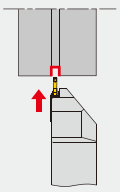
Designation	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
STCR/L2020-38	1.5	4	20	20	120	20	18.1	5	35	TCL38...	2.5
STCR/L2525-38	1.5	4	25	25	135	25	23.1	-	-	TCL38...	2.5
STCR/L3232-38	1.5	4	32	32	135	32	30.1	-	-	TCL38...	2.5

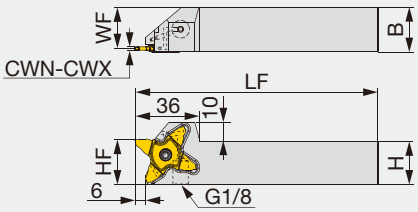
*Torque: Recommended clamping torque (N·m)

STCR/L-38-CHP

Tube connection

External grooving and parting toolholder, with high pressure coolant capability





Right hand (R) shown.

Designation	CWN	CWX	H	B	LF	HF	WF	Insert	Torque*
STCR/L2525-38-CHP	1.5	4	25	25	135	25	23.1	TCL38...	2.5

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Screw	Wrench
C4STCR27050-27-CHP	SR16-212-01397L	T-2010/5
C4STCL27050-27-CHP	SR16-212-01397	T-2010/5
STCR...	SR16-212-01397L	T-2010/5
STCL...	SR16-212-01397	T-2010/5

Reference pages: Inserts → F065 - F069, Standard cutting conditions → F070
Parts for coolant hose → F266

External grooving and parting

TCS27 (4 corners)



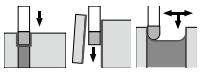
F066, F067

First choice for grooving

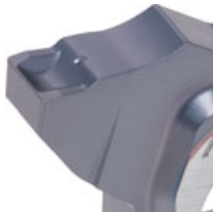
For general machining

Lower cutting force and superior sharpness

CW = 0.5 - 3.18 mm
CDX = 6.4 mm



TCM27 (4 corners)



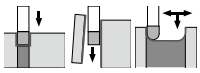
F068, F069

For higher efficiency

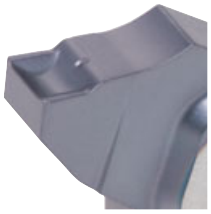
For high feed machining

Well-designed edge with high strength and fracture resistance

CW = 1.5 - 3.18 mm
CDX = 6.4 mm



TCL27 (4 corners)

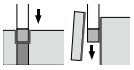


F065

For lighter cutting action

Extremely sharp cutting edge
A large dimple geometry eliminates chip jamming

CW = 1.5 - 3 mm
CDX = 6.4 mm



TCL38 (4 corners)

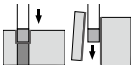


F069

For lighter cutting action

Sharp edge for light cutting action
Excellent chip control at low feeds

CW = 1.5 - 4 mm
CDX = 10 mm

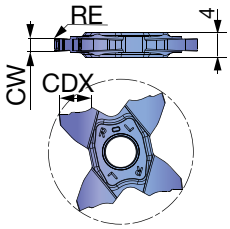


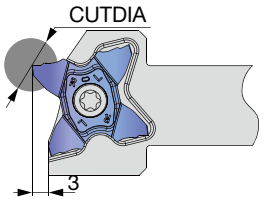
Please see page F*** for the product details.

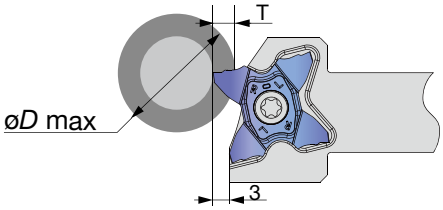
INSERTS

TCL27 (for grooving and parting off)









P	Steel	★	★	★	★
M	Stainless	★	★	★	★
K	Cast iron	★	★	★	★
N	Non-ferrous				
S	Superalloys	★	★	★	
H	Hard materials				

★ : First choice

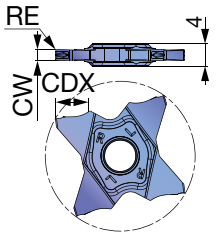
Designation	CW±0.02	RE	Coated				CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725	AH7025	AH8005	AH6235			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCL27-150-015	1.5	0.15	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCL27-200-020	2	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCL27-250-020	2.5	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCL27-300-020	3	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55

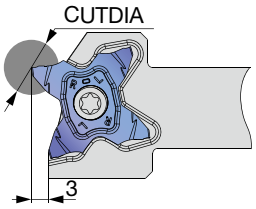
5 pieces per package
●: Line up
▲: To be discontinued

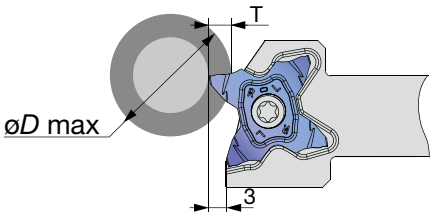
Reference pages: Toolholders → F059 - F064, Standard cutting conditions → F070

TCS27 (for grooving and parting off)









P	Steel	★	★	★	★
M	Stainless	★	★	★	★
K	Cast iron	★	★	★	★
N	Non-ferrous				
S	Superalloys	★	★	★	
H	Hard materials				

★ : First choice

Designation	CW±0.02	RE	Coated				CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725	AH7025	AH8005	AH6235			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCS27-050-000	0.5	0	▲	★	★	★	1	2	∞	-	-	-	-	-	-	-	-	-
TCS27-050-004	0.5	0.04	▲	★	★	★	2.5	5	∞	-	-	-	-	-	-	-	-	-
TCS27-075-010	0.75	0.1	▲	●	●	●	2.5	5	∞	-	-	-	-	-	-	-	-	-
TCS27-080-000	0.8	0	▲	★	★	★	1.6	3.2	∞	-	-	-	-	-	-	-	-	-
TCS27-100-006	1	0.06	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCS27-100-010	1	0.1	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCS27-104-000	1.04	0	▲	★	★	★	2	4	∞	-	-	-	-	-	-	-	-	-
TCS27-120-000	1.2	0	▲	★	★	★	2	4	∞	-	-	-	-	-	-	-	-	-
TCS27-125-010	1.25	0.1	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCS27-125-020	1.25	0.2	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCS27-140-000	1.4	0	▲	★	★	★	2	4	∞	-	-	-	-	-	-	-	-	-
TCS27-147-000	1.47	0	▲	★	★	★	2.5	5	∞	-	-	-	-	-	-	-	-	-
TCS27-150-010	1.5	0.1	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCS27-150-020	1.5	0.2	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCS27-157-015	1.57	0.15	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-170-010	1.7	0.1	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-175-010	1.75	0.1	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-175-020	1.75	0.2	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-178-018	1.78	0.18	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-185-020	1.85	0.2	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-196-015	1.96	0.15	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCS27-200-010	2	0.1	▲	●	●	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCS27-200-020	2	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCS27-222-015	2.22	0.15	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCS27-230-020	2.3	0.2	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCS27-239-015	2.39	0.15	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCS27-247-020	2.47	0.2	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCS27-250-010	2.5	0.1	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCS27-250-030	2.5	0.3	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCS27-270-010	2.7	0.1	▲	●	●	●	6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCS27-287-020	2.87	0.2	▲	●	●	●	6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCS27-300-000	3	0	▲	★	★	★	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCS27-300-020	3	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCS27-300-030	3	0.3	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCS27-300-040	3	0.4	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCS27-315-015	3.15	0.15	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	68
TCS27-318-020	3.18	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	68

5 pieces per package

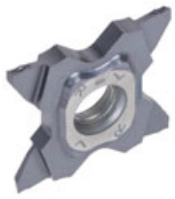
★: Will be released in January 2025

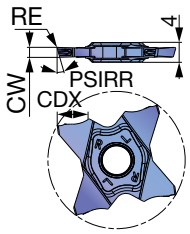
●: Line up

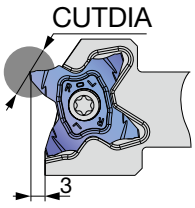
▲: To be discontinued

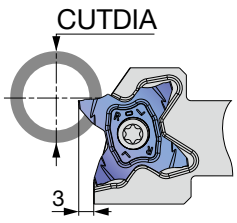
Reference pages: Toolholders → F059 - F064, Standard cutting conditions → F070

TCS27-R/L (for parting off)









Right hand (R) shown.

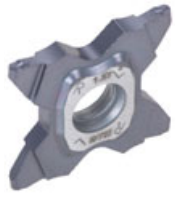
P	Steel	★	★	★	★
M	Stainless	★	★	★	★
K	Cast iron	★	★	★	★
N	Non-ferrous				
S	Superalloys	★	★	★	
H	Hard materials				

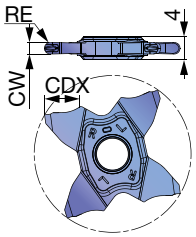
★ : First choice

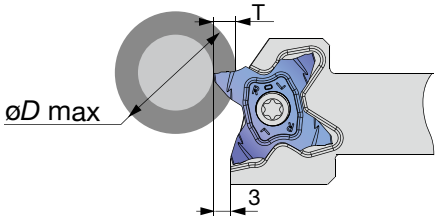
Designation	HAND	CW±0.02	RE	Coated				CDX	PSIRL	PSIRR	Max. parting off dia. CUTDIA	
				AH725	AH7025	AH8005	AH6235				Solid bar	Tube
TCS27-100-15R	R	1	0.06	▲	●	●	●	3.5	0°	15°	7	600
TCS27-100-15L	L	1	0.06	▲	●	●	●	3.5	15°	0°	7	600
TCS27-150-6R	R	1.5	0.06	▲	●	●	●	5.7	0°	6°	11.4	35
TCS27-150-6L	L	1.5	0.06	▲	●	●	●	5.7	6°	0°	11.4	35
TCS27-150-15R	R	1.5	0.06	▲	●	●	●	5.7	0°	15°	11.4	35
TCS27-150-15L	L	1.5	0.06	▲	●	●	●	5.7	15°	0°	11.4	35
TCS27-200-6R	R	2	0.1	▲	●	●	●	6.4	0°	6°	12.8	30
TCS27-200-6L	L	2	0.1	▲	●	●	●	6.4	6°	0°	12.8	30
TCS27-200-15R	R	2	0.1	▲	●	●	●	6.4	0°	15°	12.8	30
TCS27-200-15L	L	2	0.1	▲	●	●	●	6.4	15°	0°	12.8	30

5 pieces per package
●: Line up
▲: To be discontinued

TCS27 (for grooving and profiling, full R)







P	Steel	★	★	★	★
M	Stainless	★	★	★	★
K	Cast iron	★	★	★	★
N	Non-ferrous				
S	Superalloys	★	★	★	
H	Hard materials				

★ : First choice

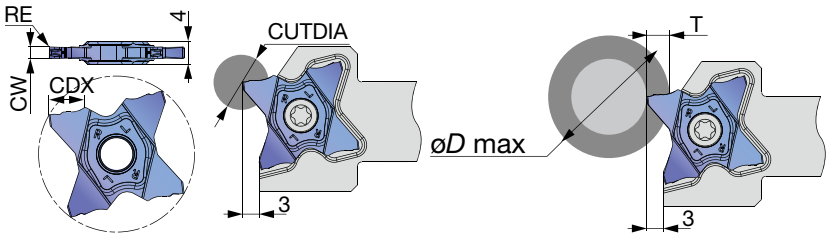
Designation	CW±0.02	RE	Coated				CDX	Relation of groove depth (T) and Max. diameter (øD max)								
			AH725	AH7025	AH8005	AH6235		T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCS27-157-079	1.57	0.79	▲	●	●	●	3	∞	-	-	-	-	-	-	-	-	-
TCS27-200-100	2	1	▲	●	●	●	3	∞	-	-	-	-	-	-	-	-	-
TCS27-239-120	2.39	1.2	▲	●	●	●	5.7	∞	600	280	180	130	50	35	-	-	-
TCS27-300-150	3	1.5	▲	●	●	●	6.4	∞	600	280	180	135	105	95	85	78	55

5 pieces per package
●: Line up
▲: To be discontinued

Reference pages: Toolholders → F059 - F064, Standard cutting conditions → F070

TCM27 (for grooving and parting off)





P	Steel	★	★	★	★
M	Stainless	★	★	★	★
K	Cast iron	★	★	★	★
N	Non-ferrous				
S	Superalloys	★	★	★	
H	Hard materials				

★ : First choice

Designation	CW±0.02	RE	Coated				CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725	AH7025	AH8005	AH6235			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCM27-150-010	1.5	0.1	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-150-020	1.5	0.2	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-157-015	1.57	0.15	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-170-010	1.7	0.1	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-175-010	1.75	0.1	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-175-020	1.75	0.2	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-178-018	1.78	0.18	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-185-020	1.85	0.2	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-196-015	1.96	0.15	▲	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-200-010	2	0.1	▲	●	●	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCM27-200-020	2	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCM27-222-015	2.22	0.15	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCM27-230-020	2.3	0.2	▲	●	●	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCM27-239-015	2.39	0.15	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-247-020	2.47	0.2	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-010	2.5	0.1	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-030	2.5	0.3	▲	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-270-010	2.7	0.1	▲	●	●	●	6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCM27-287-020	2.87	0.2	▲	●	●	●	6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCM27-300-000	3	0	▲	★	★	★	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-020	3	0.2	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-030	3	0.3	▲	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-040	3	0.4	●	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-315-015	3.15	0.15	●	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	68
TCM27-318-020	3.18	0.2	●	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	68

5 pieces per package

★: Will be released in January 2025

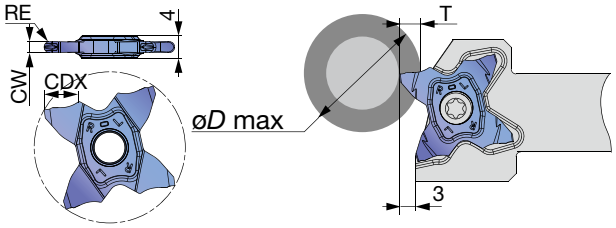
●: Line up

▲: To be discontinued

Reference pages: Toolholders → F059 - F064, Standard cutting conditions → F070

TCM27 (for grooving and profiling, full R)





P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

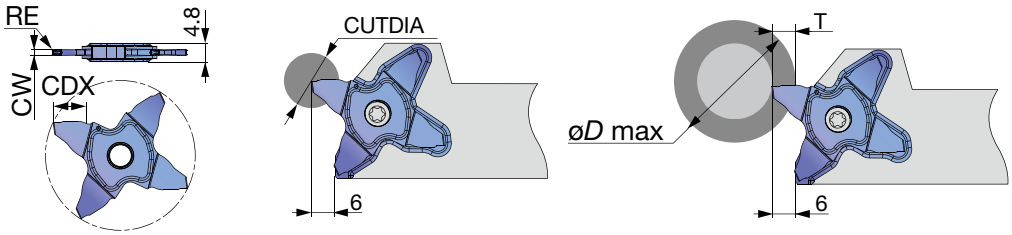
★ : First choice

Designation	CW±0.02	RE	Coated			CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH7025	AH8005	AH6235			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCM27-157-079	1.57	0.79	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-200-100	2	1	●	●	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-239-120	2.39	1.2	●	●	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-300-150	3	1.5	●	●	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55

5 pieces per package
●: Line up

TCL38 (for grooving and parting off)





P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice

Designation	CW±0.02	RE	Coated			CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)					
			AH7025					T ≤ 5	T ≤ 6	T ≤ 7	T ≤ 8	T ≤ 9	T ≤ 10
TCL38-150-020	1.5	0.2	●			9	18	∞	950	315	190	45	-
TCL38-200-020	2	0.2	●			9	18	∞	950	315	190	45	-
TCL38-300-020	3	0.2	●			10	20	∞	950	315	190	130	50
TCL38-400-030	4	0.3	●			10	20	∞	950	315	190	130	50

5 pieces per package
● : Line up

Reference pages: Toolholders → F059 - F064, Standard cutting conditions → F070

STANDARD CUTTING CONDITIONS

TCL27, TCS27, TCM27

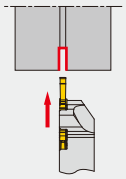
ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)						Depth of cut for profiling (with full radius insert)
				Grooving, Parting-off			Parting-off (with hand)	Profiling (with full radius insert)		
				TCL27	TCS27	TCM27	TCS27	TCS27	TCM27	
P	Carbon steel (S45C / C45, etc.)	AH725	100 - 200	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.1	0.05 - 0.15	0.5
	Alloy steel (SCM435 / 34CrMo4, etc.)	AH725	50 -180	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.1	0.05 - 0.15	0.5
M	Stainless steel (SUS304 / X5CrNi18-9, etc.)	AH725	100 - 150	0.03 - 0.12	0.05 - 0.15	0.05 - 0.2	0.04 - 0.12	0.05 - 0.1	0.05 - 0.15	0.5
K	Grey cast iron (FC250 / 250 / GG25, etc.)	AH725	50 - 180	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.1	0.05 - 0.15	0.5
	Ductile cast iron (FCD400 / 400-15 / GGG400, etc.)	AH725	50 - 120	0.03 - 0.12	0.05 - 0.15	0.05 - 0.2	0.04 - 0.12	0.05 - 0.1	0.05 - 0.15	0.5
S	Titanium alloys (Ti-6Al-4V, etc.)	AH725	30 - 60	0.03 - 0.12	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.1	0.05 - 0.1	0.5
	Superalloys (Inconel718, etc.)	AH725	20 - 50	0.03 - 0.12	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.1	0.05 - 0.1	0.5

TCL38

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)
				Grooving, Parting-off
				TCL38
P	Carbon steel (S45C / C45, etc.)	AH7025	80 - 180	0.03 - 0.18
	Alloy steel (SCM435 / 34CrMo4, etc.)	AH7025	50 - 180	0.03 - 0.18
M	Stainless steel (SUS304 / X5CrNi18-9, etc.)	AH7025	50 - 150	0.03 - 0.14
K	Grey cast iron (FC250 / 250 / GG25, etc.)	AH7025	50 - 180	0.03 - 0.14
	Ductile cast iron (FCD400 / 400-15 / GGG400, etc.)	AH7025	50 - 120	0.03 - 0.14
S	Titanium alloys (Ti-6Al-4V, etc.)	AH7025	30 - 60	0.03 - 0.14
	Superalloys (Inconel718, etc.)	AH7025	20 - 50	0.03 - 0.14

JSXXR/L

Parting-off and grooving toolholders



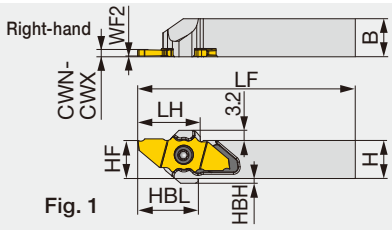


Fig. 1

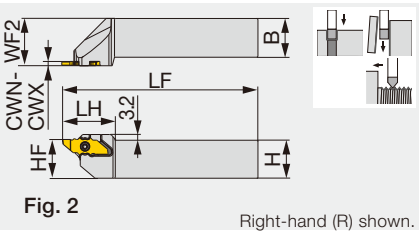


Fig. 2

Right-hand (R) shown.

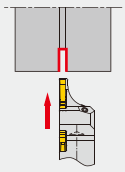
Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBL(1)	HBH	Insert	Torque*	Fig.
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2/9.8	19	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2/11.8	19	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2/11.8	19	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2/15.8	-	-	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2/19.8	-	-	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L2525Z09	0.6	2.5	25	25	135	34	25	30	-	-	JX**06...,12...,16..., 20...	1.2	2

*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20...inserts, and 4 mm shorter for JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/H/X-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes

Direct connection **Tube connection**



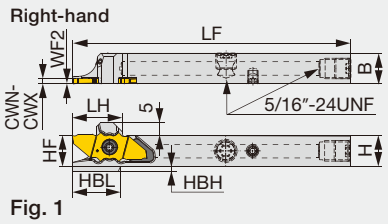


Fig. 1

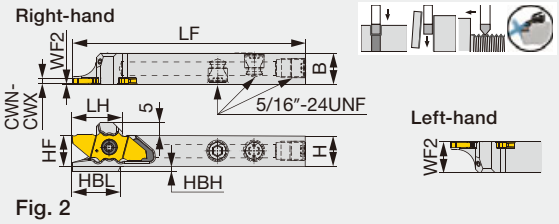


Fig. 2

Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBL(1)	HBH	Insert	Torque*	Fig.
JSXXR/L1012H09-CHP(3)	0.6	2.5	10	12	102	19.2	10	0.2/11.8	18.7	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09-CHP	0.6	2.5	12	12	85	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-CHP(3)	0.6	2.5	12	12	120	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR1616X09-CHP(3),(4)	0.6	2.5	16	16	120	19.4	16	0.2	18.7	2.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-CHP(3)	0.6	2.5	16	16	120	19.4	16	0.2/15.8	18.7	-	JX**06...,12...,16..., 20...	1.2	1

*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20... inserts, and 4 mm shorter for JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

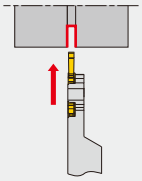
SPARE PARTS

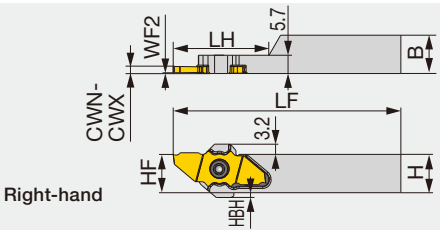
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**09	CSTC-4L100DL	T-1008/5	-	-	-	-
JSXXL**09	CSTC-4L100DR	T-1008/5	-	-	-	-
JSXXR**F**-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F**-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X**-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X**-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

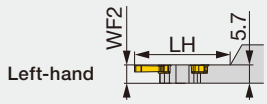
Reference pages: Inserts → F074, F075, Standard cutting conditions → F076
Parts for coolant hose → F266

JSXXR/L-S

Parting-off toolholders, for swiss lathes (for sub spindle)







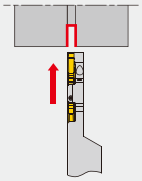
Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBH	Insert	Torque*
JSXXR/L1010X09-S	0.6	2.5	10	10	120	26	10	0.2/5.5	3	JX**06...,12...,16...(3)	1.2
JSXXR/L1212F09-S	0.6	2.5	12	12	85	26	12	0.2/5.5	1.5	JX**06...,12...,16...(3)	1.2
JSXXR/L1212X09-S	0.6	2.5	12	12	120	30	12	0.2/5.5	1.5	JX**06...,12...,16...(3)	1.2
JSXXR/L1616X09-S	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2

*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(3) JX**20... insert will not fit.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/X-S-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes (for sub spindle)

Direct connection | Tube connection



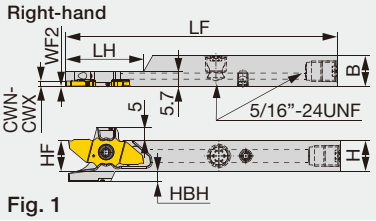


Fig. 1

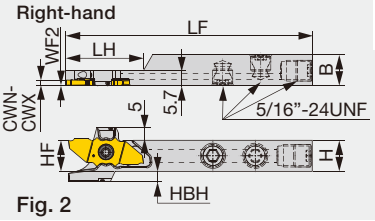
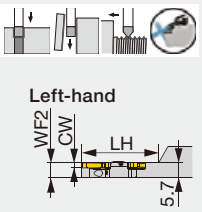


Fig. 2



Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBH	Insert	Torque*	Fig.
JSXXR1212F09-S-CHP(4)	0.6	2.5	12	12	85	26	12	0.2	4	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212F09B-S-CHP	0.6	2.5	12	12	85	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-S-CHP(3),(4)	0.6	2.5	12	12	120	30	12	0.2/5.5	4	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212X09B-S-CHP(3)	0.6	2.5	12	12	120	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR1616X09-S-CHP(3),(4)	0.6	2.5	16	16	120	30	16	0.2	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-S-CHP(3)	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2	1

*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS





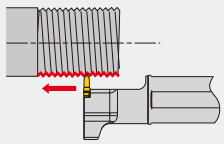


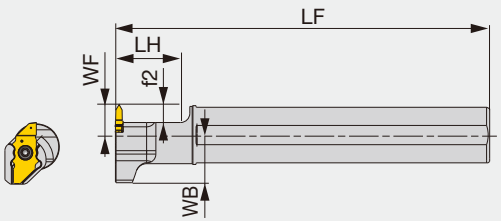

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**-S	CSTC-4L055DL	T-1008/5	-	-	-	-
JSXXL**-S	CSTC-4L055DR	T-1008/5	-	-	-	-
JSXXR**F**-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F**-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**X**-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**X**-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: Inserts → F074, F075, Standard cutting conditions → F076
Parts for coolant hose → F266

JS-SXXL09

External grooving and threading toolholder with round shank, for Swiss lathes





Designation	DCONMS	H	B	LF	LH	WB	WF(1)	f2(1)	Insert	Torque*
JS19G-SXXL09	19.05	18	18	90	21	15.43	10	6	JX**06,12*R	1.2
JS19X-SXXL09	19.05	18	18	120	21	15.43	10	6	JX**06,12*R	1.2
JS20G-SXXL09	20	19	19	90	21	15.4	10	6	JX**06,12*R	1.2
JS20X-SXXL09	20	19	19	120	21	15.4	10	6	JX**06,12*R	1.2
JS22X-SXXL09	22	21	21	120	21	15.4	10	6	JX**06,12*R	1.2
JS25H-SXXL09	25	24	24	100	21	15.4	10	6	JX**06,12*R	1.2
JS254X-SXXL09	25.4	24	24	120	21	15.4	10	6	JX**06,12*R	1.2

*Torque: Recommended clamping torque (N·m)
(1) When using JX..06... insert, both WF and f2 sizes will be 2 mm shorter than the values provided above.

SPARE PARTS

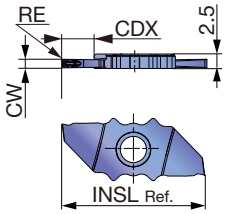



Designation	Clamping screw	Wrench
JS***-SXXL09	CSTC-4L100DL	T-1008/5

Reference pages: Inserts → F074, F075, Standard cutting conditions → F076

JXPS**R/L-F (with 3D chipbreaker, sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

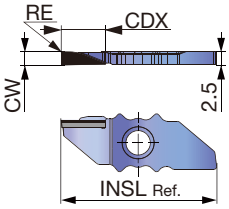
Designation	HAND	CW±0.025	RE	Coated	CUTDIA	CDX*	INSL
				SH725			
JXPS06R06F	R	0.6	0.05	●	6	3.5	21
JXPS06L06F	L	0.6	0.05	●	6	3.5	21
JXPS12R08F	R	0.8	0.05	●	12	6.5	25
JXPS12L08F	L	0.8	0.05	●	12	6.5	25
JXPS12R10F	R	1	0.05	●	12	6.5	25
JXPS12L10F	L	1	0.05	●	12	6.5	25
JXPS12R15F	R	1.5	0.05	●	12	6.5	25
JXPS12L15F	L	1.5	0.05	●	12	6.5	25
JXPS16R15F	R	1.5	0.05	●	16	8.5	29
JXPS16L15F	L	1.5	0.05	●	16	8.5	29
JXPS20R20F	R	2	0.05	●	20	10.5	33
JXPS20L20F	L	2	0.05	●	20	10.5	33

*Max grooving depth (CDX) varies depending on workpiece diameters.

● : Line up

JXDX**R-F (PCD insert)





P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

★ : First choice

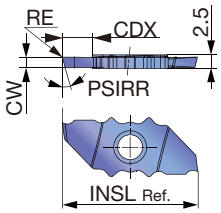
Designation	HAND	CW±0.05	RE	PCD	CDX	INSL
				DX110		
JXDX12R20F	R	2	< 0.1	●	6	25
JXDX12R25F	R	2.5	< 0.1	●	6.5	25
JXDX16R25F	R	2.5	< 0.1	●	7	29

● : Line up

Reference pages: Toolholders → F071 - F073, Standard cutting conditions → F076

JXPG**R/L-F (Sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.025	RE	Coated						CUTDIA	CDX*	INSL	PSIRR
				SH725									
JXPG06R10F	R	1	0.05	●						6	3.5	21	0°
JXPG06L10F	L	1	0.05	●						6	3.5	21	0°
JXPG06R15F	R	1.5	0.05	●						6	3.5	21	0°
JXPG06L15F	L	1.5	0.05	●						6	3.5	21	0°
JXPG06R10F-15	R	1	0.05	●						6	3.5	21	15°
JXPG06L10F-15	L	1	0.05	●						6	3.5	21	15°
JXPG06R15F-15	R	1.5	0.05	●						6	3.5	21	15°
JXPG06L15F-15	L	1.5	0.05	●						6	3.5	21	15°
JXPG12R15F	R	1.5	0.05	●						12	6.5	25	0°
JXPG12L15F	L	1.5	0.05	●						12	6.5	25	0°
JXPG12R20F	R	2	0.05	●						12	6.5	25	0°
JXPG12L20F	L	2	0.05	●						12	6.5	25	0°
JXPG12R15F-15	R	1.5	0.05	●						12	6.5	25	15°
JXPG12L15F-15	L	1.5	0.05	●						12	6.5	25	15°
JXPG12R20F-15	R	2	0.05	●						12	6.5	25	15°
JXPG12L20F-15	L	2	0.05	●						12	6.5	25	15°
JXPG16R15F	R	1.5	0.05	●						16	8.5	29	0°
JXPG16L15F	L	1.5	0.05	●						16	8.5	29	0°
JXPG16R20F	R	2	0.05	●						16	8.5	29	0°
JXPG16L20F	L	2	0.05	●						16	8.5	29	0°
JXPG16R15F-15	R	1.5	0.05	●						16	8.5	29	15°
JXPG16L15F-15	L	1.5	0.05	●						16	8.5	29	15°
JXPG16R20F-15	R	2	0.05	●						16	8.5	29	15°
JXPG16L20F-15	L	2	0.05	●						16	8.5	29	15°
JXPG20R15F	R	1.5	0.05	●						20	10.5	33	0°
JXPG20L15F	L	1.5	0.05	●						20	10.5	33	0°
JXPG20R20F	R	2	0.05	●						20	10.5	33	0°
JXPG20L20F	L	2	0.05	●						20	10.5	33	0°
JXPG20R15F-15	R	1.5	0.05	●						20	10.5	33	15°
JXPG20L15F-15	L	1.5	0.05	●						20	10.5	33	15°
JXPG20R20F-15	R	2	0.05	●						20	10.5	33	15°
JXPG20L20F-15	L	2	0.05	●						20	10.5	33	15°

*Max grooving depth (CDX) varies depending on workpiece diameters.

● : Line up

Reference pages: Toolholders → F071 - F073, Standard cutting conditions → F076

STANDARD CUTTING CONDITIONS

Parting, Grooving

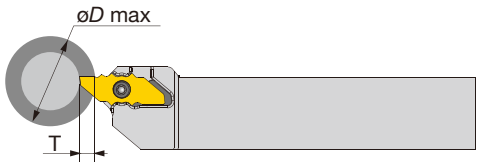
ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 200	0.01 - 0.05
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200	0.01 - 0.05
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 200	0.01 - 0.05
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 200	0.01 - 0.05
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.05
	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.05
	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.05

For aluminium and non-ferrous metal PCD insert

ISO	Workpiece materials	Grades	Operation	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)	Depth of cut *ap* (mm)
N	Aluminium alloys A5056, A6061, etc.	DX110	Grooving	100 - 300	0.03 - 0.15	-
		DX110	Turning	100 - 300	0.03 - 0.15	< 6

Maximum grooving depths (T) in relation to workpiece diameters (ø*D* max) without interference

Maximum grooving depth (T) is limited relative to workpiece diameter (ø*D* max) to avoid interference between workpiece and insert.

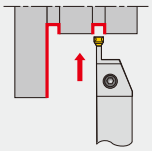


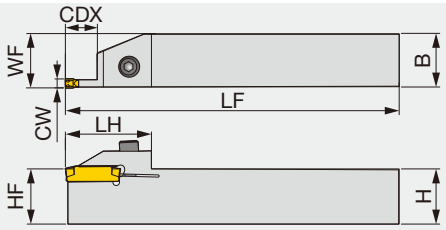
Grooving depths (T) and workpiece diameters (ø*D* max) for each insert

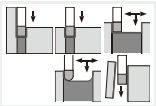
Designation	T≤1.0	T≤2.0	T≤2.5	T≤3.0	T≤3.5	T≤4.0	T≤5.0	T≤5.5	T≤6.0	T≤6.5	T≤7.0	T≤7.5	T≤8.0	T≤8.5	T≤9.0	T≤9.5	T≤10.0	T≤10.5
JXP*06...	∞	∞	200	60	30	-	-	-	-	-	-	-	-	-	-	-	-	-
JXP*12...	∞	∞	∞	∞	∞	∞	∞	100	60	35	-	-	-	-	-	-	-	-
JXP*16...	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	200	90	50	25	-	-	-	-
JXP*20...	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	200	80	50	25

CGWSR/L-W

External grooving, parting and turning toolholder, for 2 corner inserts







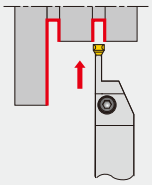
Right hand (R) shown.

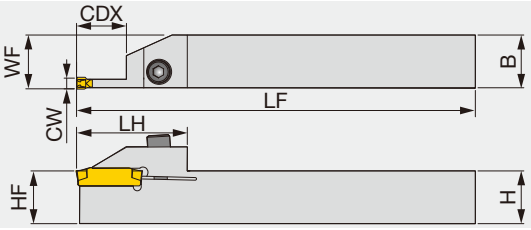
Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
CGWSR/L1616-W30	3	12	16	16	125	34	16	16.4	WG*30, WGE30R/L	5
CGWSR/L2020-W30	3	12	20	20	150	34	20	20.4	WG*30, WGE30R/L	5
CGWSR/L2525-W30	3	12	25	25	150	34	25	25.4	WG*30, WGE30R/L	5
CGWSR/L2020-W40	4	13	20	20	150	39	20	20.4	WG*40, WGE40R/L	5
CGWSR/L2525-W40	4	13	25	25	150	39	25	25.4	WG*40, WGE40R/L	5
CGWSR/L2020-W50	5	13	20	20	150	39	20	20.4	WG*50, WGE50R/L	5
CGWSR/L2525-W50	5	13	25	25	150	39	25	25.4	WG*50, WGE50R/L	5

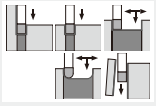
*Torque: Recommended clamping torque (N·m)

CGWSR/L-W-L

External deep grooving, parting and turning toolholder, for 2 corner inserts







Right hand (R) shown.

Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
CGWSR/L1616-W20-L	2	15	16	16	125	37	16	16.2	WGE20, WGE20R/L	5
CGWSR/L2020-W20-L	2	15	20	20	150	37	20	20.2	WGE20, WGE20R/L	5
CGWSR/L2525-W20-L	2	15	25	25	150	37	25	25.2	WGE20, WGE20R/L	5
CGWSR/L1616-W30-L	3	16.5, 17.5(1)	16	16	125	37	16	16.4	WG*30, WGE30R/L	5
CGWSR/L2020-W30-L	3	16.5, 17.5(1)	20	20	150	37	20	20.4	WG*30, WGE30R/L	5
CGWSR/L2525-W30-L	3	16.5, 17.5(1)	25	25	150	37	25	25.4	WG*30, WGE30R/L	5
CGWSR/L2020-W40-L	4	21, 21.5(1)	20	20	150	42	20	20.4	WG*40, WGE40R/L	5
CGWSR/L2525-W40-L	4	21, 21.5(1)	25	25	150	42	25	25.4	WG*40, WGE40R/L	5
CGWSR/L2020-W50-L	5	21	20	20	150	42	20	20.4	WG*50, WGE50R/L	5
CGWSR/L2525-W50-L	5	21	25	25	150	42	25	25.4	WG*50, WGE50R/L	5

*Torque: Recommended clamping torque (N·m)
(1) The value is true when using the WGR insert.

SPARE PARTS



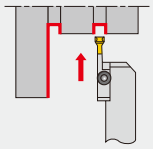


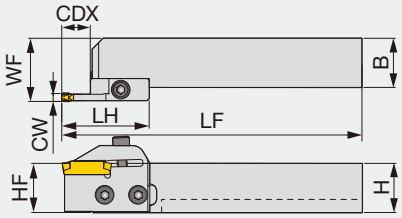
Designation	Clamping screw	Wrench
CGWSR/L****-W...	CHHM5-18	P-4

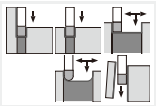
Reference pages: Inserts → F082 - F084, Standard cutting conditions → F084

CGWSR/L-WG

External grooving, parting and turning toolholder, for 2 corner inserts







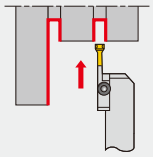
Right hand (R) shown.
Dashed line: 20mm square shank.

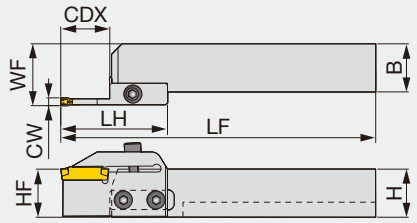
Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Shank	Adapter	Torque*
CGWSR/L2020-W30GR/L	3	12	20	20	150.5	43.5	20	26.9	WG*30, WGE30R/L	CGWSR/L2020	W30GR/L	5
CGWSR/L2525-W30GR/L	3	12	25	25	150.5	43.5	25	31.9	WG*30, WGE30R/L	CGWSR/L2525	W30GR/L	5
CGWSR/L2020-W40GR/L	4	13	20	20	151.5	44.5	20	26.9	WG*40, WGE40R/L	CGWSR/L2020	W40GR/L	5
CGWSR/L2525-W40GR/L	4	13	25	25	151.5	44.5	25	31.9	WG*40, WGE40R/L	CGWSR/L2525	W40GR/L	5
CGWSR/L2020-W50GR/L	5	13	20	20	151.5	44.5	20	26.9	WG*50, WGE50R/L	CGWSR/L2020	W50GR/L	5
CGWSR/L2525-W50GR/L	5	13	25	25	151.5	44.5	25	31.9	WG*50, WGE50R/L	CGWSR/L2525	W50GR/L	5

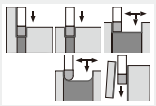
Note: Use right-hand adapters (R) with right-hand shanks (R); and left-hand adapters (L) with left-hand shanks (L).
*Torque: Recommended clamping torque (N·m)

CGWSR/L-WG-L

External deep grooving, parting and turning toolholder, for 2 corner inserts







Right hand (R) shown.
Dashed line: 20mm square shank.

Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Shank	Adapter	Torque*
CGWSR/L2020-W20GR/L-L	2	15	20	20	153.5	46.5	20	26.7	WGE20, WGE20R/L	CGWSR/L2020	W20GR/L-L	5
CGWSR/L2525-W20GR/L-L	2	15	25	25	153.5	46.5	25	31.7	WGE20, WGE20R/L	CGWSR/L2525	W20GR/L-L	5
CGWSR/L2020-W30GR/L-L	3	16.5, 17.5(1)	20	20	157.5	50.5	20	26.9	WG*30, WGE30R/L	CGWSR/L2020	W30GR/L-L	5
CGWSR/L2525-W30GR/L-L	3	16.5, 17.5(1)	25	25	157.5	50.5	25	31.9	WG*30, WGE30R/L	CGWSR/L2525	W30GR/L-L	5
CGWSR/L2020-W40GR/L-L	4	21, 21.5(1)	20	20	162.5	55.5	20	26.9	WG*40, WGE40R/L	CGWSR/L2020	W40GR/L-L	5
CGWSR/L2525-W40GR/L-L	4	21, 21.5(1)	25	25	162.5	55.5	25	31.9	WG*40, WGE40R/L	CGWSR/L2525	W40GR/L-L	5
CGWSR/L2020-W50GR/L-L	5	21	20	20	162.5	55.5	20	26.9	WG*50, WGE50R/L	CGWSR/L2020	W50GR/L-L	5
CGWSR/L2525-W50GR/L-L	5	21	25	25	162.5	55.5	25	31.9	WG*50, WGE50R/L	CGWSR/L2525	W50GR/L-L	5

Note: Use right-hand adapters (R) with right-hand shanks (R); and left-hand adapters (L) with left-hand shanks (L).
*Torque: Recommended clamping torque (N·m)
(1) The value is true when using the WGR insert.

SPARE PARTS





Designation	Clamping screw	Adapter screw	Wrench
CGWSR/L****-W**G...	CHHM5-18	CSHB-6	P-4

Combination of adapter and shank

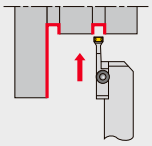
Shank	Adapter	
	**GR, **GR-L	**GL, **GL-L
CGWSR...	●	
CGWSL...		●
CGWTR...		●
CGWTL...	●	

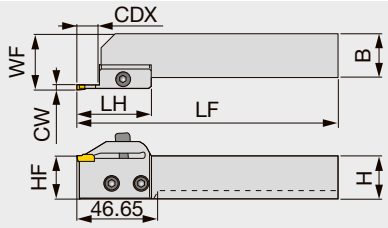
● : Corresponding

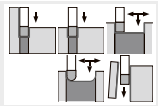
Reference pages: Inserts → F082 - F084, Shanks → F081, Standard cutting conditions → F084

CGWSR/L-G

External grooving, parting and turning toolholder, for 1 corner inserts







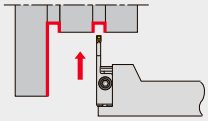
Right hand (R) shown.
The dashed line shows
20 mm-square shank tools.

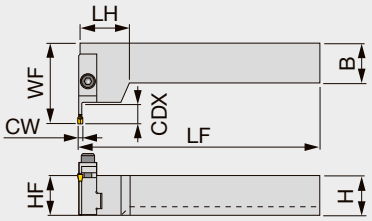
Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Shank	Adapter	Torque*
CGWSR/L2020-20GR/L	2	12	20	20	150.2	43.15	20	26.8	GE20, GE20-AL	CGWSR/L2020	20GR/L	5
CGWSR/L2525-20GR/L	2	12	25	25	150.2	43.15	25	31.8	GE20, GE20-AL	CGWSR/L2525	20GR/L	5
CGWSR/L2020-30GR/L	3	12	20	20	150.2	43.15	20	27	G*30,GE30R/L,GE30-AL	CGWSR/L2020	30GR/L	5
CGWSR/L2525-30GR/L	3	12	25	25	150.2	43.15	25	32	G*30,GE30R/L,GE30-AL	CGWSR/L2525	30GR/L	5
CGWSR/L2020-40GR/L	4	12	20	20	150.2	43.15	20	27.1	G*40,GE40R/L,GE40-AL	CGWSR/L2020	40GR/L	5
CGWSR/L2525-40GR/L	4	12	25	25	150.2	43.15	25	32.1	G*40,GE40R/L,GE40-AL	CGWSR/L2525	40GR/L	5
CGWSR/L2020-50GR/L	5	12	20	20	150.2	43.15	20	27.2	G*50,GE50R	CGWSR/L2020	50GR	5

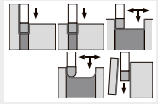
Note: For diameter compensation values in traversing, see page **F115**.
Use right-hand adapters (R) with right-hand shanks (R); and left-hand adapters (L) with left-hand shanks (L).
*Torque: Recommended clamping torque (N·m)

CGWTR/L-G

External grooving, parting and turning toolholder, for 1 corner inserts







Right hand (R) shown.
The dashed line shows
20 mm-square shank tools.

Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Shank	Adapter	Torque*
CGWTR/L2020-30GL/R	3	12	20	20	150	12.9	20	49.9	G*30,GE30R/L,GE30-AL	CGWTR/L2020	30GL/R	5
CGWTR/L2525-30GL/R	3	12	25	25	150	12.9	25	49.9	G*30,GE30R/L,GE30-AL	CGWTR/L2525	30GL/R	5
CGWTR/L2020-40GL/R	4	12	20	20	150.1	12.9	20	49.9	G*40,GE40R/L,GE40-AL	CGWTR/L2020	40GL/R	5
CGWTR/L2525-40GL/R	4	12	25	25	150.1	12.9	25	49.9	G*40,GE40R/L,GE40-AL	CGWTR/L2525	40GL/R	5
CGWTR/L2020-50GL/R	5	12	20	20	150.2	12.9	20	49.9	G*50,GE50R/L	CGWTR/L2020	50GL/R	5
CGWTR/L2525-50GL/R	5	12	25	25	150.2	12.9	25	49.9	G*50,GE50R/L	CGWTR/L2525	50GL/R	5

Note: For diameter compensation values in traversing, see page **F115**.
Use left-hand adapters (L) with right-hand shanks (R); and right-hand adapters (R) with left-hand shanks (L).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS





Designation	Clamping screw	Adapter screw	Wrench
CGW*R/L****-**G...	CHHM5-18	CSHB-6	P-4

Combination of adapter and shank

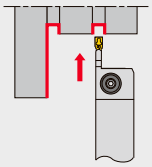
Shank	Adapter	
	**GR, **GR-L	**GL, **GL-L
CGWSR...	●	
CGWSL...		●
CGWTR...		●
CGWTL...	●	

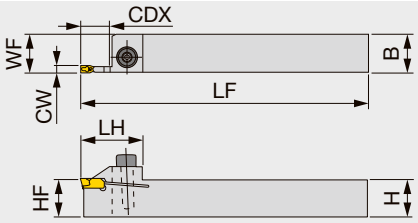
● : Corresponding

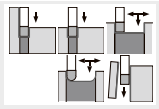
Reference pages: Inserts → F085 - F090, Shanks → F081, Standard cutting conditions → F090

CGSSR/L

External grooving, parting and turning toolholder, for 1 corner inserts







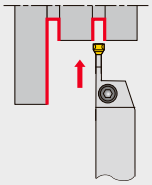
Right hand (R) shown.

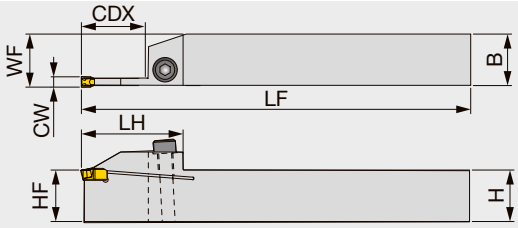
Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
CGSSR/L1616-20	2	16	16	16	125	27	16	16.2	GE20, GE20-AL	5
CGSSR/L2020-20	2	16	20	20	150	27	20	20.2	GE20, GE20-AL	5
CGSSR/L2525-20	2	16	25	25	150	27	25	25.2	GE20, GE20-AL	5
CGSSR/L1616-30	3	12	16	16	125	27	16	16.5	G*30,GE30R/L,GE30-AL	5
CGSSR/L2020-30	3	12	20	20	150	27	20	20.5	G*30,GE30R/L,GE30-AL	5
CGSSR/L2525-30	3	12	25	25	150	27	25	25.5	G*30,GE30R/L,GE30-AL	5
CGSSR/L2020-40	4	12	20	20	150	27	20	20.6	G*40,GE40R/L,GE40-AL	5
CGSSR/L2525-40	4	12	25	25	150	27	25	25.6	G*40,GE40R/L,GE40-AL	5
CGSSR/L2020-50	5	12	20	20	150	27	20	20.7	G*50,GE50R/L	5
CGSSR/L2525-50	5	12	25	25	150	27	25	25.7	G*50,GE50R/L	5

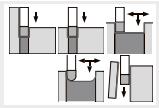
*Torque: Recommended clamping torque (N·m)

CGSSR/L-D

External grooving, parting and turning toolholder, for 1 corner inserts







Right hand (R) shown.

Designation	CW	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
CGSSR/L1616-30D	3	22	16	16	125	36.2	16	16.5	G*30,GE30R/L,GE30-AL	5
CGSSR/L2020-30D	3	22	20	20	150	36.2	20	20.5	G*30,GE30R/L,GE30-AL	5
CGSSR/L2525-30D	3	22	25	25	150	36.2	25	25.5	G*30,GE30R/L,GE30-AL	5
CGSSR/L2020-40D	4	25	20	20	150	39.5	20	20.6	G*40,GE40R/L,GE40-AL	5
CGSSR/L2525-40D	4	25	25	25	150	39.5	25	25.6	G*40,GE40R/L,GE40-AL	5
CGSSR/L2020-50D	5	25	20	20	150	39.5	20	20.7	G*50,GE50R/L	5
CGSSR/L2525-50D	5	25	25	25	150	39.5	25	25.7	G*50,GE50R/L	5

*Torque: Recommended clamping torque (N·m)

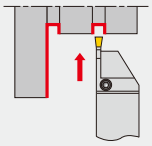
SPARE PARTS

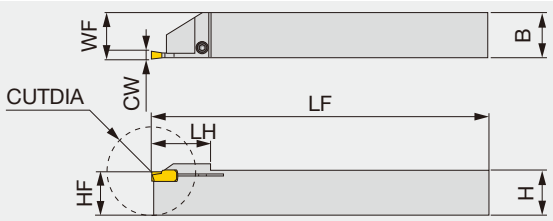
Designation	Clamping screw	Wrench
CGSSR/L...	CHHM5-18	P-4

Reference pages: Inserts → F085 - F090, Standard cutting conditions → F090

JCGSSR/L

External grooving and parting toolholder, for Swiss lathes





Right hand (R) shown.

Designation	CW	CUTDIA	H	B	LF	LH	HF	WF	Insert	Torque*
JCGSSR/L1010-20	2	20	10	10	125	15	10	10.2	GE20, GE20-AL	2.3
JCGSSR/L1212-20	2	25	12	12	125	19	12	12.2	GE20, GE20-AL	2.3
JCGSSR/L1616-20	2	32	16	16	125	22.5	16	16.2	GE20, GE20-AL	2.3

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

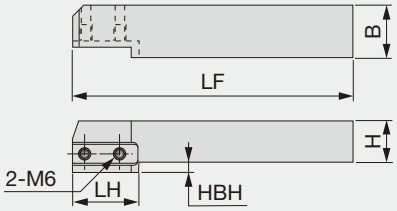




Designation	Clamping screw	Wrench
JCGSSR/L...	CSTB-3	T-9F

CGWSR/L

Shank for CGWSR/L-WG, -WG-L, -G, -CGD, -FL-G/TP, and -#S/D toolholders

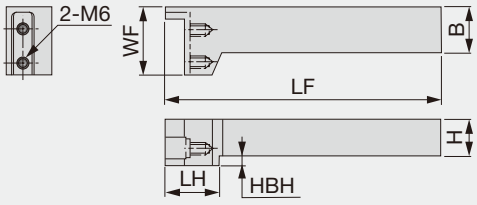


Right hand (R) shown.

Designation	H	B	LF	LH	HBH
CGWSR/L2020	20	20	137	32.5	5
CGWSR/L2525	25	25	137	-	-

CGWTR/L

Shank for CGWSR/L-WG, -WG-L, -G, -CGD, -FL-G/TP, and -#S/D toolholders, for tangentially clamped adapter



Right hand (R) shown.

Designation	H	B	LF	LH	WF	HBH
CGWTR/L2020	20	20	150	30.5	37	5
CGWTR/L2525	25	25	150	-	37	-

SPARE PARTS

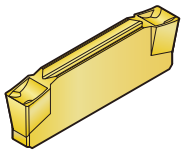


Designation	Adapter screw
CGW*R/L...	CSHB-6

Reference pages: Inserts → F085 - F090, Standard cutting conditions → F090

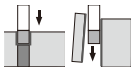
External grooving and parting

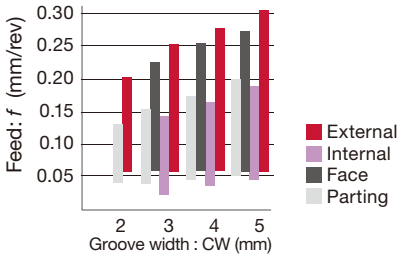
WGE



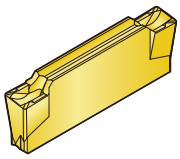
F083

1st choice for external grooving and parting
Excellent chip control for grooving
CW = 2 - 5 mm





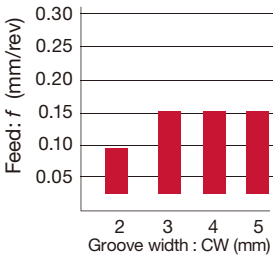
WGE R/L



F083

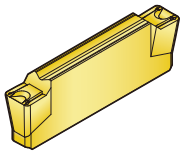
Handed insert
Minimize burr generation when workpiece is cut off
CW = 2 - 5 mm





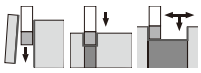
External grooving and turning

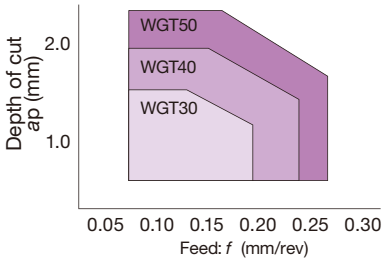
WGT



F084

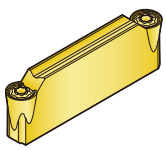
1st choice for turning
Low cutting force and good chip control for traversing
CW = 3 - 5 mm





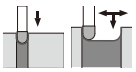
Profiling

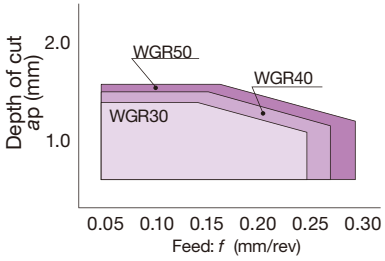
WGR



F084

Low cutting force and good chip control for profiling
CW = 3 - 5 mm



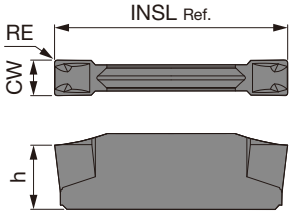


Please see page F*** for the product details.

INSERTS (2 corners)

WGE

For external grooving and parting



		Coated						Cermet					
P	Steel	★	★	★				★					
M	Stainless		★	★									
K	Cast iron		★	☆				☆					
N	Non-ferrous												
S	Superalloys		☆										
H	Hard materials												

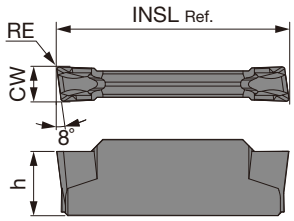
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated T9225	Coated AH120	Coated GH730	Cermet NS9530	INSL	h
WGE20	2	0.2	●	●	●	●	20	4.7
WGE30	3	0.2	●	●	●	●	20	5.5
WGE40	4	0.2	●	●	●	●	25	5.7
WGE50	5	0.2	●	●	●	●	25	5.9

● : Line up

WGE(R/L)

For parting off (handed inserts)



Right hand (R) shown.

		Coated											
P	Steel	★	★										
M	Stainless	★	★										
K	Cast iron	★	☆										
N	Non-ferrous												
S	Superalloys	☆											
H	Hard materials												

★ : First choice
☆ : Second choice

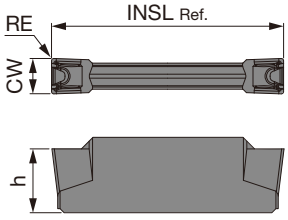
Designation	HAND	$CW^{+0.1}_{0}$	RE	Coated AH120	Coated GH730	INSL	h
WGE20R	R	2	0.2		●	20	4.7
WGE20L	L	2	0.2		●	20	4.7
WGE30R	R	3	0.2	●	●	20	5.5
WGE30L	L	3	0.2		●	20	5.5
WGE40R	R	4	0.2		●	25	5.7
WGE40L	L	4	0.2		●	25	5.7
WGE50R	R	5	0.2		●	25	5.9
WGE50L	L	5	0.2		●	25	5.9

● : Line up

Reference pages: Toolholders → F077, F078, Standard cutting conditions → F084

WGT

For external grooving, parting, and turning



		Coated			Cermet	
		T9225	AH120	GH730	NS9530	
P	Steel	★	★	★	★	
M	Stainless		★	★		
K	Cast iron		★	☆	☆	
N	Non-ferrous					
S	Superalloys		☆			
H	Hard materials					

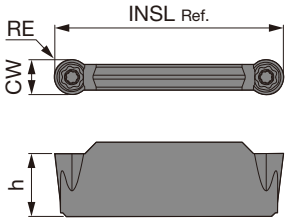
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated T9225	Coated AH120	Coated GH730	Cermet NS9530	INSL	h
WGT30	3	0.4	●		●	●	20	5.5
WGT40	4	0.4	●		●	●	25	5.7
WGT50	5	0.4	●	●	●	●	25	5.9

● : Line up

WGR

For profiling (full radius)



		Coated			Cermet	
		T9225	AH120	GH730	NS9530	
P	Steel	★	★	★	★	
M	Stainless		★	★		
K	Cast iron		★	☆	☆	
N	Non-ferrous					
S	Superalloys		☆			
H	Hard materials					

★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated T9225	Coated AH120	Coated GH730	Cermet NS9530	INSL	h
WGR30	3	1.5	●	●	●	●	20	5.5
WGR40	4	2	●	●	●	●	25	5.7
WGR50	5	2.5		●	●	●	25	5.9

● : Line up

STANDARD CUTTING CONDITIONS (for 2 corner inserts)

ISO	Workpiece material	Recommended grade	Cutting speed *Vc* (m/min)
P	Low carbon steels Alloy steels (~ HB150)	T9225	80 - 300
		NS9530	100 - 200
		GH730, AH120	50 - 180
	Medium carbon steels Alloy steels (HB150 ~ 250)	T9225	80 - 220
		NS9530	80 - 180
		GH730, AH120	50 - 150
	High carbon steels Alloy steels (HB250 ~)	T9225	80 - 220
		NS9530	80 - 150
		GH730, AH120	50 - 150
M	Stainless steels	GH730, AH120	50 - 120
K	Grey and ductile cast irons	GH730, AH120	50 - 180

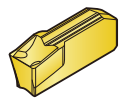
Operation	Feed: *f* (mm/rev) Groove width: CW (mm) 2	3	4	5
Grooving (WGE□□)	0.06 ~ 0.20	0.06 ~ 0.25	0.07 ~ 0.27	0.07 ~ 0.30
Parting (WGE□□R/L)	0.04 ~ 0.10	0.04 ~ 0.14	0.04 ~ 0.14	0.04 ~ 0.14
Turning (WGT□□)	-	*ap* = 0.5 ~ 1.5 *f* = 0.06 ~ 0.2	*ap* = 0.5 ~ 2.0 *f* = 0.06 ~ 0.25	*ap* = 0.5 ~ 2.5 *f* = 0.06 ~ 0.27
Profiling (WGR□□)	-	*ap* = 0.5 ~ 1.4 *f* = 0.05 ~ 0.25	*ap* = 0.5 ~ 1.5 *f* = 0.05 ~ 0.26	*ap* = 0.5 ~ 1.6 *f* = 0.05 ~ 0.3

Note: For diameter compensation values in traversing, see page F115.

Reference pages: Toolholders → F077, F078

External grooving and parting

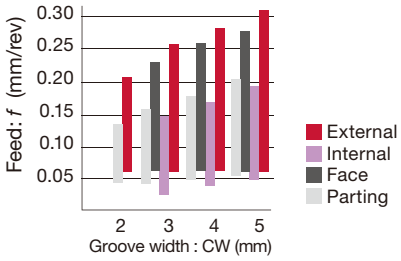
GE

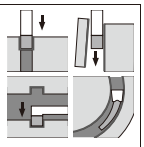


F087

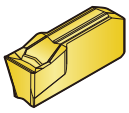
1st choice for external grooving and parting
Excellent chip control

CW = 2 - 5 mm





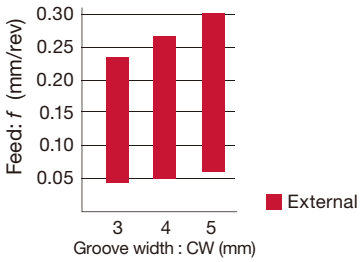
GF

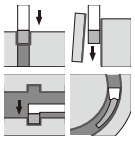


F088

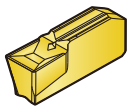
1st choice for face grooving
Low cutting force and good chip control for face grooving

CW = 3 - 5 mm





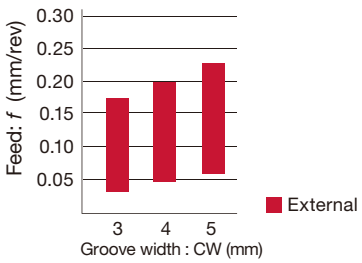
GN

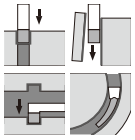


F089

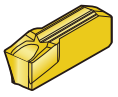
1st choice for internal grooving
Low cutting force and good chip control for internal grooving

CW = 3 - 5 mm





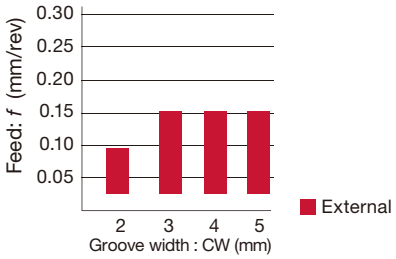
GE R/L



F089

Handed insert
Minimize burr generation when workpiece is cut off

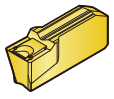
CW = 3 - 5 mm





External grooving and turning

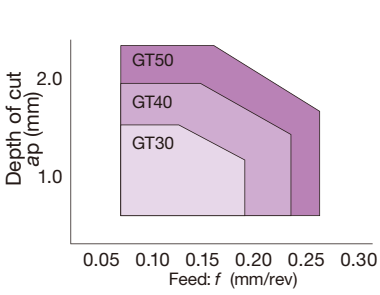
GT

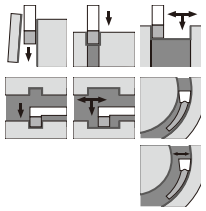


F087

1st choice for turning
Low cutting force and good chip control for traversing

CW = 3 - 5 mm

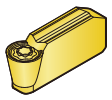




Please see page F*** for the product details.

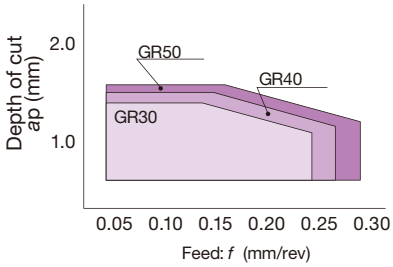
Profiling

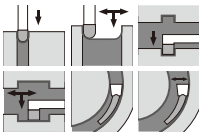
GR



F088

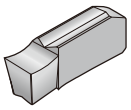
Full radius type
Low cutting force and good chip control for profiling
CW = 3 - 5 mm





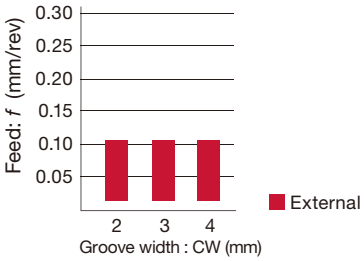
For aluminium and non-ferrous metal

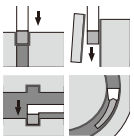
GE-AL



F090

Reduce cutting force and welding due to sharp chipbreaker
CW = 2 - 4 mm



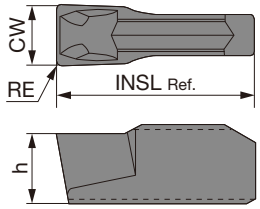


Please see page F*** for the product details.

INSERTS (1 corner)

GE

For external grooving and parting



P	Steel	★	★	★				★				
M	Stainless		★	★								
K	Cast iron		★	☆				☆				
N	Non-ferrous											
S	Superalloys		☆									
H	Hard materials											

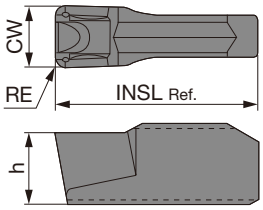
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet						INSL	h
			T9225	AH120	GH730	NS9530							
GE20	2	0.2		●	●	●						10	3.5
GE30	3	0.2	●	●	●	●						10	3.5
GE40	4	0.2	●	●	●	●						10	4
GE50	5	0.2	●	●	●	●						12	4.5

● : Line up

GT

For external grooving and turning



P	Steel	★	★	★				★				
M	Stainless		★	★								
K	Cast iron		★	☆				☆				
N	Non-ferrous											
S	Superalloys		☆									
H	Hard materials											

★ : First choice
☆ : Second choice

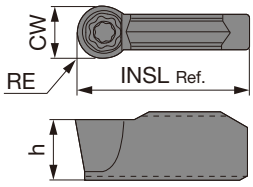
Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet						INSL	h
			T9225	AH120	GH730	NS9530							
GT30	3	0.4		●	●	●						10	3.5
GT40	4	0.4		●	●	●						10	4
GT50	5	0.4	●	●	●	●						12	4.5

● : Line up

Reference pages: Toolholders → F079 - F081, Standard cutting conditions → F090

GR

For profiling (full radius)



P	Steel	★	★	★				★			
M	Stainless		★	★							
K	Cast iron		★	☆				☆			
N	Non-ferrous										
S	Superalloys		☆								
H	Hard materials										

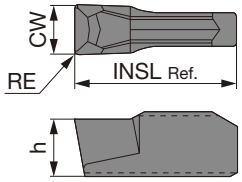
★ : First choice
☆ : Second choice

Designation	CW$^{+0.1}_{0}$	RE	Coated						Cermet				INSL	h
			T9225	AH120	GH730				NS9530					
GR30	3	1.5		●	●				●				10	3.5
GR40	4	2	●	●	●				●				10	4
GR50	5	2.5	●	●	●				●				12	4.5

● : Line up

GF

For face grooving



P	Steel	★			★						
M	Stainless	★									
K	Cast iron	☆			☆						
N	Non-ferrous										
S	Superalloys										
H	Hard materials										

★ : First choice
☆ : Second choice

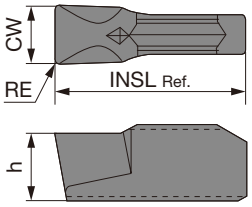
Designation	CW$^{+0.1}_{0}$	RE	Coated			Cermet							INSL	h
			GH730			NS9530								
GF30	3	0.2	●			●							10	3.5
GF40	4	0.2	●			●							10	4
GF50	5	0.2	●			●							12	4.5

● : Line up

Reference pages: Toolholders → F079 - F081, Standard cutting conditions → F090

GN

For internal grooving



P	Steel	★	
M	Stainless	★	
K	Cast iron	☆	
N	Non-ferrous		
S	Superalloys		
H	Hard materials		

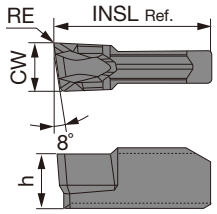
★ : First choice
☆ : Second choice

Designation	CW$^{+0.1}_{0}$	RE	Coated	INSL	h
			GH730		
GN30	3	0.2	●	10	3.5
GN40	4	0.2	●	10	4
GN50	5	0.2	●	12	4.5

● : Line up

GE-R/L

For parting off (handed inserts)



Right hand (R) shown.

P	Steel	★	★
M	Stainless	★	★
K	Cast iron	★	☆
N	Non-ferrous		
S	Superalloys	☆	
H	Hard materials		

★ : First choice
☆ : Second choice

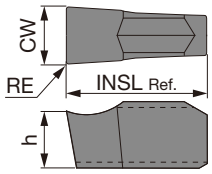
Designation	HAND	CW$^{+0.1}_{0}$	RE	Coated		INSL	h
				AH120	GH730		
GE30R	R	3	0.2	●	●	10	3.5
GE30L	L	3	0.2		●	10	3.5
GE40R	R	4	0.2	●	●	10	4
GE40L	L	4	0.2		●	10	4
GE50R	R	5	0.2		●	12	4.5
GE50L	L	5	0.2	●	●	12	4.5

● : Line up

Reference pages: Toolholders → F079 - F081, Standard cutting conditions → F090

GE-AL

For aluminium and non-ferrous metal



P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Uncoated KS05F	INSL	h
GE20-AL	2	0.2	●	10	3.5
GE30-AL	3	0.2	●	10	3.5
GE40-AL	4	0.2	●	10	4

● : Line up

STANDARD CUTTING CONDITIONS (for 1 corner inserts)

ISO	Workpiece material	Grades	Cutting speed *Vc* (m/min)
P	Low carbon steel, Alloy steel (~ HB150)	T9225	80 - 300
		NS9530	100 - 200
		GH730, AH120	50 - 180
	Medium carbon steel, Alloy steel (HB150 ~ 250)	T9225	80 - 220
		NS9530	80 - 180
		GH730, AH120	50 - 150
	High carbon steel, Alloy steel (HB250 ~)	T9225	80 - 220
		NS9530	80 - 150
		GH730, AH120	50 - 120
M	Stainless steel	GH730, AH120	50 - 120
K	Grey iron, Ductile cast iron	GH730, AH120	50 - 180
N	Aluminium alloy, Non-ferrous metal	KS05F	200 - 300

For External

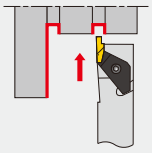
Operation	Feed: *f* (mm/rev) Groove width: CW (mm) 2	3	4	5
Grooving (GE**)	0.06 - 0.2	0.06 - 0.25	0.07 - 0.27	0.07 - 0.3
Parting off (GE**R/L)	0.04 - 0.1	0.04 - 0.14	0.04 - 0.14	0.04 - 0.14
Traversing (GT**)	-	*ap* = 0.5 - 1.5 *f* = 0.06 - 0.2	*ap* = 0.5 - 2 *f* = 0.06 - 0.25	*ap* = 0.5 - 2.5 *f* = 0.06 - 0.27
Profiling (GR**)	-	*ap* = 0.5 - 1.4 *f* = 0.05 - 0.25	*ap* = 0.5 - 1.5 *f* = 0.05 - 0.26	*ap* = 0.5 - 1.6 *f* = 0.05 - 0.3
Grooving for Aluminium alloys (GE**-AL)	0.03 - 0.1	0.03 - 0.1	0.03 - 0.1	-

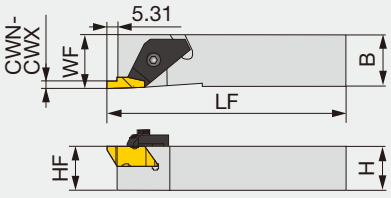
For diameter compensation values in traversing, see page F115.

Reference pages: Toolholders → F079 - F081

FLASR/L

External grooving and threading toolholder, for Swiss lathes







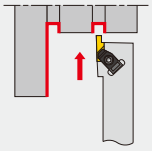
Right hand (R) shown.

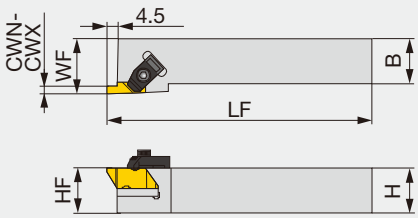
Designation	CWN	CWX	HF	H	B	LF	WF	Insert	Torque*
FLASR/L-1616M3	1	3	16	16	16	125	16	FL*-3**R/L...	3

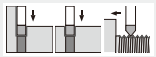
Note: Use right-hand toolholders (R) with right-hand inserts (R); and left-hand toolholders (L) with left-hand inserts (L).
*Torque: Recommended clamping torque (N·m)

FLSR/L

External grooving and threading toolholder, for Swiss lathes







Right hand (R) shown.

Designation	CWN	CWX	HF	H	B	LF	WF	Insert	Torque*
FLSR/L-2020M3	1	3	20	20	20	125	32	FL*-3**R/L...	3
FLSR/L-2525M3	1	3	25	25	25	150	32	FL*-3**R/L...	3

Note: Use right-hand toolholders (R) with right-hand inserts (R); and left-hand toolholders (L) with left-hand inserts (L).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS



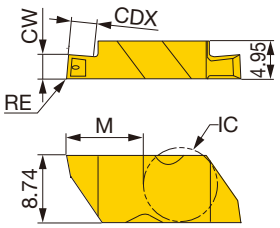


Designation	Clamp	Clamping screw	Wrench
FLASR-1616M3	TF-184	S-412	5/32HEX
FLASL-1616M3	TF-185	S-412	5/32HEX
FLSR-****M3	TF-72	S-412	5/32HEX
FLSL-****M3	TF-73	S-412	5/32HEX

Reference pages: Inserts, Standard cutting conditions → F092

INSERT

FLG-CB (For grooving)



P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	☆
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated AH110	CDX	IC	M
FLG-3M100R-CB	R	1	0.19	●	1.4	9.525	10.3
FLG-3M100L-CB	L	1	0.19	●	1.4	9.525	10.3
FLG-3M150R-CB	R	1.5	0.19	●	2.55	9.525	10.3
FLG-3M150L-CB	L	1.5	0.19	●	2.55	9.525	10.3
FLG-3M200R-CB	R	2	0.19	●	2.55	9.525	10.3
FLG-3M200L-CB	L	2	0.19	●	2.55	9.525	10.3
FLG-3M250R-CB	R	2.5	0.19	●	4.07	9.525	10.3
FLG-3M250L-CB	L	2.5	0.19	●	4.07	9.525	10.3
FLG-3M300R-CB	R	3	0.19	●	4.07	9.525	10.3
FLG-3M300L-CB	L	3	0.19	●	4.07	9.525	10.3

● : Line up

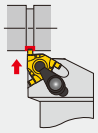
STANDARD CUTTING CONDITIONS

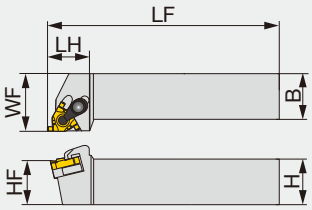
ISO	Workpiece material	Grade	Application	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	High carbon steel S45C, etc. C45, etc.	AH110	Grooving	100 - 200	0.12 - 0.35
P	Alloy steel SCM435, etc. 34CrMo4, etc.	AH110	Grooving	50 - 80	0.12 - 0.3
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	AH110	Grooving	50 - 150	0.1 - 0.2
K	Gray cast iron FC250, etc. 250, etc.	AH110	Grooving	50 - 180	0.1 - 0.25
K	Ductile cast iron FCD400, etc. 40-15, etc.	AH110	Grooving	50 - 120	0.1 - 0.25

Reference pages: Toolholders → F091

CER/L

External grooving and threading toolholder (The -DT holders can be used either with the insert screw or top-clamp)





Right hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque*
CER/L1212H16DT	1	2.25	12	12	100	24	12	16	GTGN-16...	3.5
CER/L1616H16DT	1	2.25	16	16	100	24	16	20	GTGN-16...	3.5
CER/L2020K16DT	1	2.25	20	20	125	24	20	25	GTGN-16...	3.5
CER/L2525M16DT	1	2.25	25	25	150	28	25	32	GTGN-16...	3.5
CER3232P16T	1	2.25	32	32	170	32	32	40	GTGN-16...	3.5

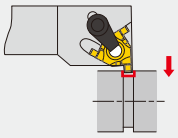
Note: A clamp set consists of a clamp and a clamping screw. A shim set consists of a shim and a shim screw to secure the shim to the toolholder.
Standard shims can be used on both right- and left-hand toolholders. Please use either of the sides depending on the tool hand.
When using grooving inserts, please use shims for grooving. Shims for grooving inserts are sold separately.
Use right-hand toolholders (R) with right-hand inserts (R); and left-hand toolholders (L) with left-hand inserts (L).
*Torque: Recommended clamping torque (N·m)

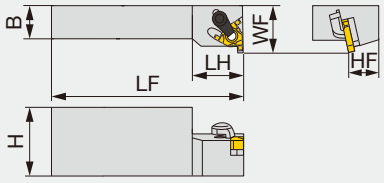
SPARE PARTS

Designation	Clamp set	Clamp screw	Shim screw	*Optional: Shim for grooving	Wrench 1	Wrench 2
CER*****16DT	CSP16	CSTB-3.5ST	DTS5-3.5	G16ER/IL-DT	P-3.5	T-15F
CEL*****16DT	CSP16	CSTB-3.5ST	DTS5-3.5	G16EL/IR-DT	P-3.5	T-15F
CER3232P16T	CSP16	-	-	G16ER/IR-S	-	T-15F

B-CER/L

External threading and grooving toolholder, for Swiss lathes





Right hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque*
B-CER/L16M16	1	2.25	32	16	150	24	16	22	GTGN-16...	3.5

Note: When using grooving inserts, please use shims for grooving. Shims for grooving inserts are sold separately.
Use right-hand toolholders (R) with right-hand inserts (R); and left-hand toolholders (L) with left-hand inserts (L).
*Torque: Recommended clamping torque (N·m)

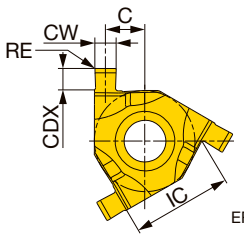
SPARE PARTS

Designation	Clamp set	Clamp screw	Wrench	*Optional: Shim for grooving
B-CER16M16	CSP16	-	T-15F	G16ER/IL-S
B-CEL16M16	CSP16	-	T-15F	G16EL/IR-S

Reference pages: Inserts, Standard cutting conditions → F094

INSERT

GTGN16



ER/IL shown.

P	Steel	★				
M	Stainless	★				
K	Cast iron					
N	Non-ferrous					
S	Superalloys	★				
H	Hard materials					

★ : First choice
☆ : Second choice

Designation	HAND (External)	CW±0.03	RE	Coated				Insert size	CDX	IC	C	Shim	
				SH730								Dual-clamp toolholder: screw-on and clamp-on	Clamp-on toolholder
GTGN-16ER/IL100	R	1	0.1	●				16	1.25	9.525	4.22	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR100	L	1	0.1	●				16	1.25	9.525	4.22	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL120	R	1.2	0.1	●				16	1.3	9.525	4.12	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR120	L	1.2	0.1	●				16	1.3	9.525	4.12	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL140	R	1.4	0.1	●				16	1.5	9.525	4.02	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR140	L	1.4	0.1	●				16	1.5	9.525	4.02	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL170	R	1.7	0.1	●				16	1.7	9.525	3.67	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR170	L	1.7	0.1	●				16	1.7	9.525	3.67	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL195	R	1.95	0.1	●				16	1.7	9.525	3.75	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR195	L	1.95	0.1	●				16	1.7	9.525	3.75	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL225	R	2.25	0.1	●				16	1.8	9.525	3.6	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR225	L	2.25	0.1	●				16	1.8	9.525	3.6	G16EL/IR-DT	G16EL/IR-S

Note: GTGN insert can be used for both external and internal machining, but the tool hand is reversed.
Shim for GTGN depends on the toolholder type.

● : Line up

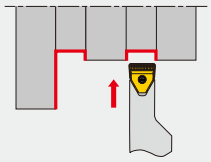
STANDARD CUTTING CONDITIONS

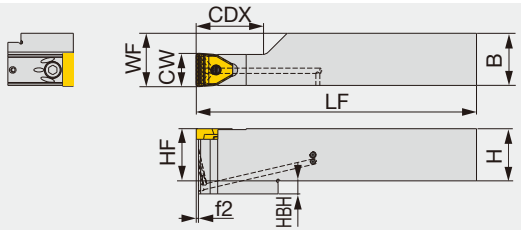
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steels S45C, SCM440 etc. C45, 42CrMo4, etc.	SH730	50 - 150	0.05 - 0.1
M	Stainless steels SUS304, SUS316 etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH730	30 - 120	0.05 - 0.1
S	Heat-resistant alloys, Titanium alloys etc. Ti-6Al-4V, etc.	SH730	30 - 40	0.05 - 0.1

Reference pages: Toolholders → F093

FPGR

External grooving toolholder



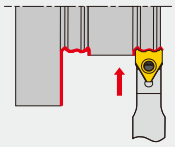


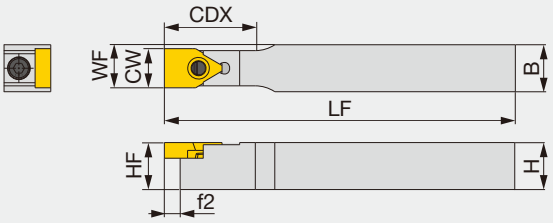
Designation	CW	CDX	H	B	LF	HF	WF	HBH	f2	Insert (1)	Torque*
FPGR2525M-10T20	10	20	25	25	150	25	25.5	-	0.5	PSG*10...	2.2
FPGR3232P-10T36	10	36	32	32	170	32	32.5	-	0.5	PSG*10...	2.2
FPGR2525M-15T20	15	20	25	25	150	25	25.5	-	0.5	PSG*15...	2.2
FPGR3232P-15T40	15	40	32	32	170	32	32.5	-	0.4	PSG*15...	2.2
FPGR3232P-20T40	20	40	32	32	170	32	32.5	8	0.4	PSG*20...	8.5
FPGR4040R-20T50	20	50	40	40	200	40	40.5	8	0.4	PSG*20...	8.5
FPGR3232P-25T40	25	40	32	32	170	32	32.5	8	0.4	PSG*25...	8.5
FPGR4040R-25T50	25	50	40	40	200	40	40.5	8	0.4	PSG*25...	8.5

(1) Can be used for both wide grooving and wide profile grooving
*Torque: Recommended clamping torque (N·m)
CDX, LF, f2 are dimensions when PSGM insert is attached. When mounting PSGB insert, the dimensions will be 5 mm longer.

FPGN

External profile grooving toolholder





Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert (1)	Torque*
FPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSG*10...	2.2
FPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSG*10...	2.2
FPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSG*10...	2.2
FPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSG*15...	2.2
FPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSG*15...	2.2
FPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSG*20...	8.5
FPGN2525M-20T32	20	37	25	25	155	25	22.5	5.5	PSG*20...	8.5
FPGN2525M-25T36	25	41	25	25	155	25	25	5.5	PSG*25...	8.5

*PSGB insert blank is available for tailored inserts.
(1) Can be used for both wide grooving and wide profile grooving
*Torque: Recommended clamping torque (N·m)
CDX, LF, f2 are dimensions when PSGB insert is attached. When mounting PSGM insert, the dimensions will be 5 mm shorter.

SPARE PARTS



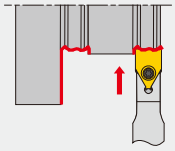


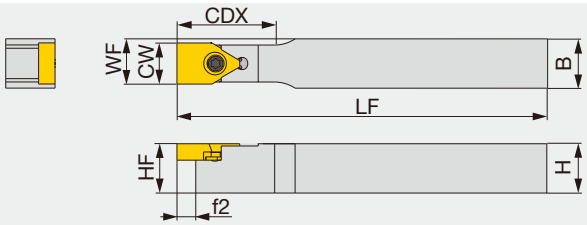

Designation	Lever	Clamping screw	Spring	Wrench
FPG******-10T..., 15T...	FCL4	FCS3	BP-5	P-2.5
FPG******-20T..., 25T...	FCL8	FCS6	BP-9	P-5

Reference pages: Inserts → F096, F097, Standard cutting conditions → F098

SPGN

External profile grooving toolholder





Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert (1)	Torque*
SPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10	1.3
SPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10	1.3
SPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10	1.3
SPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15	3.5
SPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15	3.5
SPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20	5
SPGN2525M-20T32	20	37	25	25	155	25	22.5	5.5	PSGB20	5
SPGN2525M-25T36	25	41	25	25	155	25	25	5.5	PSGB25	5

*PSGB insert blank is available for tailored inserts.
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
SPGN*****-10T20	CSTB-3L081	T-8F
SPGN*****-15T25	CSTB-4	T-15F
SPGN*****-20T..., 25T...	CSTB-5	T-20F

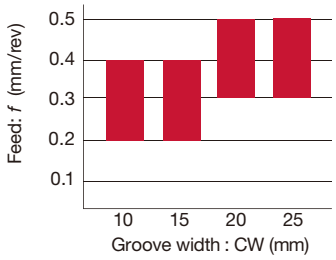
CHIPBREAKER GUIDE

PSGM



For wide grooving
Improved productivity with excellent chip control and the chipbreaker designed for high feed

CW = 10 - 25 mm



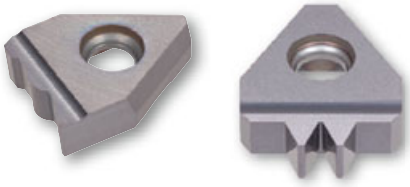
PSGB



Blank for wide profile grooving inserts
Can be prepared for various insert shapes Shortened cutting time and improved productivity with one-pass operations

CW = 10 - 25 mm

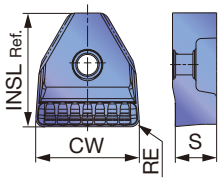
Specially tailored inserts (example)



Reference pages: Standard cutting conditions → F098

INSERTS

PSGM



P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

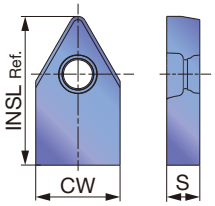
★ : First choice
☆ : Second choice

Designation	CW*	RE	Coated	INSL	S
			AH725		
PSGM10-08	10	0.8	●	11	4
PSGM15-15	15	1.5	●	15	5
PSGM20-20	20	2	●	22	6.5
PSGM25-20	25	2	●	22	6.5

*Tolerance: CW ± 0.08 (CW = 10 mm), ± 0.1 (CW ≥ 15 mm)

● : Line up

PSGB



P	Steel	☆	★
M	Stainless		★
K	Cast iron	★	
N	Non-ferrous	★	
S	Superalloys	☆	
H	Hard materials		

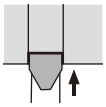
★ : First choice
☆ : Second choice

Designation	CW±0.025	Uncoated		INSL	S
		TH10	UX30		
PSGB10	10.2	●	●	18	4
PSGB15	15.2	●	●	20	5
PSGB20	20.2	●	●	27	6.5
PSGB25	25.2	●	●	27	6.5

● : Line up

Reference pages: Toolholders → F095, F096, Standard cutting conditions → F098

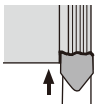
STANDARD CUTTING CONDITIONS



Wide grooving (PSGM insert)

ISO	Workpiece material	Hardness (HB)	Grade	Cutting Speed *Vc* (m/min)
P	Alloy steel SCM440, etc. 42CrMo4, etc.	< 300	AH725	50 - 180

	Groove width: CW (mm)			
	10	15	20	25
Feed: *f* (mm/rev)	0.2 - 0.4	0.2 - 0.4	0.3 - 0.5	0.3 - 0.5

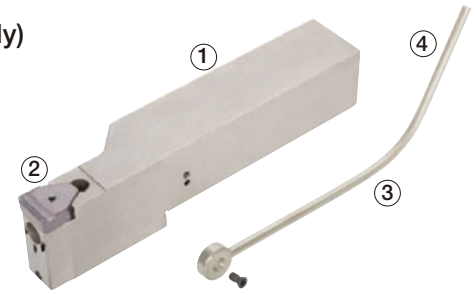


Wide profile grooving (PSGB insert)

ISO	Workpiece material	Hardness (HB)	Grade	Cutting Speed *Vc* (m/min)
P	Carbon steel S45C, etc. C45, etc.	< 200	UX30	50 - 150
	Alloy steel SCM440, etc. 42CrMo4, etc.	< 300	UX30	50 - 120
M	Stainless steel SUS303, etc. X10CrNiS18-9, etc.	< 200	UX30	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	TH10	50 - 150
	Ductile cast irons FCD450, etc. 450-10S, etc.	-	TH10	50 - 120
N	Aluminium alloy Si < 12%, etc	-	TH10	100 - 500

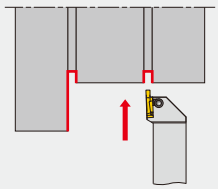
Spare parts for internal coolant supply attachment (Order separately)

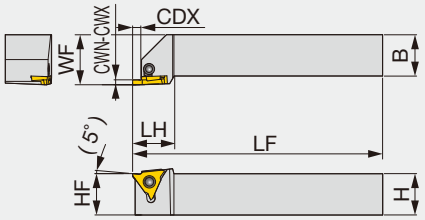
No.	Parts name	Designation	Note
①	Body	FPGR...	-
②	Insert	PSGM...	-
③	Coolant supply attachment	SGCU-341	-
④	Connector	Commercial items can be used	G 1/8 thread
			NPT 1/8 thread



TGTSR/L

External grooving toolholder, for 3 corner insert







Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Torque*
TGTSR/L2020K16	0.33	2.5	2.5	20	20	125	25	20	25	3
TGTSR/L2525M16	0.33	2.5	2.5	25	25	150	25	25	30	3
TGTSR/L2020K22-1	1	1.45	2	20	20	125	25	20	25	3
TGTSR/L2020K22-2	1.5	2.3	3.5	20	20	125	25	20	25	3
TGTSR/L2020K22-3	2.5	4.5	5	20	20	125	25	20	25	3
TGTSR/L2525M22-1	1	1.45	2	25	25	150	25	25	30	3
TGTSR/L2525M22-2	1.5	2.3	3.5	25	25	150	25	25	30	3
TGTSR/L2525M22-3	2.5	4.5	5	25	25	150	25	25	30	3

Use right-hand toolholders (TGTSR) with right-hand inserts (GBR); and left-hand toolholders (TGTSL) with left-hand inserts (GBL).
*Torque: Recommended clamping torque (N·m)

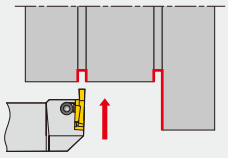
Designation	Insert
TGTSR/L2020K16	GBR/L32...
TGTSR/L2525M16	GBR/L32...
TGTSR/L2020K22-1	GBR/L43125 ~ 145 GBR/L43050R
TGTSR/L2020K22-2	GBR/L43150 ~ 230 GBR/L43075R ~ 100R
TGTSR/L2020K22-3	GBR/L43250 ~ 450 GBR/L43125R ~ 200R
TGTSR/L2525M22-1	GBR/L43125 ~ 145 GBR/L43050R
TGTSR/L2525M22-2	GBR/L43150 ~ 230 GBR/L43075R ~ 100R
TGTSR/L2525M22-3	GBR/L43250 ~ 450 GBR/L43125R ~ 200R

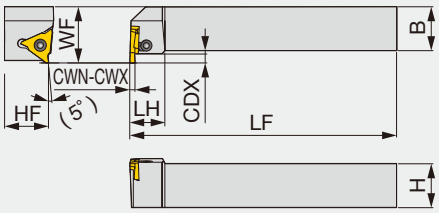
SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
TGTSR/L*****16	CP900	MCS520-2.5	P-2.5
TGTSR/L*****22...	CP910	MCS520-2.5	P-2.5

TGTTR/L

External grooving with tangential pocket, for 3 corner insert







Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Torque*
TGTTR/L2020K16	0.33	2.5	2.5	20	20	125	20	20	27	3
TGTTR/L2525M16	0.33	2.5	2.5	25	25	150	20	25	32	3
TGTTR/L2020K22-1	1	1.45	2	20	20	125	20	20	27	3
TGTTR/L2020K22-2	1.5	2.3	3.5	20	20	125	20	20	27	3
TGTTR/L2020K22-3	2.5	4.5	5	20	20	125	20	20	27	3
TGTTR/L2525M22-1	1	2.3	2	25	25	150	20	25	32	3
TGTTR/L2525M22-2	1.5	2.3	3.5	25	25	150	20	25	32	3
TGTTR/L2525M22-3	2.5	4.5	5	25	25	150	20	25	32	3

Use right-hand toolholders (TGTTR) with left-hand inserts (GBL); and left-hand toolholders (TGTTL) with right-hand inserts (GBR).
*Torque: Recommended clamping torque (N·m)

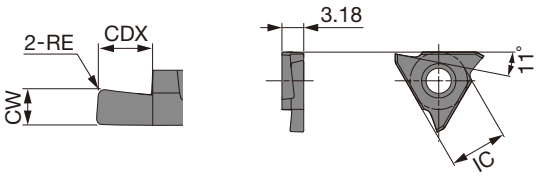
Designation	Insert
TGTTR/L2020K16	GBL/R32...
TGTTR/L2525M16	GBL/R32...
TGTTR/L2020K22-1	GBL/R43125 ~ 145 GBL/R43050R
TGTTR/L2020K22-2	GBL/R43150 ~ 230 GBL/R43075R ~ 100R
TGTTR/L2020K22-3	GBL/R43250 ~ 450 GBL/R43125R ~ 200R
TGTTR/L2525M22-1	GBL/R43125 ~ 145 GBL/R43050R
TGTTR/L2525M22-2	GBL/R43150 ~ 230 GBL/R43075R ~ 100R
TGTTR/L2525M22-3	GBL/R43250 ~ 450 GBL/R43125R ~ 200R

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
TGTTR/L*****16	CP900	MCS520-2.5	P-2.5
TGTTR/L*****22...	CP910	MCS520-2.5	P-2.5

Reference pages: Inserts → F100 - F102, Standard cutting conditions → F102

GBR/L32



Right hand (R) shown.

		Coated	Cermet	Uncoated
P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	
N	Non-ferrous			★
S	Superalloys	☆		☆
H	Hard materials			

★ : First choice
☆ : Second choice

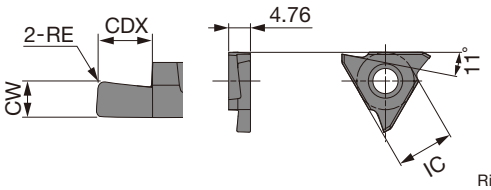
Designation	HAND	CW±0.025	RE	AH710	NS9530	KS05F	CDX	IC
GBR32033	R	0.33	0.03	●	●	●	0.8	9.53
GBL32033	L	0.33	0.03	●			0.8	9.53
GBR32050	R	0.5	0.05	●	●	●	1.2	9.53
GBL32050	L	0.5	0.05	●			1.2	9.53
GBR32075	R	0.75	0.05	●	●	●	2	9.53
GBL32075	L	0.75	0.05	●	●		2	9.53
GBR32095	R	0.95	0.05	●	●	●	2	9.53
GBL32095	L	0.95	0.05	●	●		2	9.53
GBR32100	R	1	0.05	●	●	●	2	9.53
GBL32100	L	1	0.05	●	●		2	9.53
GBR32125	R	1.25	0.2	●	●	●	2	9.53
GBL32125	L	1.25	0.2	●	●		2	9.53
GBR32145	R	1.45	0.2	●	●	●	2	9.53
GBL32145	L	1.45	0.2	●			2	9.53
GBR32150	R	1.5	0.2	●	●	●	2	9.53
GBL32150	L	1.5	0.2	●			2	9.53
GBR32200	R	2	0.2	●	●	●	2.5	9.53
GBL32200	L	2	0.2	●			2.5	9.53
GBR32250	R	2.5	0.2	●	●	●	2.5	9.53
GBL32250	L	2.5	0.2	●			2.5	9.53

● : Line up

External
Internal
Face
Parting
Others

Reference pages: Toolholders → F099, Standard cutting conditions → F102

GBR/L43



Right hand (R) shown.

P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	
N	Non-ferrous			★
S	Superalloys	☆		☆
H	Hard materials			

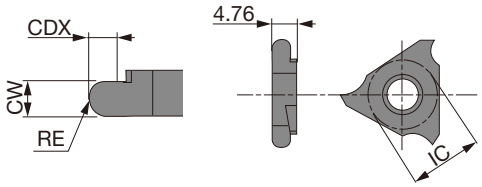
★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated	Cermet	Uncoated	CDX	IC
				AH710	NS9530	KS05F		
GBR43125	R	1.25	0.2	●	●	●	2	12.7
GBL43125	L	1.25	0.2	●			2	12.7
GBR43145	R	1.45	0.2	●	●	●	2	12.7
GBL43145	L	1.45	0.2	●			2	12.7
GBR43150	R	1.50	0.2	●	●	●	3.5	12.7
GBL43150	L	1.50	0.2	●	●		3.5	12.7
GBR43175	R	1.75	0.2	●	●	●	3.5	12.7
GBL43175	L	1.75	0.2	●	●		3.5	12.7
GBR43185	R	1.85	0.2	●	●	●	3.5	12.7
GBL43185	L	1.85	0.2	●	●		3.5	12.7
GBR43200	R	2	0.2	●	●	●	3.5	12.7
GBL43200	L	2	0.2	●	●		3.5	12.7
GBR43230	R	2.3	0.2	●	●	●	3.5	12.7
GBL43230	L	2.3	0.2	●	●		3.5	12.7
GBR43250	R	2.5	0.3	●	●	●	5	12.7
GBL43250	L	2.5	0.3	●			5	12.7
GBR43265	R	2.65	0.3	●	●	●	5	12.7
GBL43265	L	2.65	0.3	●			5	12.7
GBR43280	R	2.8	0.3	●	●	●	5	12.7
GBL43280	L	2.8	0.3	●			5	12.7
GBR43300	R	3	0.3	●	●	●	5	12.7
GBL43300	L	3	0.3	●			5	12.7
GBR43330	R	3.3	0.3	●	●	●	5	12.7
GBL43330	L	3.3	0.3	●			5	12.7
GBR43350	R	3.5	0.3	●	●	●	5	12.7
GBL43350	L	3.5	0.3	●			5	12.7
GBR43400	R	4	0.4	●	●	●	5	12.7
GBL43400	L	4	0.4	●			5	12.7
GBR43430	R	4.3	0.4	●	●	●	5	12.7
GBL43430	L	4.3	0.4	●			5	12.7
GBR43450	R	4.5	0.4	●	●	●	5	12.7
GBL43450	L	4.5	0.4	●			5	12.7

● : Line up

Reference pages: Toolholders → F099, Standard cutting conditions → F102

GBR/L43-R(full radius)

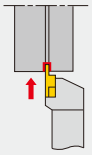


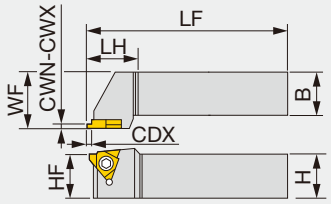
Right hand (R) shown.

| | | |

SGTR/L

External grooving toolholder, for 3 corner inserts





Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
SGTR1616-3	1.15	2.7	1.5 - 3	16	16	100	20	16	20	GLR/L3...	3.5
SGTR/L2020-3	1.15	2.7	1.5 - 3	20	20	125	20	20	25	GLR/L3...	3.5
SGTR/L2525-3	1.15	2.7	1.5 - 3	25	25	150	20	25	32	GLR/L3...	3.5
SGTR/L2020-4	1.15	4.2	1.5 - 4	20	20	125	30	20	25	GLR/L4...,GOR/L4...	5
SGTR/L2525-4	1.15	4.2	1.5 - 4	25	25	150	30	25	32	GLR/L4...,GOR/L4...	5

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

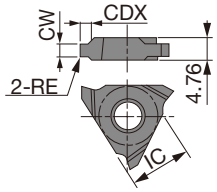




Designation	Clamping screw	Wrench
SGTR/L****-3	CSTB-4	T-15F
SGTR/L****-4	CSTB-5	T-20F

INSERTS

GOR/L (For O-ring)



Right hand (R) shown.

		Cermet	Uncoated
P	Steel	★	★
M	Stainless		★
K	Cast iron	☆	
N	Non-ferrous		
S	Superalloys		
H	Hard materials		

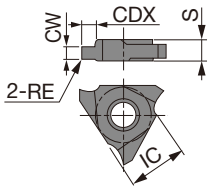
★ : First choice
☆ : Second choice

Designation	HAND	$CW^{+0.1}_{+0.05}$	RE	Cermet NS9530	Uncoated UX30	CDX	IC
GOR4190	R	2.5	0.4	●	●	1.5	12.7
GOR4240	R	3.2	0.4	●	●	2	12.7
GOR4310	R	4.1	0.7	●	●	2.5	12.7

● : Line up

Reference pages: Inserts → F103, F104, Standard cutting conditions → F104

GLR/L (For lock ring)



Right hand (R) shown.

		Cermet	Uncoated
P	Steel	★	★
M	Stainless		★
K	Cast iron	☆	
N	Non-ferrous		
S	Superalloys		
H	Hard materials		

★ : First choice
☆ : Second choice

Designation	HAND	$CW^{+0.1}_{+0.05}$	RE	Cermet NS9530	Uncoated UX30	CDX	IC	S
GLR3115	R	1.15	0.1	●	●	1.5	9.53	3.18
GLL3115	L	1.15	0.1	●	●	1.5	9.53	3.18
GLR3135	R	1.35	0.1	●	●	1.5	9.53	3.18
GLL3135	L	1.35	0.1	●		1.5	9.53	3.18
GLR3165	R	1.65	0.1	●	●	2	9.53	3.18
GLR3175	R	1.75	0.1	●	●	2	9.53	3.18
GLL3175	L	1.75	0.1	●	●	2	9.53	3.18
GLR3195	R	1.95	0.1	●	●	2.5	9.53	3.18
GLL3195	L	1.95	0.1	●	●	2.5	9.53	3.18
GLR3220	R	2.2	0.1	●	●	3	9.53	3.18
GLL3220	L	2.2	0.1		●	3	9.53	3.18
GLR3270	R	2.7	0.1	●	●	3	9.53	3.18
GLL3270	L	2.7	0.1		●	3	9.53	3.18
GLR4115	R	1.15	0.1	●	●	1.5	12.7	4.76
GLR4135	R	1.35	0.1	●	●	1.5	12.7	4.76
GLR4165	R	1.65	0.1	●	●	2	12.7	4.76
GLR4175	R	1.75	0.1	●	●	2	12.7	4.76
GLR4190	R	1.9	0.1	●		2.5	12.7	4.76
GLR4195	R	1.95	0.1	●	●	2.5	12.7	4.76
GLR4220	R	2.2	0.1	●	●	3.5	12.7	4.76
GLL4220	L	2.2	0.1		●	3.5	12.7	4.76
GLR4270	R	2.7	0.1	●	●	3.5	12.7	4.76
GLR4320	R	3.2	0.1	●	●	4	12.7	4.76
GLL4320	L	3.2	0.1		●	4	12.7	4.76
GLR4420	R	4.2	0.1	●	●	4	12.7	4.76
GLL4420	L	4.2	0.1		●	4	12.7	4.76

● : Line up

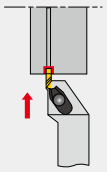
STANDARD CUTTING CONDITIONS

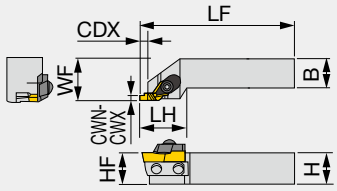
ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed: *f* (mm/rev)		
				CW < 2 mm	CW = 2 ~ 4 mm	CW > 4 mm
P	Carbon steel	NS9530	80 - 200	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
		UX30	60 - 150	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25

Reference pages: Toolholders → F103

GX-R/LE

External grooving toolholder, for 2 corner inserts





Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
GX-2020R/LE	1	4.5	1.5 - 6	20	20	125	40	20	25	XGR/L63...	5
GX-2525R/LE	1	4.5	1.5 - 6	25	25	150	38	25	32	XGR/L63...	5

Use right-hand toolholders (GX-****RE) with right-hand inserts (XGR...); and left-hand toolholders (GX-****LE) with left-hand inserts (XGL...).
*Torque: Recommended clamping torque (N·m)

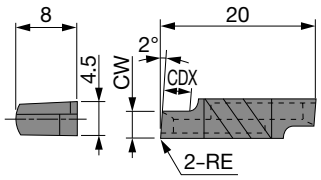
SPARE PARTS

Designation	Clamp set	Clamp screw	Shim	Shim screw	Wrench
GX-2020RE	CP81A	RT-1	SL-6R	BHM4-8	P-4
GX-2020LE	CP81A	RT-1	SL-6L	BHM4-8	P-4
GX-2525RE	CP81A	RT-1	SL-1R	BHM4-8	P-4
GX-2525LE	CP81A	RT-1	SL-1L	BHM4-8	P-4

Note: Max. groove width and max. groove depth will depend on the insert type.

INSERTS

XGR/L



Right hand (R) shown.

P	Steel	★			☆	★			
M	Stainless					★			
K	Cast iron	☆			★				
N	Non-ferrous				★				
S	Superalloys				☆				
H	Hard materials								

★ : First choice
☆ : Second choice

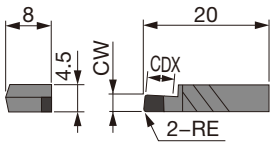
Designation	HAND	CW±0.05	RE	Cermet	Uncoated						CDX
				NS9530	TH10	UX30					
XGR6310-02	R	1	0.2	●	●	●					1.5
XGL6310-02	L	1	0.2	●	●	●					1.5
XGR6315-02	R	1.5	0.2	●	●	●					2.3
XGL6315-02	L	1.5	0.2	●	●	●					2.3
XGR6320-02	R	2	0.2	●	●	●					3
XGL6320-02	L	2	0.2	●	●	●					3
XGR6325-02	R	2.5	0.2	●	●	●					3.8
XGL6325-02	L	2.5	0.2	●	●	●					3.8
XGR6330-02	R	3	0.2	●	●	●					4.5
XGL6330-02	L	3	0.2	●	●	●					4.5
XGR6335-02	R	3.5	0.2	●	●	●					5.3
XGL6335-02	L	3.5	0.2	●	●	●					5.3
XGR6340-02	R	4	0.2	●	●	●					6
XGL6340-02	L	4	0.2	●	●	●					6
XGR6345-02	R	4.5	0.2	●	●	●					6
XGL6345-02	L	4.5	0.2	●	●	●					6

Use right-hand toolholders (GX-****RE) with right-hand inserts (XGR...)
left-hand toolholders (GX-****LE) with left-hand inserts (XGL...).

● : Line up

Reference pages: Inserts → F105, F106, Standard cutting conditions → F106

XGR/L-QBN



Right hand (R) shown.

P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous
S	Superalloys
H	Hard materials ★

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	CBN	CDX
				BX360	
XGL6310S-QBN	L	1	0.2	●	1.5
XGR6315S-QBN	R	1.5	0.2	●	2.3
XGL6315S-QBN	L	1.5	0.2	●	2.3
XGR6320S-QBN	R	2	0.2	●	3
XGL6320S-QBN	L	2	0.2	●	3
XGR6325S-QBN	R	2.5	0.2	●	3.8
XGL6325S-QBN	L	2.5	0.2	●	3.8
XGR6330S-QBN	R	3	0.2	●	4.5
XGL6330S-QBN	L	3	0.2	●	4.5
XGR6335S-QBN	R	3.5	0.2	●	5.3
XGL6335S-QBN	L	3.5	0.2	●	5.3
XGR6340S-QBN	R	4	0.2	●	6
XGL6340S-QBN	L	4	0.2	●	6
XGR6345S-QBN	R	4.5	0.2	●	6
XGL6345S-QBN	L	4.5	0.2	●	6

● : Line up

Use right-hand toolholders (GX-****RE) with right-hand inserts (XGR...)
left-hand toolholders (GX-****LE) with left-hand inserts (XGL...).

STANDARD CUTTING CONDITIONS

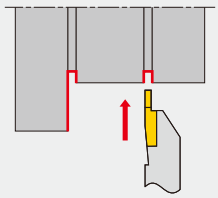
ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed: *f* (mm/rev)		
				CW < 2 mm	CW = 2 ~ 4 mm	CW > 4 mm
P	Carbon steel	NS9530	80 - 200	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
		UX30	60 - 150	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
K	Cast irons , Light alloys	TH10	60 - 150	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
H	Hardened steels	BX360	50 - 180	0.05 - 0.15	0.05 - 0.15	0.05 - 0.15

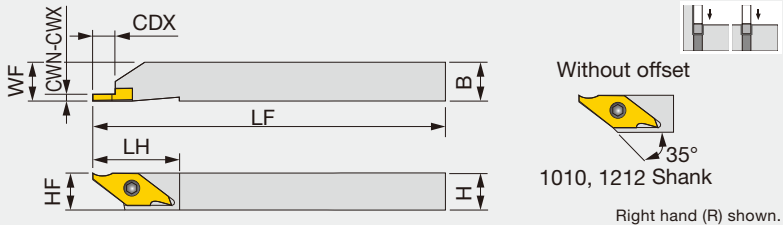
Reference pages: Toolholders → F105

J-SERIES

JSVGR/L

External grooving toolholder, for Swiss lathes





Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
JSVGR/L1010K-C	0.33	2	0.7 - 5.5	10	10	125	23	10	10	JVGR/L...	2.3
JSVGR/L1212K-C	0.33	2	0.7 - 5.5	12	12	125	23	12	12	JVGR/L...	2.3
JSVGR/L1616K	0.33	2	0.7 - 5.5	16	16	125	23	16	16	JVGR/L...	2.3

*Torque: Recommended clamping torque (N·m)

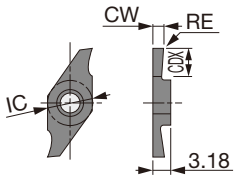
SPARE PARTS



Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVGR/L...	CSTB-3S	T-9F	(T-9L)

INSERT

JVG (with hand, sharp edge)



Right hand (R) shown.

P	Steel	★	★			★			☆				
M	Stainless	★	★										
K	Cast iron					☆			☆				
N	Non-ferrous								★				
S	Superalloys								★				
H	Hard materials												

★ : First choice
☆ : Second choice

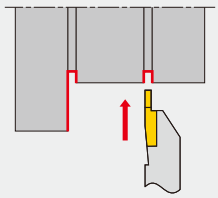
Designation	HAND	$CW^{+0.05}_{0}$	RE	Coated SH725	Coated J740	Cermet NS9530	Uncoated TH10	CDX	IC
JVGR033F	R	0.33	0	●	●		●	0.7	7.94
JVGL033F	L	0.33	0	●				0.7	7.94
JVGR050F	R	0.5	0	●	●		●	1.1	7.94
JVGL050F	L	0.5	0	●				1.1	7.94
JVGR075F	R	0.75	0	●	●		●	1.9	7.94
JVGL075F	L	0.75	0	●				1.9	7.94
JVGR095F	R	0.95	0	●	●		●	1.9	7.94
JVGL095F	L	0.95	0	●				1.9	7.94
JVGR100F	R	1	0	●	●	●	●	5.5	7.94
JVGL100F	L	1	0	●		●	●	5.5	7.94
JVGR125F	R	1.25	0	●	●		●	5	7.94
JVGL125F	L	1.25	0	●				5	7.94
JVGR150F	R	1.5	0	●	●	●	●	5.5	7.94
JVGL150F	L	1.5	0	●		●	●	5.5	7.94
JVGR200F	R	2	0	●	●	●	●	5.5	7.94
JVGL200F	L	2	0	●				5.5	7.94

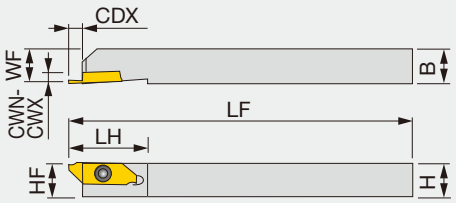
● : Line up

Reference pages: Standard cutting conditions → F114

JSXGR/L

Screw-on toolholder for front turning, reverse turning, and external grooving, for Swiss lathes







Without offset



1010, 1212 Shank

Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
JSXGR/L1010K8-C	0.7	2	4.5 - 6	10	10	125	29	10	9.9	JXG...	1.3
JSXGR/L1212K8-C	0.7	2	4.5 - 6	12	12	125	29	12	11.9	JXG...	1.3
JSXGR/L1616K8	0.7	2	4.5 - 6	16	16	125	29	16	15.9	JXG...	1.3
JSXGR/L2020K8	0.7	2	4.5 - 6	20	20	125	29	20	19.9	JXG...	1.3
JSXGR/L2525K8	0.7	2	4.5 - 6	25	25	125	29	25	24.9	JXG...	1.3

Can be wrenched also from the back with a double-head screw.
This toolholder can be used for JXF front-turning insert, JXR reverse-turning insert, and JXG parting and grooving insert.
*Torque: Recommended clamping torque (N·m)

SPARE PARTS



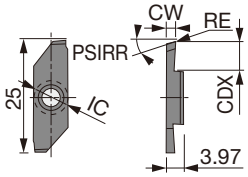




Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSXGR/L...	CSTB-4SD	T-8F	(T-8L)

INSERT

JXG (with hand, sharp edge)



Right hand (R) shown.

		Coated	Uncoated
P	Steel	★	☆
M	Stainless	★	
K	Cast iron		☆
N	Non-ferrous		★
S	Superalloys		★
H	Hard materials		

★ : First choice
☆ : Second choice

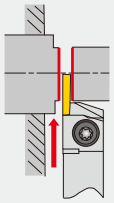
Designation	HAND	CW±0.025	RE	Coated J740	Uncoated TH10	CDX	IC	PSIRR
JXGR8070FA	R	0.7	0	●	●	4.5	8	15°
JXGL8070FA	L	0.7	0	●	●	4.5	8	15°
JXGR8070FA-005	R	0.7	0.05	●		4.5	8	15°
JXGR8100FA	R	1	0	●	●	6	8	15°
JXGL8100FA	L	1	0	●	●	6	8	15°
JXGR8100FA-005	R	1	0.05	●		6	8	15°
JXGR8100FA45	R	1	0	●	●	4.5	8	15°
JXGR8100FA45-005	R	1	0.05	●		4.5	8	15°
JXGR8150FA	R	1.5	0	●	●	6	8	15°
JXGL8150FA	L	1.5	0	●	●	6	8	15°
JXGR8150FA-005	R	1.5	0.05	●		6	8	15°
JXGR8150FA50	R	1.5	0	●	●	5	8	15°
JXGR8150FA50-005	R	1.5	0.05	●		5	8	15°
JXGR8180FA	R	1.8	0	●	●	6	8	15°
JXGR8180FA-005	R	1.8	0.05	●		6	8	15°
JXGR8200FA	R	2	0	●	●	6	8	15°
JXGL8200FA	L	2	0	●	●	6	8	15°
JXGR8200FA-005	R	2	0.05	●		6	8	15°
JXGR8200FN	R	2	0	●	●	6	8	0°
JXGL8200FN	L	2	0	●	●	6	8	0°
JXGR8200FN-005	R	2	0.05	●		6	8	0°

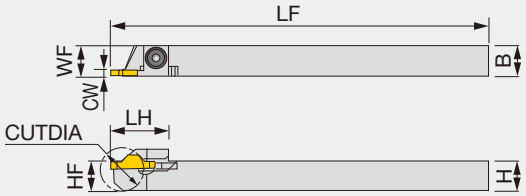
● : Line up

Reference pages: Standard cutting conditions → F114

JCCWSR/L

External grooving and parting toolholder, for Swiss lathes





Right hand (R) shown.

Designation	CW	CUTDIA	H	B	LF	LH	HF	WF	Insert	Torque*
JCCWSR/L1010K2	2	20	10	10	125	19	10	10	JCC*200...	3.5
JCCWSR/L1212K2	2	20	12	12	125	19	12	12	JCC*200...	3.5
JCCWSR/L1616K2	2	20	16	16	125	19	16	16	JCC*200...	3.5
JCCWSR/L2020K2	2	20	20	20	125	19	20	20	JCC*200...	3.5
JCCWSR/L2525K2	2	20	25	25	125	19	25	25	JCC*200...	3.5

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

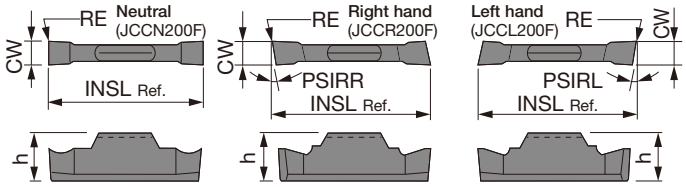




Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JCCWSR/L...	CSTB-4S	T-15F	(T-15L)

INSERT

JCC (Sharp edge)



P	Steel	★			☆				
M	Stainless	★							
K	Cast iron				☆				
N	Non-ferrous				★				
S	Superalloys				★				
H	Hard materials								

★ : First choice
☆ : Second choice

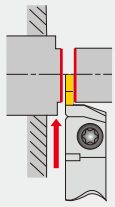
Designation	HAND	CW±0.025	RE	Coated	Uncoated				INSL	h	PSIRL	PSIRR
				J740	TH10							
JCCN200F	N	2	0	●	●				15	4.8	0°	0°
JCCN200F-005	N	2	0.05	●					15	4.8	0°	0°
JCCR200F	R	2	0	●	●				15	4.8	0°	15°
JCCL200F	L	2	0	●	●				15	4.8	15°	0°
JCCR200F-005	R	2	0.05	●					15	4.8	0°	15°
JCCL200F-005	L	2	0.05	●					15	4.8	15°	0°

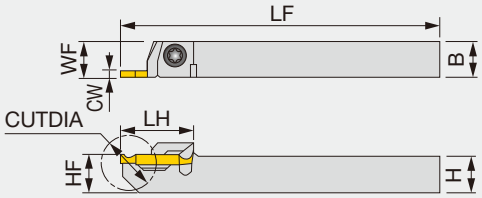
● : Line up

Reference pages: Standard cutting conditions → F114

JCGWSR/L

External grooving and parting toolholder, for Swiss lathes







Right hand (R) shown.

Designation	CW	CUTDIA	H	B	LF	LH	HF	WF	Insert	Torque*
JCGWSR/L1010K2	2	20	10	10	125	20	10	10	JCGN200F...	3.5
JCGWSR/L1212K2	2	20	12	12	125	20	12	12	JCGN200F...	3.5
JCGWSR/L1616K2	2	20	16	16	125	20	16	16	JCGN200F...	3.5

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

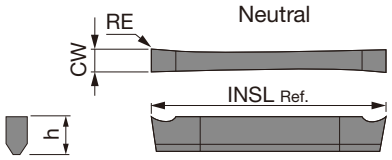


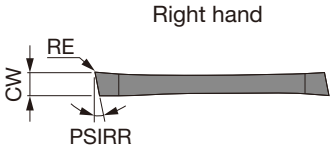


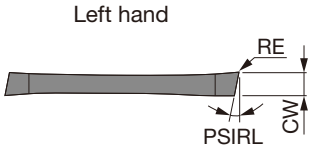
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JCGWSR/L...	CSTB-4S	T-15F	(T-15L)

INSERT

JCGN (Sharp edge)







		Coated	Uncoated
		J740	TH10
P	Steel	★	☆
M	Stainless	★	
K	Cast iron		☆
N	Non-ferrous		★
S	Superalloys		★
H	Hard materials		

★ : First choice
☆ : Second choice

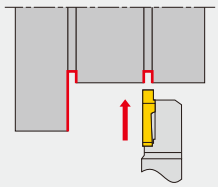
Designation	HAND	CW±0.025	RE	Coated J740	Uncoated TH10	INSL	h	PSIRL	PSIRR
JCGN200F	N	2	0.05	●	●	20	3	0°	0°
JCGN200FR	R	2	0.05	●	●	20	3	0°	8°
JCGN200FL	L	2	0.05	●	●	20	3	8°	0°

● : Line up

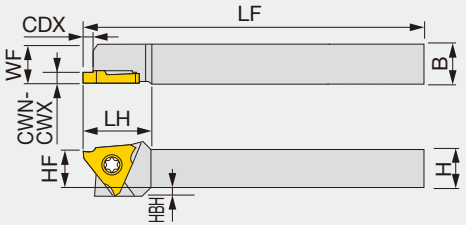
Reference pages: Standard cutting conditions → F114

JSTGR/L

External grooving toolholder, for Swiss lathes



Can be wrenched also from the back with a double-head screw



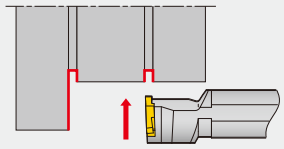
Right hand (R) shown.

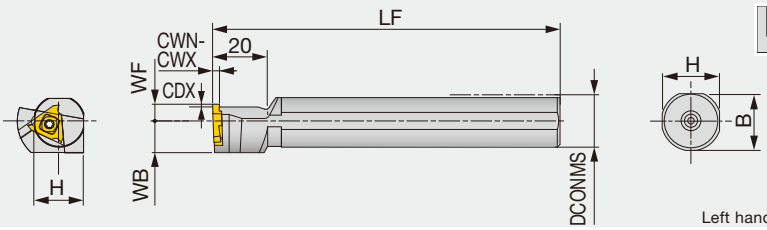
Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
JSTGR/L1010X3	0.33	3	0.7 - 2.6	10	10	120	18.5	10	10	2	JTGR/L3...	1.2
JSTGR/L1212F3	0.33	3	0.7 - 2.6	12	12	85	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1212X3	0.33	3	0.7 - 2.6	12	12	120	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1616X3	0.33	3	0.7 - 2.6	16	16	120	18.5	16	16	-	JTGR/L3...	1.2
JSTGL1616K3	0.33	3	0.7 - 2.6	16	16	125	18.5	16	16	-	JTGR/L3...	1.2

*Torque: Recommended clamping torque (N·m)

JS-TGL3

External grooving toolholder, for Swiss lathes





Left hand (L) shown.

Designation	CWN	CWX	CDX	DCONMS	H	B	LF	WF	WB	Insert	Torque*
JS19K-TGL3	0.33	3	0.7 - 2.6	19.05	18	18	125	6	11.5	JTGR3...	3
JS20K-TGL3	0.33	3	0.7 - 2.6	20	19	19	125	6	11.5	JTGR3...	3
JS22K-TGL3	0.33	3	0.7 - 2.6	22	21	21	125	6	11.5	JTGR3...	3
JS25K-TGL3	0.33	3	0.7 - 2.6	25.4	24	24	125	10	12.7	JTGR3...	3

Note: Use left-hand toolholders (L) with right-hand inserts (R).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

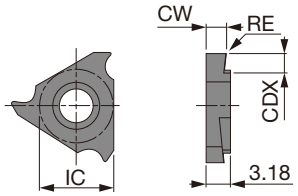




Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTGR/L...	CSTB-4SD	T-8F	(T-8L)
JS***-TGL3	CSTB-4S	T-15F	-

Reference pages: Inserts → F112, F113, Standard cutting conditions → F114

JTG (Sharp edge)



Right hand (R) shown.

P	Steel	★ ★ ★ ☆
M	Stainless	★ ★
K	Cast iron	☆ ★
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	

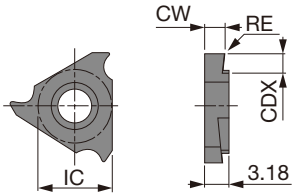
★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$	RE	Coated		Cermet	Uncoated	CDX	IC
				SH725	J740	NS9530	TH10		
JTGR3033F	R	0.33	0.03	●	●		●	0.7	9.53
JTGL3033F	L	0.33	0.03		●		●	0.7	9.53
JTGR3033F-005	R	0.33	0.05	●				0.7	9.53
JTGR3043F	R	0.43	0.03		●			1.1	9.53
JTGR3050F	R	0.5	0.03	●	●	●	●	1.1	9.53
JTGL3050F	L	0.5	0.03	●	●		●	1.1	9.53
JTGR3050F-005	R	0.5	0.05	●				1.1	9.53
JTGL3050F-005	L	0.5	0.05	●				1.1	9.53
JTGR3065F	R	0.65	0.03	●	●			1.9	9.53
JTGR3065F-010	R	0.65	0.1	●				1.9	9.53
JTGR3075F	R	0.75	0.03	●	●	●	●	1.9	9.53
JTGL3075F	L	0.75	0.03	●	●	●	●	1.9	9.53
JTGR3075F-010	R	0.75	0.1	●				1.9	9.53
JTGL3075F-010	L	0.75	0.1	●				1.9	9.53
JTGR3080F	R	0.8	0.03	●	●			1.9	9.53
JTGR3080F-010	R	0.8	0.1	●				1.9	9.53
JTGR3085F	R	0.85	0.03	●	●			1.9	9.53
JTGR3095F	R	0.95	0.03	●	●	●	●	1.9	9.53
JTGL3095F	L	0.95	0.03	●	●		●	1.9	9.53
JTGR3095F-010	R	0.95	0.1	●				1.9	9.53
JTGL3095F-010	L	0.95	0.1	●				1.9	9.53
JTGR3100F	R	1	0.05	●	●	●	●	2.1	9.53
JTGL3100F	L	1	0.05	●	●		●	2.1	9.53
JTGR3100F-010	R	1	0.1	●				2.1	9.53
JTGL3100F-010	L	1	0.1	●				2.1	9.53
JTGR3110F	R	1.1	0.05	●	●			2.1	9.53
JTGR3120F	R	1.2	0.05	●	●			2.1	9.53
JTGR3120F-010	R	1.2	0.1	●				2.1	9.53
JTGR3125F	R	1.25	0.05	●	●	●	●	2.1	9.53
JTGL3125F	L	1.25	0.05	●	●		●	2.1	9.53
JTGR3125F-010	R	1.25	0.1	●				2.1	9.53
JTGL3125F-010	L	1.25	0.1	●				2.1	9.53
JTGR3130F	R	1.3	0.05	●	●			2.1	9.53
JTGR3140F	R	1.4	0.05	●	●			2.1	9.53
JTGR3140F-010	R	1.4	0.1	●				2.1	9.53
JTGR3145F	R	1.45	0.05	●	●	●	●	2.1	9.53
JTGL3145F	L	1.45	0.05		●		●	2.1	9.53
JTGR3145F-010	R	1.45	0.1	●				2.1	9.53
JTGR3150F	R	1.5	0.05	●	●	●	●	2.1	9.53
JTGL3150F	L	1.5	0.05	●	●		●	2.1	9.53
JTGR3150F-010	R	1.5	0.1	●				2.1	9.53
JTGL3150F-010	L	1.5	0.1	●				2.1	9.53

● : Line up

Reference pages: Toolholders → F111, Standard cutting conditions → F114

JTG (Sharp edge)



Right hand (R) shown.

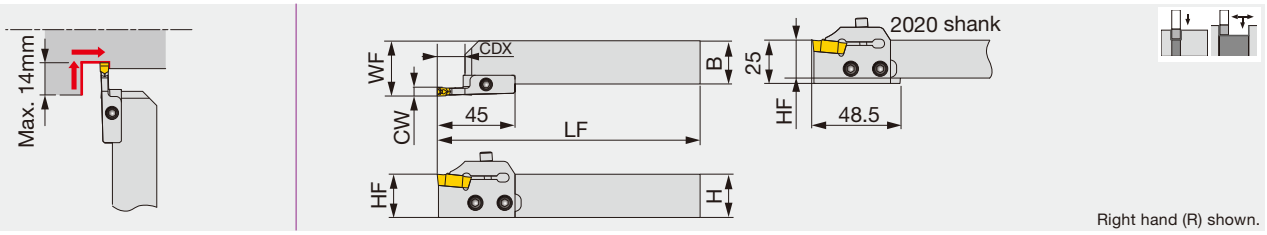
| | | |

STANDARD CUTTING CONDITIONS (J-Series grooving tool)

ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed *f* (mm/rev)
P	General steels, Free-cutting steels, etc.	J740	10 - 100	0.01 - 0.1
		SH725	50 - 150	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
M	Stainless steels, etc.	J740	10 - 100	0.01 - 0.1
		SH725	50 - 150	0.01 - 0.1
N	Aluminium alloys, copper alloys, etc.	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-cut materials, titanium alloys, etc.	TH10	10 - 30	0.01 - 0.1

CGWSR/L-FLR/L#GP

External grooving and turning toolholder



Right hand (R) shown.

Designation	CW	CDX	H	B	LF	HF	WF	Insert	Shank	Adapter	Torque*
CGWSR/L2020-FLR/L3GP	3	10	20	20	152	20	27	FLEX30R/L	CGWSR/L2020	FLR/L3GP	5
CGWSR/L2525-FLR/L3GP	3	10	25	25	152	25	32	FLEX30R/L	CGWSR/L2525	FLR/L3GP	5
CGWSR/L2020-FLR/L4GP	4	12	20	20	152	20	27	FLEX40R/L	CGWSR/L2020	FLR/L4GP	5
CGWSR/L2525-FLR/L4GP	4	12	25	25	152	25	32	FLEX40R/L	CGWSR/L2525	FLR/L4GP	5
CGWSR/L2020-FLR/L5GP	5	14	20	20	152	20	27	FLEX50R/L	CGWSR/L2020	FLR/L5GP	5
CGWSR/L2525-FLR/L5GP	5	14	25	25	152	25	32	FLEX50R/L	CGWSR/L2525	FLR/L5GP	5

Toolholders are in stock with the designations of: a set of shank and adapter; a shank; a adapter. Combining the designations of a adapter and a shank will make the designation of a set.
Please check the stock and place an order with the designation of a set or a shank+a adapter.
Use right-hand toolholders (CGWSR...) with right-hand adapter (FLR...); and left-hand toolholders (CGWSL...) with left-hand adapter (FLL...).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

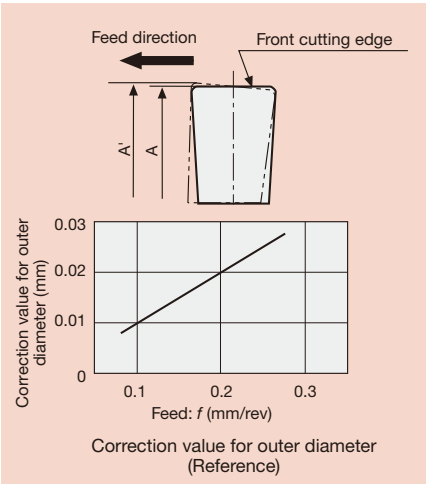




Designation	Clamping screw	Adapter screw	Wrench
CGWSR/L****-FLR/L*GP	CHHM5-18	CSHB-6	P-4

Caution

Toolholders with FLEX insert have mechanism in which the end cutting edge angle is formed by accepting a cutting force. In external grooving, there is a possibility that if the cutting conditions (feed and depth of cut) are set too high, the programmed diameter will not be achieved. To prevent this problem, it is necessary to perform a compensation in the program by an amount that is equal to the amount A'-A that is shown in the drawing on the right. The values of compensation corresponding to the feeds are also shown in the graph.

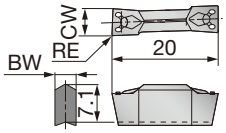


Correction value for outer diameter (Reference)

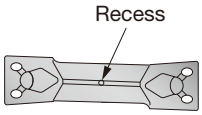
Reference pages: Inserts, Standard cutting conditions → F116

INSERT

FLEX(R/L)



Right hand (R) shown.



To distinguish the insert hands, the V-shape surface (top surface) of a left-hand insert has a recess. (not of a right-hand insert)

		Coated				Cermet				Uncoated				
P	Steel	★				★				★				
M	Stainless	★								★				
K	Cast iron	☆				☆								
N	Non-ferrous													
S	Superalloys													
H	Hard materials													

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	Coated				Cermet				Uncoated				BW
				T9225				NS9530				UX30				
FLEX30R	R	3	0.4					●								2.2
FLEX30L	L	3	0.4					●								2.2
FLEX40R	R	4	0.4					●								3.1
FLEX40L	L	4	0.4					●								3.1
FLEX50R	R	5	0.4	●				●				●				4
FLEX50L	L	5	0.4	●				●				●				4

● : Line up

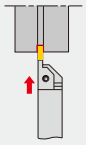
STANDARD CUTTING CONDITIONS

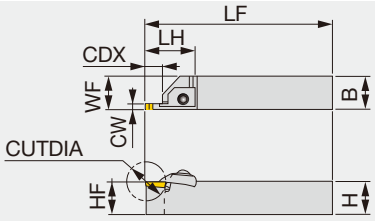
ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving	Turning
P	Carbon steel	T9225	80 - 300	0.05 - 0.25	0.1 - 0.3
		NS9530	80 - 200	0.05 - 0.25	0.1 - 0.3
		UX30	60 - 150	0.05 - 0.25	0.1 - 0.3

Reference pages: Toolholders → F115

CTWR/L

External grooving and parting toolholder, for 2 corner inserts





Right hand (R) shown.

Designation	CW	CUTDIA	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
CTWR/L2020-3	3	32	14	20	20	150	41	20	20.25	CTD3	5
CTWR/L2525-3	3	32	14	25	25	150	41	25	25.25	CTD3	5
CTWR/L2020-4	4	32	14	20	20	150	41	20	20.25	CTD4	5
CTWR/L2525-4	4	32	14	25	25	150	41	25	25.25	CTD4	5
CTWR/L2525-5	5	42	20	25	25	150	46	25	25.25	CTD5	5

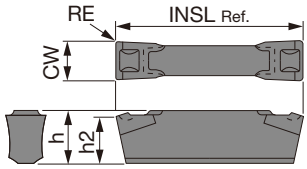
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamp	Pin	Clamping screw	Washer	Wrench
CTWR2020-3	CTC-3R	BP-360	CTS-M6	CDW6	P-4
CTWL2020-3	CTC-3L	BP-360	CTS-M6	CDW6	P-4
CTWR2525-3	CTC-3R	BP-360	CTS-M6	CDW6	P-4
CTWL2525-3	CTC-3L	BP-360	CTS-M6	CDW6	P-4
CTWR2020-4	CTC-4R	BP-360	CTS-M6	CDW6	P-4
CTWL2020-4	CTC-4L	BP-360	CTS-M6	CDW6	P-4
CTWR2525-4	CTC-4R	BP-360	CTS-M6	CDW6	P-4
CTWL2525-4	CTC-4L	BP-360	CTS-M6	CDW6	P-4
CTWR2525-5	CTC-5R	BP-360	CTS-M6	CDW6	P-4
CTWL2525-5	CTC-5L	BP-360	CTS-M6	CDW6	P-4

INSERT

CTD



		Coated
		AH725
P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	CW±0.1	RE	AH725	INSL	h	h2
CTD3	3	0.2	●	20	4.3	4
CTD4	4	0.2	●	20	5.3	5
CTD5	5	0.2	●	25	6.3	6

● : Line up

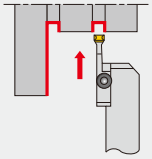
STANDARD CUTTING CONDITIONS

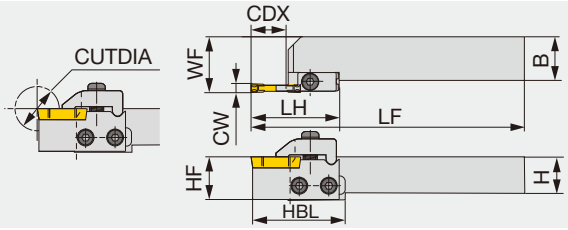
ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving	Parting off
P	Carbon steel	AH725	80 - 180	0.08 - 0.3	0.08 - 0.15
M	Stainless steel	AH725	50 - 120	0.08 - 0.25	0.08 - 0.1

MY-T SERIES

CGWSR/L-CGD

External grooving and parting toolholder







Right hand (R) shown.

Designation	CW	CUTDIA	CDX	H	B	LF	LH	HBL	HF	WF	Insert	Shank	Adapter	Torque*
CGWSR/L2020-CGDR/L2	2	35	16	20	20	152	45	48.5	20	26.45	CGD200	CGWSR/L2020	CGDR/L2	5
CGWSR/L2525-CGDR/L2	2	35	16	25	25	152	45	-	25	31.45	CGD200	CGWSR/L2525	CGDR/L2	5
CGWSR/L2020-CGDR/L3	3	46	21.6	20	20	157.6	50.6	54.1	20	26.45	CGD300	CGWSR/L2020	CGDR/L3	5
CGWSR/L2525-CGDR/L3	3	46	21.6	25	25	157.6	50.6	-	25	31.45	CGD300	CGWSR/L2525	CGDR/L3	5
CGWSR/L2020-CGDR/L4	4	46	21.6	20	20	157.6	50.6	54.1	20	26.65	CGD400	CGWSR/L2020	CGDR/L4	5
CGWSR/L2525-CGDR/L4	4	46	21.6	25	25	157.6	50.6	-	25	31.65	CGD400	CGWSR/L2525	CGDR/L4	5
CGWSR/L2020-CGDR/L5	5	46	21.6	20	20	157.6	50.6	54.1	20	26.95	CGD500	CGWSR/L2020	CGDR/L5	5
CGWSR/L2525-CGDR/L5	5	46	21.6	25	25	157.6	50.6	-	25	31.95	CGD500	CGWSR/L2525	CGDR/L5	5
CGWSR/L2020-CGDR/L6	6	46	21.6	20	20	157.6	50.6	54.1	20	27.1	CGD600	CGWSR/L2020	CGDR/L6	5
CGWSR/L2525-CGDR/L6	6	46	21.6	25	25	157.6	50.6	-	25	32.1	CGD600	CGWSR/L2525	CGDR/L6	5
CGWSR2525-8	7 / 8	50	21.6	25	25	150	-	-	25	26.35	CGD700, CGD800	-	-	8.5
CGWSR3232-8	7 / 8	50	21.6	32	32	170	-	-	32	33.35	CGD700, CGD800	-	-	8.5

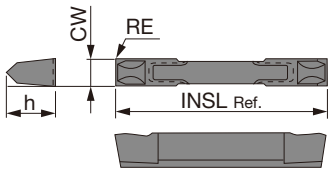
When using a right or left hand adapter set, the right hand adapter set is used with right hand shank and the left hand adapter set is used with left hand shank.
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Adapter	Clamp	Clamping screw	Adapter screw	Spring pin	Spring	Wrench
CGWSR****-CGDR2	TCR2	CCR2	RT-1	CSHB-6	-	BP-9	P-4
CGWSL****-CGDL2	TCL2	CCL2	RT-1	CSHB-6	-	BP-9	P-4
CGWSR****-CGDR3	TCR3	CCR3	RT-1	CSHB-6	-	BP-9	P-4
CGWSL****-CGDL3	TCL3	CCL3	RT-1	CSHB-6	-	BP-9	P-4
CGWSR****-CGDR4	TCR4	CCR4	RT-1	CSHB-6	-	BP-9	P-4
CGWSL****-CGDL4	TCL4	CCL4	RT-1	CSHB-6	-	BP-9	P-4
CGWSR****-CGDR5	TCR5	CCR5	RT-1	CSHB-6	-	BP-9	P-4
CGWSL****-CGDL5	TCL5	CCL5	RT-1	CSHB-6	-	BP-9	P-4
CGWSR****-CGDR6	TCR6	CCR6	RT-1	CSHB-6	-	BP-9	P-4
CGWSR****-CGDL6	TCL6	CCL6	RT-1	CSHB-6	-	BP-9	P-4
CGWSR****-8	-	CCR/L-8	CHHM6-20	-	5X14AW	BP-9	P-5

INSERT

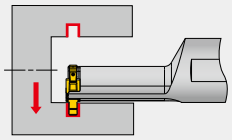
CGD

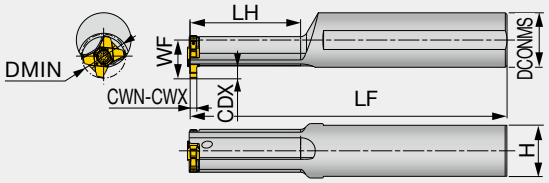


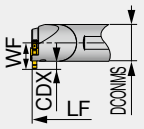
| | | |

A/E-STCIR/L

Internal grooving toolholder







Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	DCONMS	LH	LF	WF	H	Insert	Torque*
A12H-STCIR/L10-D105	Steel	0.5	3	10.5	12	25	100	8.3	11	TCIG10...	1
A12H-STCIR/L10-D120	Steel	0.5	3	12	12	31	100	8.3	11	TCIG10...	1
E12K-STCIR/L10-D150	Carbide	0.5	3	15	12	-	125	8.3	11	TCIG10...	1
A16J-STCIR/L12-D130	Steel	1	3	13	16	33	110	11.3	15	TCIG12...	1.3
A16J-STCIR/L12-D160	Steel	1	3	16	16	41	110	11.3	15	TCIG12...	1.3
E16M-STCIR/L12-D200	Carbide	1	3	20	16	-	150	11.3	15	TCIG12...	1.3

Torque*: Recommended clamping torque (N·m)

SPARE PARTS

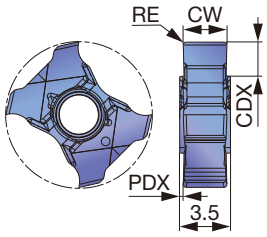


Designation	Clamping screw
A/E-STCIR10-...	CSTB-2.2L053DR
A/E-STCIL10-...	CSTB-2.2L053DL
A/E-STCIR12-...	CSTB-2.5L054DR
A/E-STCIL12-...	CSTB-2.5L054DL

INSERT

TCIG





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

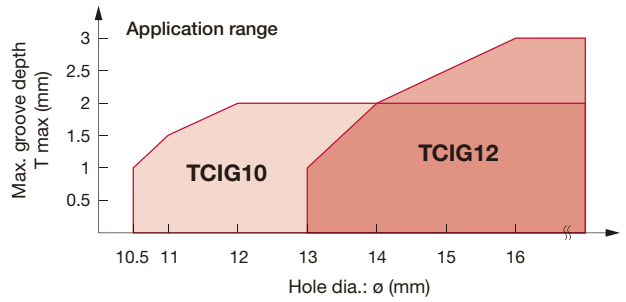
★ : First choice

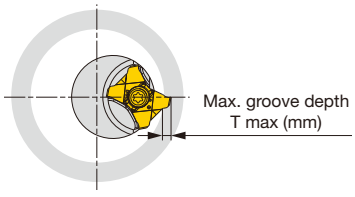
Designation	CW±0.025	RE	Coated AH725	CDX	PDX
TCIG10-050-005	0.5	0.05	●	1	1.5
TCIG10-122-008	1.22	0.08	●	2	1.14
TCIG10-142-008	1.42	0.08	●	2	1.04
TCIG10-150-010	1.5	0.1	●	2	1
TCIG10-172-008	1.72	0.08	●	2	0.89
TCIG10-200-010	2	0.1	●	2	0.75
TCIG10-250-020	2.5	0.2	●	2	0.5
TCIG10-300-020	3	0.2	●	2	0.25
TCIG12-100-010	1	0.1	●	2.5	1.25
TCIG12-150-010	1.5	0.1	●	3	1
TCIG12-197-008	1.97	0.08	●	3	0.77
TCIG12-200-020	2	0.2	●	3	0.75
TCIG12-224-008	2.24	0.08	●	3	0.63
TCIG12-250-020	2.5	0.2	●	3	0.5
TCIG12-277-015	2.77	0.15	●	3	0.37
TCIG12-300-020	3	0.2	●	3	0.25

● : Line up

Shallower groove depths (T max) for smaller bores

Maximum groove depths (T max) for TCIG10 inserts are smaller than the CDX value shown above when the grooving bore diameter is < 12 mm; and for TCIG12, when the bore diameter is < 16 mm.
See the chart below for T max values in relation to the given bore diameter.



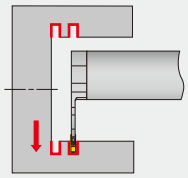


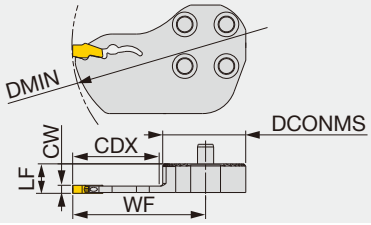
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel S45C, C45, SCM435, 34CrMo4, etc.	< 300 HB	First choice	30 - 80	0.01 - 0.05
M	Stainless steel SUS303, X10CrNiS18-9, etc.	< 200 HB	First choice	30 - 50	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	10 - 50	0.01 - 0.05

S-QSIR/L-H

Internal grooving head





Left hand (L) shown.

Designation	CW	CDX	DMIN	DCONMS*	Seat size	LF	WF	Shank
S25-QSIR/L2T26D550-H	2	26	55	25	2	8.5	40.1	D25
S25-QSIR/L3T26D550-H	3	26	55	25	3	9	40.1	D25
S32-QSIR/L3T32D700-H	3	32	70	32	3	11	49.6	D32
S32-QSIR/L4T32D700-H	4	32	70	32	4	11.5	49.6	D32

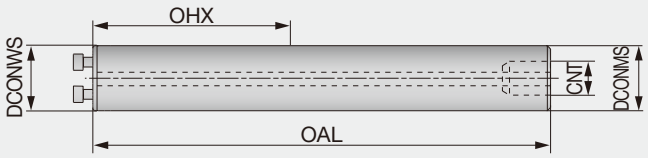
DCONMS*: Mounting part diameter on the shank

SPARE PARTS

Designation	Wrench
S**-QSIR/L...	QL-39

Straight Shank

Anti-vibration bars with through coolant for interchangeable turning heads, for S-QSIR/L modular heads



Designation	Material	DCONWS*	DCONMS	OAL	OHX	CNT
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8

DCONWS*: Mounting part diameter on the head

SPARE PARTS

Designation	Clamping screw	Wrench
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0

Reference pages: Inserts → F124, F125, Standard cutting conditions → F125

C#-SH-CHP / C#-SH-E-CHP

Tool adapter with PSC connection (made of steel or carbide), for S-QSIR/L modular heads

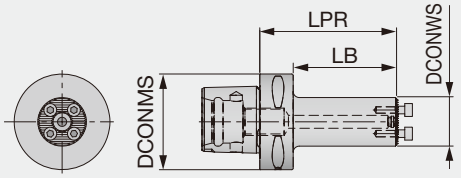


Fig. 1

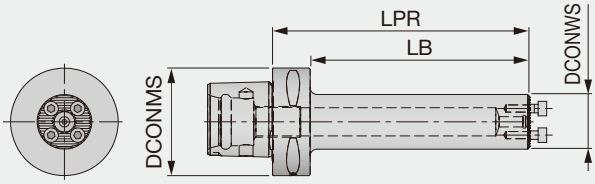


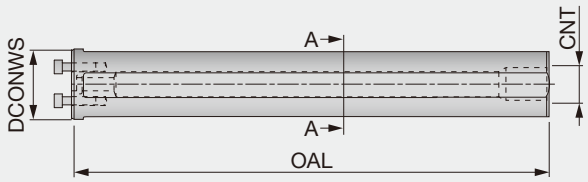
Fig. 2

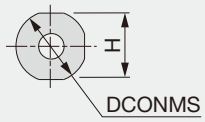
Designation	Material	DCONWS*	DCONMS	LPR	LB	Fig
C4-SH-D25-2.5D-CHP	Steel	25	40	55	35	1
C4-SH-D32-2.5D-CHP	Steel	32	40	75	55	1
C6-SH-D25-5D-E-CHP	Carbide	25	63	115	93	2
C6-SH-D32-5D-E-CHP	Carbide	32	63	150	128	2

DCONWS*: Mounting part diameter on the head

D#4D-SH

Steel shank for internal turning, with through coolant, for S-QSIR/L modular heads





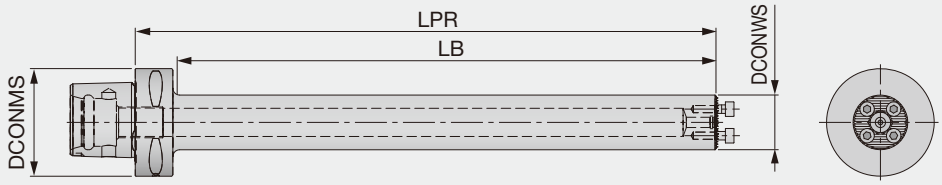
A-A cross section

Designation	Material	DCONWS*	DCONMS	OAL	CNT	H
D25-L200-4D-SH	Steel	25	25	200	UNF-2B 1/2"-20	23
D32-L218-4D-SH	Steel	32	32	218	UNF-2B 1/2"-20	29

DCONWS*: Mounting part diameter on the head

C6-9D-C

Vibration-dampening toolholder with PSC connection, 9xD, for S-QSIR/L modular heads



Designation	Material	DCONWS*	DCONMS	LPR	LB	WT (kg)
C6-D25-L230-9D-C	Steel	25	63	230.5	200.1	1.65
C6-D32-L288-9D-C	Steel	32	63	288.5	259.5	2.73

DCONWS*: Mounting part diameter on the head

SPARE PARTS

Designation	Clamping screw	Wrench
C4/C6**D25... D25-L...	SRM4X12DIN912	HW3.0
C4/C6**D32... D32-L...	SRM5X12DIN912	HW4.0

Reference pages: Inserts → F124, F125, Standard cutting conditions → F125

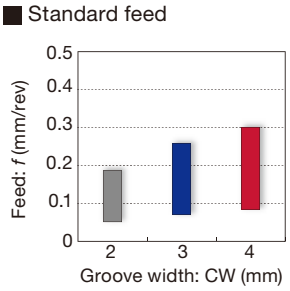
CHIPBREAKER GUIDE

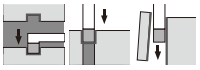
QGM



First choice for grooving and parting

Smooth chip evacuation
Well-designed edge with high strength
CW = 2 - 4 mm



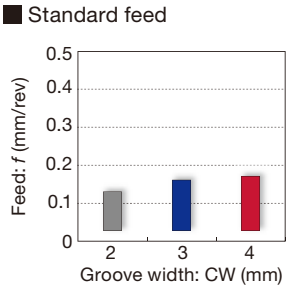


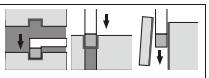
QGS



Lower cutting force and superior sharpness

Uniquely designed edge and chipbreaker
CW = 2 - 4 mm



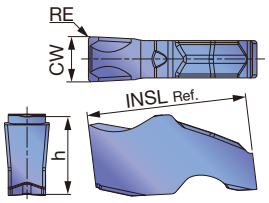


INSERTS

QGM

External/internal deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGM2-020	2	2	0.2	●	11	5.3
QGM3-020	3	3	0.2	●	11	5.3
QGM4-030	4	4	0.3	●	13	7.3

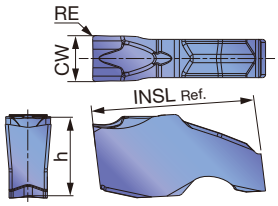
● : Line up

Reference pages: Toolholders → F122, F123

QGS

External/internal deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGS2-020	2	2	0.2	●	11	5.3
QGS3-020	3	3	0.2	●	11	5.3
QGS4-030	4	4	0.3	●	13	7.3

● : Line up

STANDARD CUTTING CONDITIONS

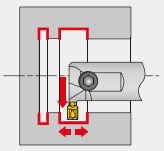
ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)
P	Steels C45, 34CrMo4, etc.	< 300 HB	AH7025	50 - 180
M	Stainless steel X10CrNiS18-9, etc.	< 200 HB	AH7025	50 - 120
K	Gray cast iron GG25, 250, etc.	-	AH7025	50 - 180
	Ductile cast irons GGG45, 450-10S, etc.	-	AH7025	50 - 120
S	Superalloys Inconel718, etc.	< HRC 40	AH7025	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	AH7025	20 - 60

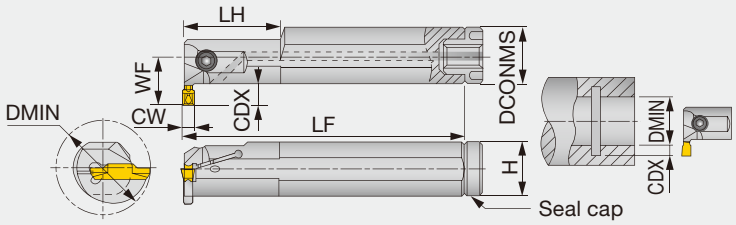
Please see page **F124** for feed: *f* (mm/rev).

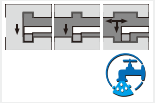
Reference pages: Toolholders → **F122, F123**

CTIR/L

Internal grooving and turning toolholder







Right hand (R) shown.

Designation	CW	DMIN	Seat size	CDX	DCONMS	H	LF (1)	LH	WF	Insert	Torque*
CTIR/L16-2T08-D250	2	25	2	8	16	14	125	-	16.5	DGIM..., DGIS..., DTX...	5
CTIR/L20-2T06-D250	2	25	2	6	20	18	160	40	15.8	DGIM..., DGIS..., DTX...	5
CTIR/L20-3T06-D250	3	25	3	6	20	18	160	40	15.8	DTI..., DTX...	5
CTIR/L25-3T05-D250	3	25	3	5.1	25	23	200	40	17.5	DTI..., DTX...	5
CTIR/L25-3T08-D320	3	32	3	8	25	23	200	40	21.5	DTI..., DTX...	5
CTIR/L32-3T10-D400	3	40	3	10	32	30	250	60	27	DTI..., DTX...	5
CTIR/L20-4T06-D250	4	25	4	6	20	18	160	40	15.8	DTI..., DTX...	5
CTIR/L25-4T08-D320	4	32	4	8	25	23	200	40	21.5	DTI..., DTX...	5
CTIR/L32-4T04-D310	4	31	4	4	32	30	250	60	20.8	DTI..., DTX...	5
CTIR/L32-4T10-D400	4	40	4	10	32	30	250	60	27	DTI..., DTX...	5
CTIR/L25-5T05-D310	5	31	5	5	25	23	200	60	17.3	DTI..., DTX...	8.5
CTIR/L32-5T10-D400	5	40	5	10	32	30	250	60	27	DTI..., DTX...	8.5
CTIR/L32-6T04-D310	6	31	6	4	32	30	250	60	20.8	DTI..., DTX...	8.5
CTIR/L32-6T10-D400	6	40	6	10	32	30	250	60	27	DTI..., DTX...	8.5
CTIR/L32-8T05-D370	8	37	8	5	32	30	250	60	21.3	DTI..., DTX...	8.5
CTIR/L40-8T05-D420	8	42	8	5.8	40	38	300	65	25.8	DTI..., DTX...	8.5

(1) LF is calculated with the groove width CW in the above table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS



Designation	Clamping screw	Wrench	Seal cap	Thread type for connection
CTIR/L16-2T08-D250	CM5X0.8X10-A	P-4	CA-16	M6
CTIR/L20-2T06-D250	CM5X0.8X12-A	P-4	CA-20	M6
CTIR/L20-3T06-D250	CM5X0.8X12-A	P-4	CA-20	M6
CTIR/L25-3T05-D250	CM5X0.8X16-A	P-4	CA-25	R1/8"
CTIR/L25-3T08-D320	CM5X0.8X16-A	P-4	CA-25	R1/8"
CTIR/L32-3T10-D400	CM5X0.8X16-A	P-4	CA-32	R1/8"
CTIR/L20-4T06-D250	CM5X0.8X12-A	P-4	CA-20	M6
CTIR/L25-4T08-D320	CM5X0.8X16-A	P-4	CA-25	R1/8"
CTIR/L32-4T04-D310	CM5X0.8X16-A	P-4	CA-32	R1/8"
CTIR/L32-4T10-D400	CM5X0.8X16-A	P-4	CA-32	R1/8"
CTIR/L25-5T05-D310	CM6X1X16-A	P-5	CA-25	R1/8"
CTIR/L32-5T10-D400	CM6X1X20-A	P-5	CA-32	R1/8"
CTIR/L32-6T04-D310	CM6X1X20-A	P-5	CA-32	R1/8"
CTIR/L32-6T10-D400	CM6X1X20-A	P-5	CA-32	R1/8"
CTIR/L32-8T05-D370	CM6X1X20-A	P-5	CA-32	R1/8"
CTIR/L40-8T05-D420	CM6X1X25-A	P-5	CA-40	R1/8"

When using the inserts that are not in the above

INSERT	Groove width CW	Min. diameter DMIN
DGM / DGS / SGN / DGL / DTM	2	50
DGM / DGS / SGN / DGL / DTM	3	50
DGM / DGS / SGN / DTM / DGL	4	50
DGM / DGS / DTM / DGL	5	60
DGM / DGS / DTM / DGL	6	60
DGM / DGS / DTM	8	70
DTE / DGG	3	40
DTE / DGG	4	40
DTE / DGG	5	50
DTE / DGG	6	50
DTE / DGG	8	62
DTR	2	45
DTR	3	38
DTR	4	38
DTR	5	43
DTR	6	46
DTR	8	56

Reference pages: Inserts → F127 - F144, Standard cutting conditions → F145

Internal grooving and turning

DTX type (2 corners)

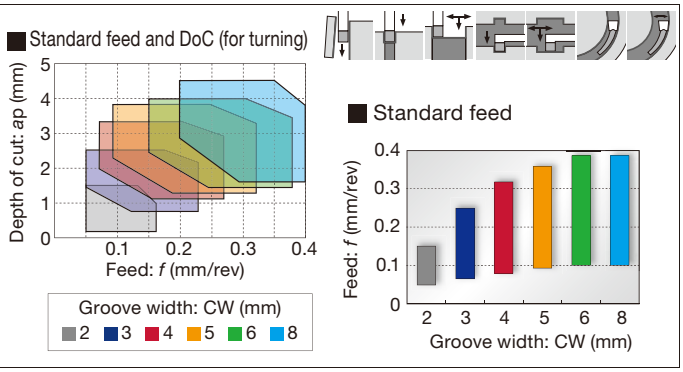
First choice



F132

Multi-functional type

Well balanced sharpness and strength
Multi-functional insert
CW = 2 - 8 mm



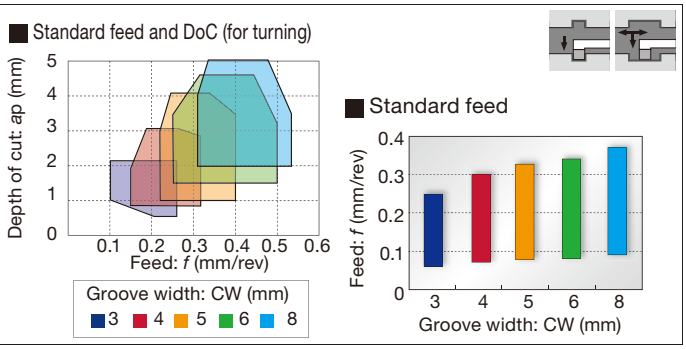
DTI type (2 corners)



F133, F134

For general purpose I.D. grooving

Unique chipbreaker makes chips shorter
Molded and ground inserts available
CW = 3 - 8 mm



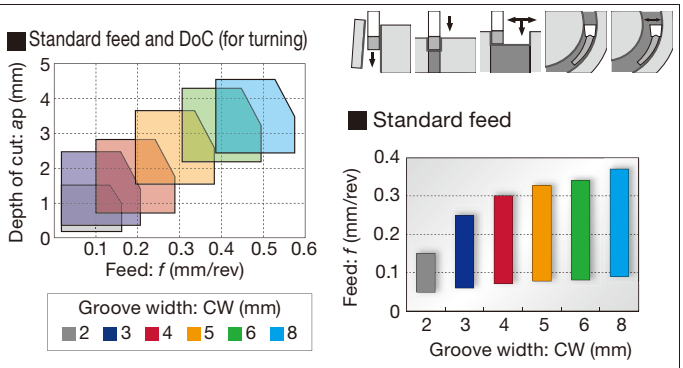
DTM type (2 corners)



F134

General purpose

1st choice for grooving and turning
Suitable for light to medium cutting
Excellent chip control in machining steel, alloy steel, stainless steel, and heat-resistant alloy
CW = 2 - 8 mm



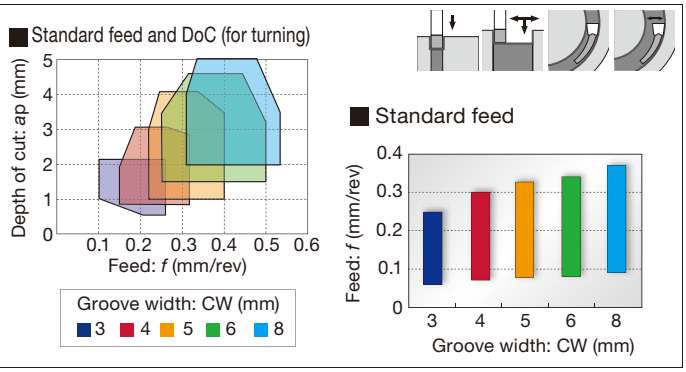
DTE type (2 corners)



F139

General purpose

Unique chipbreaker makes chips shorter
Molded and ground insert available
CW = 2.65 - 8 mm



Please see page F*** for the product details.

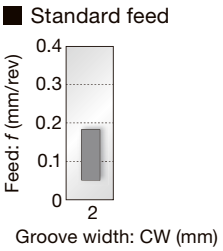
DGIM type (2 corners)



F132

2 mm insert width only (For general purpose)

Unique chipbreaker for excellent chip control
Excellent fracture resistance due to optimum land on the cutting edge
For general applications on steels & stainless steels
CW = 2 mm





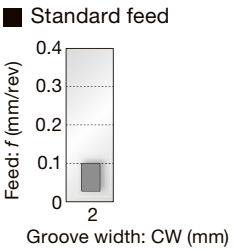
DGIS type (2 corners)



F133

2 mm insert width only (Lower cutting force)

Lower cutting force
Excellent fracture resistance due to optimum land on the cutting edge
Applicable for low carbon steels & stainless steels
CW = 2 mm





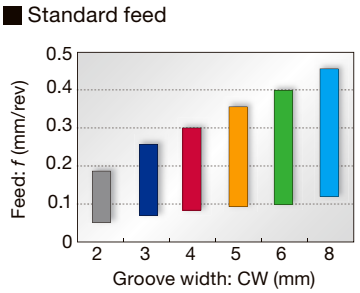
DGM type (2 corners) SGM type (1 corner)

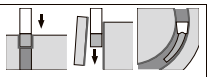


F135, F136

1st choice for grooving and parting

Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 2 - 8 mm





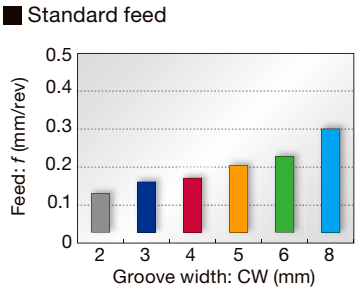
DGS type (2 corners) SGS type (1 corner)

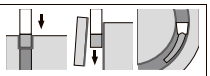


F137, F138

Lower cutting force and superior sharpness

Unique-designed edge and chipbreaker
Handed insert available
CW = 2 - 8 mm





Please see page F*** for the product details.

Internal grooving

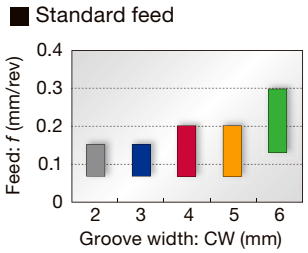
DGL type (2 corners)

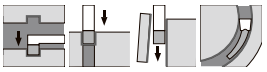


F139

1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often gives difficulties in chip control
CW = 2 - 6 mm





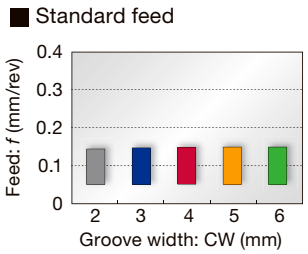
DGG type (2 corners)

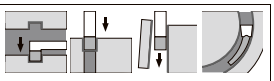


F140

For non-ferrous materials and titanium

Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 2 - 6 mm





Profiling and undercutting

DTR type (2 corners)
STR type (1 corner)

Molded
DTR, STR



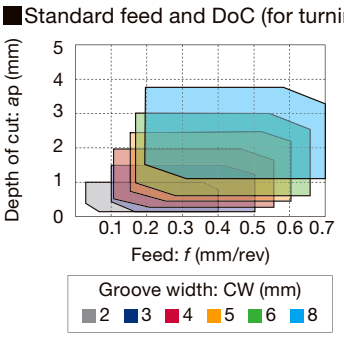
Ground
DTR

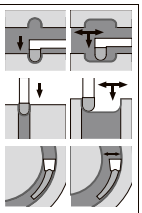


F141, F142

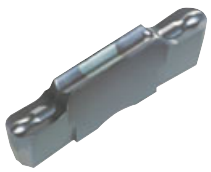
Full radius type

Excellent chip control
Molded and ground inserts available
CW = 2 - 8 mm





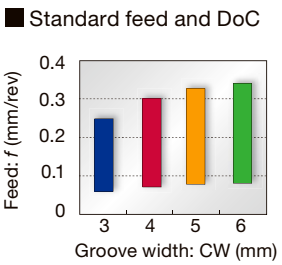
DTIU type (2 corners)

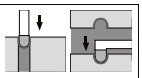


F142

Full radius type

Excellent chip control for undercutting
CW = 3 - 6 mm





Please see page F*** for the product details.

Aluminium wheel machining

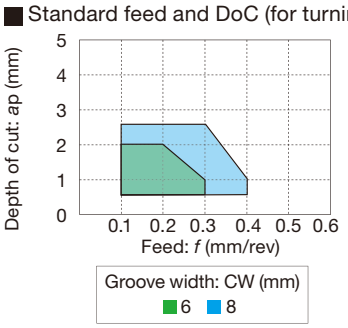
DTA type (2 corners)

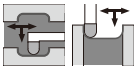


F143

Full radius type

Excellent chip control
For aluminium wheel profiling
Ground insert
CW = 6 - 8 mm





For high feed external/internal/face turning of hardened steel parts

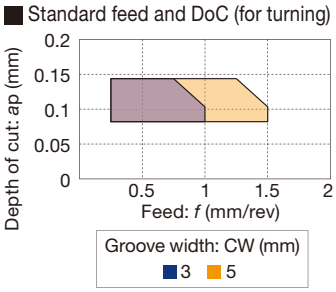
STH type (1 corner)

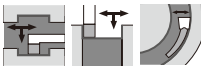


F143

External and face turning of hardened steel parts

High efficiency machining using light D.O.C. and increased feeds
CW = 3, 5 mm





External/internal grooving of hardened steel

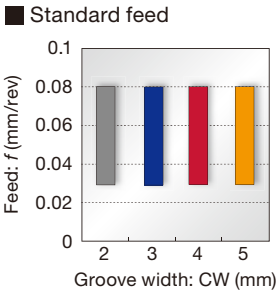
SGN-CBN type (1 corner)

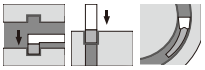


F144

For hardened steel cutting

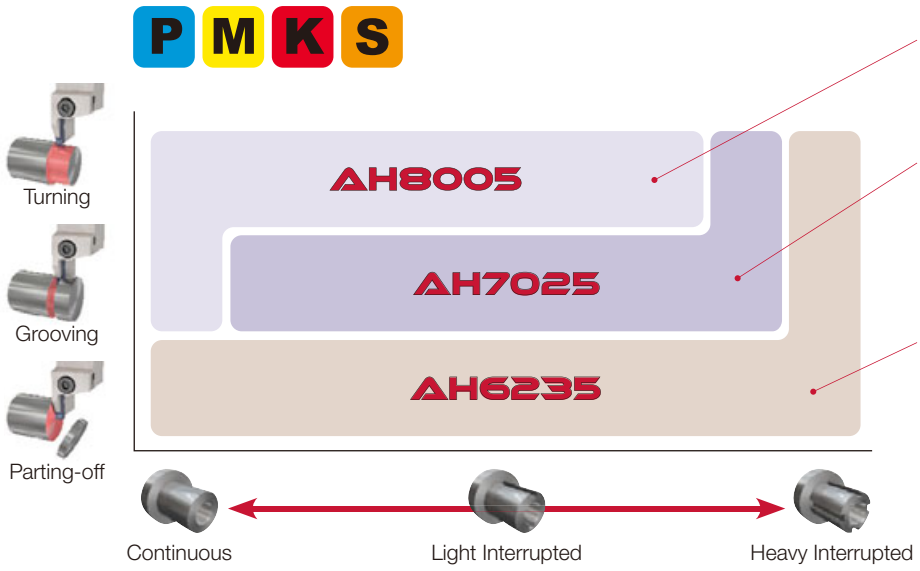
Optimum cutting edge shape for grooving of hardened steels
High tolerance width for finishing
CW = 2 - 5 mm
(CW = ±0.025 mm)





Please see page F*** for the product details.

GRADE SELECTION



GRADES

AH8005 P M K S
- First choice for external, internal, and side-turning, continuous cuts

AH7025 P M K S
- First choice for light interrupted cuts or a mix of continuous and interrupted cuts
- New PVD coating with high Al content provides excellent adhesion strength
- Improved wear and chipping resistance

AH6235 P M K
- First choice for heavy interrupted cuts, as well as parting and facing applications

AH725 P M S
- General purpose PVD grade for high fracture resistance

T515 K
- First recommended grade for cast iron
- Exellent wear resistance in high speed machining

T9225 P
- Suitable for steel machining at high speeds
- New CVD coating and substrate deliver an outstanding balance of wear and chipping resistance

NS9530 P
- Advanced cermet for finish cutting of steel
- Innovative grade with incredible fracture and high wear resistance

GH130 P M K
- Recommended for interrupted machining
- TiCNO PVD coating layer with high wear resistance
- High hardness wear resistance

AH905 S
- Remarkable for machining of heat resistant alloys
- Exclusive coating layer improves adhesion strength and wear resistance

KS05F N S
- Recommended for non-ferrous materials and titanium

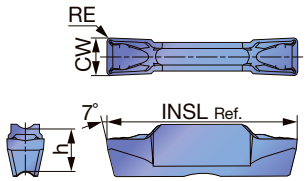
TH10 N
- Recommended for non-ferrous materials

BXA10 H
- Coated CBN grade designed for turning hardened steel parts

BX360 H
- Developed for grooving applications of hardened steel parts

DTX

External/internal/face grooving and turning



P	Steel	★	★	☆	★	☆	★		★						
M	Stainless		★	☆	★	★	★								
K	Cast iron		★		★	☆	★		☆				☆		
N	Non-ferrous												☆		
S	Superalloys		★	☆	★								★		
H	Hard materials														

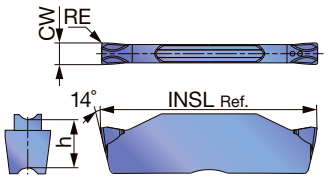
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated						Cermet				Uncoated				INSL	h
				T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530				KS05F					
DTX2-020	2	2	0.2		●		●		●					●				20	5
DTX3-030	3	3	0.3	●	●	●	●	●	●	●				●				20	5
DTX4-040	4	4	0.4	●	●	●	●	●	●	●				●				20	5
DTX5-040	5	5	0.4	●	●	●	●	●	●	●				●				25	5.5
DTX6-080	6	6	0.8		●	●	●	●	●					●				25	5.5
DTX8-080	8	8	0.8		●		●		●					●				30	6.7

●: Line up

DGIM

Internal grooving



P	Steel	★	★	☆	☆				★						
M	Stainless		★	☆	★										
K	Cast iron		★		☆				☆						
N	Non-ferrous														
S	Superalloys		★	☆											
H	Hard materials														

★ : First choice
☆ : Second choice

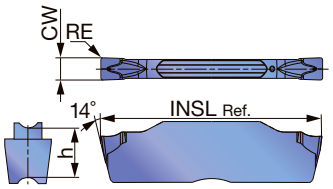
Designation	Seat size	CW±0.05	RE	Coated						Cermet								INSL	h
				T9225	AH7025	AH725	GH130			NS9530									
DGIM2-020	2	2	0.2	●	●	●	●			●								20	5

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

DGIS

Internal grooving



P	Steel	★	★	☆	☆				★				
M	Stainless		★	☆	★								
K	Cast iron		★		☆				☆				
N	Non-ferrous												
S	Superalloys		★	☆									
H	Hard materials												

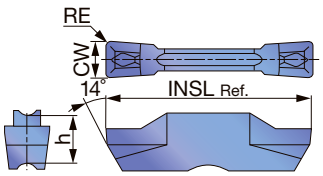
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated							Cermet						INSL	h
				T9225	AH7025	AH725	GH130				NS9530							
DGIS2-020	2	2	0.2	●	●	●	●				●						20	5

●: Line up

DTI

Internal grooving and turning (for high precision)



P	Steel	★	★	☆	☆				★				
M	Stainless		★	☆	★								
K	Cast iron		★		☆				☆				
N	Non-ferrous												
S	Superalloys		★	☆									
H	Hard materials												

★ : First choice
☆ : Second choice

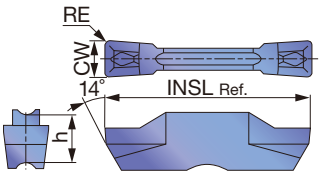
Designation	Seat size	CW±0.02	RE	Coated							Cermet						INSL	h
				T9225	AH7025	AH725	GH130				NS9530							
DTI300-040	3	3	0.4	●	●	●	●				●						20	5
DTI400-040	4	4	0.4	●	●	●	●				●						20	5
DTI400-080	4	4	0.8	●	●	●	●				●						20	5
DTI500-040	5	5	0.4	●	●	●	●				●						25	5.5
DTI500-080	5	5	0.8	●	●	●	●				●						25	5.5
DTI600-080	6	6	0.8	●	●	●	●										25	5.5
DTI600-120	6	6	1.2	●	●	●	●										25	5.5
DTI800-080	8	8	0.8	●	●	●	●										30	6.7
DTI800-120	8	8	1.2	●	●	●	●										30	6.7

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

DTI

Internal grooving and turning



P	Steel	★ ★ ☆ ☆ ★
M	Stainless	★ ☆ ★
K	Cast iron	★ ☆ ☆
N	Non-ferrous	
S	Superalloys	★ ☆
H	Hard materials	

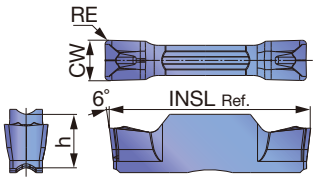
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated				Cermet	INSL	h
				T9225	AH7025	AH725	GH130	NS9530		
DTI3-040	3	3	0.4	●	●	●	●	●	20	5
DTI4-040	4	4	0.4	●	●	●	●	●	20	5

●: Line up

DTM

External/internal/face grooving and turning



P	Steel	★ ★ ★
M	Stainless	★ ★ ★
K	Cast iron	★ ★ ★
N	Non-ferrous	
S	Superalloys	★ ★
H	Hard materials	

★ : First choice
☆ : Second choice

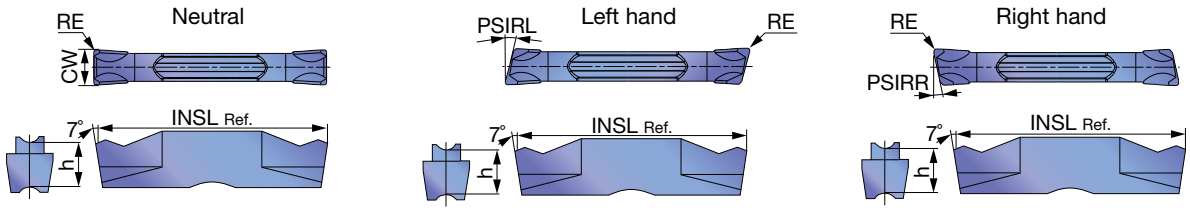
Designation	Seat size	CW±0.05	RE	Coated			INSL	h
				AH7025	AH8005	AH6235		
DTM2-020	2	2	0.2	●	●	●	20	5
DTM3-030	3	3	0.3	●	●	●	20	5
DTM4-040	4	4	0.4	●	●	●	20	5
DTM4-080	4	4	0.8	●	●	●	20	5
DTM5-080	5	5	0.8	●	●	●	25	5.5
DTM6-080	6	6	0.8	●	●	●	25	5.5
DTM8-080	8	8	0.8	●	●	●	30	6.7

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

DGM

External/internal grooving and parting



P	Steel	★	★	☆	★		☆	★		★						
M	Stainless		★	☆	★		★	★								
K	Cast iron		★		★	☆	☆	★		☆			☆			
N	Non-ferrous												☆			
S	Superalloys		★	☆	★	★							★			
H	Hard materials															

★ : First choice
☆ : Second choice

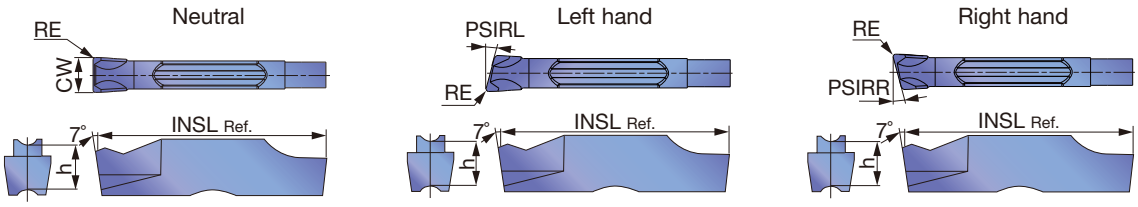
Designation	Seat size	HAND	CW±0.05	RE	Coated							Cermet		Uncoated				INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F							
DGM2-020	2	N	2	0.2	●	●	●	●		●	●	●		●				20	5	0°	0°
DGM2-020-6R	2	R	2	0.2		●	●			●								20	5	0°	6°
DGM2-020-6L	2	L	2	0.2		●	●			●								20	5	6°	0°
DGM2-020-8R	2	R	2	0.2		●	●			●								20	5	0°	8°
DGM2-020-8L	2	L	2	0.2		●	●			●								20	5	8°	0°
DGM2-020-15R	2	R	2	0.2		●	●			●								20	5	0°	15°
DGM2-020-15L	2	L	2	0.2		●	●			●								20	5	15°	0°
DGM2-002-15R	2	R	2	0.02			●			●								19.35	5	0°	15°
DGM2-002-15L	2	L	2	0.02			●			●								19.35	5	15°	0°
DGM2.39-020	2	N	2.39	0.2		●		●			●							20	5	0°	0°
DGM3-020	3	N	3	0.2	●	●	●	●	●	●	●	●		●				20	5	0°	0°
DGM3-020-6R	3	R	3	0.2		●	●			●								20	5	0°	6°
DGM3-020-6L	3	L	3	0.2		●	●			●								20	5	6°	0°
DGM3-002-6R	3	R	3	0.02			●			●								19.45	5	0°	6°
DGM3-002-6L	3	L	3	0.02			●			●								19.45	5	6°	0°
DGM3-020-15R	3	R	3	0.2		●	●			●								20	5	0°	15°
DGM3-020-15L	3	L	3	0.2		●	●			●								20	5	15°	0°
DGM3.18-020	3	N	3.18	0.2		●		●			●							20	5	0°	0°
DGM4-030	4	N	4	0.3	●	●	●	●	●	●	●	●		●				20	5	0°	0°
DGM4-030-4R	4	R	4	0.3		●	●			●								20	5	0°	4°
DGM4-030-4L	4	L	4	0.3		●	●			●								20	5	4°	0°
DGM4-030-15R	4	R	4	0.3		●	●			●								20	5	0°	15°
DGM4-030-15L	4	L	4	0.3		●	●			●								20	5	15°	0°
DGM4.76-040	5	N	4.76	0.4		●		●			●							25	5.5	0°	0°
DGM5-030	5	N	5	0.3	●	●	●	●	●	●	●	●		●				25	5.5	0°	0°
DGM5-030-4R	5	R	5	0.3		●	●			●								25	5.5	0°	4°
DGM6-030	6	N	6	0.3	●	●	●	●	●	●	●			●				25	5.5	0°	0°
DGM6.35-040	6	N	6.35	0.4		●		●			●							25	5.5	0°	0°
DGM8-040	8	N	8	0.4	●	●	●	●		●	●			●				30	6.7	0°	0°

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

SGM

External/internal deep grooving and parting



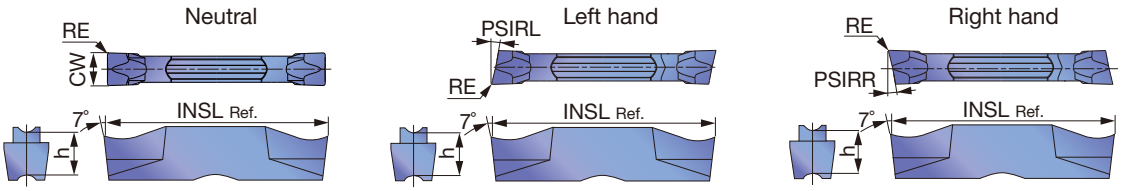
		AH7025	AH725	AH8005	GH130	AH6235	KS05F
P	Steel	★	☆	★	☆	★	
M	Stainless	★	☆	★	★	★	
K	Cast iron	★		★	☆	★	☆
N	Non-ferrous						☆
S	Superalloys	★	☆	★			★
H	Hard materials						

★ : First choice
☆ : Second choice

| Designation | Seat size | HAND | CW±0.05 | RE | Coated | | | | | Uncoated | | | | | |

DGS

External/internal grooving and parting



P	Steel	★	★	☆	★	☆	★		★								
M	Stainless		★	☆	★	★	★										
K	Cast iron		★		★	☆	★		☆			☆					
N	Non-ferrous											☆					
S	Superalloys		★	☆	★							★					
H	Hard materials																

★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated						Cermet		Uncoated				INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530		KS05F							
DGS2-005	2	N	2	0.05			●										20	5	0°	0°
DGS2-010	2	N	2	0.1			●										20	5	0°	0°
DGS2-020	2	N	2	0.2	●	●	●	●	●	●	●		●				20	5	0°	0°
DGS2-020-6R	2	R	2	0.2		●	●		●								20	5	0°	6°
DGS2-020-6L	2	L	2	0.2		●	●		●								20	5	6°	0°
DGS2-002-6R	2	R	2	0.02			●		●								19.5	5	0°	6°
DGS2-002-6L	2	L	2	0.02			●		●								19.5	5	6°	0°
DGS2-020-15R	2	R	2	0.2		●	●		●								20	5	0°	15°
DGS2-020-15L	2	L	2	0.2		●	●		●								20	5	15°	0°
DGS2-002-15R	2	R	2	0.02			●		●								19.5	5	0°	15°
DGS2-002-15L	2	L	2	0.02			●		●								19.5	5	15°	0°
DGS2.39-020	2	N	2.39	0.2		●		●		●							20	5	0°	0°
DGS3-020	3	N	3	0.2	●	●	●	●	●	●	●		●				20	5	0°	0°
DGS3-020-6R	3	R	3	0.2		●	●		●								20	5	0°	6°
DGS3-020-6L	3	L	3	0.2		●	●		●								20	5	6°	0°
DGS3-002-6R	3	R	3	0.02			●		●								19.45	5	0°	6°
DGS3-002-6L	3	L	3	0.02			●		●								19.45	5	6°	0°
DGS3-020-15R	3	R	3	0.2		●	●		●								20	5	0°	15°
DGS3-020-15L	3	L	3	0.2		●	●		●								20	5	15°	0°
DGS3-002-15R	3	R	3	0.02			●		●								19.45	5	0°	15°
DGS3-002-15L	3	L	3	0.02			●		●								19.45	5	15°	0°
DGS3.18-020	3	N	3.18	0.2		●		●		●							20	5	0°	0°
DGS4-030	4	N	4	0.3	●	●	●	●	●	●	●		●				20	5	0°	0°
DGS4-030-4R	4	R	4	0.3		●	●		●								20	5	0°	4°
DGS4-030-4L	4	L	4	0.3		●	●		●								20	5	4°	0°
DGS4.76-040	5	N	4.76	0.4		●		●		●							25	5.5	0°	0°
DGS5-030	5	N	5	0.3	●	●	●	●	●	●	●		●				25	5.5	0°	0°
DGS6-030	6	N	6	0.3	●	●	●	●	●	●			●				25	5.5	0°	0°
DGS6.35-040	6	N	6.35	0.4		●		●		●							25	5.5	0°	0°
DGS8-040	8	N	8	0.4		●		●		●			●				30	6.7	0°	0°

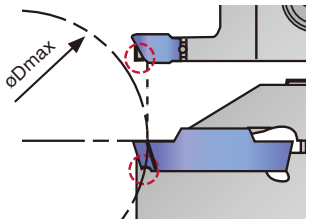
●: Line up

Caution

The tool will interfere with the workpiece when grooving larger diameters than øDmax.

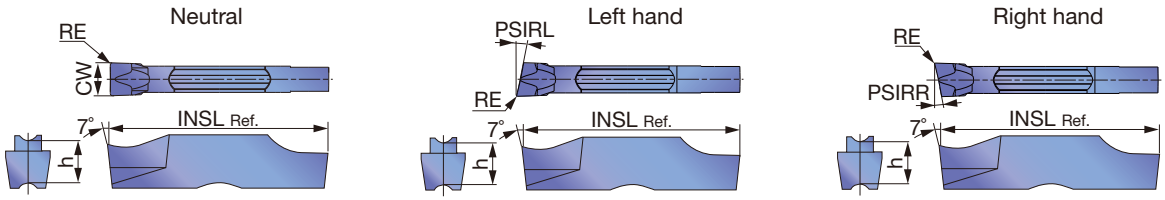
Designation	øDmax (mm)
DGM2-002-15R/L	28
DGM3-002-15R/L	29
DGM4-030-15R/L	30
SGM3-020-15R/L	103

Designation	øDmax (mm)
DGS2-002-15R/L	28
DGS3-002-15R/L	29
SGS3-020-15R/L	103
SGS3-002-15R/L	34



Reference pages: Toolholders → F126, Standard cutting conditions → F145

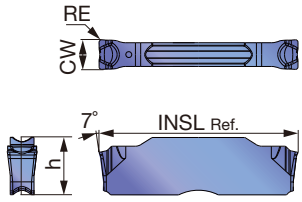
External/internal deep grooving and parting



| | | Coated | | | | | Uncoated | | | | |

DGL

External/internal grooving and parting



P	Steel	★	★	★	
M	Stainless	★	★	★	
K	Cast iron	★	★	★	
N	Non-ferrous				
S	Superalloys	★	★		
H	Hard materials				

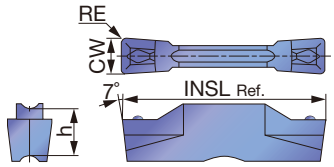
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	Coated AH8005	Coated AH6235	INSL	h
DGL2-020	2	2	0.2	●	●	●	20	5
DGL3-025	3	3	0.25	●	●	●	20	5
DGL4-030	4	4	0.3	●	●	●	20	5
DGL5-030	5	5	0.3	●	●	●	25	5.5
DGL6-080	6	6	0.8	●	●	●	25	5.5

●: Line up

DTE

External/internal/face grooving and turning (for high precision)



P	Steel	★	★	☆	☆				★			
M	Stainless		★	☆	★							
K	Cast iron		★		☆							
N	Non-ferrous											
S	Superalloys		★	☆								
H	Hard materials											

★ : First choice
☆ : Second choice

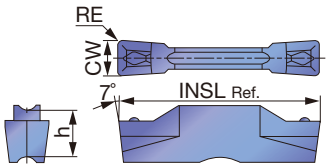
Designation	Seat size	CW±0.02	RE	Coated T9225	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	INSL	h
DTE265-015	3	2.65	0.15	●	●	●	●	●	20	5
DTE300-020	3	3	0.2	●	●	●	●	●	20	5
DTE300-040	3	3	0.4	●	●	●	●	●	20	5
DTE315-015	3	3.15	0.15	●	●	●	●	●	20	5
DTE400-040	4	4	0.4	●	●	●	●	●	20	5
DTE400-080	4	4	0.8	●	●	●	●	●	20	5
DTE415-015	4	4.15	0.15	●	●	●	●	●	20	5
DTE478-055	5	4.78	0.55	●	●	●	●	●	25	5.5
DTE500-040	5	5	0.4	●	●	●	●	●	25	5.5
DTE500-080	5	5	0.8	●	●	●	●	●	25	5.5
DTE515-015	5	5.15	0.15	●	●	●	●		25	5.5
DTE600-080	6	6	0.8	●	●	●	●		25	5.5
DTE600-120	6	6	1.2	●	●	●	●		25	5.5
DTE800-080	8	8	0.8	●	●	●	●		30	6.7
DTE800-120	8	8	1.2	●	●	●	●		30	6.7

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

DTE

External/internal/face grooving and turning



P	Steel	★		★	☆	★	☆	★		★			
M	Stainless			★	☆	★	★	★					
K	Cast iron		★	★		★	☆	★					
N	Non-ferrous												
S	Superalloys			★	☆	★							
H	Hard materials												

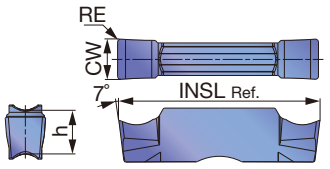
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated							Cermet						INSL	h
				T9225	T515	AH7025	AH725	AH8005	GH130	AH6235	NS9530							
DTE3-020	3	3	0.2			●		●		●							20	5
DTE3-040	3	3	0.4	●	●	●	●	●	●	●	●						20	5
DTE4-040	4	4	0.4	●	●	●	●	●	●	●	●						20	5
DTE4-080	4	4	0.8			●		●		●							20	5
DTE5-040	5	5	0.4		●	●		●		●							25	5.5
DTE5-080	5	5	0.8			●		●		●							25	5.5
DTE6-080	6	6	0.8		●	●		●		●							25	5.5

●: Line up

DGG

External/internal grooving (for high precision)



P	Steel	★		★	
M	Stainless	★			
K	Cast iron	★		☆	☆
N	Non-ferrous				★
S	Superalloys	★			☆
H	Hard materials				

★ : First choice
☆ : Second choice

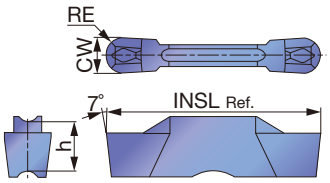
Designation	Seat size	CW±0.02	RE	Coated	Cermet	Uncoated	INSL	h
				AH7025	NS9530	KS05F		
DGG200-020	2	2	0.2	●	●	●	20	5
DGG300-020	3	3	0.2	●	●	●	20	5
DGG400-040	4	4	0.4	●	●	●	20	5
DGG500-040	5	5	0.4	●	●	●	25	5.5
DGG600-040	6	6	0.4	●	●	●	25	5.5

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

DTR

Profiling and undercutting (for high precision)



		T9225	AH7025	AH725	GH130	NS9530
P	Steel	★	★	☆	☆	★
M	Stainless		★	☆	★	
K	Cast iron		★		☆	☆
N	Non-ferrous					
S	Superalloys		★	☆		
H	Hard materials					

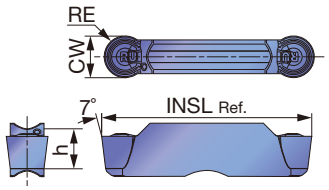
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated							Cermet						INSL	h
				T9225	AH7025	AH725	GH130				NS9530							
DTR300-150	3	3	1.5	●	●	●	●				●						20	5
DTR400-200	4	4	2	●	●	●	●				●						20	5
DTR478-239	5	4.78	2.39	●	●	●	●				●						25	5.5
DTR500-250	5	5	2.5	●	●	●	●				●						25	5.5
DTR600-300	6	6	3	●	●	●	●										25	5.5

●: Line up

DTR

Profiling and undercutting



		T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530	KS05F
P	Steel	★	★	☆	★		☆	★	★	
M	Stainless		★	☆	★		★	★		
K	Cast iron		★		★	☆	☆	★	☆	☆
N	Non-ferrous									☆
S	Superalloys		★	☆	★	★				★
H	Hard materials									

★ : First choice
☆ : Second choice

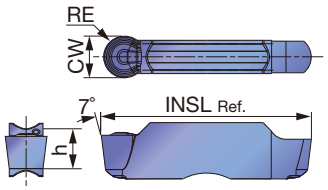
Designation	Seat size	CW±0.05	RE	Coated							Cermet		Uncoated			INSL	h
				T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F				
DTR2-100	2	2	1		●		●			●			●			20	5
DTR3-150	3	3	1.5	●	●	●	●	●	●	●	●		●			20	5
DTR4-200	4	4	2	●	●	●	●	●	●	●	●		●			20	5
DTR5-250	5	5	2.5	●	●	●	●	●	●	●	●		●			25	5.5
DTR6-300	6	6	3	●	●	●	●		●	●			●			25	5.5
DTR8-400	8	8	4	●	●	●	●		●	●			●			30	6.7

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

STR

Profiling and undercutting



P	Steel	★	★
M	Stainless	★	★
K	Cast iron	★	★
N	Non-ferrous		
S	Superalloys	★	★
H	Hard materials		

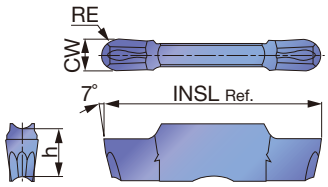
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated		Uncoated	INSL	h
				AH7025	AH8005	KS05F		
STR2-100	2	2	1	●	●	●	20	5
STR3-150	3	3	1.5	●	●	●	20	5
STR4-200	4	4	2	●	●	●	20	5
STR5-250	5	5	2.5	●	●	●	25	5.5
STR6-300	6	6	3	●	●	●	25	5.5
STR8-400	8	8	4	●	●	●	30	6.7

●: Line up

DTIU

Profiling and undercutting (for high precision)



P	Steel	★	☆	☆
M	Stainless	★	☆	★
K	Cast iron	★		☆
N	Non-ferrous			
S	Superalloys	★	☆	
H	Hard materials			

★ : First choice
☆ : Second choice

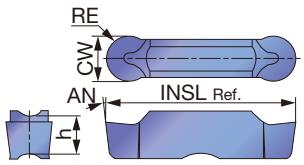
Designation	Seat size	CW±0.02	RE	Coated			INSL	h
				AH7025	AH725	GH130		
DTIU300-150	3	3	1.5	●	●	●	20	5
DTIU400-200	4	4	2	●	●	●	20	5
DTIU500-250	5	5	2.5	●	●	●	25	5.5
DTIU600-300	6	6	3	●	●	●	25	5.5

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

DTA

Aluminium wheel machining (for high precision)



P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous ★
S	Superalloys
H	Hard materials

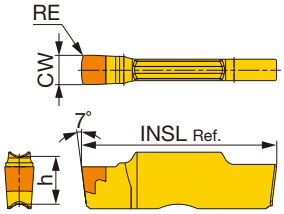
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Uncoated TH10	INSL	h	AN
DTA600-300	6	6	3	●	25	5.5	7°
DTA800-400	8	8	4	●	30	6.7	10°

●: Line up

STH

External/internal/face turning



P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous
S	Superalloys
H	Hard materials ★

★ : First choice

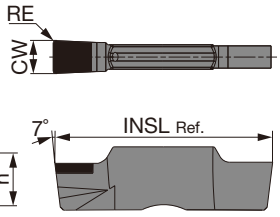
Designation	Seat size	CW±0.025	RE	CBN BXA10	INSL	h
STH300-SR	3	3	0.3	●	20	5
STH500-SR	5	5	0.3	●	25	5.5

●: Line up

Reference pages: Toolholders → F126, Standard cutting conditions → F145

SGN

External/internal grooving



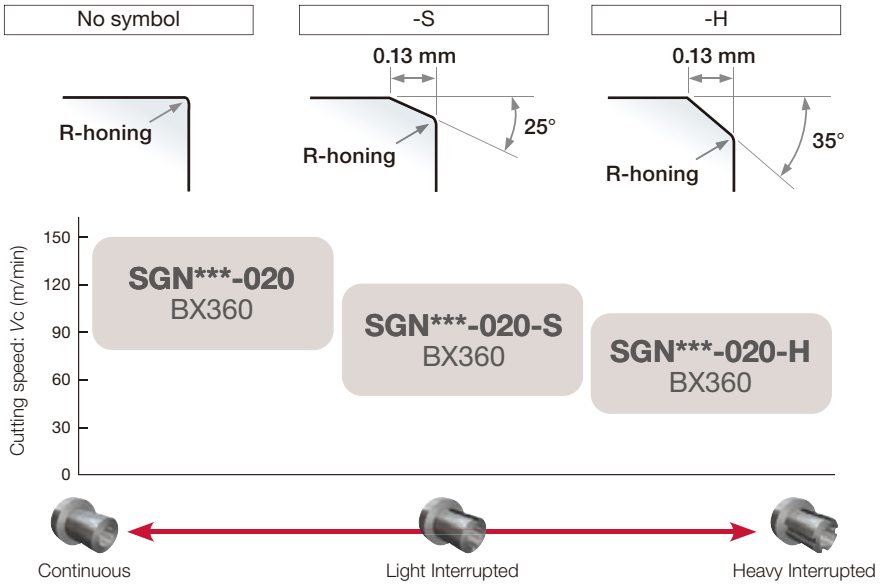
P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous
S	Superalloys
H	Hard materials

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.025	RE	CBN	INSL	h	Condition		
				BX360			Continuous	Light interrupted	Heavy interrupted
SGN200-020	2	2	0.2	●	20	5	○		
SGN200-020-S	2	2	0.2	●	20	5		○	
SGN200-020-H	2	2	0.2	●	20	5			○
SGN300-020	3	3	0.2	●	20	5	○		
SGN300-020-S	3	3	0.2	●	20	5		○	
SGN300-020-H	3	3	0.2	●	20	5			○
SGN400-020	4	4	0.2	●	20	5	○		
SGN400-020-S	4	4	0.2	●	20	5		○	
SGN400-020-H	4	4	0.2	●	20	5			○
SGN500-020-S	5	5	0.2	●	25	5.5		○	
SGN500-020-H	5	5	0.2	●	25	5.5			○

●: Line up

Edge preparations



Reference pages: Toolholders → F126, Standard cutting conditions → F145

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Wear resistance	T9225, AH8005	80 - 300
		< 300 HB	Impact resistance	AH6235, GH130	50 - 120
		< 300 HB	Surface quality	NS9530	80 - 220
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Wear resistance	AH8005	50 - 120
		< 200 HB	Impact resistance	AH6235, GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	T515	150 - 700
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	T515	150 - 300
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
		-	First choice	KS05F	100 - 600
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	20 - 60
		< HRC 40	Impact resistance	AH7025, AH725, AH6235	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	20 - 100
		< HRC 40	Impact resistance	AH7025, AH725	20 - 80

Please see page F127 - F130 for feed: *f* (mm/rev).

STH

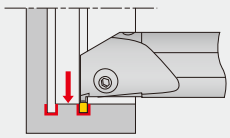
ISO	Grade	CW	Application	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
H	BXA10	3	External turning	100 - 230	0.08 - 0.12	0.4 - 1
			Face turning	100 - 230	0.08 - 0.12	0.4 - 0.8
		5	External turning	100 - 230	0.08 - 0.12	0.5 - 1.5
			Face turning	100 - 230	0.08 - 0.12	0.5 - 0.8

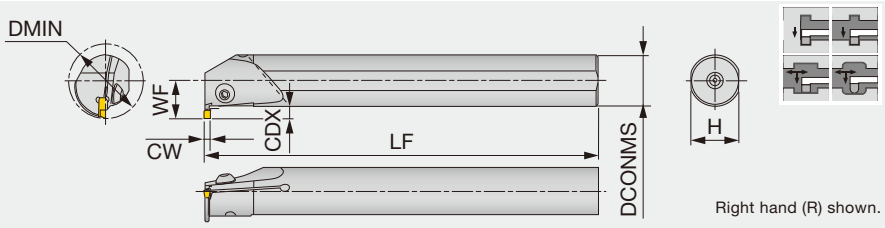
SGN

ISO	Grade	Edge preparation	Workpiece condition	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
H	BX360	No symbol	Continuous	80 - 150	0.03 - 0.08
		-S	Light interrupted	50 - 120	0.03 - 0.08
		-H	Heavy interrupted	40 - 100	0.03 - 0.06

CGTR/L

Internal grooving and turning toolholder





Right hand (R) shown.

Designation	CW	DMIN	CDX	DCONMS	H	LF	WF	Insert	Torque*
S20Q-CGTR/L30	3	25	3.5	20	18	180	14.5	G*30, GE30-AL	3
S25R-CGTR/L30	3	32	5	25	23	200	18.5	G*30, GE30-AL	3
S25R-CGTR/L40	4	32	5	25	23	200	18.5	G*40, GE40-AL	3
S32S-CGTR/L40	4	40	6	32	30	250	23	G*40, GE40-AL	3
S25R-CGTR/L50	5	32	5	25	23	200	18.5	G*50	3
S32S-CGTR/L50	5	40	6	32	30	250	23	G*50	3

*Torque: Recommended clamping torque (N·m)

SPARE PARTS

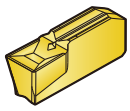



Designation	Clamping screw	Wrench
S***-CGTR/L...	BHM5-14	P-3

Reference pages: Inserts → F147 - F150, Standard cutting conditions → F151

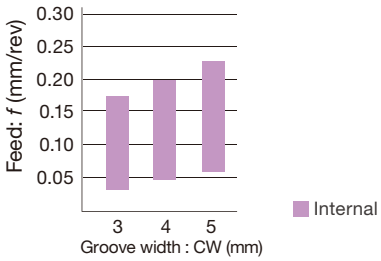
Internal grooving

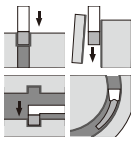
GN



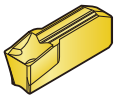
F150

1st choice for internal grooving
Low cutting force and good chip control for internal grooving
CW = 3 - 5 mm



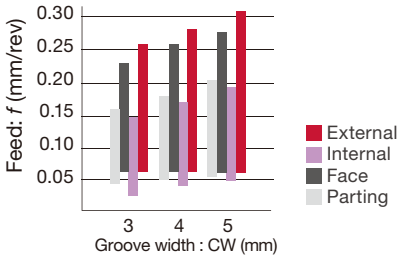


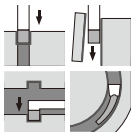
GE



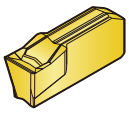
F148

1st choice for external grooving and parting
Excellent chip control
CW = 3 - 5 mm



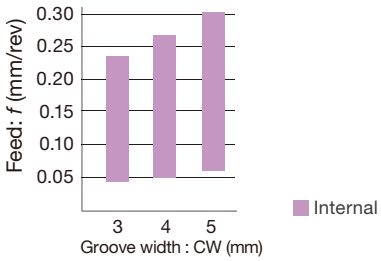


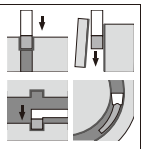
GF



F149

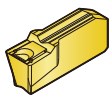
1st choice for face grooving
Low cutting force and good chip control for face grooving
CW = 3 - 5 mm





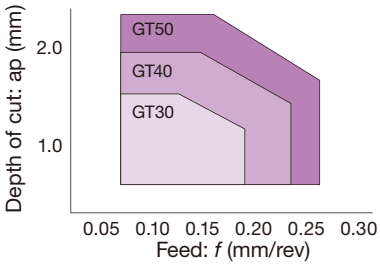
Grooving and turning

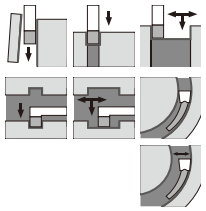
GT



F148

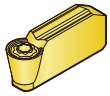
1st choice for turning
Low cutting force and good chip control for traversing
CW = 3 - 5 mm





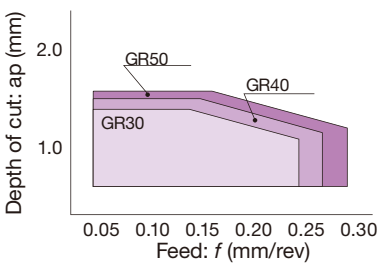
Profiling

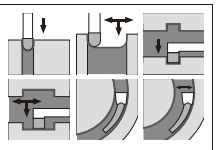
GR



F149

Full radius type
Low cutting force and good chip control for profiling
CW = 3 - 5 mm

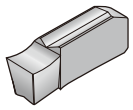




Please see page F*** for the product details.

For aluminium and non-ferrius metal

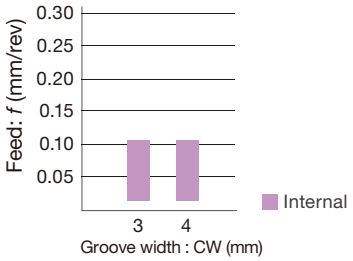
GE-AL

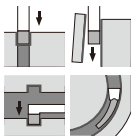


F150

Reduce cutting force and welding due to sharp chipbreaker

CW = 3 - 4 mm



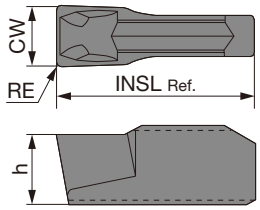


Please see page F*** for the product details.

INSERTS

GE

For external grooving and parting



P	Steel	★	★	★				★					
M	Stainless		★	★									
K	Cast iron		★	☆				☆					
N	Non-ferrous												
S	Superalloys		☆										
H	Hard materials												

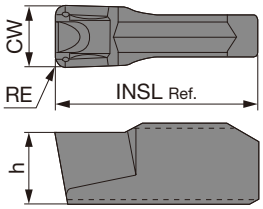
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet					INSL	h
			T9225	AH120	GH730	NS9530						
GE30	3	0.2	●	●	●	●					10	3.5
GE40	4	0.2	●	●	●	●					10	4
GE50	5	0.2	●	●	●	●					12	4.5

● : Line up

GT

For external grooving and turning



P	Steel	★	★	★				★					
M	Stainless		★	★									
K	Cast iron		★	☆				☆					
N	Non-ferrous												
S	Superalloys		☆										
H	Hard materials												

★ : First choice
☆ : Second choice

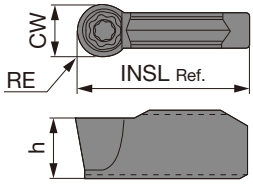
Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet					INSL	h
			T9225	AH120	GH730	NS9530						
GT30	3	0.4		●	●	●					10	3.5
GT40	4	0.4		●	●	●					10	4
GT50	5	0.4	●	●	●	●					12	4.5

● : Line up

Reference pages: Toolholders → F146, Standard cutting conditions → F151

GR

For profiling (full radius)



P	Steel	★	★	★				★			
M	Stainless		★	★							
K	Cast iron		★	☆				☆			
N	Non-ferrous										
S	Superalloys		☆								
H	Hard materials										

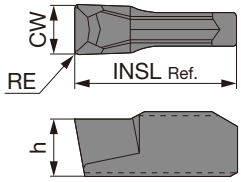
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated						Cermet						INSL	h
			T9225	AH120	GH730				NS9530							
GR30	3	1.5		●	●				●						10	3.5
GR40	4	2	●	●	●				●						10	4
GR50	5	2.5	●	●	●				●						12	4.5

● : Line up

GF

For face grooving



P	Steel	★			★						
M	Stainless	★									
K	Cast iron	☆			☆						
N	Non-ferrous										
S	Superalloys										
H	Hard materials										

★ : First choice
☆ : Second choice

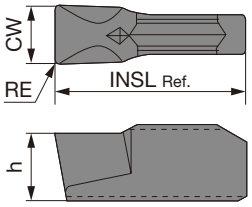
Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet									INSL	h
			GH730			NS9530										
GF30	3	0.2	●			●									10	3.5
GF40	4	0.2	●			●									10	4
GF50	5	0.2	●			●									12	4.5

● : Line up

Reference pages: Toolholders → F146, Standard cutting conditions → F151

GN

For internal grooving



P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

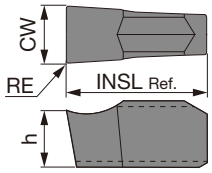
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated	INSL	h
			GH730		
GN30	3	0.2	●	10	3.5
GN40	4	0.2	●	10	4
GN50	5	0.2	●	12	4.5

● : Line up

GE-AL

For aluminium and non-ferrous metal



P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Uncoated	INSL	h
			KS05F		
GE30-AL	3	0.2	●	10	3.5
GE40-AL	4	0.2	●	10	4

● : Line up

Reference pages: Toolholders → F146, Standard cutting conditions → F151

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)
P	Low carbon steel, Alloy steel (~ HB150)	T9225	80 - 300
		NS9530	100 - 200
		GH730, AH120	50 - 180
	Medium carbon steel, Alloy steel (HB150 ~ 250)	T9225	80 - 220
		NS9530	80 - 180
		GH730, AH120	50 - 150
	High carbon steel, Alloy steel (HB250 ~)	T9225	80 - 220
		NS9530	80 - 150
		GH730, AH120	50 - 120
M	Stainless steel	GH730, AH120	50 - 120
K	Grey iron, Ductile cast iron	GH730, AH120	50 - 180
N	Aluminium alloy, Non-ferrous metal	KS05F	200 - 300

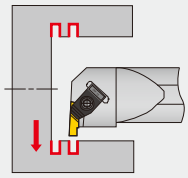
Internal

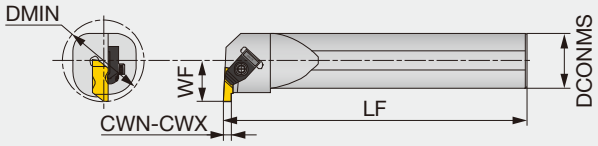
Operation	Feed: *f* (mm/rev) Groove width: CW (mm)		
	3	4	5
Internal grooving (GE**)	0.04 - 0.14	0.05 - 0.15	0.05 - 0.16
Internal grooving (GN**)	0.04 - 0.16	0.05 - 0.18	0.05 - 0.2
Internal traversing (GT**)	*ap* = 0.5 - 1.5 *f* = 0.06 - 0.2	*ap* = 0.5 - 2 *f* = 0.06 - 0.25	*ap* = 0.5 - 2.5 *f* = 0.06 - 0.27
Internal traversing (GR**)	*ap* = 0.5 - 1.4 *f* = 0.05 - 0.25	*ap* = 0.5 - 1.5 *f* = 0.05 - 0.26	*ap* = 0.5 - 1.6 *f* = 0.05 - 0.3
Aluminium alloys (GE**-AL)	0.03 - 0.1	0.03 - 0.1	-

For diameter compensation values in traversing, see page F115.
When vibration occurs in turning, please use the lower limit value in the above table

A_M-FLER/L

Internal grooving and threading toolholder





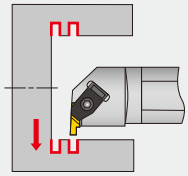
Right hand (R) shown.

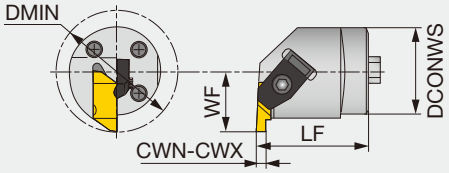
Designation	CWN	CWX	DMIN	DCONMS	LF	WF	Insert	Torque*
A25M-FLER/L3	1	3	34.9	25	300	17.7	FL*-3**L/R...	3
A32M-FLER/L3	1	3	44.45	32	350	22.1	FL*-3**L/R...	3
A40M-FLER3	1	3	50.8	40	350	24.5	FL*-3**L...	3

Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).
*Torque: Recommended clamping torque (N·m)

HS-FLER/L

Internal grooving and threading head, for S-570 shank





Right hand (R) shown.

Designation	CWN	CWX	DMIN	DCONWS	LF	WF	Insert	Torque*
HS40-FLER3W	1	3	56.1	40	40.1	28	FL*-3**L...	3
HS50-FLER3W	1	3	70.1	50	41.9	35	FL*-3**L...	3

Note: Use right-hand toolholders (R) with left-hand inserts (L).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

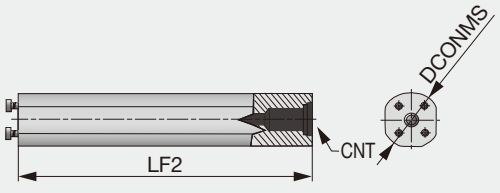




Designation	Clamp	Clamping screw	Wrench
A/HS**-FLER...	TF-73	S-412	5/32HEX
A**M-FLEL3	TF-72	S-412	5/32HEX

S-570

Steel shank for head exchangeable tools



Designation	DCONMS	LF2	CNT
S-570-40M-40	40	273	1/2-14NPT
S-570-50M-50	50	366	1/2-14NPT

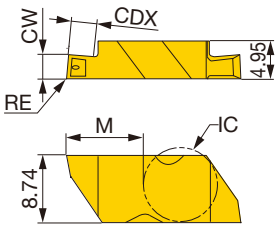
SPARE PARTS




Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4HEX

INSERT

FLG-CB (For grooving)



P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	☆
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated AH110	CDX	IC	M
FLG-3M100R-CB	R	1	0.19	●	1.4	9.525	10.29
FLG-3M100L-CB	L	1	0.19	●	1.4	9.525	10.29
FLG-3M150R-CB	R	1.5	0.19	●	2.55	9.525	10.29
FLG-3M150L-CB	L	1.5	0.19	●	2.55	9.525	10.29
FLG-3M200R-CB	R	2	0.19	●	2.55	9.525	10.29
FLG-3M200L-CB	L	2	0.19	●	2.55	9.525	10.29
FLG-3M250R-CB	R	2.5	0.19	●	4.07	9.525	10.29
FLG-3M250L-CB	L	2.5	0.19	●	4.07	9.525	10.29
FLG-3M300R-CB	R	3	0.19	●	4.07	9.525	10.29
FLG-3M300L-CB	L	3	0.19	●	4.07	9.525	10.29

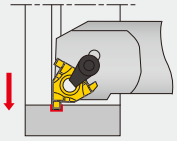
● : Line up

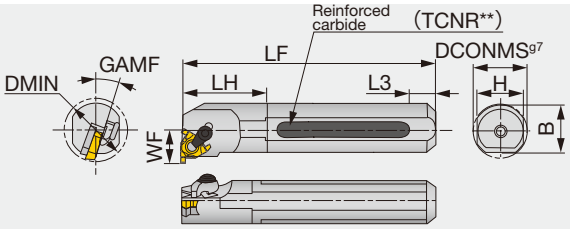
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Application	Cutting Speed *Vc* (m/min)	Feed *f* (mm/rev)
P	High carbon steel S45C, etc. C45, etc	AH110	Grooving	100 - 200	0.12 - 0.35
	Alloy steel SCM435, etc. 34CrMo4, etc.	AH110	Grooving	50 - 80	0.12 - 0.3
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	AH110	Grooving	50 - 150	0.1 - 0.2
K	Grey cast iron FC250, etc. 250, etc.	AH110	Grooving	50 - 180	0.1 - 0.25
	Ductile cast iron FCD400, etc. 40-15, etc.	AH110	Grooving	50 - 120	0.1 - 0.25

CNR/L

Internal threading and grooving toolholder (The -DT holders can be used either with the insert screw or top-clamp)





Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	DCONMS	H	B	LF	LH	WF	L3	GAMF	Insert	Torque*
TCNR0020R16DT	Reinforced	1	2.25	24	20	18	-	200	30	14	49	15°	GTGN-16...	3.5
TCNR0025S16DT	Reinforced	1	2.25	29	25	23	-	250	38	16.5	64	15°	GTGN-16...	3.5
CNR/L0020P16	Steel	1	2.25	24	20	18	19	170	30	14	-	15°	GTGN-16...	3.5
CNR/L0025R16	Steel	1	2.25	29	25	23	24	200	38	16.5	-	15°	GTGN-16...	3.5
CNR/L0032S16	Steel	1	2.25	37	32	30	31	250	48	20.1	-	15°	GTGN-16...	3.5

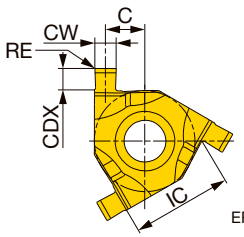
Note: A clamp set consists of a clamp and a clamping screw.
A shim set consists of a shim and a shim screw to secure the shim to the toolholder.
Use right-hand toolholders (T/CNR...) with right-hand inserts (**IR...); and left-hand toolholders (T/CNL...) with left-hand inserts (**IL...).
Standard shims can be used on both right- and left-hand toolholders. Please use either of the sides depending on the tool hand.
When using grooving inserts, please use shims for grooving. Shims for grooving inserts are sold separately.
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamp set	Clamping screw	Shim screw	Shim (Optional)	Wrench1	Wrench2
TCNR002**16DT	CSP16	CSTB-3.5ST	DTS5-3.5	G16EL/IR-DT	P-3.5	T-15F
CNR00***16	CSP16	-	-	G16EL/IR-S	-	T-15F
CNL00***16	CSP16	-	-	G16ER/IL-S	-	T-15F

INSERT

GTGN16



ER/IL shown.

P	Steel	★
M	Stainless	★
K	Cast iron	
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

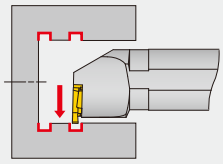
Designation	HAND (Internal)	CW±0.03	RE	Coated				Insert size	CDX	IC	C	Shim	
				SH730								Dual-clamp toolholder: screw-on and clamp-on	Clamp-on toolholder
GTGN-16ER/IL100	L	1	0.1	●				16	1.25	9.525	4.22	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR100	R	1	0.1	●				16	1.25	9.525	4.22	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL120	L	1.2	0.1	●				16	1.3	9.525	4.12	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR120	R	1.2	0.1	●				16	1.3	9.525	4.12	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL140	L	1.4	0.1	●				16	1.5	9.525	4.02	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR140	R	1.4	0.1	●				16	1.5	9.525	4.02	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL170	L	1.7	0.1	●				16	1.7	9.525	3.67	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR170	R	1.7	0.1	●				16	1.7	9.525	3.67	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL195	L	1.95	0.1	●				16	1.7	9.525	3.75	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR195	R	1.95	0.1	●				16	1.7	9.525	3.75	G16EL/IR-DT	G16EL/IR-S
GTGN-16ER/IL225	L	2.25	0.1	●				16	1.8	9.525	3.6	G16ER/IL-DT	G16ER/IL-S
GTGN-16EL/IR225	R	2.25	0.1	●				16	1.8	9.525	3.6	G16EL/IR-DT	G16EL/IR-S

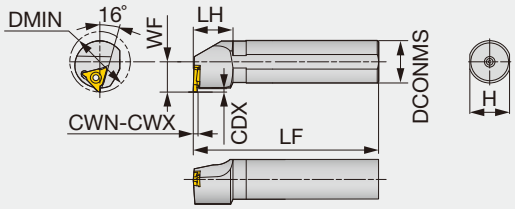
Note: GTGN insert can be used for both external and internal machining, but the tool hand is reversed.
Shim for GTGN depends on the toolholder type.

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steels S45C, SCM440, etc. C45, 42CrMo4, etc.	SH730	50 - 150	0.05 - 0.1
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9,X5CrNiMo17-12-2, etc.	SH730	30 - 150	0.05 - 0.1
S	Heat-resistant alloys, Titanium alloys etc. Ti-6Al-4V, etc.	SH730	30 - 100	0.05 - 0.1





Right hand (R) shown.

Designation	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*
S25R-SGTR/L16	0.33	2.5	35	2	25	23	200	30	17.5	GBL/R32...	3.5
S32S-SGTR/L22	1.25	4.5	40	2.5	32	30	250	30	23	GBL/R43...	5

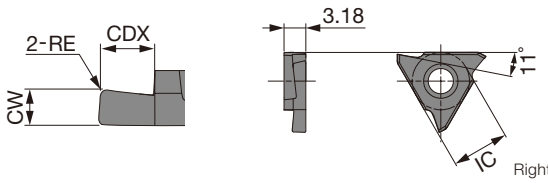
Use right-hand toolholders (SGTR) with left-hand inserts (GBL); and left-hand toolholders (SGTL) with right-hand inserts (GBR).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
S25R-SGTR/L16	CSTB-4S	T-15F
S32S-SGTR/L22	CSTB-5S	T-20F

INSERTS

GBR/L32



Right hand (R) shown.

		Coated		Cermet		Uncoated		
P	Steel	★		★				
M	Stainless	★						
K	Cast iron	★		☆				
N	Non-ferrous					★		
S	Superalloys	☆				☆		
H	Hard materials							

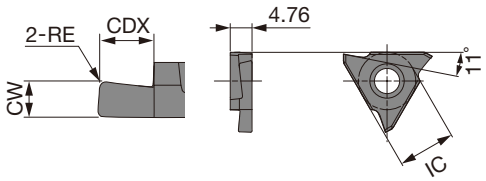
★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated AH710	Cermet NS9530	Uncoated KS05F	CDX	IC
GBR32033	R	0.33	0.03	●	●	●	0.8	9.53
GBL32033	L	0.33	0.03	●			0.8	9.53
GBR32050	R	0.5	0.05	●	●	●	1.2	9.53
GBL32050	L	0.5	0.05	●			1.2	9.53
GBR32075	R	0.75	0.05	●	●	●	2	9.53
GBL32075	L	0.75	0.05	●	●		2	9.53
GBR32095	R	0.95	0.05	●	●	●	2	9.53
GBL32095	L	0.95	0.05	●	●		2	9.53
GBR32100	R	1	0.05	●	●	●	2	9.53
GBL32100	L	1	0.05	●	●		2	9.53
GBR32125	R	1.25	0.2	●	●	●	2	9.53
GBL32125	L	1.25	0.2	●	●		2	9.53
GBR32145	R	1.45	0.2	●	●	●	2	9.53
GBL32145	L	1.45	0.2	●			2	9.53
GBR32150	R	1.5	0.2	●	●	●	2	9.53
GBL32150	L	1.5	0.2	●			2	9.53
GBR32200	R	2	0.2	●	●	●	2.5	9.53
GBL32200	L	2	0.2	●			2.5	9.53
GBR32250	R	2.5	0.2	●	●	●	2.5	9.53
GBL32250	L	2.5	0.2	●			2.5	9.53

● : Line up

Reference pages: Inserts → F156 - F158, Standard cutting conditions → F158

GBR/L43



Right hand (R) shown.

		AH710	NS9530	KS05F
P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	
N	Non-ferrous			★
S	Superalloys	☆		☆
H	Hard materials			

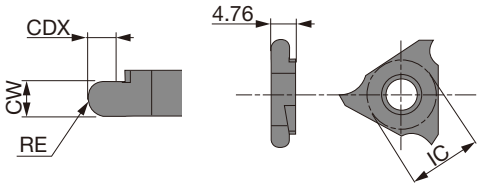
★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated AH710	Cermet NS9530	Uncoated KS05F	CDX	IC
GBR43125	R	1.25	0.2	●	●	●	2	12.7
GBL43125	L	1.25	0.2	●			2	12.7
GBR43145	R	1.45	0.2	●	●	●	2	12.7
GBL43145	L	1.45	0.2	●			2	12.7
GBR43150	R	1.50	0.2	●	●	●	3.5	12.7
GBL43150	L	1.50	0.2	●	●		3.5	12.7
GBR43175	R	1.75	0.2	●	●	●	3.5	12.7
GBL43175	L	1.75	0.2	●	●		3.5	12.7
GBR43185	R	1.85	0.2	●	●	●	3.5	12.7
GBL43185	L	1.85	0.2	●	●		3.5	12.7
GBR43200	R	2	0.2	●	●	●	3.5	12.7
GBL43200	L	2	0.2	●	●		3.5	12.7
GBR43230	R	2.3	0.2	●	●	●	3.5	12.7
GBL43230	L	2.3	0.2	●	●		3.5	12.7
GBR43250	R	2.5	0.3	●	●	●	5	12.7
GBL43250	L	2.5	0.3	●			5	12.7
GBR43265	R	2.65	0.3	●	●	●	5	12.7
GBL43265	L	2.65	0.3	●			5	12.7
GBR43280	R	2.8	0.3	●	●	●	5	12.7
GBL43280	L	2.8	0.3	●			5	12.7
GBR43300	R	3	0.3	●	●	●	5	12.7
GBL43300	L	3	0.3	●			5	12.7
GBR43330	R	3.3	0.3	●	●	●	5	12.7
GBL43330	L	3.3	0.3	●			5	12.7
GBR43350	R	3.5	0.3	●	●	●	5	12.7
GBL43350	L	3.5	0.3	●			5	12.7
GBR43400	R	4	0.4	●	●	●	5	12.7
GBL43400	L	4	0.4	●			5	12.7
GBR43430	R	4.3	0.4	●	●	●	5	12.7
GBL43430	L	4.3	0.4	●			5	12.7
GBR43450	R	4.5	0.4	●	●	●	5	12.7
GBL43450	L	4.5	0.4	●			5	12.7

● : Line up

Reference pages: Standard cutting conditions → F158

GBR/L43-R (full radius)



Right hand (R) shown.

P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	
N	Non-ferrous			★
S	Superalloys	☆		☆
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated	Cermet	Uncoated	CDX	IC
				AH710	NS9530	KS05F		
GBR43050R	R	1	0.5	●	●	●	2	12.7
GBL43050R	L	1	0.5	●		●	2	12.7
GBR43075R	R	1.5	0.75	●	●	●	3.5	12.7
GBL43075R	L	1.5	0.75	●		●	3.5	12.7
GBR43100R	R	2	1	●	●	●	3.5	12.7
GBL43100R	L	2	1	●		●	3.5	12.7
GBR43125R	R	2.5	1.25	●	●	●	5	12.7
GBL43125R	L	2.5	1.25	●		●	5	12.7
GBR43150R	R	3	1.5	●	●	●	5	12.7
GBL43150R	L	3	1.5	●		●	5	12.7
GBR43200R	R	4	2	●	●	●	5	12.7
GBL43200R	L	4	2	●		●	5	12.7

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Carbon steels, Alloy steels S45C, SCM415, etc. C45, 18CrMo4, etc.	150 - 240HB	NS9530	100 - 200	0.02 - 0.25
		150 - 240HB	AH710	60 - 150	0.05 - 0.25
M	Stainless steels SUS304, etc. X5CrNi18-9, etc.	≤ 240HB	AH710	60 - 150	0.05 - 0.15
K	Cast irons FC250, etc. 250, etc.	Tensile strength ≤ 350 N/mm^2	AH710	60 - 150	0.05 - 0.15
N	Non-ferrous metals Aluminium, etc.	-	KS05F	200 - 300	0.05 - 0.15

Reference pages: Toolholders → F156

Toolholders for internal grooving, with through coolant

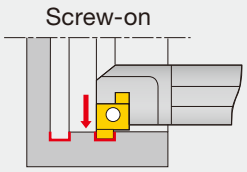
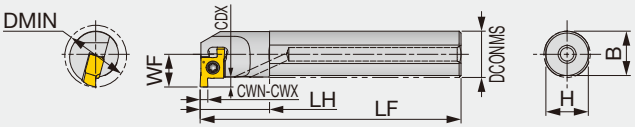
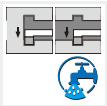


Fig. 1



Fig. 2





Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	B	LF	LH	WF	Insert	Torque*	Fig.
A08H-SNGR06-D080	Steel	1	2	8	1.5	8	7	-	100	18	4.73	6GMR..., 6GR...	0.7	1
A08H-SNGR07-D100	Steel	1	2	10	1.5	8	7	-	100	23	5.8	7GMR..., 7GR...	1.0	1
A10K-SNGR07-D120	Steel	1	2	12	1.5	10	9	-	125	29	6.8	7GMR..., 7GR...	1.0	1
A10K-SNGR08-D140	Steel	1.5	3.5	14	2	10	9	-	125	15	7.6	8GMR..., 8GR...	1.0	2
A12M-SNGR08-D160	Steel	1.5	3.5	16	2	12	11	11.5	150	18	8.6	8GMR..., 8GR...	1.0	2
A16Q-SNGR09-D200	Steel	1.5	3.5	20	3	16	15	15.5	180	20	11.6	9GMR..., 9GR...	1.3	2
A20R-SNGR09-D240	Steel	1.5	3.5	24	3	20	18	19	200	25	13.6	9GMR..., 9GR...	1.3	2
E08X-SNGR07-D100	Carbide	1	2	10	1.5	8	7.5	-	120.5	35	5.8	7GMR..., 7GR...	1.0	1
E10X-SNGR07-D120	Carbide	1	2	12	1.5	10	9	-	143.5	45	6.8	7GMR..., 7GR...	1.0	1
E10X-SNGR08-D140	Carbide	1.5	3.5	14	2	10	9	-	146	-	7.6	8GMR..., 8GR...	1.0	2
E12X-SNGR08-D160	Carbide	1.5	3.5	16	2	12	11	-	174.8	-	8.6	8GMR..., 8GR...	1.0	2
E16X-SNGR09-D200	Carbide	1.5	3.5	20	3	16	15	-	194.6	-	11.6	9GMR..., 9GR...	1.5	2

Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS



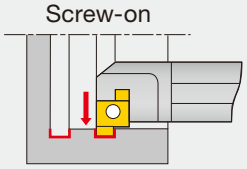


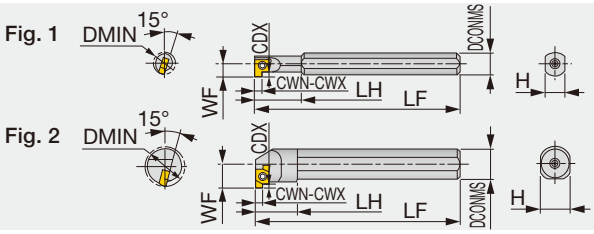
Designation	Clamping screw	Wrench
A**-SNGR06-D...	CSTB-2L040	T-6F
A**-SNGR07-D...	CSTB-2.2S	T-7F
A**-SNGR08-D...	CSTB-2.2	T-7F
A**-SNGR09-D...	CSTB-2.5L080	T-8F
E**-SNGR07-D...	CSTB-2.2S	T-7F
E**-SNGR08-D...	CSTB-2.2	T-7F
E**-SNGR09-D...	CSTB-2.5L080	T-8F

Reference pages: Inserts → F161, F162, Standard cutting conditions → F163

SNGR/L

Toolholders for internal grooving





Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*	Fig.
SNGR/L08H06	Steel	1	2	8	1.5	8	7	100	18	4.7	6GMR..., 6GR/L...	0.7	1
SNGR/L08H07	Steel	1	2	10	1.5	8	7	100	23	5.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10K07	Steel	1	2	12	1.5	10	9	125	29	6.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10K08	Steel	1.5	3.5	14	2	10	9	125	15	7.6	8GMR..., 8GR/L...	1.0	2
SNGR/L12M08	Steel	1.5	3.5	16	2	12	11	150	18	8.6	8GMR..., 8GR/L...	1.0	2
SNGR/L16Q09	Steel	1.5	3.5	20	3	16	15	180	20	11.6	9GMR..., 9GR/L...	1.3	2
SNGR/L20R09	Steel	1.5	3.5	24	3	20	18	200	25	13.6	9GMR..., 9GR/L...	1.3	2
SNGR/L08K06SC	Carbide	1	2	8	1.5	8	7	125	28	4.7	6GMR..., 6GR/L...	0.7	1
SNGR/L08K07SC	Carbide	1	2	10	1.5	8	7	125	35	5.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10M07SC	Carbide	1	2	12	1.5	10	9	150	45	6.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10M08SC	Carbide	1.5	3.5	14	2	10	9	150	45	7.6	8GMR..., 8GR/L...	1.0	2
SNGR/L12Q08SC	Carbide	1.5	3.5	16	2	12	11	180	-	8.6	8GMR..., 8GR/L...	1.0	2
SNGR/L16R09SC	Carbide	1.5	3.5	20	3	16	15	200	-	11.6	9GMR..., 9GR/L...	1.5	2

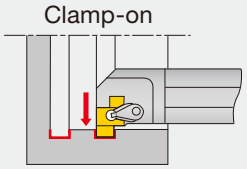
Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR), and use the left-hand insert (☐GL) with the left-hand holder (☐NGL).
*Torque: Recommended clamping torque (N·m)

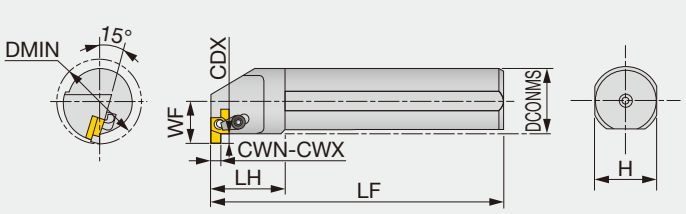
SPARE PARTS

Designation	Clamping screw	Wrench
SNGR/L***06	CSTB-2L040	T-6F
SNGR/L***07	CSTB-2.2S	T-7F
SNGR/L***08	CSTB-2.2	T-7F
SNGR/L***09	CSTB-2.5L080	T-8F
SNGR/L***06SC	CSTB-2L040	T-6F
SNGR/L***07SC	CSTB-2.2S	T-7F
SNGR/L***08SC	CSTB-2.2	T-7F
SNGR/L***09SC	CSTB-2.5L080	T-8F

CNGR/L

Toolholders for internal grooving





Right hand (R) shown.

Designation	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*
CNGR/L25S15	2	5	32	5	25	23	250	30	18.1	15GR/L...	7
CNGR/L32T15	2	5	40	5	32	30	300	35	22.1	15GR/L...	7
CNGR/L40U15	2	5	48	5	40	38	350	45	26.1	15GR/L...	7

Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR), and use the left-hand insert (☐GL) with the left-hand holder (☐NGL).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamp set	Screw	Shim	Wrench
CNGR...	CSP22	DTS5-3.5	SGSR151	T-20F
CNGL...	CSP22	DTS5-3.5	SGSL151	T-20F

Optional parts for CNG holders

Use the following parts for screw clamp options.

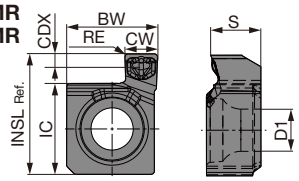


Designation	Clamping screw	Wrench
CNGR/L...	CSTB-3.5L	T-15F

Reference pages: Inserts → F161, F162, Standard cutting conditions → F163

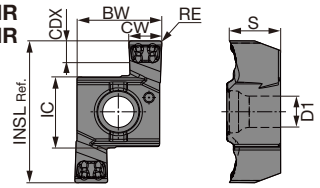
**GMR/L

6GMR
7GMR



Single edge

8GMR
9GMR



Double edge

Right hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

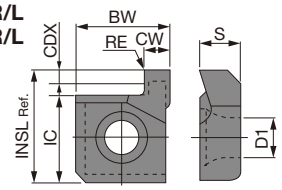
Designation	HAND	CW±0.025	RE	Coated AH7025	CDX	BW	S	IC	INSL	D1
6GMR100-015	R	1	0.15	●	1.5	5.56	2.34	4.76	6.4	2.3
7GMR200-020	R	2	0.2	●	1.5	5.56	3.08	5.56	7.4	2.6
8GMR150-020	R	1.5	0.2	●	2	6.15	3.87	5.56	10.2	2.6
9GMR200-020	R	2	0.2	●	3	7.74	4.66	6.35	13	2.9
9GMR300-020	R	3	0.2	●	3	7.74	4.66	6.35	13	2.9

● : Line up

Reference pages: Toolholders → F159, F160, Standard cutting conditions → F163

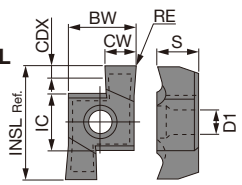
**GR/L

6GR/L
7GR/L



Single edge

8GR/L
9GR/L
15GR/L



Double edge

Right hand (R) shown.

		Cermet	Uncoated	
P	Steel	★	★	
M	Stainless		★	
K	Cast iron	☆	★	
N	Non-ferrous		★	
S	Superalloys		☆	
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Cermet	Uncoated		CDX	BW	S	IC	INSL	D1
				NS9530	TH10	UX30						
6GR100	R	1	0.2	●	●	●	1.5	5.6	2.34	4.76	6.4	2.3
6GL100	L	1	0.2			●	1.5	5.6	2.34	4.76	6.4	2.3
6GR150	R	1.5	0.2	●	●	●	1.5	5.6	2.34	4.76	6.4	2.3
6GL150	L	1.5	0.2		●	●	1.5	5.6	2.34	4.76	6.4	2.3
6GR200	R	2	0.2	●	●	●	1.5	5.6	2.34	4.76	6.4	2.3
6GL200	L	2	0.2		●	●	1.5	5.6	2.34	4.76	6.4	2.3
7GR100	R	1	0.2	●	●	●	1.5	5.6	3.08	5.56	7.4	2.6
7GR150	R	1.5	0.2	●	●	●	1.5	5.6	3.08	5.56	7.4	2.6
7GR200	R	2	0.2	●	●	●	1.5	5.6	3.08	5.56	7.4	2.6
7GL200	L	2	0.2		●	●	1.5	5.6	3.08	5.56	7.4	2.6
8GR150	R	1.5	0.2	●	●	●	2	6.2	3.87	5.56	10.2	2.6
8GR200	R	2	0.2	●	●	●	2	6.2	3.87	5.56	10.2	2.6
8GL200	L	2	0.2		●		2	6.2	3.87	5.56	10.2	2.6
8GR250	R	2.5	0.2	●	●	●	2	6.2	3.87	5.56	10.2	2.6
8GL250	L	2.5	0.2		●	●	2	6.2	3.87	5.56	10.2	2.6
8GR300	R	3	0.2	●	●	●	2	6.2	3.87	5.56	10.2	2.6
8GL300	L	3	0.2		●	●	2	6.2	3.87	5.56	10.2	2.6
8GR350	R	3.5	0.2		●	●	2	6.2	3.87	5.56	10.2	2.6
9GR150	R	1.5	0.2	●	●	●	2	7.7	4.66	6.35	13	2.9
9GL150	L	1.5	0.2	●		●	2	7.7	4.66	6.35	13	2.9
9GR200	R	2	0.2	●	●	●	3	7.7	4.66	6.35	13	2.9
9GL200	L	2	0.2	●	●	●	3	7.7	4.66	6.35	13	2.9
9GR250	R	2.5	0.2	●	●	●	3	7.7	4.66	6.35	13	2.9
9GL250	L	2.5	0.2	●		●	3	7.7	4.66	6.35	13	2.9
9GR300	R	3	0.2	●	●	●	3	7.7	4.66	6.35	13	2.9
9GL300	L	3	0.2	●	●	●	3	7.7	4.66	6.35	13	2.9
9GR350	R	3.5	0.2	●	●	●	3	7.7	4.66	6.35	13	2.9
9GL350	L	3.5	0.2	●		●	3	7.7	4.66	6.35	13	2.9
15GR200	R	2	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GR250	R	2.5	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GR300	R	3	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GL300	L	3	0.2			●	3	10.8	5.1	9.2	20.8	4.8
15GR350	R	3.5	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GR400	R	4	0.2	●	●	●	4	10.8	5.1	9.2	20.8	4.8
15GR450	R	4.5	0.2		●	●	4	10.8	5.1	9.2	20.8	4.8
15GL450	L	4.5	0.2		●		4	10.8	5.1	9.2	20.8	4.8
15GR500	R	5	0.2		●	●	5	10.8	5.1	9.2	20.8	4.8

Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR), and use the left-hand insert (☐GL) with the left-hand holder (☐NGL).

● : Line up

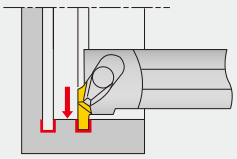
Reference pages: Toolholders → F159, F160

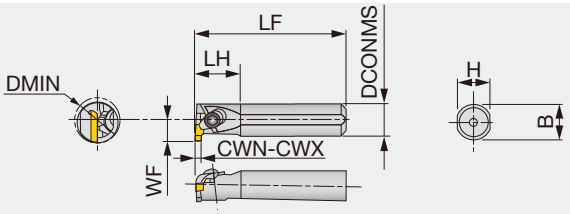
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed rate: *f* (mm/rev)	
				**GMR...	**GR/L...
P	Carbon steel S45C, C45, etc.	AH7025	80 - 180	0.03 - 0.12	-
		NS9530	80 - 200	-	0.05 - 0.15
		UX30	40 - 150	-	0.05 - 0.15
	Alloy steel SCM435, 34CrMo4, etc.	AH7025	80 - 180	0.03 - 0.12	-
		NS9530	80 - 200	-	0.05 - 0.15
		UX30	40 - 150	-	0.05 - 0.15
M	Stainless steel SUS304, X5CrNi18-9, etc.	AH7025	50 - 120	0.03 - 0.12	-
		UX30	40 - 100	-	0.03 - 0.10
K	Grey cast irons F250, GG25, 250, etc.	AH7025	50 - 220	0.03 - 0.12	-
		TH10	60 - 200	-	0.05 - 0.15
	Ductile cast irons FCD400, etc.	AH7025	50 - 180	0.03 - 0.12	-
		TH10	40 - 160	-	0.05 - 0.15
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	-
		TH10	20 - 50	-	0.05 - 0.08
	Superalloys Inconel718, etc.	AH7025	20 - 40	0.03 - 0.12	-
		TH10	10 - 30	-	0.03 - 0.08

CGXR/L

Internal grooving





Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	B	LF	LH	WF	Insert	Torque*
CGXR/L0016	Steel	1	3	20	3	16	15	15.5	150	24	11.3	GIR/L52...	2.2
CGXR/L0020	Steel	1	3	24	3	20	18	19	180	30	13.3	GIR/L52...	2.2
CGXR/L0025	Steel	1	5	32	5.3	25	23	24	200	38	18	GIR/L63...	5
CGXR/L0032	Steel	1	5	40	5.3	32	30	31	250	48	23	GIR/L63...	5
CGXR/L0040	Steel	1	5	48	5.3	40	37	38.5	300	60	27	GIR/L63...	5
CGXR/L16SC	Carbide	1	3	20	3	16	15	-	200	24	11.3	GIR/L52...	2.2

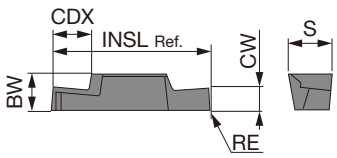
Note: Use right-hand holder (CGXR) with right-hand insart (GIR); and left-hand holder (L) with left-hand insart (GIL).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamp set	Wrench1	Wrench2
CGXR/L0016/20	CSW-0	-	P-2.5T
CGXR/L0025/32/40	CSW-2	P-4	-
CGXR/L16SC	CSW-0	-	P-2.5T

INSERT

GIR/L



Right hand (R) shown.

		Cermet	Uncoated
P	Steel	★	
M	Stainless		☆
K	Cast iron	☆	★
N	Non-ferrous		★
S	Superalloys		☆
H	Hard materials		

★ : First choice
☆ : Second choice

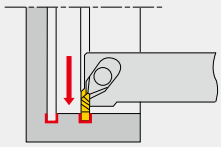
Designation	HAND	CW±0.05	RE	NS9530	TH10	CDX	INSL	BW	S
GIR5210-02	R	1	0.2	●	●	1.5	15	3.5	4.4
GIL5210-02	L	1	0.2	●	●	1.5	15	3.5	4.4
GIR5215-02	R	1.5	0.2	●	●	2.3	15	3.5	4.4
GIL5215-02	L	1.5	0.2	●	●	2.3	15	3.5	4.4
GIR5220-02	R	2	0.2	●	●	3	15	3.5	4.4
GIL5220-02	L	2	0.2	●	●	3	15	3.5	4.4
GIR5225-02	R	2.5	0.2	●	●	3	15	3.5	4.4
GIL5225-02	L	2.5	0.2		●	3	15	3.5	4.4
GIR5230-02	R	3	0.2	●	●	3	15	3.5	4.4
GIL5230-02	L	3	0.2		●	3	15	3.5	4.4
GIR6310-02	R	1	0.2	●	●	1.5	24	5.5	6.4
GIL6310-02	L	1	0.2		●	1.5	24	5.5	6.4
GIR6315-02	R	1.5	0.2	●	●	2.3	24	5.5	6.4
GIL6315-02	L	1.5	0.2	●	●	2.3	24	5.5	6.4
GIR6320-02	R	2	0.2	●	●	3	24	5.5	6.4
GIL6320-02	L	2	0.2	●	●	3	24	5.5	6.4
GIR6325-02	R	2.5	0.2	●	●	3.8	24	5.5	6.4
GIL6325-02	L	2.5	0.2	●	●	3.8	24	5.5	6.4
GIR6330-02	R	3	0.2	●	●	4.5	24	5.5	6.4
GIL6330-02	L	3	0.2	●	●	4.5	24	5.5	6.4
GIR6335-02	R	3.5	0.2	●	●	5.3	24	5.5	6.4
GIL6335-02	L	3.5	0.2	●	●	5.3	24	5.5	6.4
GIR6340-02	R	4	0.2	●	●	5.3	24	5.5	6.4
GIL6340-02	L	4	0.2	●	●	5.3	24	5.5	6.4
GIR6345-02	R	4.5	0.2	●	●	5.3	24	5.5	6.4
GIL6345-02	L	4.5	0.2		●	5.3	24	5.5	6.4
GIR6350-02	R	5	0.2	●	●	5.3	24	5.5	6.4
GIL6350-02	L	5	0.2		●	5.3	24	5.5	6.4

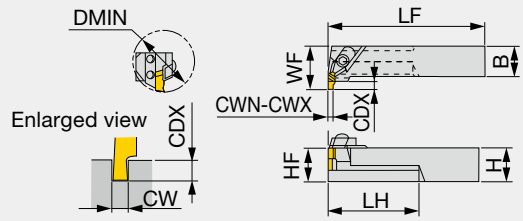
● : Line up

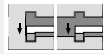
Use right-hand toolholders (CGXR～) with right-hand inserts (GIR); and left-hand toolholders (GX-****LI) with left-hand inserts (XGR).

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)		
				W < 2 mm	*W* = 2 ~ 4 mm	*W* > 4 mm
P	Carbon steels	NS9530	80 - 150	0.05 - 0.1	0.08 - 0.15	0.08 - 0.2
K	Cast irons, Light alloys	TH10	60 - 150	0.05 - 0.1	0.08 - 0.15	0.08 - 0.2





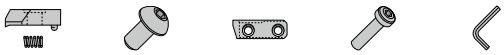


Right hand (R) shown.

Designation	CWN	CWX	DMIN	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
GX-2525R/LI	1	4.5	55	1.5 - 6	25	25	200	70	25	35	XGL/R63...	5

Use right-hand toolholders (GX-****RI) with left-hand inserts (XGL...); and left-hand toolholders (GX-****LI) with right-hand inserts (XGR...).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

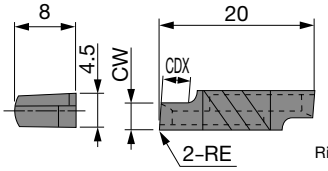


Designation	Clamp set	Clamp screw	Shim	Shim screw	Wrench
GX-2525RI	CP81B	RT-1	SL-2R	BHM3-8	P-4
GX-2525LI	CP81B	RT-1	SL-2L	BHM3-8	P-4

Note: Max. groove width and max. groove depth will depend on the insert type.

INSERT

XGR/L



Right hand (R) shown.

P	Steel	★			☆	★			
M	Stainless					★			
K	Cast iron	☆			★				
N	Non-ferrous				★				
S	Superalloys				☆				
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	Cermet NS9530	Uncoated TH10	Uncoated UX30	CDX
XGR6310-02	R	1	0.2	●	●	●	1.5
XGL6310-02	L	1	0.2	●	●	●	1.5
XGR6315-02	R	1.5	0.2	●	●	●	2.3
XGL6315-02	L	1.5	0.2	●	●	●	2.3
XGR6320-02	R	2	0.2	●	●	●	3
XGL6320-02	L	2	0.2	●	●	●	3
XGR6325-02	R	2.5	0.2	●	●	●	3.8
XGL6325-02	L	2.5	0.2	●	●	●	3.8
XGR6330-02	R	3	0.2	●	●	●	4.5
XGL6330-02	L	3	0.2	●	●	●	4.5
XGR6335-02	R	3.5	0.2	●	●	●	5.3
XGL6335-02	L	3.5	0.2	●	●	●	5.3
XGR6340-02	R	4	0.2	●	●	●	6
XGL6340-02	L	4	0.2	●	●	●	6
XGR6345-02	R	4.5	0.2	●	●	●	6
XGL6345-02	L	4.5	0.2	●	●	●	6

Use right-hand toolholders (GX-****RI) with left-hand inserts (XGL...)
left-hand toolholders (GX-****LI) with right-hand inserts (XGR...).

● : Line up

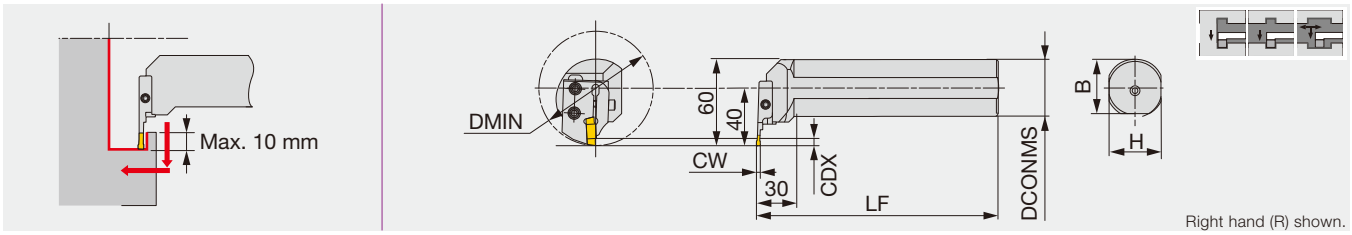
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed f (mm/rev) W < 2 mm	W = 2 ~ 4 mm	W > 4 mm
P	Carbon steels	NS9530	80 - 200	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
		UX30	60 - 150	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
K	Cast irons, Light alloys	TH10	60 - 150	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
H	Hardened steel	BX360	50 - 180	0.05 - 0.15	0.05 - 0.15	0.05 - 0.15

MY-T SERIES

CGWTR/L0040-FLL/R3NP

Internal grooving and turning toolholder



Designation	CW	DMIN	CDX	DCONMS	LF	H	B	Insert	Shank	Adapter	Torque*
CGWTR/L0040-FLL/R3NP	3	80	10	40	180	37.5	37	FLEX30L/R	CGWTR/L0040	FLL/R3NP	5

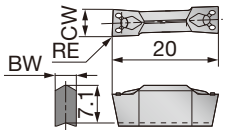
Please place an order with the designation of a set or a shank+a adapter
Note: Use right-hand shanks (CGWTR) with left-hand adapters (FLL3NP); and left-hand shanks (CGWTL) with right-hand adapters (FLR3NP).
*Torque: Recommended clamping torque (N·m)

SPARE PARTS

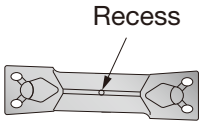
Designation	Clamping screw	Adapter screw	Wrench
CGWTR/L0040-FLL/R3NP	CHHM5-18	CSHB-6	P-4

INSERT

FLEX(R/L)



Right hand (R) shown.



To distinguish the insert hands, the V-shape surface (top surface) of a left-hand insert has a recess. (not of a right-hand insert)

		Coated			Cermet		Uncoated		
P	Steel	★			★		★		
M	Stainless						★		
K	Cast iron				☆				
N	Non-ferrous								
S	Superalloys								
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	T9225	NS9530	UX30	BW
FLEX30R	R	3	0.4		●		2.2
FLEX30L	L	3	0.4		●		2.2
FLEX40R	R	4	0.4		●		3.1
FLEX40L	L	4	0.4		●		3.1
FLEX50R	R	5	0.4	●	●	●	4
FLEX50L	L	5	0.4	●	●	●	4

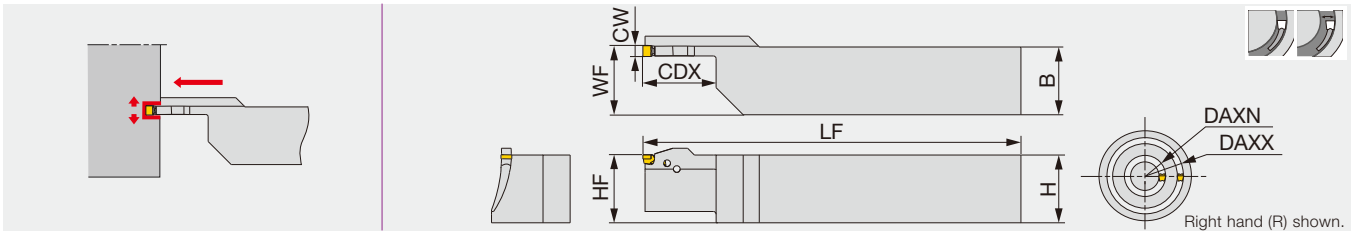
● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving	Turning
P	Carbon steels	T9225	80 - 300	0.05 - 0.25	0.1 - 0.3
		NS9530	80 - 200	0.05 - 0.25	0.1 - 0.3
		UX30	60 - 150	0.05 - 0.25	0.1 - 0.3

ETFR/L

Face grooving and turning toolholder



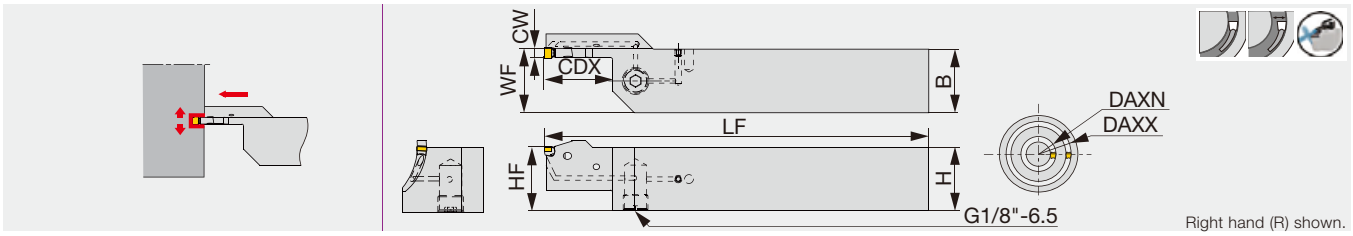
Designation	CW	DAXN	DAXX	CDX	H	B	LF	HF	WF	Insert
ETFR/L2020-4T15-030035	4	30	35	15	20	20	125	20	20.5	E**4...
ETFR/L2525-4T15-030035	4	30	35	15	25	25	150	25	25.5	E**4...
ETFR/L2020-4T22-035045	4	35	45	22	20	20.	125	20	20.5	E**4...
ETFR/L2525-4T22-035045	4	35	45	22	25	25	150	25	25.5	E**4...
ETFR/L2020-4T25-045055	4	45	55	25	20	20	125	20	20.5	E**4...
ETFR/L2525-4T25-045055	4	45	55	25	25	25	150	25	25.5	E**4...
ETFR/L2020-4T25-055075	4	55	75	25	20	20	125	20	20.5	E**4...
ETFR/L2525-4T25-055075	4	55	75	25	25	25	150	25	25.5	E**4...
ETFR/L2020-4T25-075120	4	75	120	25	20	20.	125	20	20.5	E**4...
ETFR/L2525-4T25-075120	4	75	120	25	25	25	150	25	25.5	E**4...
ETFR/L2525-4T25-120200	4	120	200	25	25	25	150	25	25.5	E**4...
ETFR/L2525-4T25-200500	4	200	500	25	25	25	150	25	25.5	E**4...
ETFR/L2525-5T25-035045	5	35	45	25	25	25	150	25	25.5	ETX5...
ETFR/L2525-5T25-045055	5	45	55	25	25	25	150	25	25.5	ETX5...
ETFR/L2525-5T25-055075	5	55	75	25	25	25	150	25	25.5	ETX5...
ETFR/L2525-5T32-075120	5	75	120	32	25	25	150	25	25.5	ETX5...
ETFR/L2525-5T32-120200	5	120	200	32	25	25	150	25	25.5	ETX5...
ETFR/L2525-5T32-200500	5	200	500	32	25	25	150	25	25.5	ETX5...
ETFR/L2525-6T25-040055	6	40	55	25	25	25	150	25	25.5	ETX6...
ETFR/L2525-6T25-055075	6	55	75	25	25	25	150	25	25.5	ETX6...
ETFR/L2525-6T32-075120	6	75	120	32	25	25	150	25	25.5	ETX6...
ETFR/L2525-6T32-120200	6	120	200	32	25	25	150	25	25.5	ETX6...
ETFR/L2525-6T32-200500	6	200	500	32	25	25	150	25	25.5	ETX6...

Wrench (ECW...) is not included. Please order it separately.

ETFR-CHP

Tube connection

Face grooving and turning toolholder, with high pressure coolant capability



Designation	CW	DAXN	DAXX	CDX	H	B	LF	HF	WF	Insert
ETFR2525-4T15-030035-CHP	4	30	35	15	25	25	150	25	25.5	E**4...
ETFR2525-4T22-035045-CHP	4	35	45	22	25	25	150	25	25.5	E**4...
ETFR2525-4T25-045055-CHP	4	45	55	25	25	25	150	25	25.5	E**4...
ETFR2525-4T25-055075-CHP	4	55	75	25	25	25	150	25	25.5	E**4...
ETFR2525-4T25-075120-CHP	4	75	120	25	25	25	150	25	25.5	E**4...
ETFR2525-4T25-120200-CHP	4	120	200	25	25	25	150	25	25.5	E**4...
ETFR2525-4T25-200500-CHP	4	200	500	25	25	25	150	25	25.5	E**4...

Wrench (ECW...) is not included. Please order it separately.

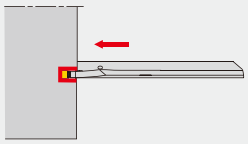
SPARE PARTS

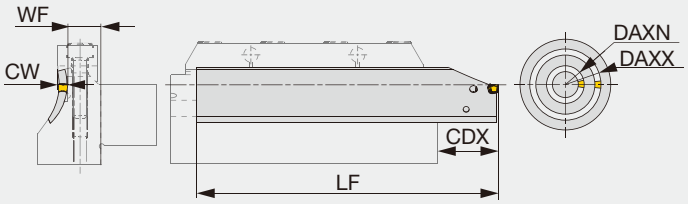
Designation	Wrench (Optional)
ETFR/L...	ECW-456EF

Reference pages: Inserts → F170, F171, Standard cutting conditions → F171
Parts for coolant hose → F266

EFPR/L

Face grooving blade





Right hand (R) shown.

Designation	CW	DAXN	DAXX	WF	LF	Min. CDX	Max. CDX	Insert
EFPR/L-4-030035	4	30	35	13.6	125	18	50	E**4...
EFPR-4-035045	4	35	45	13.6	125	18	50	E**4...
EFPR-4-045055	4	45	55	13.6	125	18	50	E**4...
EFPR-4-055075	4	55	75	13.6	125	18	50	E**4...
EFPR-4-075120	4	75	120	13.6	140	18	65	E**4...
EFPR-4-120200	4	120	200	13.6	140	18	65	E**4...
EFPR-4-200500	4	200	500	13.6	140	18	65	E**4...
EFPR-5-035045	5	35	45	13.6	125	19	50	ETX5...
EFPR-5-045055	5	45	55	13.6	125	19	50	ETX5...
EFPR-5-055075	5	55	75	13.6	125	19	50	ETX5...
EFPR-5-075120	5	75	120	13.6	140	19	65	ETX5...
EFPR-5-120200	5	120	200	13.6	140	19	65	ETX5...
EFPR-5-200500	5	200	500	13.6	140	19	65	ETX5...
EFPR-6-045055	6	45	55	13.6	125	20	50	ETX6...
EFPR-6-055075	6	55	75	13.6	125	20	50	ETX6...
EFPR-6-075120	6	75	120	13.6	140	20	65	ETX6...
EFPR-6-120200	6	120	200	13.6	140	20	65	ETX6...
EFPR/L-6-200500	6	200	500	13.6	140	20	65	ETX6...

Wrench (ECW...) is not included. Please order it separately.

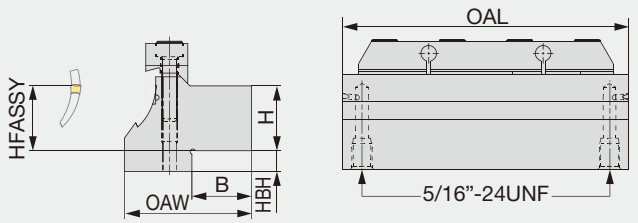
SPARE PARTS



Designation	Wrench (Optional)
EFPR/L...	ECW-456I

CTBU-CHP for EFPR/L

Tool block for EFP blades with high pressure coolant capability



Designation	CW	DAXN	H	B	HFASSY	HBH	OAW	OAL	Blade
CTBU25-030-4-CHP	4	30	25	23	25	8	49	110	EFPR/L-4-030035
CTBU25-035-4/5-CHP	4, 5	35	25	23	25	8	49	110	EFPR-4/5-035045
CTBU25-045-4/5-CHP	4, 5	45	25	23	25	8	49	110	EFPR-4/5-045055
CTBU25-055-4/5-CHP	4, 5	55	25	23	25	8	47	110	EFPR-4/5-055075
CTBU25-075-4/5-CHP	4, 5	75	25	23	25	8	45	110	EFPR-4/5-075120
CTBU25-120-4/5-CHP	4, 5	120	25	23	25	8	44	110	EFPR-4/5-120200
CTBU25-200-4/5-CHP	4, 5	200	25	23	25	8	41.5	110	EFPR-4/5-200500
CTBU25-045-6-CHP	6	45	25	23	25	8	51	110	EFPR-6-045055
CTBU25-055-6-CHP	6	55	25	23	25	8	49	110	EFPR-6-055075
CTBU25-075-6-CHP	6	75	25	23	25	8	47	110	EFPR-6-075120
CTBU25-120-6-CHP	6	120	25	23	25	8	46	110	EFPR-6-120200
CTBU25-200-6-CHP	6	200	25	23	25	8	43.5	110	EFPR/L-6-200500

SPARE PARTS




Designation	Clamp	Clamping screw	Wrench
CTBU25-***-***-CHP	CT-110	CM6X30-S	P-5

Reference pages: Inserts → F170, F171
Standard cutting conditions → F171
Parts for coolant hose → F266

CHIPBREAKER GUIDE

ETX type

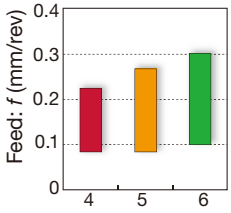


Multi-functional insert
Grooving and turning suitable for light to medium cutting
Well-balanced sharpness and strength

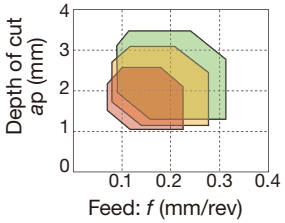
CW = 4 - 6 mm



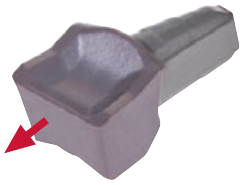
■ Standard feed



■ Standard feed and depth of cut for turning



EGM type

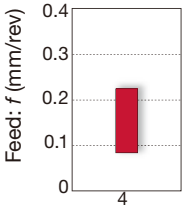


1st choice for parting
High strength
Well-designed edge

CW = 4 mm



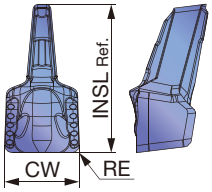
■ Standard feed



INSERTS

ETX





P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

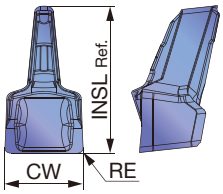
Designation	CW±0.05	RE	Coated AH725	INSL
ETX4-040	4	0.4	●	8
ETX5-040	5	0.4	●	10
ETX6-040	6	0.4	●	12

● : Line up

Reference pages: Toolholders → F168, F169

EGM





P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	CW±0.05	RE	Coated AH725	INSL
EGM4-030	4	0.3	●	8

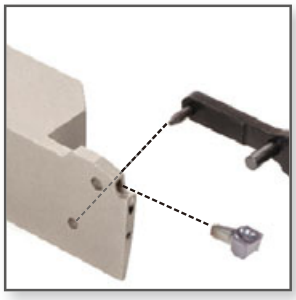
● : Line up

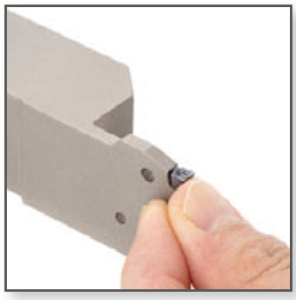
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Grade	Chipbreaker	Cutting speed *Vc* (m/min)
P	Low carbon steel S45C, etc. S15C, etc.	- 300 HB	AH725	ETX	80 - 180
		- 300 HB	AH725	EGM	80 - 180
	Carbon steel, Alloy steel S55C, etc. SCM440, etc.	- 300 HB	AH725	ETX	80 - 180
		- 300 HB	AH725	EGM	80 - 180
	Prehardened steel NAK80, etc. PX5, etc.	- 300 HB	AH725	ETX	80 - 180
		- 300 HB	AH725	EGM	80 - 180
M	Stainless steels SUS303, etc. SUS316, etc.	-	AH725	ETX	50 - 120
		-	AH725	EGM	50 - 120

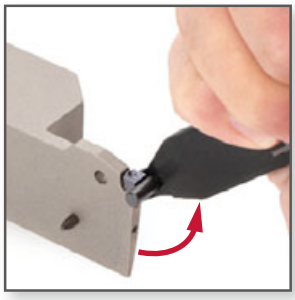
Procedure to clamp and unclanp insert

1 Put the insert in the Unclamp pocket

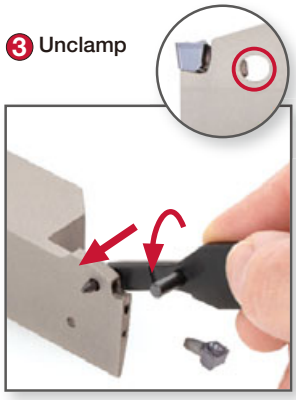




2 Turn the wrench Push the insert into the pocket to clamp



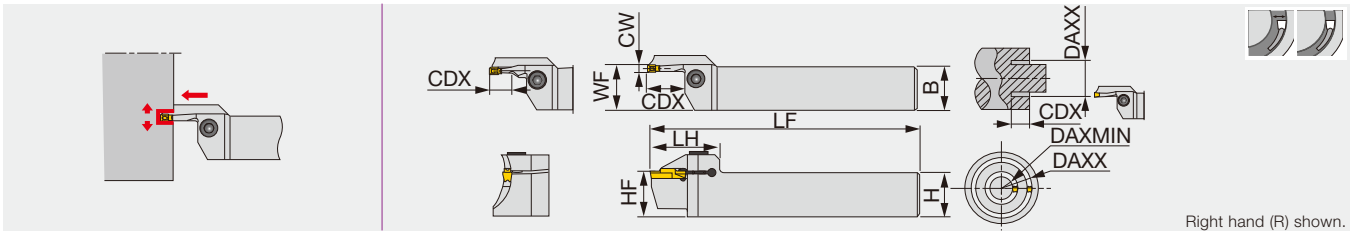
3 Unclamp



Reference pages: Toolholders → F168, F169

CTFR/L

Face grooving and turning toolholder



Right hand (R) shown.

Designation	CW	DAXMIN	DAXX	Seat size	CDX	H	B	LF	LH	HF	WF (1)	Torque*
CTFR/L2525-3T10-024035	3	24	35	3	10	25	25	150	38	25	25.5	5
CTFR/L2525-3T10-029040	3	29	40	3	10	25	25	150	38	25	25.5	5
CTFR/L2525-3T10-034050	3	34	50	3	10	25	25	150	38	25	25.5	5
CTFR/L2525-3T15-044070	3	44	70	3	15	25	25	150	38	25	25.5	5
CTFR/L2525-3T15-064100	3	64	100	3	15	25	25	150	38	25	25.5	5
CTFR/L2525-4T10-022036	4	22	36	4	10	25	25	150	39	25	25.6	5
CTFR/L2525-4T20-028042	4	28	42	4	20	25	25	150	39	25	25.6	5
CTFR/L2525-4T20-034050	4	34	50	4	20	25	25	150	39	25	25.6	5
CTFR/L2525-4T20-042070	4	42	70	4	20	25	25	150	39	25	25.6	5
CTFR/L2525-4T20-062120	4	62	120	4	20	25	25	150	39	25	25.6	5
CTFR/L2525-4T20-112200	4	112	200	4	20	25	25	150	39	25	25.6	5
CTFR/L2525-5T25-050080	5	50	80	5	25	25	25	150	49	25	25.6	12
CTFR/L2525-5T25-070110	5	70	110	5	25	25	25	150	49	25	25.6	12
CTFR/L2525-5T25-100150	5	100	150	5	25	25	25	150	49	25	25.6	12
CTFR/L2525-5T25-140200	5	140	200	5	25	25	25	150	49	25	25.6	12
CTFR/L2525-6T25-048070	6	48	70	6	25	25	25	150	49	25	25.6	12
CTFR/L2525-6T25-058100	6	58	100	6	25	25	25	150	49	25	25.6	12
CTFR/L2525-6T25-088180	6	88	180	6	25	25	25	150	49	25	25.6	12
CTFR/L2525-6T25-168400	6	168	400	6	25	25	25	150	49	25	25.6	12

When depth is deeper than (insert length - 1.5 mm), 1 corner type is recommended.
Max. groove depth will be 15 mm with DTF insert.
Use the right-hand insert for the right-hand holder with DTF insert.
(1) WF is calculated with the groove width (CW) in the above table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS




Designation	Clamping screw	Wrench
CTFR/L2525-3T - 4T...	CM6X1X25-A	P-5
CTFR/L2525-5T - 6T...	CM8X1.25X25-A	P-6

INSERT

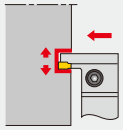
Designation	Seat size	Insert
CTFR/L2525-3T10-024035	3	DTF, DTX
CTFR/L2525-3T10-029040	3	DTF, DTX
CTFR/L2525-3T10-034050	3	DTF, DTX
CTFR/L2525-3T15-044070	3	DTF, DTX, DTR, DTE, DGG, DTM
CTFR/L2525-3T15-064100	3	DTF, DTX, DTE, DGG, DGM, DGS, DTR, SGN, DGL, DTM
CTFR/L2525-4T10-022036	4	DTF, DTX
CTFR/L2525-4T20-028042	4	DTF, DTX, DTR
CTFR/L2525-4T20-034050	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, DTM, DGL, SGN
CTFR/L2525-4T20-042070	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, SGN, DTM, DGL
CTFR/L2525-4T20-062120	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, SGN, DTM, DGL
CTFR/L2525-4T20-112200	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, SGN, DTM, DGL
CTFR/L2525-5T25-...	5	DTX, DTE, DGG, DGM, DGS, DTR, DTM, DGL, SGN
CTFR/L2525-6T25-...	6	DTX, DTE, DGG, DGM, DGS, DTR, DTM, DGL, SGN

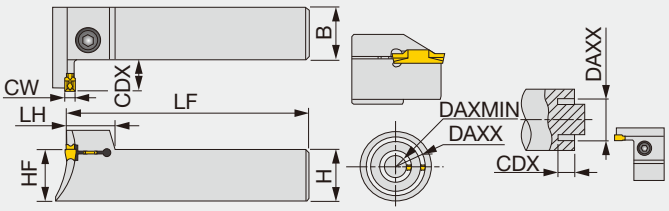
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

Reference pages: Inserts → F183 - F197, Standard cutting conditions → F198

CTFVR/L

Face grooving and turning perpendicular toolholder





Right hand (R) shown.

Designation	CW	DAXMIN	DAXX	Seat size	CDX	H	B	LF	LH	HF	Torque*
CTFVR/L2525-3T10-024035	3	24	35	3	10	25	25	150	18	25	5
CTFVR/L2525-3T10-029040	3	29	40	3	10	25	25	150	18	25	5
CTFVR/L2525-3T10-034050	3	34	50	3	10	25	25	150	18	25	5
CTFVR/L2525-3T15-044060	3	44	60	3	15	25	25	150	18	25	5
CTFVR/L2525-3T15-054085	3	54	85	3	15	25	25	150	18	25	5
CTFVR/L2525-4T12-022040	4	22	40	4	12	25	25	150	18.5	25	8.5
CTFVR/L2525-4T15-032050	4	32	50	4	15	25	25	150	18.5	25	8.5
CTFVR/L2525-4T15-042060	4	42	60	4	15	25	25	150	18.5	25	8.5
CTFVR/L2525-4T15-052085	4	52	85	4	15	25	25	150	18.5	25	8.5
CTFVR/L2525-5T20-050080	5	50	80	5	20	25	25	150	22	25	12
CTFVR/L2525-5T20-070110	5	70	110	5	20	25	25	150	22	25	12
CTFVR/L2525-5T20-100150	5	100	150	5	20	25	25	150	22	25	12
CTFVR/L2525-5T20-140200	5	140	200	5	20	25	25	150	22	25	12
CTFVR/L2525-6T20-048085	6	48	85	6	20	25	25	150	22	25	12
CTFVR/L2525-6T20-073150	6	73	150	6	20	25	25	150	22	25	12
CTFVR/L2525-6T20-138250	6	138	250	6	20	25	25	150	22	25	12

When depth is deeper than (insert length - 1.5 mm), 1 corner type is recommended
Max. groove depth will be 15 mm with DTF insert.
Use the right-hand insert for the right-hand holder with DTF insert.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS





Designation	Clamping screw	Wrench
CTFVR/L2525-3T...	CM5X0.8X25-A	P-4
CTFVR/L2525-4T...	CM6X1X25-A	P-5
CTFVR/L2525-5T..., 6T...	CM8X1.25X25-A	P-6

INSERT

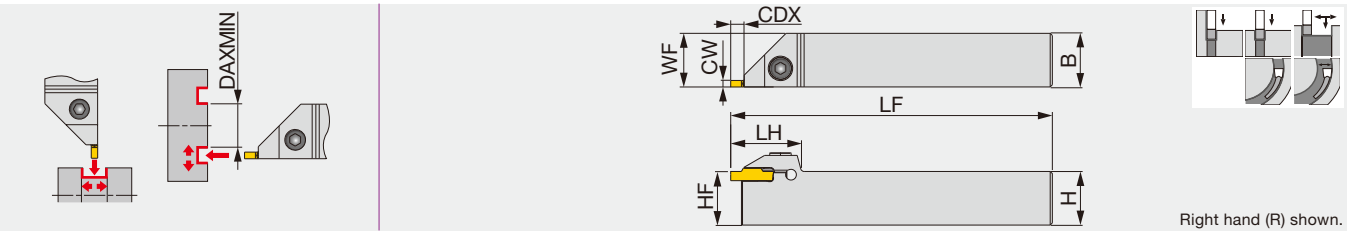
Designation	Seat size	Insert
CTFVR/L2525-3T10-024035	3	DTF, DTX
CTFVR/L2525-3T10-029040	3	DTF, DTX
CTFVR/L2525-3T10-034050	3	DTF, DTX, DTR
CTFVR/L2525-3T15-044060	3	DTF, DTX, DTR
CTFVR/L2525-3T15-054085	3	DTF, DTX, DTE, DGG, DTR, DTM
CTFVR/L2525-4T12-022040	4	DTF, DTX, DTR
CTFVR/L2525-4T15-032050	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, DTM, DGL, SGN
CTFVR/L2525-4T15-042060	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, SGN, DTM, DGL
CTFVR/L2525-4T15-052085	4	DTF, DTX, DTE, DGG, DGM, DGS, DTR, SGN, DTM, DGL
CTFVR/L2525-5T20-...	5	DTX, DTE, DGG, DGM, DGS, DTR, DTM, DGL, SGN
CTFVR/L2525-6T20-...	6	DTX, DTE, DGG, DGM, DGS, DTR, DTM, DGL

Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

Reference pages: Inserts → F183 - F197, Standard cutting conditions → F198

CTEFR/L

External face grooving and turning toolholder



Right hand (R) shown.

Designation	CW	Seat size	CDX	H	B	LF	LH	HF	WF (1)	Torque*
CTEFR/L2020-4T04	4	2, 3, 4	4.8	20	20	125	33	20	20.5	8.5
CTEFR/L2525-4T04	4	2, 3, 4	4.8	25	25	150	33	25	25.5	8.5
CTEFR/L2020-6T04	6	5, 6	4.8	20	20	125	37	20	20.6	8.5
CTEFR/L2525-6T04	6	5, 6	4.8	25	25	150	37	25	25.6	8.5

(1) "WF" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
CTEFR/L2020-4T04	CM6X1X20-A	P-5
CTEFR/L2525-4T04	CM6X1X25-A	P-5
CTEFR/L2020-6T04	CM6X1X20-A	P-5
CTEFR/L2525-6T04	CM6X1X25-A	P-5

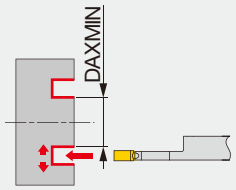
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	2	295
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTX / DTM / DTR	2	295
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61

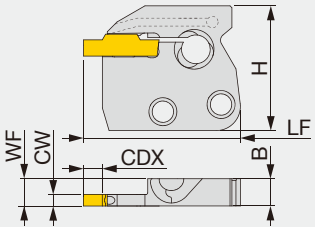
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

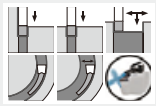
Reference pages: Inserts → F183 - F197, Standard cutting conditions → F198

CAEFR/L-CHP

Face and external grooving adapter, with high pressure coolant capability







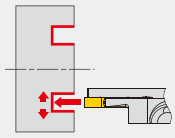
Right hand (R) shown.

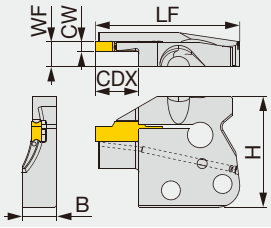
Designation	CW	Seat size	CDX	H	B	LF	WF (1)
CAEFR/L-4T04-CHP	4	2,3,4	4.8	33	7.2	41.5	7.7
CAEFR/L-6T04-CHP	6	5,6	4.8	33	7.2	46.3	7.8

(1) "WF" value is calculated with groove width "CW" shown in the table.

CAFR/L-CHP

Face grooving and turning adapter, with high pressure coolant capability









Right hand (R) shown.

Designation	CW	DAXMIN	DAXX	Seat size	CDX	H	B	LF	WF (1)
CAFR/L-3T12-040055-CHP	3	40	55	3	12	33	10.2	43	7.5
CAFR/L-3T12-055075-CHP	3	55	75	3	12	33	10.2	43	7.5
CAFR/L-3T12-075100-CHP	3	75	100	3	12	33	10.2	43	7.5
CAFR/L-3T12-100140-CHP	3	100	140	3	12	33	10.2	43	7.5
CAFR/L-3T12-140200-CHP	3	140	200	3	12	33	10.2	43	7.5
CAFR/L-4T16-050070-CHP	4	50	70	4	16	33	10.2	43	8
CAFR/L-4T16-070100-CHP	4	70	100	4	16	33	10.2	43	8
CAFR/L-4T16-100150-CHP	4	100	150	4	16	33	10.2	43	8
CAFR/L-4T16-150250-CHP	4	150	250	4	16	33	10.2	43	8
CAFR/L-5T20-055080-CHP	5	55	80	5	20	33	10.2	47	8.5
CAFR/L-5T20-080120-CHP	5	80	120	5	20	33	10.2	47	8.5
CAFR/L-5T20-120180-CHP	5	120	180	5	20	33	10.2	47	8.5
CAFR/L-5T20-180300-CHP	5	180	300	5	20	33	10.2	47	8.5
CAFR/L-5T20-300000-CHP	5	300	∞	5	20	33	10.2	47	8.5
CAFR/L-6T25-060090-CHP	6	60	90	6	25	33	10.2	52	9
CAFR/L-6T25-090150-CHP	6	90	150	6	25	33	10.2	52	9
CAFR/L-6T25-150250-CHP	6	150	250	6	25	33	10.2	52	9
CAFR/L-6T25-250400-CHP	6	250	400	6	25	33	10.2	52	9

When groove depth is larger than (insert length - 1.5 mm), please use 1-cornered insert.
Max. groove depth will be 15 mm with DTF insert.
Use the right-hand insert for the right-hand holder with DTF insert.
(1) WF is calculated with the groove width (CW) in the above table.

Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	2	295
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTX / DTM / DTR	2	295
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61

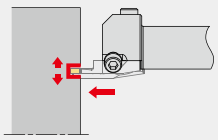
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

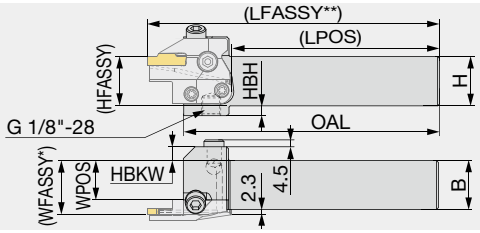
Reference pages: Inserts → F183 - F197, Shanks and toolholders → F176 - F178
Standard cutting conditions → F198, Technical Reference → L053

CHSR/L-CHP

Tube connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with left-hand adapter shown.

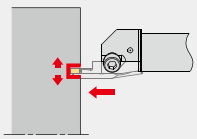
Designation	H	B	OAL	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP	20	20	130	105.5	15.1	12	20	10	CA*FL/R**-CHP	6.5
CHSR/L2525-CHP	25	25	130	105.5	20.1	7	25	5	CA*FL/R**-CHP	6.5

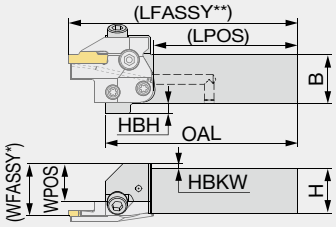
WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

CHSR/L-CHP-MC

Direct connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with left-hand adapter shown.

Designation	H	B	OAL	LPOS	WPOS	HBKW	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP-MC	20	20	98	73.5	14	6	10	CA*FL/R**-CHP	6.5
CHSR/L2525-CHP-MC	25	25	98	73.5	19	-	5	CA*FL/R**-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHSR/L**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179
CHSR/L**-CHP-MC	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	-

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

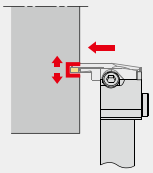
Shank	External grooving adapter		Face grooving adapter		External and face grooving adapter	
	CAER**-CHP, -MD	CAEL**-CHP, -MD	CAFR**-CHP	CAFL**-CHP	CAEFR**-CHP	CAEFL**-CHP
CHSR**-CHP (-MC)	●			●	●	
CHSL**-CHP (-MC)		●	●			●

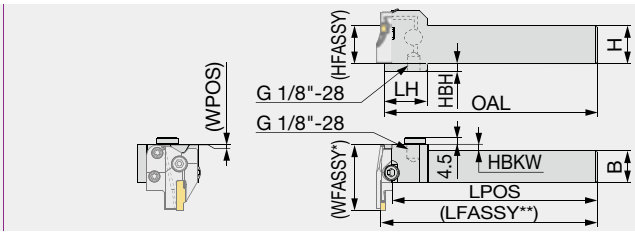
● : Corresponding

Reference pages: Inserts → F183 - F197, Adapters → F175, Standard cutting conditions → F198
Parts for coolant hose → F266, Technical Reference → L053

CHFVR/L-CHP

Shank for perpendicularly-mounted adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

Designation	H	B	OAL	LH	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHFVR/L2020-CHP	20	20	140	28	135.1	0.5	5	20	10	CA*FR/L**-CHP	6.5
CHFVR/L2525-CHP	25	25	140	28	135.1	0.5	0	25	5	CA*FR/L**-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHFVR/L...	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

Shank	External grooving adapter		Face grooving adapter		External and face grooving adapter	
	CAER**-CHP, -MD	CAEL**-CHP, -MD	CAFR**-CHP	CAFL**-CHP	CAEFR**-CHP	CAEFL**-CHP
CHFVR**-CHP		●	●			●
CHFVL**-CHP	●			●	●	

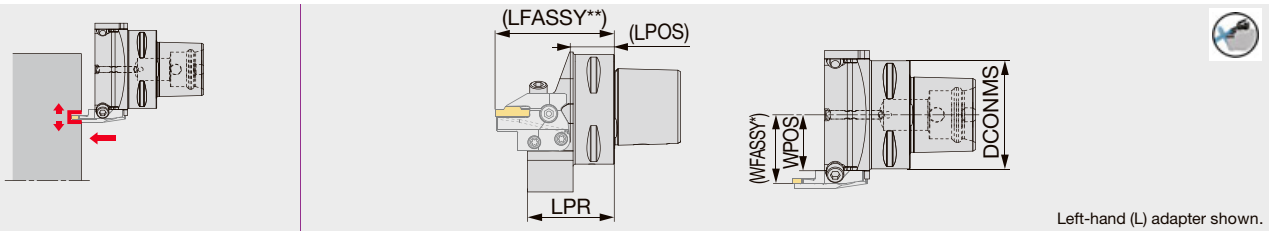
● : Corresponding

Reference pages: Inserts → F183 - F197, Adapters → F175, Standard cutting conditions → F198
Parts for coolant hose → F266, Technical Reference → L053

C*CHSN-CHP

Direct connection

Toolholder with TungCap connection, for adapter, with high pressure coolant capability



Left-hand (L) adapter shown.

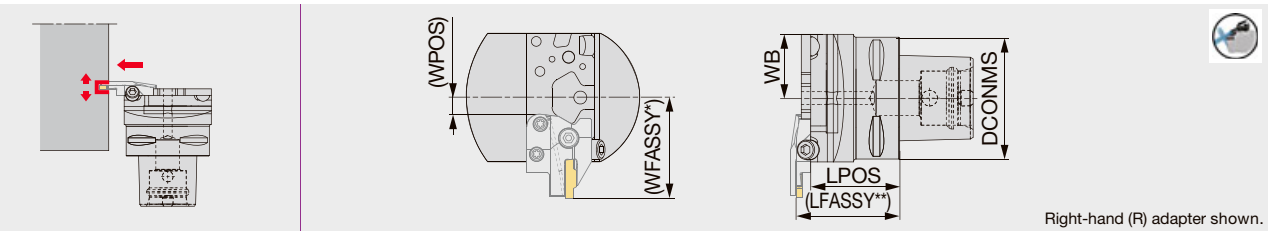
Designation	DCONMS	LPR	LPOS	WPOS	Adapter (Option)	Torque*
C3CHSN19045-CHP	32	45	17.5	18.5	CA*FR/L**-CHP	6.5
C4CHSN21047-CHP	40	46.5	21.5	21	CA*FR/L**-CHP	6.5
C5CHSN26047-CHP	50	47	22.5	26	CA*FR/L**-CHP	6.5
C6CHSN33050-CHP	63	50	24.5	32.5	CA*FR/L**-CHP	6.5

WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

C*CHFVN-CHP

Direct connection

Toolholder with TungCap connection, for perpendicularly-mounted adapter, with high pressure coolant capability



Right-hand (R) adapter shown.

Designation	DCONMS	LPOS	WB	WPOS	Adapter (Option)	Torque*
C3CHFVN26040-CHP	32	40	26	1.5	CA*FR/L**-CHP	6.5
C4CHFVN26046-CHP	40	46	26	1.5	CA*FR/L**-CHP	6.5
C5CHFVN26046-CHP	50	46	26	1.5	CA*FR/L**-CHP	6.5
C6CHFVN33046-CHP	63	46	33	8.5	CA*FR/L**-CHP	6.5

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS



Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring
C*CH**N**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N

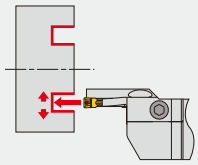
Recommended clamping torque (N·m)

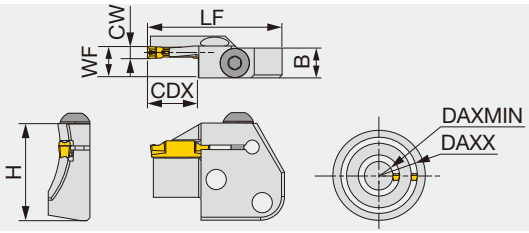
Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Reference pages: Inserts → F183 - F197, Adapters → F175, Standard cutting conditions → F198
Technical Reference → L053

CAFR/L

Face grooving and turning adapter





Right hand (R) shown.

Designation	CW	DAXMIN	DAXX	Seat size	CDX	H	B	LF	WF (1)	Torque*
CAFR/L-3T12-040055	3	40	55	3	12	32.7	10	45	10.4	5
CAFR/L-3T12-055075	3	55	75	3	12	32.7	10	45	10.4	5
CAFR/L-3T12-075100	3	75	100	3	12	32.7	10	45	10.4	5
CAFR/L-3T12-100140	3	100	140	3	12	32.7	10	45	10.4	5
CAFR/L-3T12-140200	3	140	200	3	12	32.7	10	45	10.4	5
CAFR/L-4T16-050070	4	50	70	4	16	32.7	10	45	10.5	5
CAFR/L-4T16-070100	4	70	100	4	16	32.7	10	45	10.5	5
CAFR/L-4T16-100150	4	100	150	4	16	32.7	10	45	10.5	5
CAFR/L-4T16-150250	4	150	250	4	16	32.7	10	45	10.5	5
CAFR/L-5T20-055080	5	55	80	5	20	32.7	10	49	10.5	5
CAFR/L-5T20-080120	5	80	120	5	20	32.7	10	49	10.5	5
CAFR/L-5T20-120180	5	120	180	5	20	32.7	10	49	10.5	5
CAFR/L-5T20-180300	5	180	300	5	20	32.7	10	49	10.5	5
CAFR/L-5T20-300000	5	300	∞	5	20	32.7	10	49	10.5	5
CAFR/L-6T25-060090	6	60	90	6	25	32.7	10	55	10.5	5
CAFR/L-6T25-090150	6	90	150	6	25	32.7	10	55	10.5	5
CAFR/L-6T25-150250	6	150	250	6	25	32.7	10	55	10.5	5
CAFR/L-6T25-250400	6	250	400	6	25	32.7	10	55	10.5	5

When groove depth is larger than (insert length - 1.5 mm), please use 1-cornered insert.
Max. groove depth will be 15 mm with DTF insert.
Use the right-hand insert for the right-hand holder with DTF insert.
Not compatible with TungModularSystem
(1) WF is calculated with the groove width (CW) in the above table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

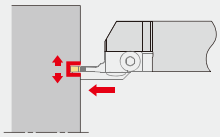
Designation	Clamping screw	Wrench
CAFR/L...	BHM6-20-A	P-4

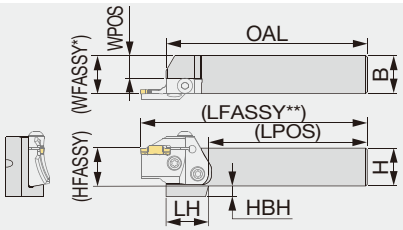
Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

Reference pages: Inserts → F183 - F197, Shanks and toolholders → F180, F181
Standard cutting conditions → F198

CHSR/L

Shank for adapter





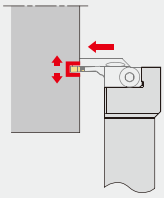
Right hand (R)
with left-hand adapter shown.

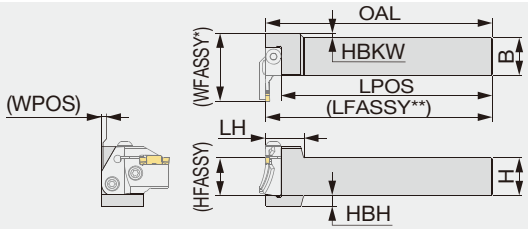
Designation	H	B	OAL	LPOS	LH	WPOS	HFASSY	HBH	Adapter (Option)
CHSR/L2020	20	20	133	105	35	10	20	12	CAFL/R...
CHSR/L2525	25	25	133	105	28	15	25	7	CAFL/R...
CHSR/L3232	32	32	153	125	-	22	32	-	CAFL/R...

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Not compatible with TungModularSystem

CHFVR/L

Shank for adapter, perpendicularly mounted





Right hand (R)
with right-hand adapter shown.

Designation	H	B	OAL	LPOS	LH	WPOS	HBKW	HFASSY	HBH	Adapter (Option)
CHFVR/L2020	20	20	150	140	25	0	8	20	12	CAFR/L...
CHFVR/L2525	25	25	150	140	25	0	3	25	7	CAFR/L...
CHFVR/L3232	32	32	170	160	25	4	-	32	-	CAFR/L...

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Not compatible with TungModularSystem

SPARE PARTS





Designation	Clamping screw	Wrench
CH**R/L...	CSHB-6-A	P-4

Combination of adapter and shank

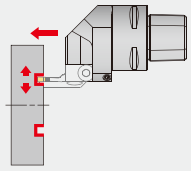
Shank	External grooving adapter		Face grooving adapter	
	CAER...	CAEL...	CAFR...	CAFL...
CHSR...	●			●
CHSL...		●	●	
CHFVR...		●	●	
CHFVL...	●			●

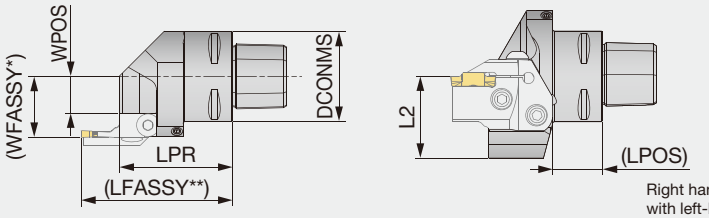
● : Corresponding

Reference pages: Inserts → F183 - F197, Adapters → F179, Standard cutting conditions → F198

C-CHSR/L

Toolholder with TungCap connection for adapter





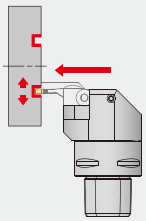
Right hand (R)
with left-hand adapter shown.

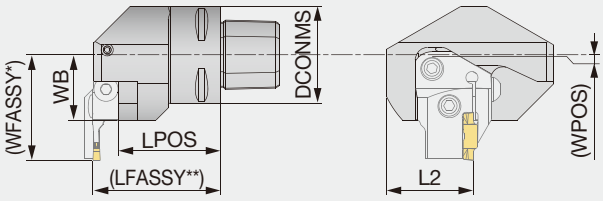
Designation	DCONMS	LPR	LPOS	L2	WPOS	Adapter (Option)
C3CHSR/L22050N	32	50	22.1	35	11.5	CAFL/R...
C4CHSR/L27050N	40	50	22.1	36	16.5	CAFL/R...
C5CHSR/L35060N	50	60	32.1	36	24.5	CAFL/R...
C6CHSR/L45065N	63	65	32.1	41	34.5	CAFL/R...

WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change. If needed, the coolant direction can be adjusted by the nozzle.
Applicable for 7 MPa coolant. Not compatible with TungModularSystem.

C-CHFVR/L

Toolholder with TungCap connection for adapter, perpendicularly mounted





Right hand (R)
with right-hand adapter shown.

Designation	DCONMS	LPOS	L2	WB	WPOS	Adapter (Option)
C3CHFVR/L22040N	32	32.5	35	22	-5.9	CAFR/L...
C4CHFVR/L27050N	40	42.5	36	27	-0.9	CAFR/L...
C5CHFVR/L35060N	50	49.5	36	35	7.1	CAFR/L...
C6CHFVR/L45065N	63	54.5	41	45	17.1	CAFR/L...

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change. If needed, the coolant direction can be adjusted by the nozzle.
Applicable for 7 MPa coolant. Not compatible with TungModularSystem.

SPARE PARTS

Designation	Coolant parts	Clamping screw	Wrench
C3CH**R/L...	SATZ-M8X1-M3	CSHB-6-A	P-4
C4CH**R/L...	SATZ-M8X1-M3	CSHB-6-A	P-4
C5CH**R/L...	SATZ-M10X1-M5	CSHB-6-A	P-4
C6CH**R/L...	SATZ-M10X1-M5	CSHB-6-A	P-4

Combination of adapter and toolholder

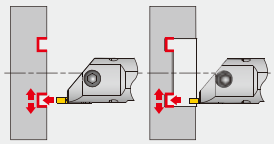
Toolholder	External grooving adapter		Face grooving adapter	
	CAER...	CAEL...	CAFR...	CAFL...
C*CHSR...	●			●
C*CHSL...		●	●	
C*CHFVR...		●	●	
C*CHFVL...	●			●

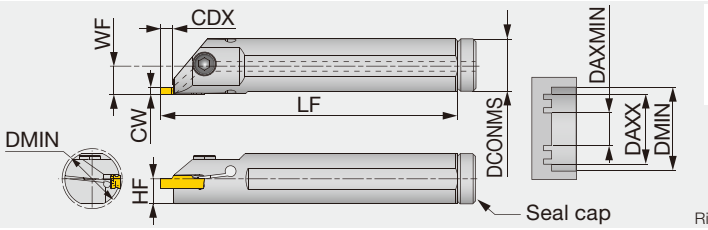
● : Corresponding

Reference pages: Inserts → F183 - F197, Adapters → F179, Standard cutting conditions → F198

CTIFR/L

External/Internal face grooving and turning toolholder





Right hand (R) shown.

Designation	CW	Seat size	CDX	DCONMS	LF	HF	WF (1)	Torque*
CTIFR/L25-4T05-D270	4	2, 3, 4	5.5	25	200	11.5	13.3	5
CTIFR/L32-4T05-D340	4	2, 3, 4	5.5	32	250	15	16.8	5
CTIFR/L25-5T05-D270	6	5, 6	5.5	25	200	11.5	13.3	5
CTIFR/L32-5T05-D340	6	5, 6	5.5	32	250	15	16.8	5

Use the right-hand insert for the right-hand holder with DTF insert.
(1) WF is calculated with the groove width CW in the above table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench	Seal cap
CTIFR/L25-4T05-D270	CM6X1X16-A	P-5	CA-25
CTIFR/L32-4T05-D340	CM6X1X20-A	P-5	CA-32
CTIFR/L25-5T05-D270	CM6X1X16-A	P-5	CA-25
CTIFR/L32-5T05-D340	CM6X1X20-A	P-5	CA-32

Seat size	Min. machining dia.: DMIN	
	DCONMS = 25 mm	DCONMS = 32 mm
2	299	299
3	26.3	33.3
4	26.8	33.8
5	26.3	33.3
6	26.8	33.8

Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DGM / DGS / SGN / DGL	2	295
DGM / DGS / SGN / DGL	3	92
DGM / DGS / SGN / DGL	4	37
DGM / DGS / SGN / DGL	5	60
DGM / DGS / DGL	6	57
DTX / DTM / DTR	2	295
DTE / DGG / DTM	3	62
DTE / DGG / DTM	4	42
DTE / DGG / DTM	5	64
DTE / DGG / DTM	6	61

Insert	Groove width CW	Face grooving Min. machining dia. DAXMIN
DTR	3	44
DTR	4	32
DTR	5	48
DTR	6	48
DTX	3	22
DTX	4	20
DTX	5	20
DTX	6	23
DTF	3	20
DTF	4	20

Reference pages: Inserts → F183 - F197, Standard cutting conditions → F198

Face grooving and turning

DTF type (2 corners)

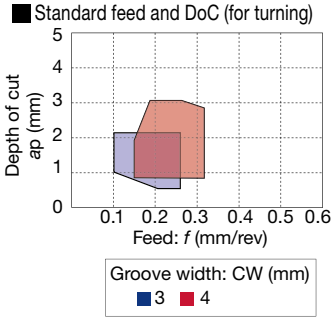
First choice

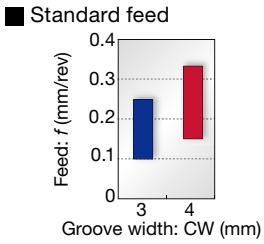


F187

1st choice for face grooving

Unique chipbreaker makes chips shorter
CW = 3 - 4 mm





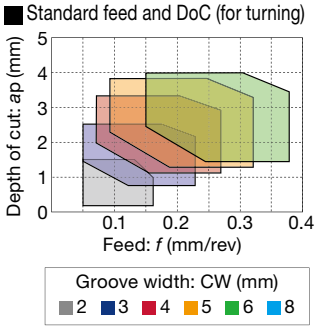
DTX type (2 corners)

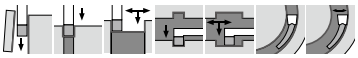


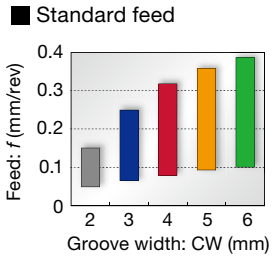
F187

Multi-functional type

Well balanced sharpness and strength
Multi-functional insert
CW = 2 - 6 mm







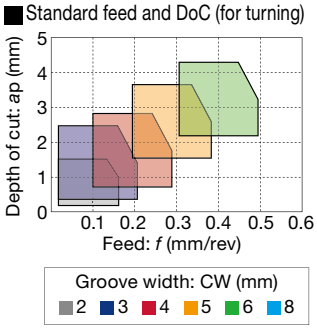
DTM type (2 corners)

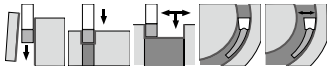


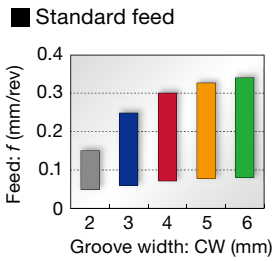
F188

General purpose

1st choice for grooving and turning
Suitable for light to medium cutting
Excellent chip control in machining steel, alloy steel, stainless steel, and heat-resistant alloy
CW = 2 - 6 mm







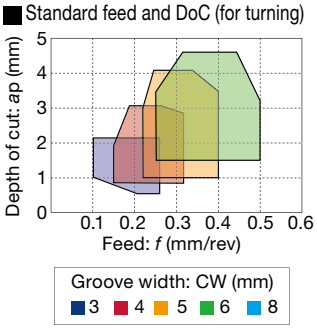
DTE type (2 corners)

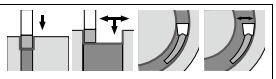


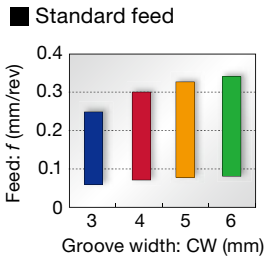
F188, F189

General purpose

Unique chipbreaker makes chips shorter
Molded and ground insert available
CW = 2.65 - 6 mm







Please see page F*** for the product details.

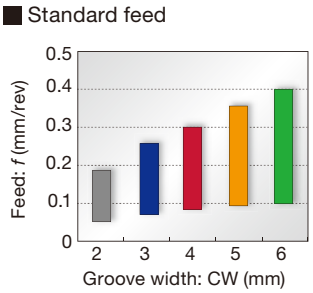
DGM type (2 corners) SGM type (1 corner)

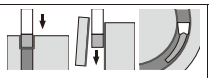


F190, F191

1st choice for grooving and parting

Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 2 - 6.35 mm





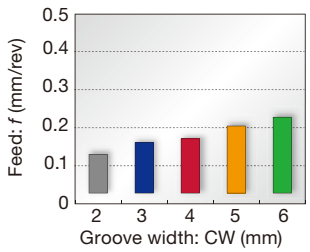
DGS type (2 corners) SGS type (1 corner)

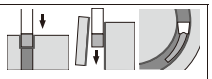


F192, F193

Lower cutting force and superior sharpness

Unique-designed edge and chipbreaker
Handed insert available
CW = 2 - 6.35 mm





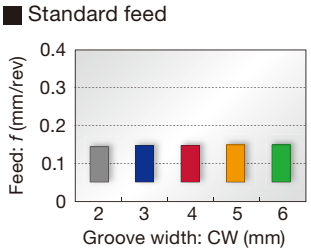
DGG type (2 corners)

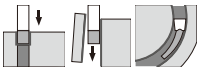


F193

For non-ferrous materials and titanium

Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 2 - 6 mm





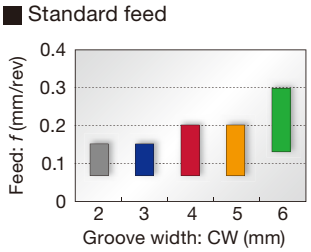
DGL type (2 corners)

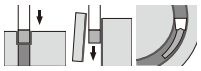


F194

1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often gives difficulties in chip control
CW = 2 - 6 mm





Please see page F*** for the product details.

Profiling and undercutting

DTR type (2 corners)
STR type (1 corner)

Molded
DTR, STR



Ground
DTR

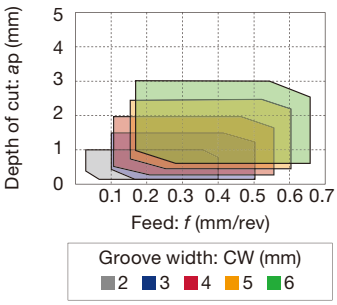


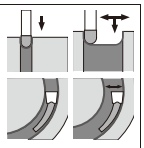
F194, F195

Full radius type

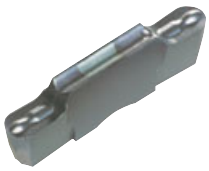
Excellent chip control
Molded and ground inserts available
CW = 2 - 6 mm

Standard feed and DoC (for turning)





DTIU type
(2 corners)

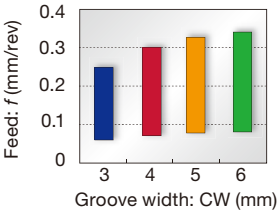


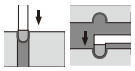
F196

Full radius type

Excellent chip control for undercutting
CW = 3 - 6 mm

Standard feed and DoC





Aluminium wheel machining

DTA type
(2 corners)

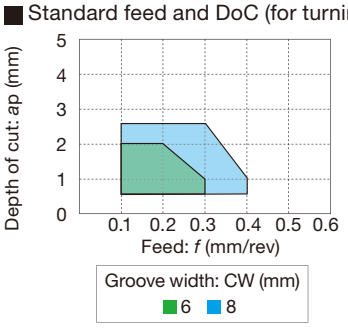


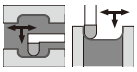
F196

Full radius type

Excellent chip control
For aluminium wheel profiling
Ground insert
CW = 6 - 8 mm

Standard feed and DoC (for turning)





For high feed external and face turning of hardened steel parts

STH type
(1 corner)

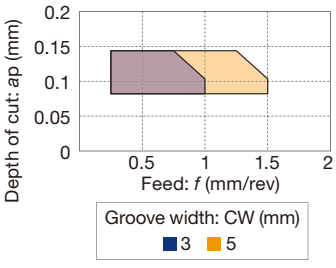


F197

External and face turning of hardened steel parts

High efficiency machining using light D.O.C. and increased feeds
CW = 3, 5 mm

Standard feed and DoC (for turning)





External grooving of hardened steel

SGN-CBN type
(1 corner)

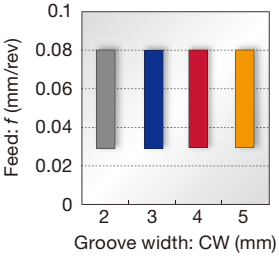


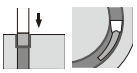
F197

For hardened steel cutting

Optimum cutting edge shape for grooving of hardened steels
High tolerance width for finishing
CW = 2 - 5 mm
(CW = ±0.025 mm)

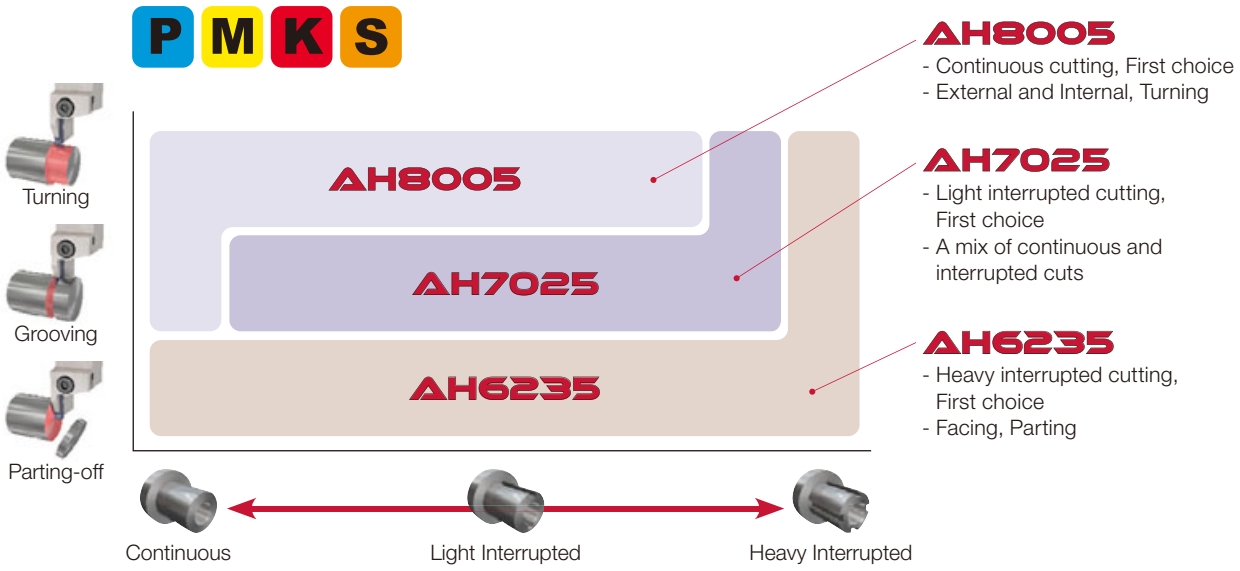
Standard feed





Please see page F*** for the product details.

GRADE SELECTION



GRADES

AH8005 P M K S
- First choice for external, internal, and side-turning, continuous cuts

AH7025 P M K S
- First choice for light interrupted cuts or a mix of continuous and interrupted cuts
- New PVD coating with high Al content provides excellent adhesion strength
- Improved wear and chipping resistance

AH6235 P M K
- First choice for heavy interrupted cuts, as well as parting and facing applications

AH725 P M S
- General purpose PVD grade for high fracture resistance

T515 K
- First recommended grade for cast iron
- Exellent wear resistance in high speed machining

T9225 P
- Suitable for steel machining at high speeds
- New CVD coating and substrate deliver an outstanding balance of wear and chipping resistance

NS9530 P
- Advanced cermet for finish cutting of steel
- Innovative grade with incredible fracture and high wear resistance

GH130 P M K
- Recommended for interrupted machining
- TiCNO PVD coating layer with high wear resistance
- High hardness wear resistance

AH905 S
- Remarkable for machining of heat resistant alloys
- Exclusive coating layer improves adhesion strength and wear resistance

KS05F N S
- Recommended for non-ferrous materials and titanium

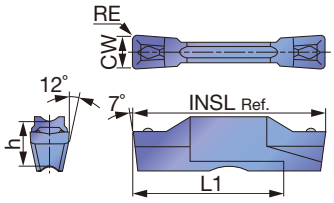
TH10 N
- Recommended for non-ferrous materials

BXA10 H
- Coated CBN grade designed for turning hardened steel parts

BX360 H
- Developed for grooving applications of hardened steel parts

DTF

Face grooving and turning



Right hand (R) shown.

P	Steel	★	★	☆	☆				★					
M	Stainless		★	☆	★									
K	Cast iron		★		☆				☆					
N	Non-ferrous													
S	Superalloys		★	☆										
H	Hard materials													

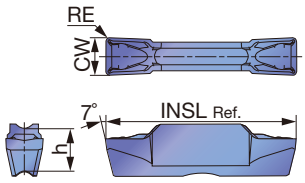
★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated							Cermet						INSL	h	L1
					T9225	AH7025	AH725	GH130				NS9530								
DTF3-040-R	3	R	3	0.4	●	●	●	●				●						20	5	16
DTF3-040-L	3	L	3	0.4	●	●	●	●				●						20	5	16
DTF4-040-R	4	R	4	0.4	●	●	●	●				●						20	5	16
DTF4-040-L	4	L	4	0.4	●	●	●	●				●						20	5	16

●: Line up

DTX

External, internal and face grooving, and turning



P	Steel	★	★	☆	★	☆	★		★										
M	Stainless		★	☆	★	★	★												
K	Cast iron		★		★	☆	★		☆					☆					
N	Non-ferrous													☆					
S	Superalloys		★	☆	★									★					
H	Hard materials																		

★ : First choice
☆ : Second choice

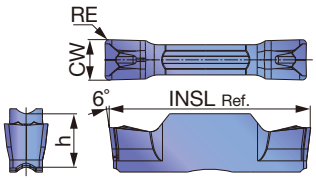
Designation	Seat size	CW±0.05	RE	Coated						Cermet				Uncoated				INSL	h
				T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530				KS05F					
DTX2-020	2	2	0.2		●		●		●					●				20	5
DTX3-030	3	3	0.3	●	●	●	●	●	●	●				●				20	5
DTX4-040	4	4	0.4	●	●	●	●	●	●	●				●				20	5
DTX5-040	5	5	0.4	●	●	●	●	●	●	●				●				25	5.5
DTX6-080	6	6	0.8		●	●	●	●	●					●				25	5.5

● : Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DTM

External face grooving and turning



P	Steel	★ ★ ★
M	Stainless	★ ★ ★
K	Cast iron	★ ★ ★
N	Non-ferrous	
S	Superalloys	★ ★
H	Hard materials	

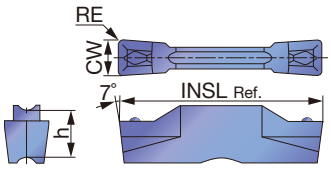
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	Coated AH8005	Coated AH6235	INSL	h
DTM2-020	2	2	0.2	●	●	●	20	5
DTM3-030	3	3	0.3	●	●	●	20	5
DTM4-040	4	4	0.4	●	●	●	20	5
DTM4-080	4	4	0.8	●	●	●	20	5
DTM5-080	5	5	0.8	●	●	●	25	5.5
DTM6-080	6	6	0.8	●	●	●	25	5.5

● : Line up

DTE

External face grooving and turning (for high precision)



P	Steel	★	★	☆	☆				★			
M	Stainless		★	☆	★							
K	Cast iron		★		☆							
N	Non-ferrous											
S	Superalloys		★	☆								
H	Hard materials											

★ : First choice
☆ : Second choice

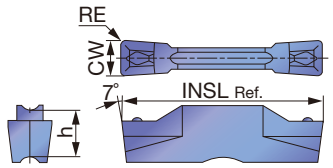
Designation	Seat size	CW±0.02	RE	Coated T9225	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	INSL	h
DTE265-015	3	2.65	0.15	●	●	●	●	●	20	5
DTE300-020	3	3	0.2	●	●	●	●	●	20	5
DTE300-040	3	3	0.4	●	●	●	●	●	20	5
DTE315-015	3	3.15	0.15	●	●	●	●	●	20	5
DTE400-040	4	4	0.4	●	●	●	●	●	20	5
DTE400-080	4	4	0.8	●	●	●	●	●	20	5
DTE415-015	4	4.15	0.15	●	●	●	●	●	20	5
DTE478-055	5	4.78	0.55	●	●	●	●	●	25	5.5
DTE500-040	5	5	0.4	●	●	●	●	●	25	5.5
DTE500-080	5	5	0.8	●	●	●	●	●	25	5.5
DTE515-015	5	5.15	0.15	●	●	●	●		25	5.5
DTE600-080	6	6	0.8	●	●	●	●		25	5.5
DTE600-120	6	6	1.2	●	●	●	●		25	5.5

●: Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DTE

External face grooving and turning



P	Steel	★		★	☆	★	☆	★		★		
M	Stainless			★	☆	★	★	★				
K	Cast iron		★	★		★	☆	★				
N	Non-ferrous											
S	Superalloys			★	☆	★						
H	Hard materials											

★ : First choice
☆ : Second choice

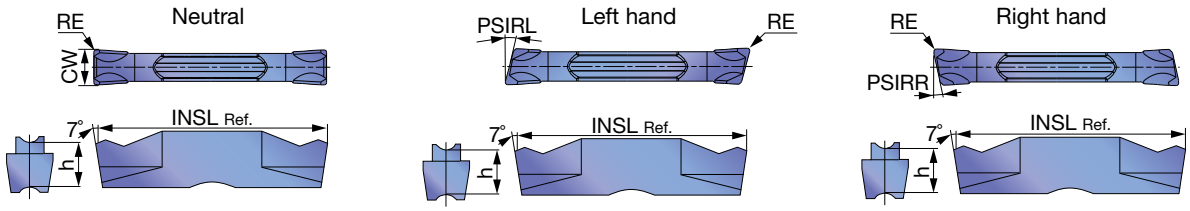
Designation	Seat size	CW±0.05	RE	Coated							Cermet					INSL	h
				T9225	T515	AH7025	AH725	AH8005	GH130	AH6235	NS9530						
DTE3-020	3	3	0.2			●		●		●						20	5
DTE3-040	3	3	0.4	●	●	●	●	●	●	●	●					20	5
DTE4-040	4	4	0.4	●	●	●	●	●	●	●	●					20	5
DTE4-080	4	4	0.8			●		●		●						20	5
DTE5-040	5	5	0.4		●	●		●		●						25	5.5
DTE5-080	5	5	0.8			●		●		●						25	5.5
DTE6-080	6	6	0.8		●	●		●		●						25	5.5

● : Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DGM

External/face grooving and parting



		Coated							Cermet		Uncoated						
P	Steel	★	★	☆	★		☆	★		★							
M	Stainless		★	☆	★		★	★									
K	Cast iron		★		★	☆	☆	★		☆		☆					
N	Non-ferrous											☆					
S	Superalloys		★	☆	★	★						★					
H	Hard materials																

★ : First choice
☆ : Second choice

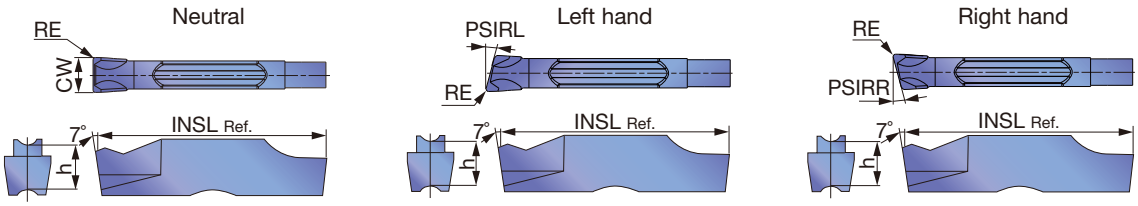
Designation	Seat size	HAND	CW±0.05	RE	T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530	KS05F	INSL	h	PSIRL	PSIRR
DGM2-020	2	N	2	0.2	●	●	●	●		●	●	●	●	20	5	0°	0°
DGM2-020-6R	2	R	2	0.2		●	●			●				20	5	0°	6°
DGM2-020-6L	2	L	2	0.2		●	●			●				20	5	6°	0°
DGM2-020-8R	2	R	2	0.2		●	●			●				20	5	0°	8°
DGM2-020-8L	2	L	2	0.2		●	●			●				20	5	8°	0°
DGM2-020-15R	2	R	2	0.2		●	●			●				20	5	0°	15°
DGM2-020-15L	2	L	2	0.2		●	●			●				20	5	15°	0°
DGM2-002-15R	2	R	2	0.02			●			●				19.35	5	0°	15°
DGM2-002-15L	2	L	2	0.02			●			●				19.35	5	15°	0°
DGM2.39-020	2	N	2.39	0.2		●		●			●			20	5	0°	0°
DGM3-020	3	N	3	0.2	●	●	●	●	●	●	●	●	●	20	5	0°	0°
DGM3-020-6R	3	R	3	0.2		●	●			●				20	5	0°	6°
DGM3-020-6L	3	L	3	0.2		●	●			●				20	5	6°	0°
DGM3-002-6R	3	R	3	0.02			●			●				19.45	5	0°	6°
DGM3-002-6L	3	L	3	0.02			●			●				19.45	5	6°	0°
DGM3-020-15R	3	R	3	0.2		●	●			●				20	5	0°	15°
DGM3-020-15L	3	L	3	0.2		●	●			●				20	5	15°	0°
DGM3.18-020	3	N	3.18	0.2		●		●			●			20	5	0°	0°
DGM4-030	4	N	4	0.3	●	●	●	●	●	●	●	●	●	20	5	0°	0°
DGM4-030-4R	4	R	4	0.3		●	●			●				20	5	0°	4°
DGM4-030-4L	4	L	4	0.3		●	●			●				20	5	4°	0°
DGM4-030-15R	4	R	4	0.3		●	●			●				20	5	0°	15°
DGM4-030-15L	4	L	4	0.3		●	●			●				20	5	15°	0°
DGM4.76-040	5	N	4.76	0.4		●		●			●			25	5.5	0°	0°
DGM5-030	5	N	5	0.3	●	●	●	●	●	●	●	●	●	25	5.5	0°	0°
DGM5-030-4R	5	R	5	0.3		●	●			●				25	5.5	0°	4°
DGM6-030	6	N	6	0.3	●	●	●	●	●	●	●		●	25	5.5	0°	0°
DGM6.35-040	6	N	6.35	0.4		●		●			●			25	5.5	0°	0°

● : Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

SGM

External/face deep grooving and parting



		AH7025	AH725	AH8005	GH130	AH6235	KS05F
P	Steel	★	☆	★	☆	★	
M	Stainless	★	☆	★	★	★	
K	Cast iron	★		★	☆	★	☆
N	Non-ferrous						☆
S	Superalloys	★	☆	★			★
H	Hard materials						

★ : First choice
☆ : Second choice

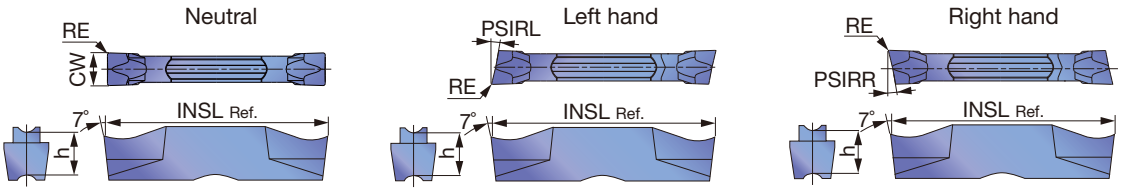
Designation	Seat size	HAND	CW±0.05	RE	Coated					Uncoated		INSL	h	PSIRL	PSIRR
					AH7025	AH725	AH8005	GH130	AH6235	KS05F					
SGM2-020	2	N	2	0.2	●	●	●	●	●	●		20	5	0°	0°
SGM2-020-6R	2	R	2	0.2	●	●		●				20	5	0°	6°
SGM2-020-6L	2	L	2	0.2	●	●		●				20	5	6°	0°
SGM3-020	3	N	3	0.2	●	●	●	●	●	●		20	5	0°	0°
SGM3-020-6R	3	R	3	0.2	●	●		●				20	5	0°	6°
SGM3-020-6L	3	L	3	0.2	●	●		●				20	5	6°	0°
SGM3-020-15R	3	R	3	0.2	●	●		●				20	5	0°	15°
SGM3-020-15L	3	L	3	0.2	●	●		●				20	5	15°	0°
SGM4-030	4	N	4	0.3	●	●	●	●	●	●		20	5	0°	0°
SGM4-030-4R	4	R	4	0.3	●	●		●				20	5	0°	4°
SGM4-030-4L	4	L	4	0.3	●	●		●				20	5	4°	0°
SGM5-030	5	N	5	0.3	●	●	●	●	●	●		25	5.5	0°	0°
SGM6-030	6	N	6	0.3	●	●	●	●	●	●		25	5.5	0°	0°

● : Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DGS

External/face grooving and parting



		T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530	KS05F
P	Steel	★	★	☆	★	☆	★	★	
M	Stainless		★	☆	★	★	★		
K	Cast iron		★		★	☆	★	☆	☆
N	Non-ferrous								☆
S	Superalloys		★	☆	★				★
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated						Cermet		Uncoated		INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530		KS05F					
DGS2-005	2	N	2	0.05			●								20	5	0°	0°
DGS2-010	2	N	2	0.1			●								20	5	0°	0°
DGS2-020	2	N	2	0.2	●	●	●	●	●	●	●		●		20	5	0°	0°
DGS2-020-6R	2	R	2	0.2		●	●		●						20	5	0°	6°
DGS2-020-6L	2	L	2	0.2		●	●		●						20	5	6°	0°
DGS2-002-6R	2	R	2	0.02			●		●						19.5	5	0°	6°
DGS2-002-6L	2	L	2	0.02			●		●						19.5	5	6°	0°
DGS2-020-15R	2	R	2	0.2		●	●		●						20	5	0°	15°
DGS2-020-15L	2	L	2	0.2		●	●		●						20	5	15°	0°
DGS2-002-15R	2	R	2	0.02			●		●						19.5	5	0°	15°
DGS2-002-15L	2	L	2	0.02			●		●						19.5	5	15°	0°
DGS2.39-020	2	N	2.39	0.2		●		●		●					20	5	0°	0°
DGS3-020	3	N	3	0.2	●	●	●	●	●	●	●		●		20	5	0°	0°
DGS3-020-6R	3	R	3	0.2		●	●		●						20	5	0°	6°
DGS3-020-6L	3	L	3	0.2		●	●		●						20	5	6°	0°
DGS3-002-6R	3	R	3	0.02			●		●						19.45	5	0°	6°
DGS3-002-6L	3	L	3	0.02			●		●						19.45	5	6°	0°
DGS3-020-15R	3	R	3	0.2		●	●		●						20	5	0°	15°
DGS3-020-15L	3	L	3	0.2		●	●		●						20	5	15°	0°
DGS3-002-15R	3	R	3	0.02			●		●						19.45	5	0°	15°
DGS3-002-15L	3	L	3	0.02			●		●						19.45	5	15°	0°
DGS3.18-020	3	N	3.18	0.2		●		●		●					20	5	0°	0°
DGS4-030	4	N	4	0.3	●	●	●	●	●	●	●		●		20	5	0°	0°
DGS4-030-4R	4	R	4	0.3		●	●		●						20	5	0°	4°
DGS4-030-4L	4	L	4	0.3		●	●		●						20	5	4°	0°
DGS4.76-040	5	N	4.76	0.4		●		●		●					25	5.5	0°	0°
DGS5-030	5	N	5	0.3	●	●	●	●	●	●	●		●		25	5.5	0°	0°
DGS6-030	6	N	6	0.3	●	●	●	●	●	●			●		25	5.5	0°	0°
DGS6.35-040	6	N	6.35	0.4		●		●		●					25	5.5	0°	0°

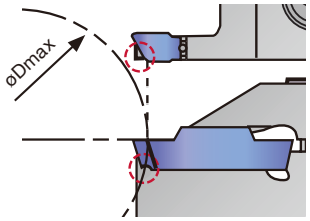
● : Line up

Caution

The tool will interfere with the workpiece when grooving larger diameters than øDmax.

Designation	øDmax (mm)
DGM2-002-15R/L	28
DGM3-002-15R/L	29
DGM4-030-15R/L	30
SGM3-020-15R/L	103

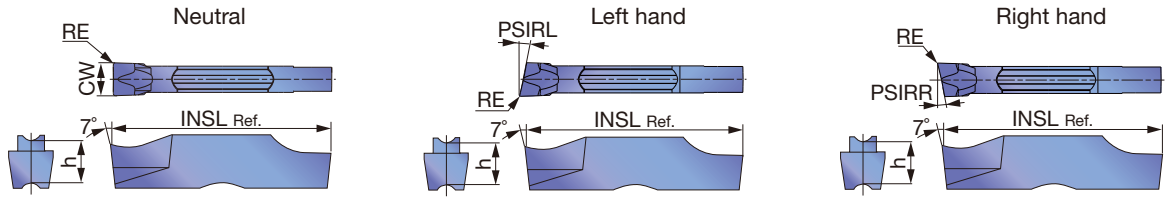
Designation	øDmax (mm)
DGS2-002-15R/L	28
DGS3-002-15R/L	29
SGS3-020-15R/L	103
SGS3-002-15R/L	34



Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

SGS

External/face deep grooving and parting



		AH7025	AH725	AH8005	GH130	AH6235	KS05F
P	Steel	★	☆	★	☆	★	
M	Stainless	★	☆	★	★	★	
K	Cast iron	★		★	☆	★	☆
N	Non-ferrous						☆
S	Superalloys	★	☆	★			★
H	Hard materials						

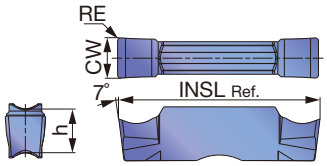
★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated AH7025	Coated AH725	Coated AH8005	Coated GH130	Coated AH6235	Uncoated KS05F	INSL	h	PSIRL	PSIRR
SGS2-020	2	N	2	0.2	●	●	●	●	●	●	20	5	0°	0°
SGS2-020-6R	2	R	2	0.2	●	●		●			20	5	0°	6°
SGS2-020-6L	2	L	2	0.2	●	●		●			20	5	6°	0°
SGS2-020-15R	2	R	2	0.2	●	●		●			20	5	0°	15°
SGS2-020-15L	2	L	2	0.2	●	●		●			20	5	15°	0°
SGS3-020	3	N	3	0.2	●	●	●	●	●	●	20	5	0°	0°
SGS3-020-6R	3	R	3	0.2	●	●		●			20	5	0°	6°
SGS3-020-6L	3	L	3	0.2	●	●		●			20	5	6°	0°
SGS3-002-6R	3	R	3	0.02		●		●			19.8	5	0°	6°
SGS3-002-6L	3	L	3	0.02		●		●			19.8	5	6°	0°
SGS3-020-15R	3	R	3	0.2	●	●		●			20	5	0°	15°
SGS3-020-15L	3	L	3	0.2	●	●		●			20	5	15°	0°
SGS3-002-15R	3	R	3	0.02		●		●			19.8	5	0°	15°
SGS3-002-15L	3	L	3	0.02		●		●			19.8	5	15°	0°
SGS4-030	4	N	4	0.3	●	●	●	●	●	●	20	5	0°	0°
SGS5-030	5	N	5	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGS6-030	6	N	6	0.3	●	●	●	●	●	●	25	5.5	0°	0°

● : Line up

DGG

External/face grooving (for high precision)



		AH7025	NS9530	KS05F
P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	☆
N	Non-ferrous			★
S	Superalloys	★		☆
H	Hard materials			

★ : First choice
☆ : Second choice

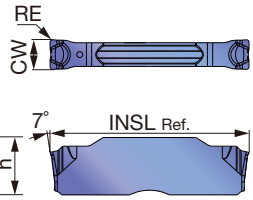
Designation	Seat size	CW±0.02	RE	Coated AH7025	Cermet NS9530	Uncoated KS05F	INSL	h
DGG200-020	2	2	0.2	●	●	●	20	5
DGG300-020	3	3	0.2	●	●	●	20	5
DGG400-040	4	4	0.4	●	●	●	20	5
DGG500-040	5	5	0.4	●	●	●	25	5.5
DGG600-040	6	6	0.4	●	●	●	25	5.5

●: Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DGL

External/face grooving and parting



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

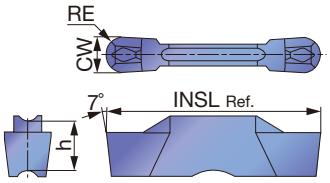
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	Coated AH8005	Coated AH6235	INSL	h
DGL2-020	2	2	0.2	●	●	●	20	5
DGL3-025	3	3	0.25	●	●	●	20	5
DGL4-030	4	4	0.3	●	●	●	20	5
DGL5-030	5	5	0.3	●	●	●	25	5.5
DGL6-080	6	6	0.8	●	●	●	25	5.5

●: Line up

DTR

Profiling and undercutting (for high precision)



P	Steel	★	★	☆	☆	★
M	Stainless		★	☆	★	
K	Cast iron		★		☆	☆
N	Non-ferrous					
S	Superalloys		★	☆		
H	Hard materials					

★ : First choice
☆ : Second choice

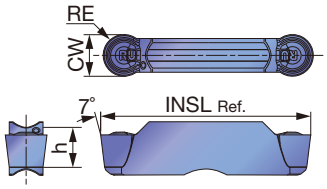
Designation	Seat size	CW±0.02	RE	Coated T9225	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	INSL	h
DTR300-150	3	3	1.5	●	●	●	●	●	20	5
DTR400-200	4	4	2	●	●	●	●	●	20	5
DTR478-239	5	4.78	2.39	●	●	●	●	●	25	5.5
DTR500-250	5	5	2.5	●	●	●	●	●	25	5.5
DTR600-300	6	6	3	●	●	●	●		25	5.5

●: Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DTR

Profiling and undercutting



		T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530	KS05F
P	Steel	★	★	☆	★		☆	★	★	
M	Stainless		★	☆	★		★	★		
K	Cast iron		★		★	☆	☆	★	☆	☆
N	Non-ferrous									☆
S	Superalloys		★	☆	★	★				★
H	Hard materials									

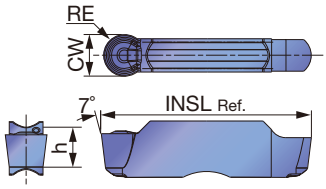
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated							Cermet			Uncoated				INSL	h
				T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530			KS05F					
DTR2-100	2	2	1		●		●			●				●				20	5
DTR3-150	3	3	1.5	●	●	●	●	●	●	●	●			●				20	5
DTR4-200	4	4	2	●	●	●	●	●	●	●	●			●				20	5
DTR5-250	5	5	2.5	●	●	●	●	●	●	●	●			●				25	5.5
DTR6-300	6	6	3	●	●	●	●		●	●				●				25	5.5

● : Line up

STR

Profiling and undercutting



		AH7025	AH8005	KS05F
P	Steel	★	★	
M	Stainless	★	★	
K	Cast iron	★	★	☆
N	Non-ferrous			☆
S	Superalloys	★	★	★
H	Hard materials			

★ : First choice
☆ : Second choice

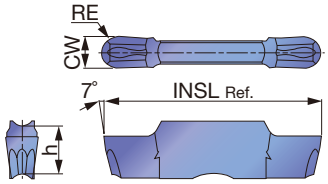
Designation	Seat size	CW±0.05	RE	Coated		Uncoated						INSL	h
				AH7025	AH8005					KS05F			
STR2-100	2	2	1	●	●					●		20	5
STR3-150	3	3	1.5	●	●					●		20	5
STR4-200	4	4	2	●	●					●		20	5
STR5-250	5	5	2.5	●	●					●		25	5.5
STR6-300	6	6	3	●	●					●		25	5.5

●: Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

DTIU

Profiling and undercutting (for high precision)



P	Steel	★	☆	☆
M	Stainless	★	☆	★
K	Cast iron	★		☆
N	Non-ferrous			
S	Superalloys	★	☆	
H	Hard materials			

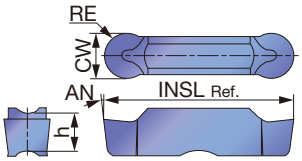
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated AH7025	Coated AH725	Coated GH130	INSL	h
DTIU300-150	3	3	1.5	●	●	●	20	5
DTIU400-200	4	4	2	●	●	●	20	5
DTIU500-250	5	5	2.5	●	●	●	25	5.5
DTIU600-300	6	6	3	●	●	●	25	5.5

●: Line up

DTA

Aluminium wheel machining (for high precision)



P	Steel			
M	Stainless			
K	Cast iron			
N	Non-ferrous	★		
S	Superalloys			
H	Hard materials			

★ : First choice
☆ : Second choice

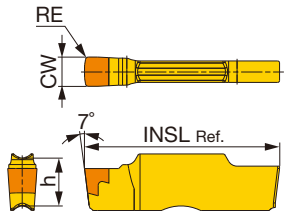
Designation	Seat size	CW±0.02	RE	Uncoated TH10	INSL	h	AN
DTA600-300	6	6	3	●	25	5.5	7°

●: Line up

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

STH

External and face turning



P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	
S	Superalloys	
H	Hard materials	★

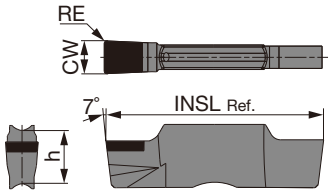
★ : First choice

Designation	Seat size	CW±0.025	RE	CBN	INSL	h
				BXA10		
STH300-SR	3	3	0.3	●	20	5
STH500-SR	5	5	0.3	●	25	5.5

●: Line up

SGN

External/face grooving



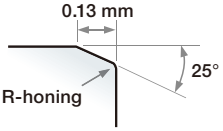
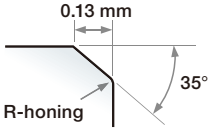
P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	
S	Superalloys	
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.025	RE	CBN	INSL	h	Condition		
				BX360			Continuous	Light interrupted	Heavy interrupted
SGN200-020	2	2	0.2	●	20	5	○		
SGN200-020-S	2	2	0.2	●	20	5		○	
SGN200-020-H	2	2	0.2	●	20	5			○
SGN300-020	3	3	0.2	●	20	5	○		
SGN300-020-S	3	3	0.2	●	20	5		○	
SGN300-020-H	3	3	0.2	●	20	5			○
SGN400-020	4	4	0.2	●	20	5	○		
SGN400-020-S	4	4	0.2	●	20	5		○	
SGN400-020-H	4	4	0.2	●	20	5			○
SGN500-020-S	5	5	0.2	●	25	5.5		○	
SGN500-020-H	5	5	0.2	●	25	5.5			○

●: Line up

Edge preparations

No symbol	-S	-H
		

Reference pages: Toolholders → F172 - F182, Standard cutting conditions → F198

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Wear resistance	T9225, AH8005	80 - 300
		< 300 HB	Impact resistance	AH6235, GH130	50 - 120
		< 300 HB	Surface quality	NS9530	80 - 220
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Wear resistance	AH8005	50 - 120
		< 200 HB	Impact resistance	AH6235, GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	T515	150 - 700
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	T515	150 - 300
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
		-	First choice	KS05F	100 - 600
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	20 - 60
		< HRC 40	Impact resistance	AH7025, AH725, AH6235	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	20 - 100
		< HRC 40	Impact resistance	AH7025, AH725	20 - 80

Please see page F183 - F185 for feed: *f* (mm/rev).

STH

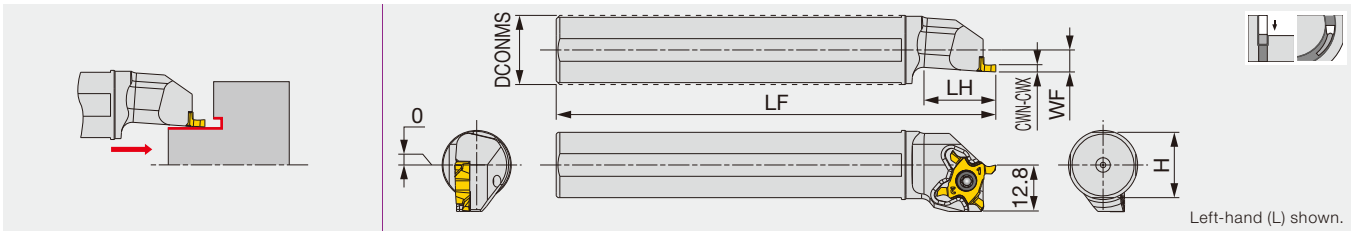
ISO	Grade	CW	Application	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
H	BXA10	3	External turning	100 - 230	0.08 - 0.12	0.4 - 1
			Face turning	100 - 230	0.08 - 0.12	0.4 - 0.8
		5	External turning	100 - 230	0.08 - 0.12	0.5 - 1.5
			Face turning	100 - 230	0.08 - 0.12	0.5 - 0.8

SGN

ISO	Grade	Edge preparation	Workpiece condition	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
H	BX360	No symbol	Continuous	80 - 150	0.03 - 0.08
		-S	Light interrupted	50 - 120	0.03 - 0.08
		-H	Heavy interrupted	40 - 100	0.03 - 0.06

JS-STCFL18

Face grooving toolholder with round shank

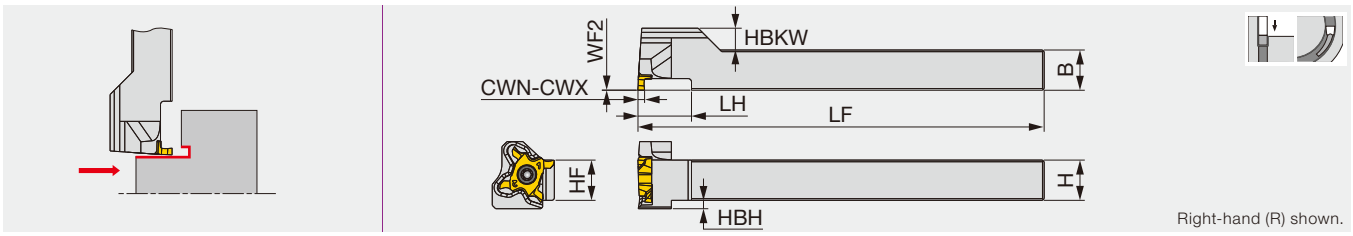


Designation	CWN	CWX	DCONMS	LF	LH	H	WF	Insert	Torque*
JS16F-STCFL18	0.33	3.18	16	85	20	15	6	TCF18L...	1.2
JS19G-STCFL18	0.33	3.18	19.05	90	20	18	6	TCF18L...	1.2
JS19X-STCFL18	0.33	3.18	19.05	120	20	18	6	TCF18L...	1.2
JS20G-STCFL18	0.33	3.18	20	90	20	19	6	TCF18L...	1.2
JS20X-STCFL18	0.33	3.18	20	120	20	19	6	TCF18L...	1.2
JS22X-STCFL18	0.33	3.18	22	120	20	21	6	TCF18L...	1.2
JS25H-STCFL18	0.33	3.18	25	100	20	24	6	TCF18L...	1.2
JS254X-STCFL18	0.33	3.18	25.4	120	20	24.5	6	TCF18L...	1.2

Note: The left hand insert (L) is used for the left hand toolholders (L).
Torque*: Recommended clamping torque: N·m

STCFVR-18

Face grooving toolholder with square shank, for Swiss lathes



Designation	CWN	CWX	H	B	LF	LH	HF	WF2	HBKW	HBH	Insert	Torque*
STCFVR1010H18	0.33	3.18	10	10	100	12	10	0	8.5	4.5	TCF18L...	1.2
STCFVR1212F18	0.33	3.18	12	12	85	16	12	0	6.5	2.5	TCF18L...	1.2
STCFVR1212X18	0.33	3.18	12	12	120	16	12	0	6.5	2.5	TCF18L...	1.2
STCFVR1616X18	0.33	3.18	16	16	120	20	16	0	2.5	0	TCF18L...	1.2

Note: The left hand insert (L) is used for the right hand toolholders (R).
Torque*: Recommended clamping torque: N·m

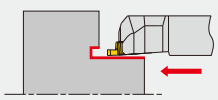
SPARE PARTS

Designation	Clamping screw	Wrench
JS**-STCFL18, STCFVR**18	CSTC-4L100DR	T-1008/5

Reference pages: Inserts → F204, F205, Standard cutting conditions → F212

STCR/L-18

Precision grooving tools with uniquely shaped insert for swiss type machine and general lathes



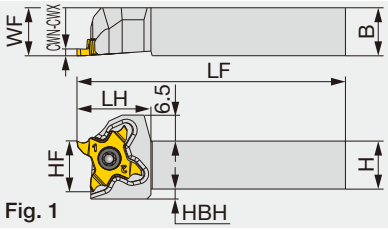


Fig. 1

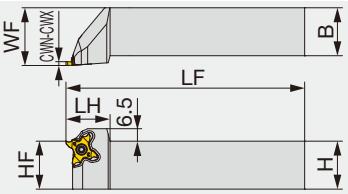
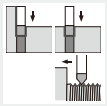


Fig. 2



Right-hand (R) shown.

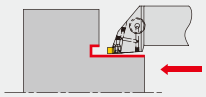
Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2
STCR/L2525Z18	0.33	3.18	25	25	135	23	25	30	-	TC*18...	1.2	2

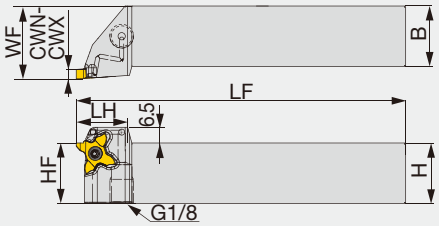
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert is used for the left hand toolholders
*Torque: Recommended clamping torque: N·m

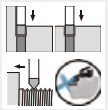
STCR/L-18-CHP

Tube connection

Threading tool - for external theading with high pressure coolant capability







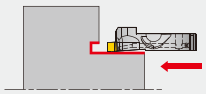
Right-hand (R) shown.

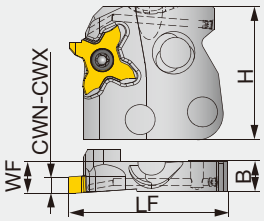
Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L2020X18-CHP	0.33	3.18	20	20	120	23	-	20	25	-	TC*18...	1.2
STCR/L2525Z18-CHP	0.33	3.18	25	25	135	23	-	25	30	-	TC*18...	1.2

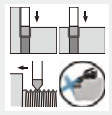
Use the right hand insert (TC*18R...) with the right hand toolholders (STCR...). Use the left hand insert (TC*18L...) with the left hand holder (STCL...).
*Torque: Recommended torque (N·m) for clamping

STCAR/L18-CHP

External grooving and threading adapter, with high pressure coolant capability







Right-hand (R) shown.

Designation	CWN	CWX	WF	H	LF	B	Insert	Torque*
STCAR/L18-CHP	0.33	3.18	7.5	33	38	7.2	TC*18...	1.2

Use the right hand insert (TC*18R...) with the right hand adapter (STCAR...). Use the left hand insert (TC*18L...) with the left hand adapter (STCAL...).
*Torque: Recommended torque (N·m) for clamping

SPARE PARTS





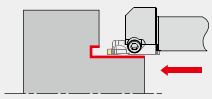
Designation	Clamping screw	Wrench
STCL**18, STCL**18-CHP, STCAL18-CHP	CSTC-4L100DR	T-1008/5
STCR**18, STCR**18-CHP, STCAR18-CHP	CSTC-4L100DL	T-1008/5

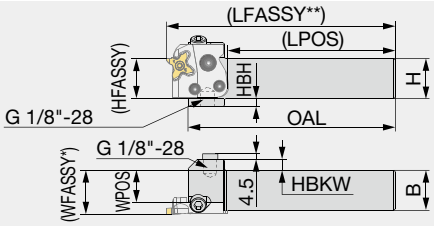
Reference pages: STCR/L-18: Inserts → F204 - F211, Standard cutting conditions → F212
STCR/L-18-CHP: Inserts → F204 - F211, Standard cutting conditions → F212
Parts for coolant hose → F266
STCAR/L18-CHP: Inserts → F204 - F211, Shanks and toolholders → F201 - F203
Standard cutting conditions → F212, Technical Reference → L053

CHSR/L-CHP

Tube connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

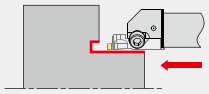
Designation	H	B	OAL	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP	20	20	130	105.5	15.1	12	20	10	STCAR/L18-CHP	6.5
CHSR/L2525-CHP	25	25	130	105.5	20.1	7	25	5	STCAR/L18-CHP	6.5

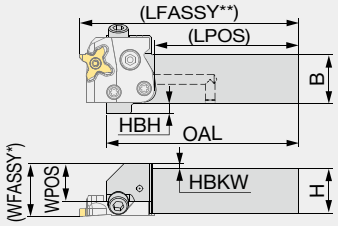
WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

CHSR/L-CHP-MC

Direct connection

Shank for adapter, with high pressure coolant capability





Right hand (R)
with right-hand adapter shown.

Designation	H	B	OAL	LPOS	WPOS	HBKW	HBH	Adapter (Option)	Torque*
CHSR/L2020-CHP-MC	20	20	98	73.5	14	6	10	STCAR/L18-CHP	6.5
CHSR/L2525-CHP-MC	25	25	98	73.5	19	-	5	STCAR/L18-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (WF)
LFASSY** : Shank (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHSR/L**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179
CHSR/L**-CHP-MC	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	-

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

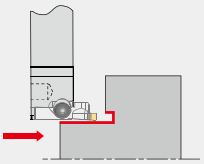
Combination of adapter and shank

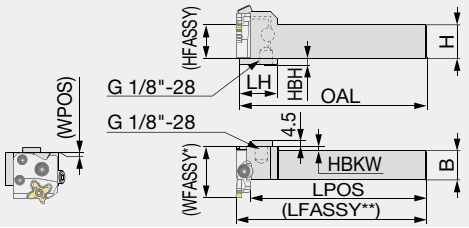
Shank	Adapter	
	STCAR18-CHP	STCAL18-CHP
CHSR**-CHP (-MC)	●	
CHSL**-CHP (-MC)		●
CHFVR**-CHP		●
CHFVL**-CHP	●	

● : Corresponding

Reference pages: Inserts → F204 - F211, Adapters → F200, Standard cutting conditions → F212
Parts for coolant hose → F266, Technical Reference → L053

Shank for perpendicularly-mounted adapter, with high pressure coolant capability





Right hand (R)
with left-hand adapter shown.

Designation	H	B	OAL	LH	LPOS	WPOS	HBKW	HFASSY	HBH	Adapter (Option)	Torque*
CHFVR/L2020-CHP	20	20	140	28	135.1	0.5	5	20	10	STCAL/R18-CHP	6.5
CHFVR/L2525-CHP	25	25	140	28	135.1	0.5	0	25	5	STCAL/R18-CHP	6.5

WFASSY* : Shank (WPOS) + adapter (LF)
LFASSY** : Shank (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring	Plug
CHFVR/L...	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N	PLUGG1/8ISO1179

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Combination of adapter and shank

Shank	Adapter	
	STCAR18-CHP	STCAL18-CHP
CHSR**-CHP (-MC)	●	
CHSL**-CHP (-MC)		●
CHFVR**-CHP		●
CHFVL**-CHP	●	

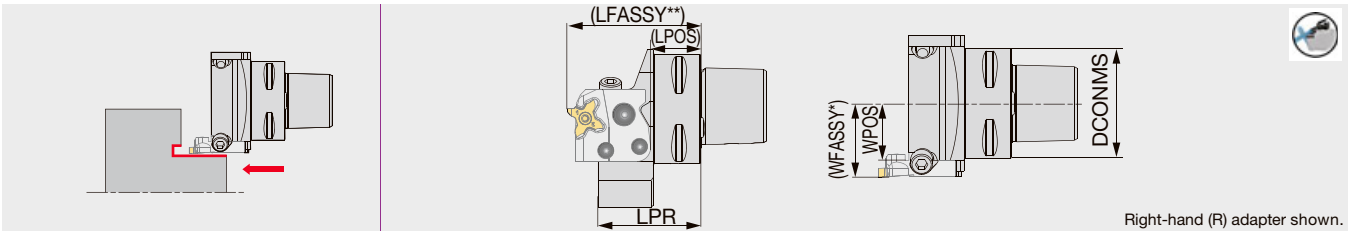
● : Corresponding

Reference pages: Inserts → F204 - F211, Adapters → F200, Standard cutting conditions → F212
Parts for coolant hose → F266, Technical Reference → L053

C*CHSN-CHP

Direct connection

Toolholder with TungCap connection, for adapter, with high pressure coolant capability



Right-hand (R) adapter shown.

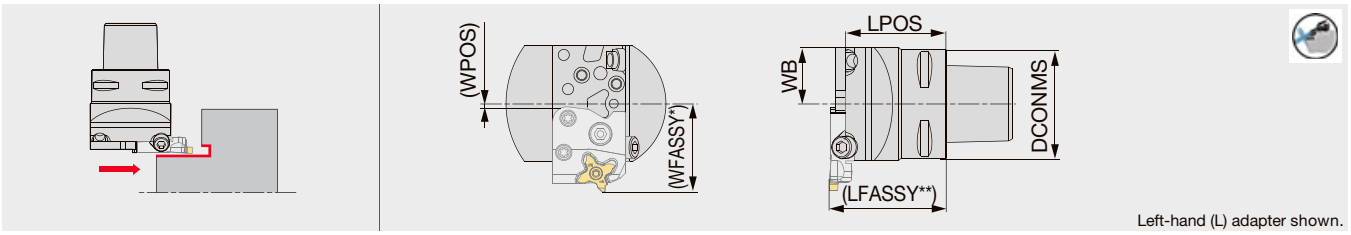
Designation	DCONMS	LPR	LPOS	WPOS	Adapter (Option)	Torque*
C3CHSN19045-CHP	32	45	17.5	18.5	STCAR/L18-CHP	6.5
C4CHSN21047-CHP	40	46.5	21.5	21	STCAR/L18-CHP	6.5
C5CHSN26047-CHP	50	47	22.5	26	STCAR/L18-CHP	6.5
C6CHSN33050-CHP	63	50	24.5	32.5	STCAR/L18-CHP	6.5

WFASSY* : Toolholder (WPOS) + adapter (WF)
LFASSY** : Toolholder (LPOS) + adapter (LF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

C*CHFVN-CHP

Direct connection

Toolholder with TungCap connection, for perpendicularly-mounted adapter, with high pressure coolant capability



Left-hand (L) adapter shown.

Designation	DCONMS	LPOS	WB	WPOS	Adapter (Option)	Torque*
C3CHFVN26040-CHP	32	40	26	1.5	STCAR/L18-CHP	6.5
C4CHFVN26046-CHP	40	46	26	1.5	STCAR/L18-CHP	6.5
C5CHFVN26046-CHP	50	46	26	1.5	STCAR/L18-CHP	6.5
C6CHFVN33046-CHP	63	46	33	8.5	STCAR/L18-CHP	6.5

WFASSY* : Toolholder (WPOS) + adapter (LF)
LFASSY** : Toolholder (LPOS) + adapter (WF)
Depend on the adapter type, the value of LFASSY or WFASSY may change.
Torque*: Recommended clamping torque (N·m)
Applicable for 30 MPa coolant
Please see page L053 for instructions on installing and removing the adapter or the insert.

SPARE PARTS

Designation	Clamping screw 1	Wrench 1	Clamping screw 2	Clamping screw 3	Wrench 2	O-ring
C*CH**N**-CHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW5.0	OR 5X1N

Recommended clamping torque (N·m)

Clamping screw	Torque (N·m)
SR M5-04451	2.5
SR M6X12DIN6912	6.5
SR M6X20-XT	6.5

Reference pages: Inserts → F204 - F211, Adapters → F200, Standard cutting conditions → F212
Technical Reference → L053

Face grooving

TCF18 (4 corners)



F205

First choice for face grooving

Provides light cutting action and excellent surface finish.
Provides superior chip evacuation for face grooving operations.

CW = 0.5 - 2.5 mm
CDX = 3 mm



External grooving

TCS18 (4 corners)



F205, F206

First choice for O.D. grooving

General-purpose pressed-in 3D chipbreaker for smooth chip control

CW = 1 - 3 mm
CDX = 3 mm



TCL18 (4 corners)



F207

For lighter cutting action

Features pressed-in 3D chipbreaker with sharp cutting edge for light cutting action. Provides excellent chip control at low feed rates.

CW = 1.5 - 3 mm
CDX = 3 mm



TCG18 (4 corners)



F208, F209

For better chipping resistance

Features an optimum rake angle and edge preparation for a good balance of light cutting action and fracture resistance.

CW = 1 - 3.18 mm
CDX = 3 mm



TCP18 (4 corners)



F210, F211

For higher surface quality

Featuring a large rake angle, providing light cutting action and better surface finish. TCP-F style insert is also available for sharp cutting edge.

CW = 0.33 - 3 mm
CDX = 3 mm

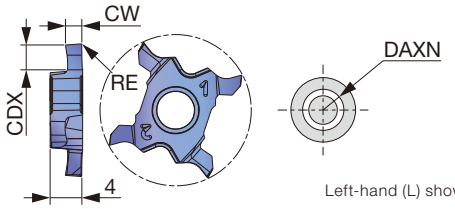


Please see page F*** for the product details.

INSERTS

TCF18L (Face grooving, sharp edge)





Left-hand (L) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

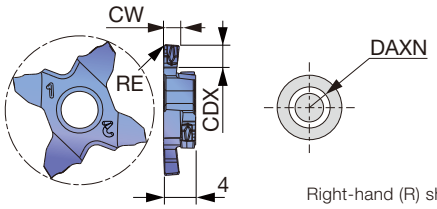
★: First choice

Designation	HAND	CW±0.02	RE	Coated SH725	CDX	DAXN
TCF18L050F-005	L	0.5	0.05	●	1	6
TCF18L100F-005	L	1	0.05	●	2.5	6
TCF18L150F-005	L	1.5	0.05	●	2.5	6
TCF18L200F-005	L	2	0.05	●	3	6
TCF18L250F-005	L	2.5	0.05	●	3	6

5 pieces per package
●: Line up

TCS18R/L (3D chipbreaker, honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX	DAXN
TCS18R100-010	R	1	0.1	●	2	65
TCS18L100-010	L	1	0.1	●	2	65
TCS18R120-010	R	1.2	0.1	●	2	65
TCS18L120-010	L	1.2	0.1	●	2	65
TCS18R125-010	R	1.25	0.1	●	2	65
TCS18L125-010	L	1.25	0.1	●	2	65
TCS18R125-020	R	1.25	0.2	●	2	65
TCS18L125-020	L	1.25	0.2	●	2	65
TCS18R130-020	R	1.3	0.2	●	3	65
TCS18L130-020	L	1.3	0.2	●	3	65
TCS18R140-010	R	1.4	0.1	●	3	65
TCS18L140-010	L	1.4	0.1	●	3	65
TCS18R140-020	R	1.4	0.2	●	3	65
TCS18L140-020	L	1.4	0.2	●	3	65
TCS18R145-010	R	1.45	0.1	●	3	65
TCS18L145-010	L	1.45	0.1	●	3	65

5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

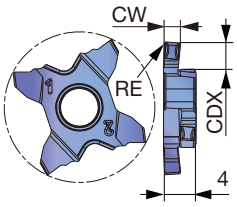
Designation	HAND	CW±0.02	RE	Coated											CDX	DAXN
				AH7025												
TCS18R150-010	R	1.5	0.1	●											3	65
TCS18L150-010	L	1.5	0.1	●											3	65
TCS18R150-020	R	1.5	0.2	●											3	65
TCS18L150-020	L	1.5	0.2	●											3	65
TCS18R160-020	R	1.6	0.2	●											3	65
TCS18L160-020	L	1.6	0.2	●											3	65
TCS18R170-020	R	1.7	0.2	●											3	65
TCS18L170-020	L	1.7	0.2	●											3	65
TCS18R175-010	R	1.75	0.1	●											3	65
TCS18L175-010	L	1.75	0.1	●											3	65
TCS18R175-020	R	1.75	0.2	●											3	65
TCS18L175-020	L	1.75	0.2	●											3	65
TCS18R185-020	R	1.85	0.2	●											3	65
TCS18L185-020	L	1.85	0.2	●											3	65
TCS18R195-020	R	1.95	0.2	●											3	65
TCS18L195-020	L	1.95	0.2	●											3	65
TCS18R200-010	R	2	0.1	●											3	65
TCS18L200-010	L	2	0.1	●											3	65
TCS18R200-020	R	2	0.2	●											3	65
TCS18L200-020	L	2	0.2	●											3	65
TCS18R225-020	R	2.25	0.2	●											3	65
TCS18L225-020	L	2.25	0.2	●											3	65
TCS18R230-020	R	2.3	0.2	●											3	65
TCS18L230-020	L	2.3	0.2	●											3	65
TCS18R250-010	R	2.5	0.1	●											3	65
TCS18L250-010	L	2.5	0.1	●											3	65
TCS18R250-020	R	2.5	0.2	●											3	65
TCS18L250-020	L	2.5	0.2	●											3	65
TCS18R250-030	R	2.5	0.3	●											3	65
TCS18L250-030	L	2.5	0.3	●											3	65
TCS18R265-030	R	2.65	0.3	●											3	65
TCS18L265-030	L	2.65	0.3	●											3	65
TCS18R280-030	R	2.8	0.3	●											3	65
TCS18L280-030	L	2.8	0.3	●											3	65
TCS18R300-010	R	3	0.1	●											3	65
TCS18L300-010	L	3	0.1	●											3	65
TCS18R300-020	R	3	0.2	●											3	65
TCS18L300-020	L	3	0.2	●											3	65
TCS18R300-030	R	3	0.3	●											3	65
TCS18L300-030	L	3	0.3	●											3	65

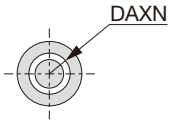
5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

TCL18R/L (3D chipbreaker, honed edge)







Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

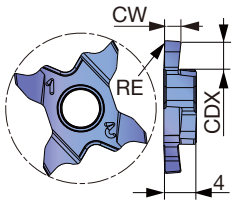
Designation	HAND	CW±0.02	RE	Coated	CDX	DAXN
				AH7025		
TCL18R150-010	R	1.5	0.1	●	3	65
TCL18L150-010	L	1.5	0.1	●	3	65
TCL18R150-020	R	1.5	0.2	●	3	65
TCL18L150-020	L	1.5	0.2	●	3	65
TCL18R175-020	R	1.75	0.2	●	3	65
TCL18L175-020	L	1.75	0.2	●	3	65
TCL18R200-010	R	2	0.1	●	3	65
TCL18L200-010	L	2	0.1	●	3	65
TCL18R200-020	R	2	0.2	●	3	65
TCL18L200-020	L	2	0.2	●	3	65
TCL18R250-030	R	2.5	0.3	●	3	65
TCL18L250-030	L	2.5	0.3	●	3	65
TCL18R300-010	R	3	0.1	●	3	65
TCL18L300-010	L	3	0.1	●	3	65
TCL18R300-020	R	3	0.2	●	3	65
TCL18L300-020	L	3	0.2	●	3	65
TCL18R300-030	R	3	0.3	●	3	65
TCL18L300-030	L	3	0.3	●	3	65

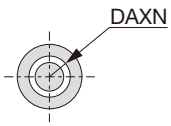
5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

TCG18R/L (honed edge)







Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated	CDX	DAXN
				AH7025		
TCG18R100-010	R	1	0.1	●	2	65
TCG18L100-010	L	1	0.1	●	2	65
TCG18R120-010	R	1.2	0.1	●	2	65
TCG18L120-010	L	1.2	0.1	●	2	65
TCG18R125-010	R	1.25	0.1	●	2	65
TCG18L125-010	L	1.25	0.1	●	2	65
TCG18R125-020	R	1.25	0.2	●	2	65
TCG18L125-020	L	1.25	0.2	●	2	65
TCG18R130-020	R	1.3	0.2	●	2	65
TCG18L130-020	L	1.3	0.2	●	2	65
TCG18R140-010	R	1.4	0.1	●	3	65
TCG18L140-010	L	1.4	0.1	●	3	65
TCG18R140-020	R	1.4	0.2	●	3	65
TCG18L140-020	L	1.4	0.2	●	3	65
TCG18R145-010	R	1.45	0.1	●	3	65
TCG18L145-010	L	1.45	0.1	●	3	65
TCG18R145-020	R	1.45	0.2	●	3	65
TCG18L145-020	L	1.45	0.2	●	3	65
TCG18R150-010	R	1.5	0.1	●	3	65
TCG18L150-010	L	1.5	0.1	●	3	65
TCG18R150-020	R	1.5	0.2	●	3	65
TCG18L150-020	L	1.5	0.2	●	3	65
TCG18R160-020	R	1.6	0.2	●	3	65
TCG18L160-020	L	1.6	0.2	●	3	65
TCG18R170-020	R	1.7	0.2	●	3	65
TCG18L170-020	L	1.7	0.2	●	3	65
TCG18R175-010	R	1.75	0.1	●	3	65
TCG18L175-010	L	1.75	0.1	●	3	65
TCG18R175-020	R	1.75	0.2	●	3	65
TCG18L175-020	L	1.75	0.2	●	3	65
TCG18R185-020	R	1.85	0.2	●	3	65
TCG18L185-020	L	1.85	0.2	●	3	65
TCG18R195-020	R	1.95	0.2	●	3	65
TCG18L195-020	L	1.95	0.2	●	3	65
TCG18R200-010	R	2	0.1	●	3	65
TCG18L200-010	L	2	0.1	●	3	65
TCG18R200-020	R	2	0.2	●	3	65
TCG18L200-020	L	2	0.2	●	3	65
TCG18R225-020	R	2.25	0.2	●	3	65
TCG18L225-020	L	2.25	0.2	●	3	65
TCG18R230-020	R	2.3	0.2	●	3	65
TCG18L230-020	L	2.3	0.2	●	3	65
TCG18R250-010	R	2.5	0.1	●	3	65
TCG18L250-010	L	2.5	0.1	●	3	65

5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

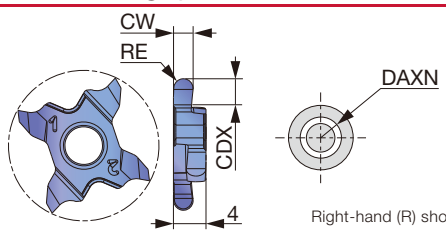
★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX	DAXN
TCG18R250-020	R	2.5	0.2	●	3	65
TCG18L250-020	L	2.5	0.2	●	3	65
TCG18R250-030	R	2.5	0.3	●	3	65
TCG18L250-030	L	2.5	0.3	●	3	65
TCG18R265-030	R	2.65	0.3	●	3	65
TCG18L265-030	L	2.65	0.3	●	3	65
TCG18R280-030	R	2.8	0.3	●	3	65
TCG18L280-030	L	2.8	0.3	●	3	65
TCG18R300-010	R	3	0.1	●	3	65
TCG18L300-010	L	3	0.1	●	3	65
TCG18R300-020	R	3	0.2	●	3	65
TCG18L300-020	L	3	0.2	●	3	65
TCG18R300-030	R	3	0.3	●	3	65
TCG18L300-030	L	3	0.3	●	3	65

5 pieces per package
● : Line up

TCG18R/L (Full R, honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

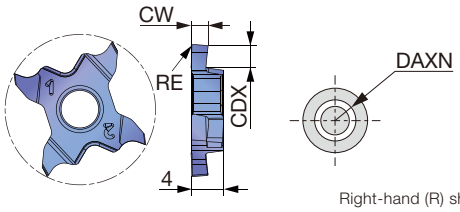
Designation	HAND	CW±0.02	RE	Coated AH7025	CDX	DAXN
TCG18R100-050	R	1	0.5	●	2	65
TCG18L100-050	L	1	0.5	●	2	65
TCG18R158-079	R	1.58	0.79	●	3	65
TCG18L158-079	L	1.58	0.79	●	3	65
TCG18R200-100	R	2	1	●	3	65
TCG18L200-100	L	2	1	●	3	65
TCG18R239-120	R	2.39	1.2	●	3	65
TCG18L239-120	L	2.39	1.2	●	3	65
TCG18R300-150	R	3	1.5	●	3	65
TCG18L300-150	L	3	1.5	●	3	65
TCG18R318-159	R	3.18	1.59	●	3	65
TCG18L318-159	L	3.18	1.59	●	3	65

5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

TCP18R/L (lightly honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

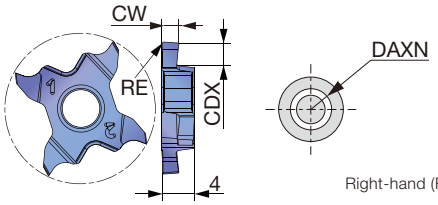
Designation	HAND	CW±0.02	RE	Coated										CDX	DAXN
				AH725											
TCP18R033-005	R	0.33	0.05	●										0.8	65
TCP18L033-005	L	0.33	0.05	●										0.8	65
TCP18R043-005	R	0.43	0.05	●										1.2	65
TCP18L043-005	L	0.43	0.05	●										1.2	65
TCP18R050-005	R	0.5	0.05	●										1.2	65
TCP18L050-005	L	0.5	0.05	●										1.2	65
TCP18R075-005	R	0.75	0.05	●										2	65
TCP18L075-005	L	0.75	0.05	●										2	65
TCP18R095-005	R	0.95	0.05	●										2	65
TCP18L095-005	L	0.95	0.05	●										2	65
TCP18R100-010	R	1	0.1	●										2	65
TCP18L100-010	L	1	0.1	●										2	65
TCP18R120-010	R	1.2	0.1	●										2	65
TCP18L120-010	L	1.2	0.1	●										2	65
TCP18R125-010	R	1.25	0.1	●										2	65
TCP18L125-010	L	1.25	0.1	●										2	65
TCP18R140-010-35	R	1.4	0.1	●										3	65
TCP18L140-010-35	L	1.4	0.1	●										3	65
TCP18R145-010	R	1.45	0.1	●										2	65
TCP18L145-010	L	1.45	0.1	●										2	65
TCP18R145-010-35	R	1.45	0.1	●										3	65
TCP18L145-010-35	L	1.45	0.1	●										3	65
TCP18R150-010	R	1.5	0.1	●										2	65
TCP18L150-010	L	1.5	0.1	●										2	65
TCP18R150-010-35	R	1.5	0.1	●										3	65
TCP18L150-010-35	L	1.5	0.1	●										3	65
TCP18R175-010	R	1.75	0.1	●										2	65
TCP18L175-010	L	1.75	0.1	●										2	65
TCP18R175-010-35	R	1.75	0.1	●										3	65
TCP18L175-010-35	L	1.75	0.1	●										3	65
TCP18R200-010	R	2	0.1	●										2.5	65
TCP18L200-010	L	2	0.1	●										2.5	65
TCP18R200-010-35	R	2	0.1	●										3	65
TCP18L200-010-35	L	2	0.1	●										3	65
TCP18R250-010	R	2.5	0.1	●										2.5	65
TCP18L250-010	L	2.5	0.1	●										2.5	65
TCP18R250-010-35	R	2.5	0.1	●										3	65
TCP18L250-010-35	L	2.5	0.1	●										3	65
TCP18R300-010	R	3	0.1	●										2.5	65
TCP18L300-010	L	3	0.1	●										2.5	65
TCP18R300-010-35	R	3	0.1	●										3	65
TCP18L300-010-35	L	3	0.1	●										3	65

5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

TCP18R/L-F (sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated	CDX	DAXN
				SH725		
TCP18R033F-005	R	0.33	0.05	●	0.8	65
TCP18L033F-005	L	0.33	0.05	●	0.8	65
TCP18R043F-005	R	0.43	0.05	●	1.2	65
TCP18L043F-005	L	0.43	0.05	●	1.2	65
TCP18R050F-005	R	0.5	0.05	●	1.2	65
TCP18L050F-005	L	0.5	0.05	●	1.2	65
TCP18R075F-005	R	0.75	0.05	●	2	65
TCP18L075F-005	L	0.75	0.05	●	2	65
TCP18R095F-005	R	0.95	0.05	●	2	65
TCP18L095F-005	L	0.95	0.05	●	2	65
TCP18R100F-005	R	1	0.05	●	2	65
TCP18R100F-010	R	1	0.1	●	2	65
TCP18L100F-010	L	1	0.1	●	2	65
TCP18R120F-005	R	1.2	0.05	●	2	65
TCP18R120F-010	R	1.2	0.1	●	2	65
TCP18L120F-010	L	1.2	0.1	●	2	65
TCP18R125F-005	R	1.25	0.05	●	2	65
TCP18R125F-010	R	1.25	0.1	●	2	65
TCP18L125F-010	L	1.25	0.1	●	2	65
TCP18R140F-010-35	R	1.4	0.1	●	3	65
TCP18R145F-005-35	R	1.45	0.05	●	3	65
TCP18R145F-010	R	1.45	0.1	●	2	65
TCP18L145F-010	L	1.45	0.1	●	2	65
TCP18R145F-010-35	R	1.45	0.1	●	3	65
TCP18L145F-010-35	L	1.45	0.1	●	3	65
TCP18R150F-005-35	R	1.5	0.05	●	3	65
TCP18R150F-010	R	1.5	0.1	●	2	65
TCP18L150F-010	L	1.5	0.1	●	2	65
TCP18R150F-010-35	R	1.5	0.1	●	3	65
TCP18L150F-010-35	L	1.5	0.1	●	3	65
TCP18R175F-005-35	R	1.75	0.05	●	3	65
TCP18R175F-010	R	1.75	0.1	●	2	65
TCP18L175F-010	L	1.75	0.1	●	2	65
TCP18R175F-010-35	R	1.75	0.1	●	3	65
TCP18L175F-010-35	L	1.75	0.1	●	3	65
TCP18R200F-005-35	R	2	0.05	●	3	65
TCP18R200F-010	R	2	0.1	●	2.5	65
TCP18L200F-010	L	2	0.1	●	2.5	65
TCP18R200F-010-35	R	2	0.1	●	3	65
TCP18L200F-010-35	L	2	0.1	●	3	65
TCP18R250F-010	R	2.5	0.1	●	2.5	65
TCP18L250F-010	L	2.5	0.1	●	2.5	65
TCP18R250F-010-35	R	2.5	0.1	●	3	65
TCP18L250F-010-35	L	2.5	0.1	●	3	65
TCP18R300F-010	R	3	0.1	●	2.5	65
TCP18L300F-010	L	3	0.1	●	2.5	65
TCP18R300F-010-35	R	3	0.1	●	3	65
TCP18L300F-010-35	L	3	0.1	●	3	65

5 pieces per package
● : Line up

Reference pages: Toolholders → F199 - F203, Standard cutting conditions → F212

STANDARD CUTTING CONDITIONS

TCF18L (Face grooving)

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel S15C, C15E, C15E4, S20C, C20, etc.	SH725	30 - 100	0.01 - 0.04
	Carbon steels, Alloy steel S55C, C55, SCM440, 42CrMoS4, etc.	SH725	30 - 100	0.01 - 0.04
	Prehardened steel NAK80, PX5, etc.	SH725	30 - 100	0.01 - 0.04
M	Stainless steel SUS304, X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH725	30 - 100	0.01 - 0.04
K	Grey cast iron FC250, GG25, 250, FC300, GG30, 300, etc.	SH725	30 - 100	0.01 - 0.04
	Ductile cast iron FCD400, 400-15, FCD600, GGG60, 600-3, etc.	SH725	30 - 100	0.01 - 0.04
S	Titanium alloys Ti-6Al-4V, etc.	SH725	20 - 40	0.01 - 0.04
	Superalloys Inconel718, etc.	SH725	10 - 30	0.01 - 0.04

TCS18R/L, TCL18R/L (3D chipbreaker), TCG18R/L (honed edge), TCG18R/L (Full R)

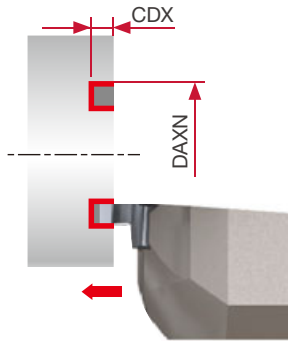
ISO	Workpiece materials	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)		
				TCL18	TCS18	TCG18
P	Low carbon steel S15C, SS400, etc., C15E4, E275A, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Carbon steel, Alloy steel S55C, SCM440, etc., C55, 42CrMo4, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
M	Stainless steel SUS304, SUS316, etc., X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
K	Grey cast iron FC250, FC300, etc., 250, 300, etc., GG25, GG30, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Ductile cast iron FCD400, etc., 400-15S, etc., GGG40, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 60	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14
	Superalloys Inconel718, etc.	AH7025	20 - 40	0.03 - 0.12	0.04 - 0.16	0.04 - 0.14

TCP18R/L (lightly honed edge), TCP18R/L-F (sharp edge)

ISO	Workpiece materials	Priority	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel S15C, SS400, etc., C15E4, E275A, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Carbon steel, Alloy steel S55C, SCM440, etc., C55, 42CrMo4, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
M	Stainless steel SUS304, SUS316, etc., X5CrNi18-9, X5CrNiMo17-12-3, etc.	First choice	SH725	50 - 120	0.03 - 0.1
		Toughness	AH725	50 - 120	0.03 - 0.1
K	Grey cast iron FC250, FC300, etc., 250, 300, etc., GG25, GG30, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
	Ductile cast iron FCD400, etc., 400-15S, etc., GGG40, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 80	0.03 - 0.1
		Toughness	AH725	30 - 80	0.03 - 0.1
	Superalloys Inconel718, etc.	First choice	AH725	20 - 40	0.03 - 0.1

Precautions of processing

Minimum diameter for face grooving

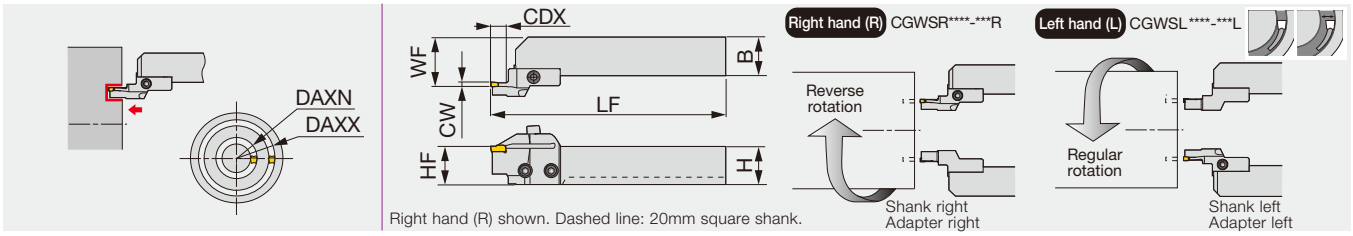


Minimum face diameter DAXN (mm)	Maximum groove depth CDX (mm)
65	3

MY-T SERIES

#S/D##R/L+CGWSR/L

Adapter for face grooving and turning toolholders (CGWSR/L-#S/D, CGWTR/L-#S/D)



Right hand (R) shown. Dashed line: 20mm square shank.

Designation	CW	DAXN	DAXX	CDX	H	B	LF	HF	WF	Insert	Shank	Torque*
30S3040R/L	3	30	40	10	20/25	20/25	152.5	20/25	27/32	G*30, GE30-AL	CGWSR/L...	5
30S4050R/L	3	40	50	10	20/25	20/25	152.5	20/25	27/32	G*30, GE30-AL	CGWSR/L...	5
30S5065R/L	3	50	65	10	20/25	20/25	152.5	20/25	27/32	G*30, GE30-AL	CGWSR/L...	5
30S6590R/L	3	65	90	10	20/25	20/25	152.5	20/25	27/32	G*30, GE30-AL	CGWSR/L...	5
30S90150R/L	3	90	150	10	20/25	20/25	152.5	20/25	27/32	G*30, GE30-AL	CGWSR/L...	5
30S150500R/L	3	150	500	10	20/25	20/25	152.5	20/25	27/32	G*30, GE30-AL	CGWSR/L...	5
40S3545R/L	4	35	45	14	20/25	20/25	152.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40S4555R/L	4	45	55	14	20/25	20/25	152.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40S5580R/L	4	55	80	14	20/25	20/25	152.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40S80140R/L	4	80	140	14	20/25	20/25	152.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40S140500R/L	4	140	500	14	20/25	20/25	152.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40D3545R/L	4	35	45	22	20/25	20/25	160.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40D4555R/L	4	45	55	22	20/25	20/25	160.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40D5580R/L	4	55	80	22	20/25	20/25	160.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40D80140R/L	4	80	140	22	20/25	20/25	160.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
40D140500R/L	4	140	500	22	20/25	20/25	160.5	20/25	27/32	G*40, GE40-AL	CGWSR/L...	5
50S3545R/L	5	35	45	14	20/25	20/25	152.5	20/25	27/32	G*50	CGWSR/L...	5
50S4555R/L	5	45	55	14	20/25	20/25	152.5	20/25	27/32	G*50	CGWSR/L...	5
50S5575R/L	5	55	75	14	20/25	20/25	152.5	20/25	27/32	G*50	CGWSR/L...	5
50S75130R/L	5	75	130	14	20/25	20/25	152.5	20/25	27/32	G*50	CGWSR/L...	5
50S130500R/L	5	130	500	14	20/25	20/25	152.5	20/25	27/32	G*50	CGWSR/L...	5
50D3545R/L	5	35	45	22	20/25	20/25	160.5	20/25	27/32	G*50	CGWSR/L...	5
50D4555R/L	5	45	55	22	20/25	20/25	160.5	20/25	27/32	G*50	CGWSR/L...	5
50D5575R/L	5	55	75	22	20/25	20/25	160.5	20/25	27/32	G*50	CGWSR/L...	5
50D75130R/L	5	75	130	22	20/25	20/25	160.5	20/25	27/32	G*50	CGWSR/L...	5
50D130500R/L	5	130	500	22	20/25	20/25	160.5	20/25	27/32	G*50	CGWSR/L...	5

Toolholders are in stock with the designations of: a set of shank and adapter; a shank; a adapter. Combining the designations of a adapter and a shank will make the designation of a set.
Please check the stock and place an order with the designation of a set or a shank+a adapter.
Use right-hand shanks (CGWSR～) with right-hand adapters (～R); and left-hand shanks (CGWSL～) with left-hand adapters (～L).
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Adapter screw	Wrench
30S..., 40S...	CHHM5-18	CSHB-6	P-4
40D...	CM5X0.8X16	CSHB-6	P-4
50S...	CHHM5-18	CSHB-6	P-4
50D...	CM5X0.8X16	CSHB-6	P-4

Combination of adapter and shank

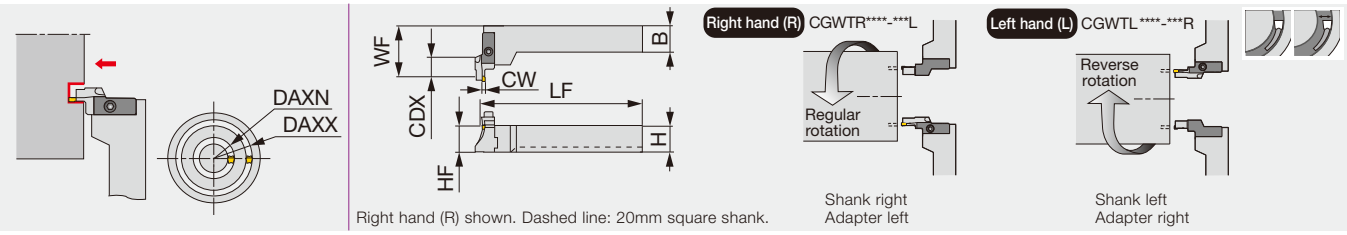
Shank	Adapter	
	S/DR	**S/D**L
CGWSR...	●	
CGWSL...		●
CGWTR...		●
CGWTL...	●	

● : Corresponding

Reference pages: Inserts → F217 - F220, Shanks → F216, Standard cutting conditions → F221

#S/D##R/L+CGWTR/L

Adapter for face grooving and turning toolholders (CGWSR/L-#S/D, CGWTR/L-#S/D)



Right hand (R) shown. Dashed line: 20mm square shank.

Designation	CW	DAXN	DAXX	CDX	H	B	LF	HF	WF	Insert	Shank	Torque*
30S3040R/L	3	30	40	10	20/25	20/25	150	20/25	52.25	G*30, GE30-AL	CGWTL/R...	5
30S4050R/L	3	40	50	10	20/25	20/25	150	20/25	52.25	G*30, GE30-AL	CGWTL/R...	5
30S5065R/L	3	50	65	10	20/25	20/25	150	20/25	52.25	G*30, GE30-AL	CGWTL/R...	5
30S6590R/L	3	65	90	10	20/25	20/25	150	20/25	52.25	G*30, GE30-AL	CGWTL/R...	5
30S90150R/L	3	90	150	10	20/25	20/25	150	20/25	52.25	G*30, GE30-AL	CGWTL/R...	5
30S150500R/L	3	150	500	10	20/25	20/25	150	20/25	52.25	G*30, GE30-AL	CGWTL/R...	5
40S3545R/L	4	35	45	14	20/25	20/25	150	20/25	52.25	G*40, GE40-AL	CGWTL/R...	5
40S4555R/L	4	45	55	14	20/25	20/25	150	20/25	52.25	G*40, GE40-AL	CGWTL/R...	5
40S5580R/L	4	55	80	14	20/25	20/25	150	20/25	52.25	G*40, GE40-AL	CGWTL/R...	5
40S80140R/L	4	80	140	14	20/25	20/25	150	20/25	52.25	G*40, GE40-AL	CGWTL/R...	5
40S140500R/L	4	140	500	14	20/25	20/25	150	20/25	52.25	G*40, GE40-AL	CGWTL/R...	5
40D3545R/L	4	35	45	22	20/25	20/25	150	20/25	60.25	G*40, GE40-AL	CGWTL/R...	5
40D4555R/L	4	45	55	22	20/25	20/25	150	20/25	60.25	G*40, GE40-AL	CGWTL/R...	5
40D5580R/L	4	55	80	22	20/25	20/25	150	20/25	60.25	G*40, GE40-AL	CGWTL/R...	5
40D80140R/L	4	80	140	22	20/25	20/25	150	20/25	60.25	G*40, GE40-AL	CGWTL/R...	5
40D140500R/L	4	140	500	22	20/25	20/25	150	20/25	60.25	G*40, GE40-AL	CGWTL/R...	5
50S3545R/L	5	35	45	14	20/25	20/25	150	20/25	52.25	G*50	CGWTL/R...	5
50S4555R/L	5	45	55	14	20/25	20/25	150	20/25	52.25	G*50	CGWTL/R...	5
50S5575R/L	5	55	75	14	20/25	20/25	150	20/25	52.25	G*50	CGWTL/R...	5
50S75130R/L	5	75	130	14	20/25	20/25	150	20/25	52.25	G*50	CGWTL/R...	5
50S130500R/L	5	130	500	14	20/25	20/25	150	20/25	52.25	G*50	CGWTL/R...	5
50D3545R/L	5	35	45	22	20/25	20/25	150	20/25	60.25	G*50	CGWTL/R...	5
50D4555R/L	5	45	55	22	20/25	20/25	150	20/25	60.25	G*50	CGWTL/R...	5
50D5575R/L	5	55	75	22	20/25	20/25	150	20/25	60.25	G*50	CGWTL/R...	5
50D75130R/L	5	75	130	22	20/25	20/25	150	20/25	60.25	G*50	CGWTL/R...	5
50D130500R/L	5	130	500	22	20/25	20/25	150	20/25	60.25	G*50	CGWTL/R...	5

Toolholders are in stock with the designations of: a set of shank and adapter; a shank; a adapter. Combining the designations of a adapter and a shank will make the designation of a set.
Please check the stock and place an order with the designation of a set or a shank+a adapter.
Use right-hand shanks (CGWTR～) with left-hand adapters (～L); and left-hand shanks (CGWTL～) with right-hand adapters (～R).
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Adapter screw	Wrench
30S..., 40S...	CHHM5-18	CSHB-6	P-4
40D...	CM5X0.8X16	CSHB-6	P-4
50S...	CHHM5-18	CSHB-6	P-4
50D...	CM5X0.8X16	CSHB-6	P-4

Combination of adapter and shank

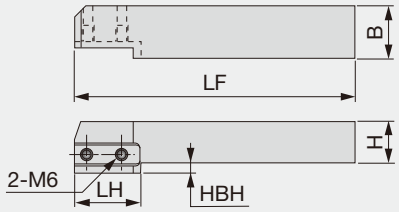
Shank	Adapter	
	S/DR	**S/D**L
CGWSR...	●	
CGWSL...		●
CGWTR...		●
CGWTL...	●	

● : Corresponding

Reference pages: Inserts → F217 - F220, Shanks → F216, Standard cutting conditions → F221

CGWSR/L

Shank for CGWSR/L-WG, -WG-L, -G, -CGD, -FL-G/TP, and -#S/D toolholders

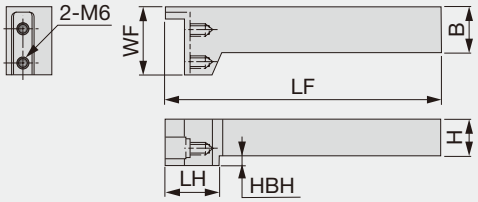


Right hand (R) shown.

Designation	H	B	LF	LH	HBH
CGWSR/L2020	20	20	137	32.5	5
CGWSR/L2525	25	25	137	-	-

CGWTR/L

Shank for CGWSR/L-WG, -WG-L, -G, -CGD, -FL-G/TP, and -#S/D toolholders, for tangentially clamped adapter



Right hand (R) shown.

Designation	H	B	LF	LH	WF	HBH
CGWTR/L2020	20	20	150	30.5	37	5
CGWTR/L2525	25	25	150	-	37	-

SPARE PARTS

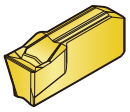


Designation	Adapter screw
CGW*R/L...	CSHB-6

Reference pages: Inserts → F217 - F220, Standard cutting conditions → F221

Face grooving

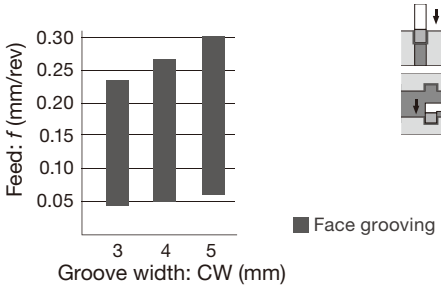
GF

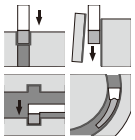


F219

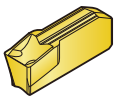
1st choice for face grooving
Low cutting force and good chip control for face grooving

CW = 3 - 5 mm





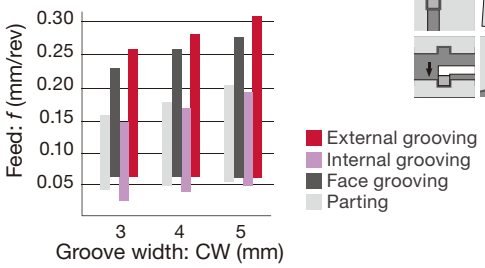
GE

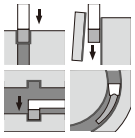


F218

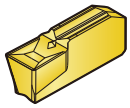
1st choice for external grooving and parting
Excellent chip control for grooving

CW = 3 - 5 mm





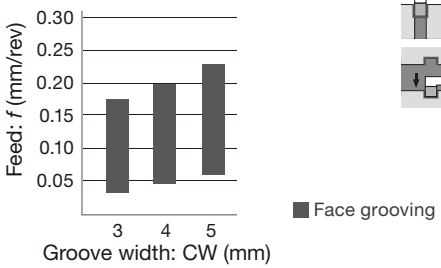
GN

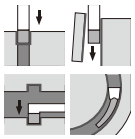


F220

1st choice for internal grooving
Low cutting force and good chip control for internal grooving

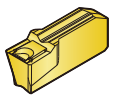
CW = 3 - 5 mm





External grooving and turning

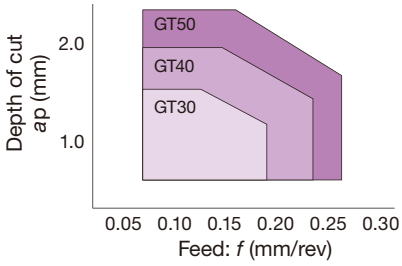
GT

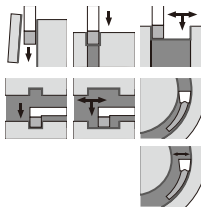


F218

1st choice for turning
Low cutting force and good chip control for traversing

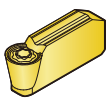
CW = 3 - 5 mm





For profiling

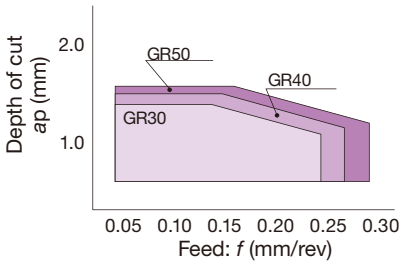
GR

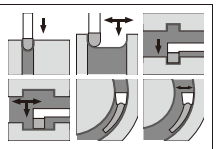


F219

Full radius type
Low cutting force and good chip control for profiling

CW = 3 - 5 mm

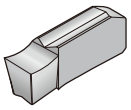




Please see page F*** for the product details.

For aluminium and non-ferrous metal

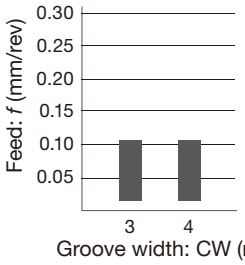
GE-AL

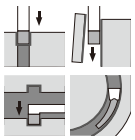


F220

Reduce cutting force and welding due to sharp chipbreaker

CW = 3 - 4 mm



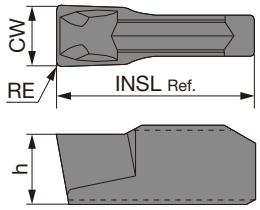


Please see page F*** for the product details.

INSERTS

GE

For external grooving and parting



P	Steel	★	★	★				★					
M	Stainless		★	★									
K	Cast iron		★	☆				☆					
N	Non-ferrous												
S	Superalloys		☆										
H	Hard materials												

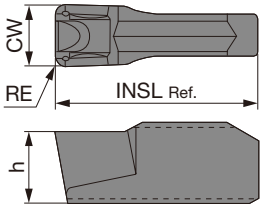
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet			INSL	h
			T9225	AH120	GH730	NS9530				
GE30	3	0.2	●	●	●	●			10	3.5
GE40	4	0.2	●	●	●	●			10	4
GE50	5	0.2	●	●	●	●			12	4.5

● : Line up

GT

For external grooving and turning



P	Steel	★	★	★				★					
M	Stainless		★	★									
K	Cast iron		★	☆				☆					
N	Non-ferrous												
S	Superalloys		☆										
H	Hard materials												

★ : First choice
☆ : Second choice

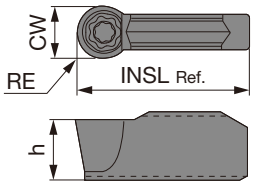
Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet			INSL	h
			T9225	AH120	GH730	NS9530				
GT30	3	0.4		●	●	●			10	3.5
GT40	4	0.4		●	●	●			10	4
GT50	5	0.4	●	●	●	●			12	4.5

● : Line up

Reference pages: Toolholders → F214 - F216, Standard cutting conditions → F221

GR

For profiling (full radius)



P	Steel	★	★	★				★			
M	Stainless		★	★							
K	Cast iron		★	☆				☆			
N	Non-ferrous										
S	Superalloys		☆								
H	Hard materials										

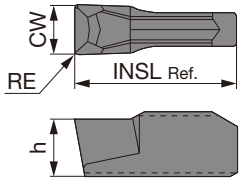
★ : First choice
☆ : Second choice

Designation	CW$^{+0.1}_{0}$	RE	Coated						Cermet						INSL	h
			T9225	AH120	GH730				NS9530							
GR30	3	1.5		●	●				●						10	3.5
GR40	4	2	●	●	●				●						10	4
GR50	5	2.5	●	●	●				●						12	4.5

● : Line up

GF

For face grooving



P	Steel	★			★						
M	Stainless	★									
K	Cast iron	☆			☆						
N	Non-ferrous										
S	Superalloys										
H	Hard materials										

★ : First choice
☆ : Second choice

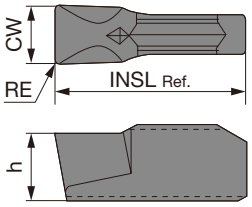
Designation	CW$^{+0.1}_{0}$	RE	Coated			Cermet						INSL	h
			GH730			NS9530							
GF30	3	0.2	●			●						10	3.5
GF40	4	0.2	●			●						10	4
GF50	5	0.2	●			●						12	4.5

● : Line up

Reference pages: Toolholders → F214 - F216, Standard cutting conditions → F221

GN

For internal grooving



P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

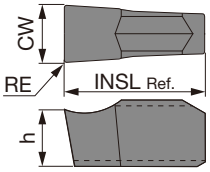
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated GH730	INSL	h
GN30	3	0.2	●	10	3.5
GN40	4	0.2	●	10	4
GN50	5	0.2	●	12	4.5

● : Line up

GE-AL

For aluminium and non-ferrous metal



P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Uncoated KS05F	INSL	h
GE30-AL	3	0.2	●	10	3.5
GE40-AL	4	0.2	●	10	4

● : Line up

Reference pages: Toolholders → F214 - F216, Standard cutting conditions → F221

STANDARD CUTTING CONDITIONS

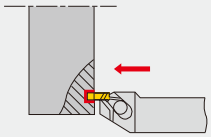
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)
P	Low carbon steel, Alloy steel (~ HB150)	T9225	80 - 300
		NS9530	100 - 200
		GH730, AH120	50 - 180
	Medium carbon steel, Alloy steel (HB150 ~ 250)	T9225	80 - 220
		NS9530	80 - 180
		GH730, AH120	50 - 150
	High carbon steel, Alloy steel (HB250 ~)	T9225	80 - 220
		NS9530	80 - 150
		GH730, AH120	50 - 120
M	Stainless steel	GH730, AH120	50 - 120
K	Grey iron, Ductile cast iron	GH730, AH120	50 - 180
N	Aluminium alloy, Non-ferrous metal	KS05F	200 - 300

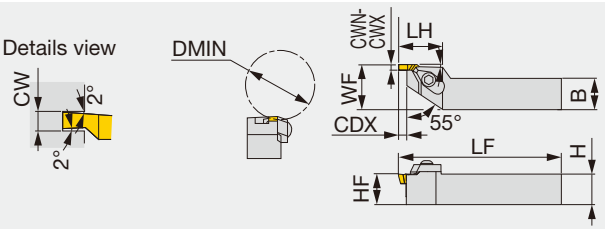
For face grooving

Operation	Feed: *f* (mm/rev) Groove width: CW (mm)		
	3	4	5
Face grooving (GE**)	0.06 - 0.22	0.06 - 0.24	0.07 - 0.26
Face grooving (GF**)	0.04 - 0.25	0.05 ~ 0.26	0.05 - 0.30
Traversing (GT**)	*ap* = 0.5 - 1.5 *f* = 0.06 - 0.2	*ap* = 0.5 - 2 *f* = 0.06 - 0.25	*ap* = 0.5 - 2.5 *f* = 0.06 - 0.27
Traversing (GR**)	*ap* = 0.5 - 1.4 *f* = 0.05 - 0.25	*ap* = 0.5 - 1.5 *f* = 0.05 - 0.26	*ap* = 0.5 - 1.6 *f* = 0.05 - 0.3
Grooving for Aluminium alloys (GE**-AL)	0.03 - 0.1	0.03 - 0.1	-

For diameter compensation values in traversing, F115 page
When vibration occurs in turning, please use the lower limit value in the above table.

Face grooving toolholder





Right hand (R) shown.

Designation	CWN	CWX	DMIN	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
GX-2525R/LF	1	4.5	55	1.5 - 6	25	25	150	35	25	32	XNL/R63...	5

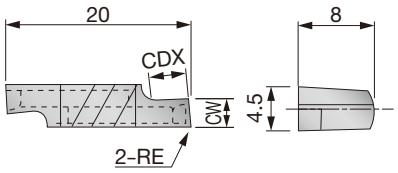
Use right-hand toolholders (GX-...RF) with left-hand inserts (XNL); and left-hand toolholders (GX-...LF) with right-hand inserts (XNR).
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamp set	Clamping screw	Shim	Shim screw	Wrench
GX-2525RF	CP81A	RT-1	SL-3R	BHM4-8	P-4
GX-2525LF	CP81A	RT-1	SL-3L	BHM4-8	P-4

INSERT

XNR/L



Left hand (L) shown.

P	Steel	★ ★
M	Stainless	
K	Cast iron	☆ ☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	Cermet	Uncoated	CDX
				NS9530	TH10	
XNR6310-02	R	1	0.2	●	●	1.5
XNL6310-02	L	1	0.2	●	●	1.5
XNR6315-02	R	1.5	0.2	●	●	2.3
XNL6315-02	L	1.5	0.2	●	●	2.3
XNR6320-02	R	2	0.2	●	●	3
XNL6320-02	L	2	0.2	●	●	3
XNR6325-02	R	2.5	0.2	●	●	3.8
XNL6325-02	L	2.5	0.2	●	●	3.8
XNR6330-02	R	3	0.2	●	●	4.5
XNL6330-02	L	3	0.2	●	●	4.5
XNR6335-02	R	3.5	0.2	●	●	5.3
XNL6335-02	L	3.5	0.2	●	●	5.3
XNR6340-02	R	4	0.2	●	●	6
XNL6340-02	L	4	0.2	●	●	6
XNR6345-02	R	4.5	0.2	●	●	6
XNL6345-02	L	4.5	0.2	●	●	6

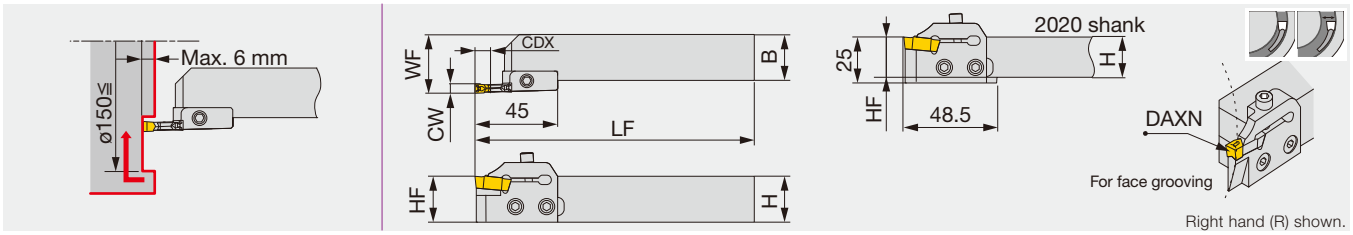
● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)		
				CW < 2 mm	CW = 2 ~ 4 mm	CW > 4 mm
P	Carbon steels	NS9530	80 - 200	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25
K	Cast irons, Light alloys	TH10	60 - 150	0.05 - 0.1	0.08 - 0.2	0.08 - 0.25

CGWSR/L-FLR/L5TP

Face grooving and turning toolholder



Designation	CW	DAXN	CDX	H	B	LF	HF	WF	Insert	Shank	Adapter	Torque*
CGWSR/L2020-FLR/L5TP	5	150	6	20	20	152	20	27	FLEX50R/L	CGWSR/L2020	FLR/L5TP	5
CGWSR/L2525-FLR/L5TP	5	150	6	25	25	152	25	32	FLEX50R/L	CGWSR/L2525	FLR/L5TP	5

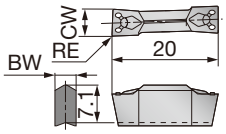
Toolholders are in stock with the designations of: a set of shank and adapter; a shank; a adapter. Combining the designations of a adapter and a shank will make the designation of a set.
Please check the stock and place an order with the designation of a set or a shank+a adapter.
Note: Use right-hand shanks (CGWSR...) with right-hand adapters (FLR5TP); and left-hand shanks (CGWSL...) with left-hand adapters (FLL5TP).
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

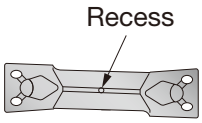
Designation	Clamping screw	Adapter screw	Wrench
CGWSR/L****-FLR/L5TP	CHHM5-18	CSHB-6	P-4

INSERT

FLEX(R/L)



Right hand (R) shown.



To distinguish the insert hands, the V-shape surface (top surface) of a left-hand insert has a recess. (not of a right-hand insert)

		Coated		Cermet	Uncoated
P	Steel	★		★	★
M	Stainless	★			★
K	Cast iron	☆		☆	
N	Non-ferrous				
S	Superalloys				
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	T9225	NS9530	UX30	BW
FLEX30R	R	3	0.4		●		2.2
FLEX30L	L	3	0.4		●		2.2
FLEX40R	R	4	0.4		●		3.1
FLEX40L	L	4	0.4		●		3.1
FLEX50R	R	5	0.4	●	●	●	4
FLEX50L	L	5	0.4	●	●	●	4

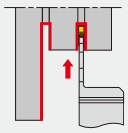
● : Line up

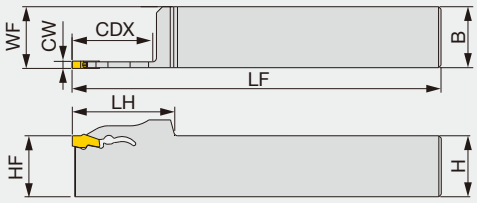
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving	Turning
P	Carbon steels	T9225	80 - 300	0.05 - 0.25	0.1 - 0.3
		NS9530	80 - 200	0.05 - 0.25	0.1 - 0.3
		UX30	60 - 150	0.05 - 0.25	0.1 - 0.3

QSER/L

External toolholders for grooving and parting





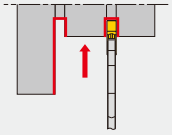


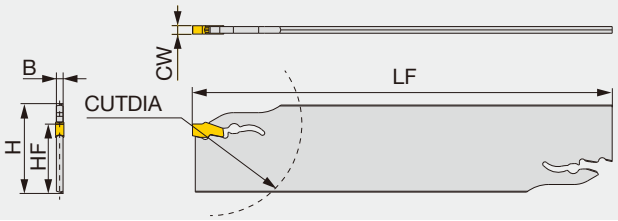
Right hand (R) shown.

Designation	CW	CDX	Seat size	H	B	LF	LH	HF	WF
QSER/L2020-2T26	2	26	2	20	20	125	36	20	20.1
QSER/L2020-2T33	2	33	2	20	20	125	42	20	20.1
QSER/L2525-2T26	2	26	2	25	25	150	36	25	25.1
QSER/L2525-2T33	2	33	2	25	25	150	42	25	25.1
QSER/L2020-3T26	3	26	3	20	20	125	36	20	20.3
QSER/L2020-3T33	3	33	3	20	20	125	42	20	20.3
QSER/L2525-3T26	3	26	3	25	25	150	36	25	25.3
QSER/L2525-3T33	3	33	3	25	25	150	42	25	25.3
QSER/L2020-4T33	4	33	4	20	20	125	42	20	20.4
QSER/L2525-4T33	4	33	4	25	25	150	42	25	25.4
QSER/L2525-5T33	5	33	5	25	25	150	42	25	25.5

QSP

Blades for external deep grooving and parting







Designation	CW	CUTDIA	Seat size	H	B	LF	HF
QSP26-2D	2	52	2	26	1.8	150	21.4
QSP32-2D	2	66	2	32	1.8	150	24.8
QSP26-3D	3	75	3	26	2.4	150	21.4
QSP32-3D	3	120	3	32	2.4	150	24.8
QSP26-4D	4	80	4	26	3.2	150	21.4
QSP32-4D	4	120	4	32	3.2	150	24.9
QSP32-5D	5	120	5	32	4	150	24.9

SPARE PARTS



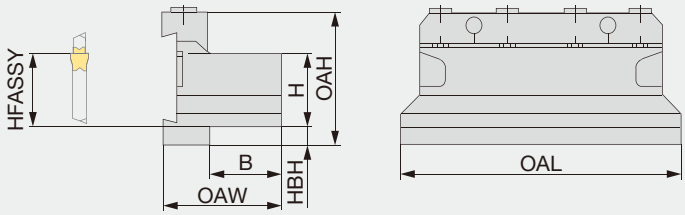
Designation	Wrench
QS...	QL-39

External
Internal
Face
Parting
Others

Reference pages: Inserts → F227, F228, Standard cutting conditions → F228

CTBU

Tool block for QSP blades



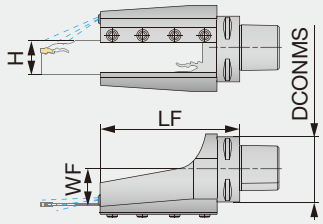
Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU20-26	20	21	86	20	9	43	38	QSP26...
CTBU25-26	25	23	110	25	5	45	43	QSP26...
CTBU20-32	20	19	100	20	13	50	38	QSP32...
CTBU25-32	25	23	110	25	8	50	42	QSP32...
CTBU32-32	32	29	110	32	5	54	48	QSP32...

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
CTBU20-26	CT-86	CM6X30-S	P-5
CTBU25-26	CT-105	CM6X30-S	P-5
CTBU20-32	CT-100	CM6X30-S	P-5
CTBU25-32	CT-110	CM6X30-S	P-5
CTBU32-32	CT-110	CM6X30-S	P-5

C-TBK-R/L

Toolholder with TungCap connection for parting-off blade



Right hand (R) shown.

Designation	DCONMS	WF	LF	H
C6TBK-32R/L	63	32	138	32

Applicable for 3 MPa coolant

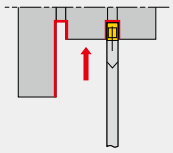
SPARE PARTS

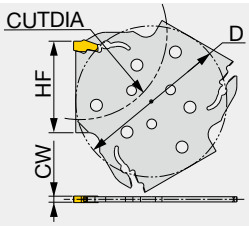
Designation	Clamp	Clamping screw	Wrench	Coolant parts
C6TBK-32R/L	BK32-9WEDG	SRM6X16DIN912-12.9	HW5.0	EZ125

Reference pages: Inserts → F227, F228, Standard cutting conditions → F228

QSG

Parting-off and external grooving blade







Designation	CW	Seat size	CUTDIA	HF	D
QSG52-2T	2	2	52	27	48.3
QSG82-2T	2	2	82	42	69.3
QSG52-3T	3	3	52	27	48.3
QSG82-3T	3	3	82	42	69.3
QSG120-3T	3	3	120	61	88
QSG52-4T	4	4	52	27	69.3
QSG82-4T	4	4	82	42	69.3
QSG120-4T	4	4	120	61	88
QSG120-5T	5	5	120	61	88

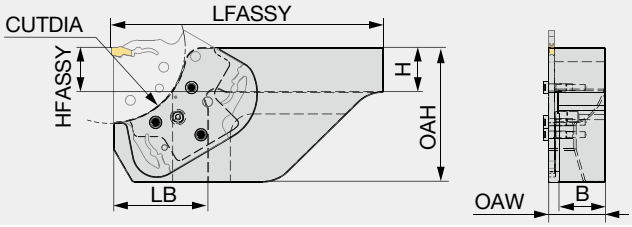
SPARE PARTS



Designation	Wrench
QSG...	QL-39

CHTBR/L

Tool block for QSG blade



Right hand (R) shown.

Designation	CUTDIA	H	B	LFASSY	HFASSY	OAH	OAW	LB
CHTBR/L2020-52	52	20	20.5	100	20	50	26.5	37
CHTBR/L2525-52	52	25	25.5	125	25	50	31.5	37
CHTBR/L2020-82	82	20	20.5	140	20	75	26.5	53
CHTBR/L2525-82	82	25	25.5	150	25	75	31.5	53
CHTBR/L2525-120	120	25	25.5	165	25	100	31.5	67
CHTBR/L3232-120	120	32	32.5	165	32	100	38.5	67

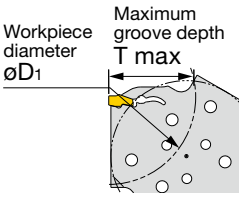
The blade clamping screw heads protrude out for as much as 3.1 mm over the insert cutting edge point.
Maintain the clearance from the chucking device to avoid interference.

SPARE PARTS





Designation	Clamping screw	Grip	Torx bit
CHTBR/L...	SR ISO 14580 M4X10	SW6-SD	BLDT20/S7



Maximum groove depth (T max) as function of workpiece diameter (øD1)

Designation	øD1																		
CHTBR/L****-52	53	54	55	56	58	60	62	65	68	72	78	84	92	102	115	133	159	198	
CHTBR/L****-82	104	108	112	116	121	127	134	142	151	162	176	192	212	237	270	313	375	468	
CHTBR/L****-120	205	214	224	235	247	261	278	297	319	345	376	414	462	522	601	709	865	1112	
T max	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	

Designation	øD1												
CHTBR/L****-82	83	84	84	85	86	87	89	90	92	94	96	98	101
CHTBR/L****-120	144	147	150	153	156	160	164	168	173	178	184	190	197
T max	34	33	32	31	30	29	28	27	26	25	24	23	22

Designation	øD1																
CHTBR/L****-120	121	122	123	124	125	126	127	128	129	130	131	133	134	136	138	140	142
T max	55	52	50	48	47	46	45	44	43	42	41	40	39	38	37	36	35

Reference pages: Inserts → F227, F228, Standard cutting conditions → F228

CHIPBREAKER GUIDE

QGM



First choice for grooving and parting

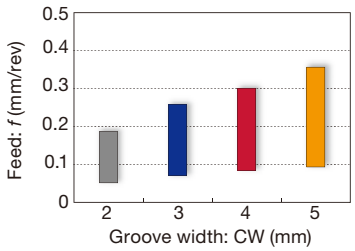
Smooth chip evacuation
Well-designed edge with high strength
CW = 2 - 5 mm

TUNGFEED BLADE

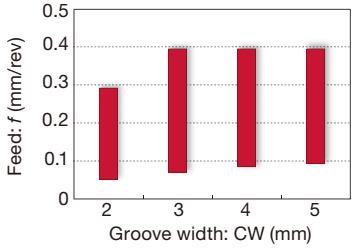
Enables high feed machining when combined with extremely rigid TungFeed-Blade toolholder

CW = 2 - 5 mm
CUTDIA = ø52, ø82, ø120 mm

■ Standard feed



■ Recommended feed when using TungFeed-Blade



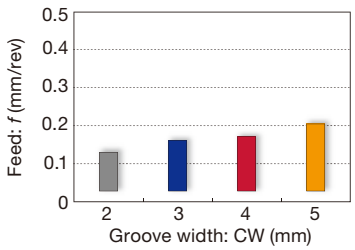
QGS



Lower cutting force and superior sharpness

Uniquely designed edge and chipbreaker
CW = 2 - 5 mm

■ Standard feed

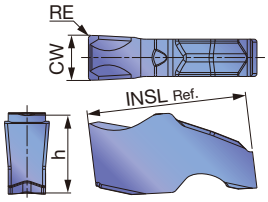


INSERTS

QGM

External deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGM2-020	2	2	0.2	●	11	5.3
QGM3-020	3	3	0.2	●	11	5.3
QGM4-030	4	4	0.3	●	13	7.3
QGM5-030	5	5	0.3	●	13	7.3

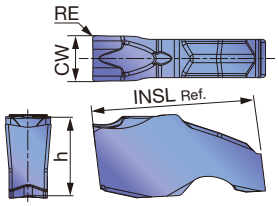
●: Line up

Reference pages: Toolholders → F224 - F226, Standard cutting conditions → F228

QGS

External deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGS2-020	2	2	0.2	●	11	5.3
QGS3-020	3	3	0.2	●	11	5.3
QGS4-030	4	4	0.3	●	13	7.3
QGS5-030	5	5	0.3	●	13	7.3

●: Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)
P	Steels C45, 34CrMo4, etc.	< 300 HB	AH7025	50 - 180
M	Stainless steel X10CrNiS18-9, etc.	< 200 HB	AH7025	50 - 120
K	Gray cast iron GG25, 250, etc.	-	AH7025	50 - 180
	Ductile cast irons GGG45, 450-10S, etc.	-	AH7025	50 - 120
S	Superalloys Inconel718, etc.	< HRC 40	AH7025	20 - 60
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	AH7025	20 - 80

Please see page F227 for feed: *f* (mm/rev).

Reference pages: Toolholders → F224 - F226

External deep grooving and parting blade

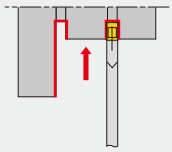


Fig.1

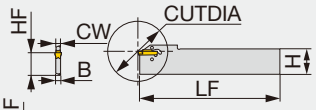


Fig.2

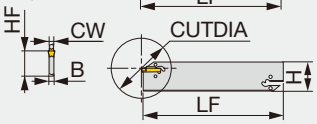
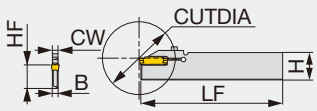
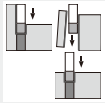


Fig.3





Designation	CW	Seat size	CUTDIA	H	B	LF	HF	Fig.	Torque*
CGP26-1.4S	1.4	1	26	26	1	150	21.4	1	-
CGP32-1.4D	1.4	1	26	32	1	150	24.8	2	-
CGP26-2S	2	2	40	26	1.8	150	21.4	1	-
CGP32-2D	2	2	50	32	1.8	150	24.8	2	-
CGP26-3S	3	3	50	26	2.4	150	21.4	1	-
CGP32-3D	3	3	100	32	2.4	150	24.8	2	-
CGP26-4S	4	4	80	26	3.2	150	21.4	1	-
CGP32-4D	4	4	100	32	3.2	150	24.9	2	-
CGP45-4D	4	4	120	45	3.2	150	38.1	2	-
CGP32-5D	5	5	120	32	4	150	24.9	2	-
CGP32-6D	6	6	120	32	5.2	150	24.9	2	-
CGP32-8S-CL	8	8	80	32	6.2	150	24.9	3	3

When depth is deeper than (insert length - 1.5mm), 1 corner type is recommended.
Wrench (CRW...) is not included. Please order it separately.
*Torque: Recommended clamping torque (N·m)

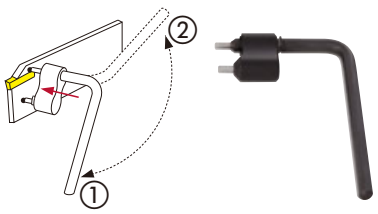
SPARE PARTS

Designation	Clamping screw	Wrench	Wrench (Optional)
CGP**-1.4*	-	-	CRW23
CGP**-2/3/4/5/6	-	-	CRW33
CGP32-8S-CL	CM4X0.7X20-M0-A	P-3	-

Caution

Newly developed clamp

Insert is clamped by the elastic deformation of upper jaw.
Low clamping stress increases the stability and tool life.

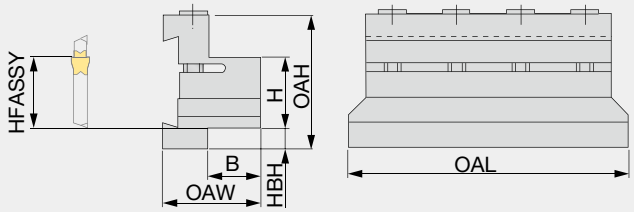


①→②: unclamp
②→①: clamp

Reference pages: Inserts → F236 - F245, Tool blocks → F230, Standard cutting conditions → F246

CTBF

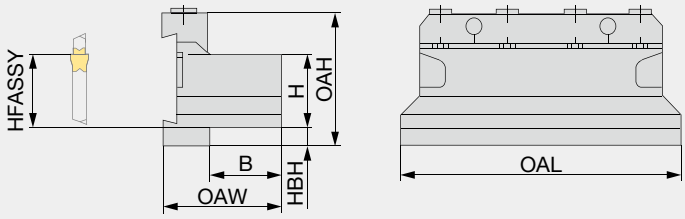
Tool block for CGP blade, mono block



Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBF25-45	25	22	110	25	25	66	40	CGP45...
CTBF32-45	32	28	120	32	18	66	45	CGP45...

CTBU

Tool block for CGP blade



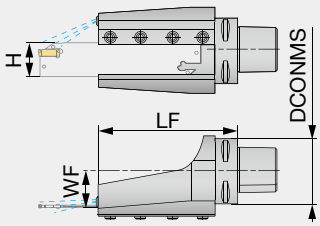
Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU20-26	20	21	86	20	9	43	38	CGP26...
CTBU25-26	25	23	110	25	5	45	43	CGP26...
CTBU20-32	20	19	100	20	13	50	38	CGP32...
CTBU25-32	25	23	110	25	8	50	42	CGP32...
CTBU32-32	32	29	110	32	5	54	48	CGP32...

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
CTBF...	-	CM6X1.0X40-A	P-5
CTBU20-26	CT-86	CM6X30-S	P-5
CTBU25-26	CT-105	CM6X30-S	P-5
CTBU20-32	CT-100	CM6X30-S	P-5
CTBU25-32	CT-110	CM6X30-S	P-5
CTBU32-32	CT-110	CM6X30-S	P-5

C-TBK-R/L

Toolholder with TungCap connection for parting-off blade



Right hand (R) shown.

Designation	DCONMS	WF	LF	H
C6TBK-32R/L	63	32	138	32

Applicable for 3 MPa coolant

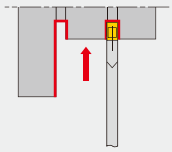
SPARE PARTS

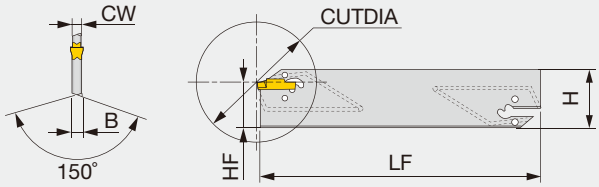
Designation	Clamp	Clamping screw	Wrench	Coolant parts
C6TBK-32R/L	BK32-9WEDG	SRM6X16DIN912-12.9	HW5.0	EZ125

Reference pages: Inserts → F236 - F245, Blades → F229, Standard cutting conditions → F246

CGP32-CHP

External deep grooving and parting blade, with high pressure coolant capability





Designation	CW	Seat size	CUTDIA	H	B	LF	HF
CGP32-2D-CHP	2	2	50	32	1.8	150	24.8
CGP32-3D-CHP	3	3	90	32	2.5	150	24.8
CGP32-4D-CHP	4	4	90	32	3.2	150	24.9
CGP32-5D-CHP	5	5	110	32	4	150	24.9
CGP32-6D-CHP	6	6	110	32	5.2	150	24.9

When depth is deeper than (insert length - 1.5mm), 1 corner type is recommended.
Wrench (CRW...) is not included. Please order it separately.

SPARE PARTS

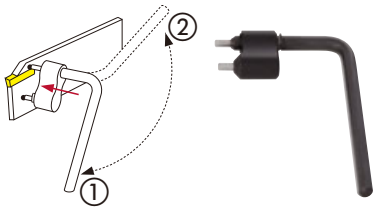



Designation	Sealing screw	Wrench (Optional)
CGP32-*D-CHP	SGC340	CRW33

Caution

Newly developed clamp

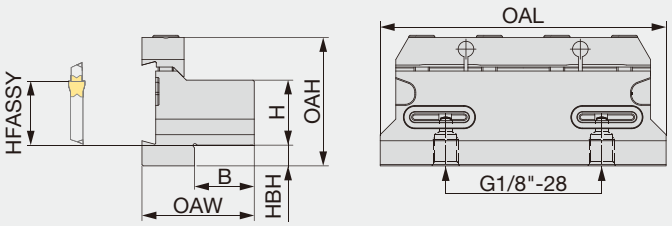
Insert is clamped by the elastic deformation of upper jaw.
Low clamping stress increases the stability and tool life.



①→②: unclamp
②→①: clamp

CTBU-CHP

Tool block for CGP-CHP blade, with high pressure coolant capability



Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU25-32-CHP	25	23	110	25	8	50	43.2	CGP32-*D-CHP

Applicable for 14 MPa coolant

SPARE PARTS



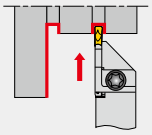


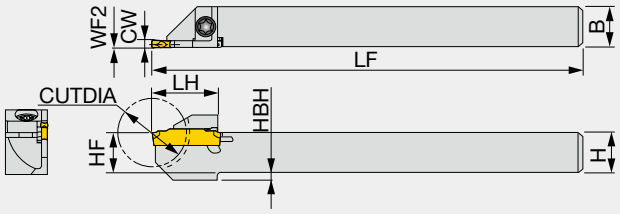

Designation	Clamping screw	Clamp	Wrench	O-ring
CTBU25-32-CHP	SRM6X16DIN912-12.9	CT-110	P-5	OR14X2.5NN

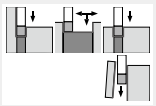
Reference pages: Inserts → F236 - F245, Standard cutting conditions → F246
Parts for coolant hose → F266

JCTER/L

External grooving and parting toolholder, for Swiss lathes







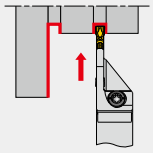
Right hand (R) shown.

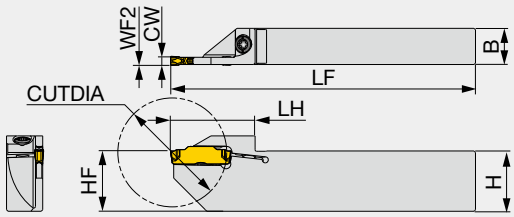
Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JCTER/L1010X1.4T10	1.4	1	20	10	10	120	18	10	0.2/10.2	-	3
JCTER/L1212F1.4T12	1.4	1	24	12	12	85	19.5	12	0.2/12.2	-	3
JCTER/L1212X1.4T12	1.4	1	24	12	12	120	19.5	12	0.2/12.2	-	3
JCTER/L1414-1.4T12	1.4	1	24	14	14	125	19.5	14	0.2/14.2	-	3
JCTER/L1616X1.4T16	1.4	1	32	16	16	120	24	16	0.2/16.2	-	3
JCTER/L1010X2T10	2	2	20	10	10	120	19	10	0.1/10.1	2	3
JCTER/L1212F2T12	2	2	24	12	12	85	19	12	0.1/12.1	2	3
JCTER/L1212X2T12	2	2	24	12	12	120	19	12	0.1/12.1	2	3
JCTER/L1414-2T12	2	2	24	14	14	125	19	14	0.1/14.1	-	3
JCTER/L1616X2T16	2	2	32	16	16	120	24	16	0.1/16.1	-	3
JCTER/L1212F3T12	3	3	24	12	12	85	19	12	0.3/12.3	2	3
JCTER/L1212X3T12	3	3	24	12	12	120	19	12	0.3/12.3	2	3
JCTER/L1616X3T16	3	3	32	16	16	120	24	16	0.3/16.3	-	3
JCTER/L2020H3T16	3	3	32	20	20	100	24	20	0.3/20.3	-	3

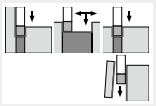
(1) "WF2" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

JCTER/L2012

External grooving and parting toolholder, for Swiss lathes, with 20 mm shank height







Right hand (R) shown.

Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	Torque*
JCTER/L2012H2T18	2	2	36	20	12	100	25	20	0.1/12.1	3
JCTER/L2012H3T21	3	3	42	20	12	100	28	20	0.1/12.1	3

(1) "WF2" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS





Designation	Clamping screw	Wrench
JCTER/L...	CSHB-4-A	T-15F

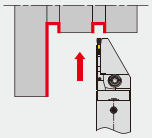
External
Internal
Face
Parting
Others

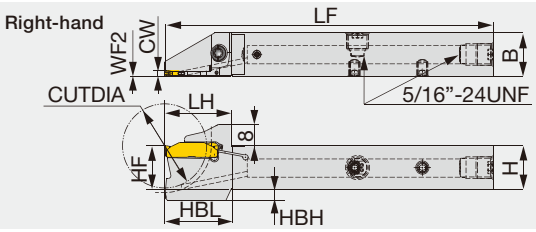
Reference pages: Inserts → F236 - F245, Standard cutting conditions → F246

JCTER/L-CHP

Direct connection

External grooving and parting toolholder, with high pressure coolant capability





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	HBL	Torque*
JCTER/L1212X2T12-CHP	2	2	25	12	12	120	24.7	12	0/12	5	24.7	3
JCTER/L1616X2T12-CHP	2	2	25	16	16	120	24.7	16	0/16	1	24.5	3
JCTER/L1616X2T16-CHP	2	2	32	16	16	120	24.7	16	0/16	4	24.7	3
JCTER/L2020X2T16-CHP	2	2	32	20	20	120	24.7	20	0/20	-	-	3

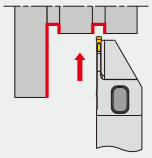
(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Torque*: Recommended clamping torque (N·m)

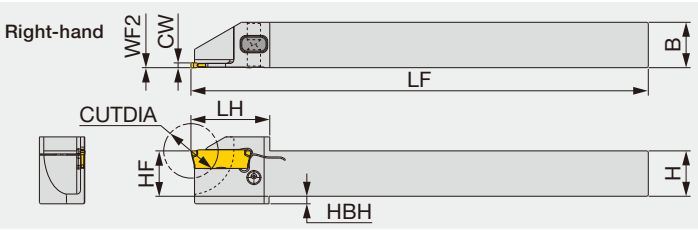
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JCTER/L...	CSHB-4-A	T-15F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

JTTER/L

External grooving and parting toolholder, for Swiss lathes





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JTTER/L1010H1.2D12	1.2	0.9	12	10	10	100	17	10	0/10	-	1.5
JTTER/L1212F1.2D16	1.2	0.9	16	12	12	85	19	12	0/12	-	1.5
JTTER/L1212X1.2D16	1.2	0.9	16	12	12	120	19	12	0/12	-	1.5
JTTER/L1212X1.2D20	1.2	0.9	20	12	12	120	21	12	0/12	2	1.5
JTTER/L1616X1.2D20	1.2	0.9	20	16	16	120	21	16	0/16	-	2

(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Torque*: Recommended clamping torque (N·m)

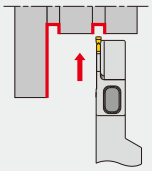
SPARE PARTS

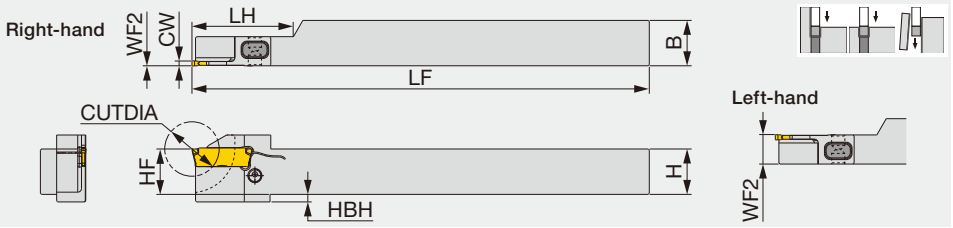
Designation	Clamping screw	Clamping pin	Wrench
JTTER/L1010...	SSM3.5x0.35	PIN-SL-TC	P-2F
JTTER/L1212...	SSM3.5x0.35	PIN-SL-TC	P-2F
JTTER/L1616...	SRM5-24145-RL	PIN-32121	P-2.5F

Reference pages: Inserts → F236 - F245, Standard cutting conditions → F246
Parts for coolant hose → F266

JTTER/L-S

External grooving and parting toolholder, for Swiss lathes (for sub spindle)





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JTTER/L1010H1.2D12-S	1.2	0.9	12	10	10	100	22.8	10	0/7.7	-	1.5
JTTER1212F1.2D16-S (2)	1.2	0.9	16	12	12	85	22.8	12	0	-	1.5
JTTER/L1212X1.2D16-S	1.2	0.9	16	12	12	120	26.8	12	0/7.7	-	1.5
JTTER/L1212X1.2D20-S	1.2	0.9	20	12	12	120	26.8	12	0/7.7	2	1.5
JTTER/L1616X1.2D20-S	1.2	0.9	20	16	16	120	26.8	16	0/7.7	-	1.5

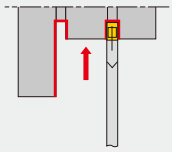
(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(2) No clamping screw from the insert side.
Torque*: Recommended clamping torque (N·m)

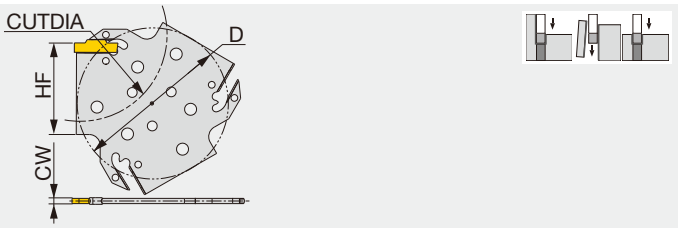
SPARE PARTS

Designation	Clamping screw	Clamping pin	Wrench
JTTER/L**-S	SSM3.5x0.35	PIN-SL-TC	P-2F

CHGP

Parting-off and external grooving blade





Designation	CW	Seat size	CUTDIA	HF	D
CHGP52-2T	2	2	52	27	48.3
CHGP52-3T	3	3	52	27	48.3
CHGP82-3T	3	3	82	42	69.3
CHGP82-4T	4	4	82	42	69.3

When depth is deeper than insert length - 1.5mm, 1 corner type is recommended.

SPARE PARTS

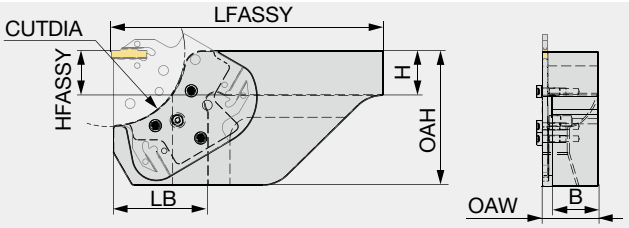
Designation	Wrench (Option)
CHGP...	CRW33

External
Internal
Face
Parting
Others

Reference pages: Inserts → F236 - F245, Standard cutting conditions → F246

CHTBR/L

Tool block for CHGP blade



Right hand (R) shown.

Designation	CUTDIA	H	B	LFASSY	HFASSY	OAH	OAW	LB
CHTBR/L2020-52	52	20	20.5	100	20	50	26.5	37
CHTBR/L2525-52	52	25	25.5	125	25	50	31.5	37
CHTBR/L2020-82	82	20	20.5	140	20	75	26.5	53
CHTBR/L2525-82	82	25	25.5	150	25	75	31.5	53

Note: The blade clamping screw heads protrude out for as much as 3.1 mm over the insert cutting edge point.
Maintain the clearance from the chucking device to avoid interference.

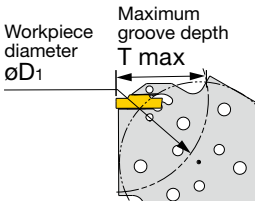
SPARE PARTS

Designation	Clamping screw	Grip	Torx bit
CHTBR/L...	SR ISO 14580 M4X10	SW6-SD	BLDT20/S7

Maximum groove depth (T max) as function of workpiece diameter (øD1)

Designation	øD1																	
CHTBR/L****-52	53	54	55	56	58	60	62	65	68	72	78	84	92	102	115	133	159	198
CHTBR/L****-82	104	108	112	116	121	127	134	142	151	162	176	192	212	237	270	313	375	468
T max	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

Designation	øD1											
CHTBR/L****-82	83	84	85	86	87	89	90	92	94	96	98	101
T max	34	33	31	30	29	28	27	26	25	24	23	22



Reference pages: Inserts → F236 - F245, Standard cutting conditions → F246

External grooving and parting

DGM type (2 corners) SGM type (1 corner)



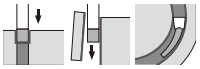
F239, F240

1st choice for grooving and parting

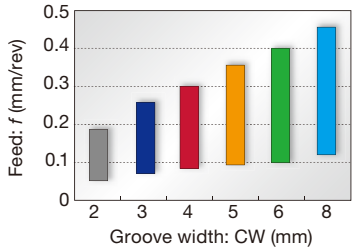
Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 2 - 8 mm

TungFeed-Blade

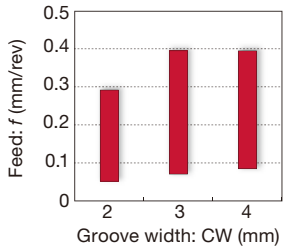
Enables high feed machining when combined with extremely rigid TungFeed-Blade toolholder
CW = 2 - 4 mm
CUTDIA = ø52, ø82 mm



■ Standard feed



■ Recommended feed when using TungFeed-Blade



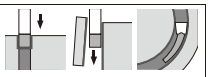
DGS type (2 corners) SGS type (1 corner)



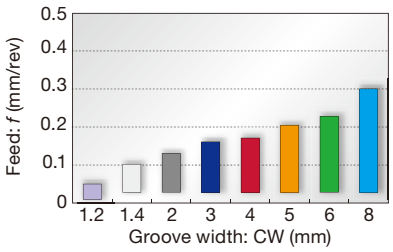
F241, F242

Lower cutting force and superior sharpness

Unique-designed edge and chipbreaker
Handed insert available
CW = 1.2 - 8 mm



■ Standard feed



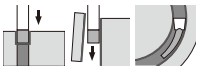
DGG type (2 corners)



F243

For non-ferrous materials and titanium

Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 2 - 6 mm



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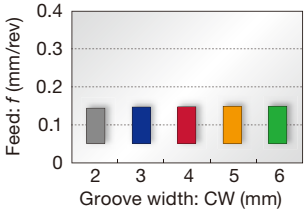


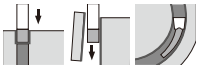
DGL type (2 corners)



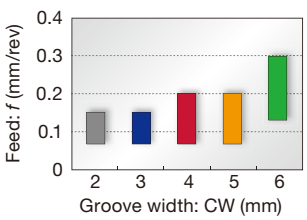
F243

1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often gives difficulties in chip control
CW = 2 - 6 mm



■ Standard feed



External
Internal
Face
Parting
Others

Please see page F*** for the product details.

External grooving and parting

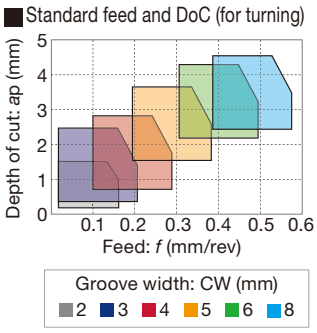
DTM type (2 corners)

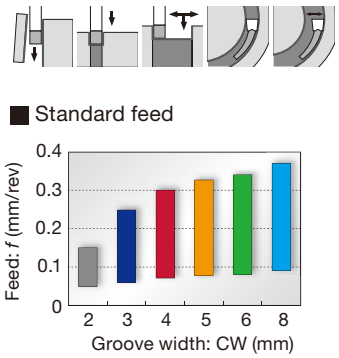


F244

General purpose

1st choice for grooving and turning
Suitable for light to medium cutting
Excellent chip control in machining steel, alloy steel, stainless steel, and heat-resistant alloy
CW = 2 - 8 mm





External grooving, turning and parting

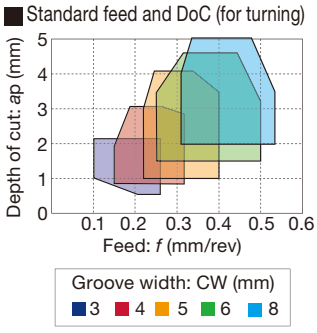
DTE type (2 corners)

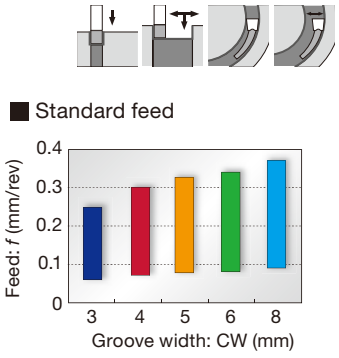


F244, F245

General purpose

Unique chipbreaker makes chips shorter
Molded and ground insert available
CW = 2.65 - 8 mm





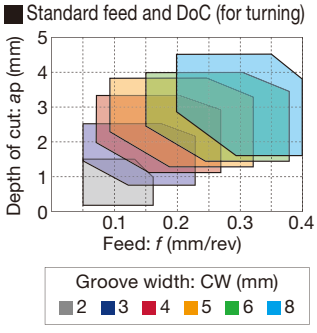
DTX type (2 corners)

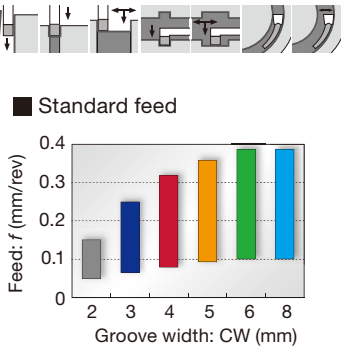


F245

Multi-functional type

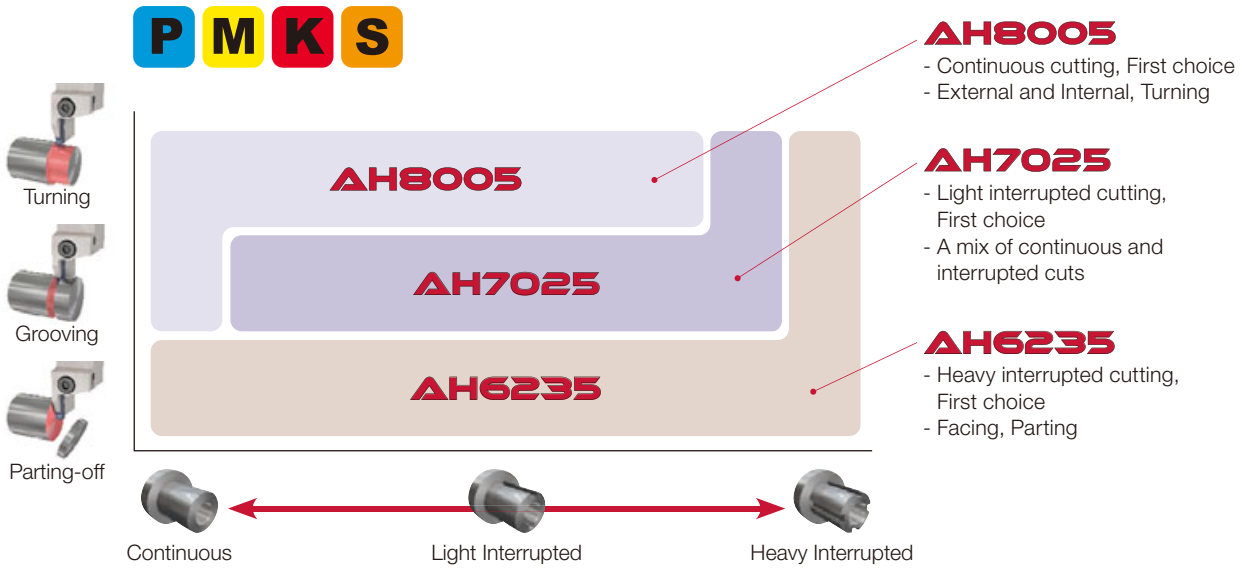
Well balanced sharpness and strength
Multi-functional insert
CW = 2 - 8 mm





Please see page F*** for the product details.

GRADE SELECTION



GRADES

AH8005 P M K S
- First choice for external, internal, and side-turning, continuous cuts

AH7025 P M K S
- First choice for light interrupted cuts or a mix of continuous and interrupted cuts
- New PVD coating with high Al content provides excellent adhesion strength
- Improved wear and chipping resistance

AH6235 P M K
- First choice for heavy interrupted cuts, as well as parting and facing applications

AH725 P M S
- General purpose PVD grade for high fracture resistance

T515 K
- First recommended grade for cast iron
- Exellent wear resistance in high speed machining

T9225 P
- Suitable for steel machining at high speeds
- New CVD coating and substrate deliver an outstanding balance of wear and chipping resistance

NS9530 P
- Advanced cermet for finish cutting of steel
- Innovative grade with incredible fracture and high wear resistance

GH130 P M K
- Recommended for interrupted machining
- TiCNO PVD coating layer with high wear resistance
- High hardness wear resistance

AH905 S
- Remarkable for machining of heat resistant alloys
- Exclusive coating layer improves adhesion strength and wear resistance

KS05F N S
- Recommended for non-ferrous materials and titanium

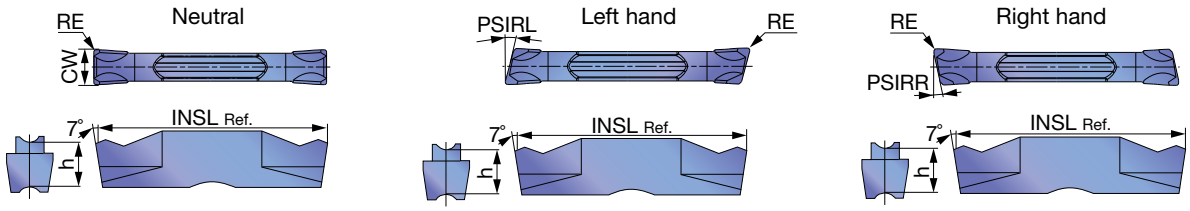
TH10 N
- Recommended for non-ferrous materials

BXA10 H
- Coated CBN grade designed for turning hardened steel parts

BX360 H
- Developed for grooving applications of hardened steel parts

DGM

External grooving and parting



P	Steel	★	★	☆	★		☆	★		★					
M	Stainless		★	☆	★		★	★							
K	Cast iron		★		★	☆	☆	★		☆			☆		
N	Non-ferrous												☆		
S	Superalloys		★	☆	★	★							★		
H	Hard materials														

★ : First choice
☆ : Second choice

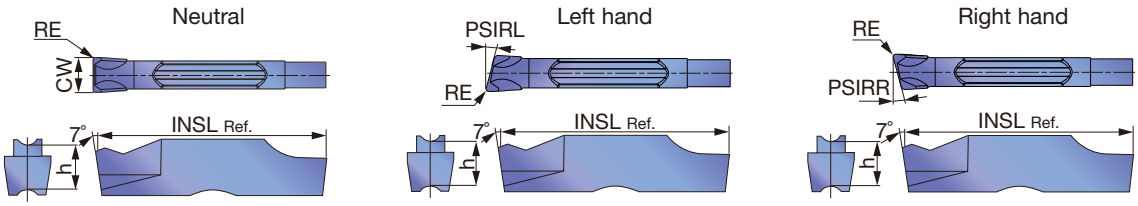
Designation	Seat size	HAND	CW±0.05	RE	Coated							Cermet		Uncoated					
					T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F			INSL	h	PSIRL	PSIRR
DGM2-020	2	N	2	0.2	●	●	●	●		●	●	●		●			20	5	0°	0°
DGM2-020-6R	2	R	2	0.2		●	●			●							20	5	0°	6°
DGM2-020-6L	2	L	2	0.2		●	●			●							20	5	6°	0°
DGM2-020-8R	2	R	2	0.2		●	●			●							20	5	0°	8°
DGM2-020-8L	2	L	2	0.2		●	●			●							20	5	8°	0°
DGM2-020-15R	2	R	2	0.2		●	●			●							20	5	0°	15°
DGM2-020-15L	2	L	2	0.2		●	●			●							20	5	15°	0°
DGM2-002-15R	2	R	2	0.02			●			●							19.35	5	0°	15°
DGM2-002-15L	2	L	2	0.02			●			●							19.35	5	15°	0°
DGM2.39-020	2	N	2.39	0.2		●		●			●						20	5	0°	0°
DGM3-020	3	N	3	0.2	●	●	●	●	●	●	●	●		●			20	5	0°	0°
DGM3-020-6R	3	R	3	0.2		●	●			●							20	5	0°	6°
DGM3-020-6L	3	L	3	0.2		●	●			●							20	5	6°	0°
DGM3-002-6R	3	R	3	0.02			●			●							19.45	5	0°	6°
DGM3-002-6L	3	L	3	0.02			●			●							19.45	5	6°	0°
DGM3-020-15R	3	R	3	0.2		●	●			●							20	5	0°	15°
DGM3-020-15L	3	L	3	0.2		●	●			●							20	5	15°	0°
DGM3.18-020	3	N	3.18	0.2		●		●			●						20	5	0°	0°
DGM4-030	4	N	4	0.3	●	●	●	●	●	●	●	●		●			20	5	0°	0°
DGM4-030-4R	4	R	4	0.3		●	●			●							20	5	0°	4°
DGM4-030-4L	4	L	4	0.3		●	●			●							20	5	4°	0°
DGM4-030-15R	4	R	4	0.3		●	●			●							20	5	0°	15°
DGM4-030-15L	4	L	4	0.3		●	●			●							20	5	15°	0°
DGM4.76-040	5	N	4.76	0.4		●		●			●						25	5.5	0°	0°
DGM5-030	5	N	5	0.3	●	●	●	●	●	●	●	●		●			25	5.5	0°	0°
DGM5-030-4R	5	R	5	0.3		●	●			●							25	5.5	0°	4°
DGM6-030	6	N	6	0.3	●	●	●	●	●	●	●			●			25	5.5	0°	0°
DGM6.35-040	6	N	6.35	0.4		●		●			●						25	5.5	0°	0°
DGM8-040	8	N	8	0.4	●	●	●	●		●	●			●			30	6.7	0°	0°

● : Line up

Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246

SGM

External deep grooving and parting



		AH7025	AH725	AH8005	GH130	AH6235	KS05F
P	Steel	★	☆	★	☆	★	
M	Stainless	★	☆	★	★	★	
K	Cast iron	★		★	☆	★	☆
N	Non-ferrous						☆
S	Superalloys	★	☆	★			★
H	Hard materials						

★ : First choice
☆ : Second choice

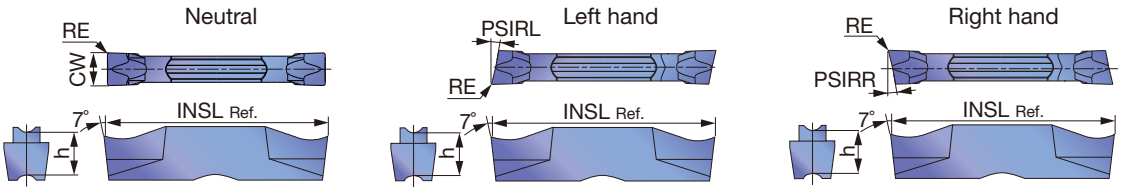
Designation	Seat size	HAND	CW±0.05	RE	Coated					Uncoated				
					AH7025	AH725	AH8005	GH130	AH6235	KS05F	INSL	h	PSIRL	PSIRR
SGM2-020	2	N	2	0.2	●	●	●	●	●	●	20	5	0°	0°
SGM2-020-6R	2	R	2	0.2	●	●		●			20	5	0°	6°
SGM2-020-6L	2	L	2	0.2	●	●		●			20	5	6°	0°
SGM3-020	3	N	3	0.2	●	●	●	●	●	●	20	5	0°	0°
SGM3-020-6R	3	R	3	0.2	●	●		●			20	5	0°	6°
SGM3-020-6L	3	L	3	0.2	●	●		●			20	5	6°	0°
SGM3-020-15R	3	R	3	0.2	●	●		●			20	5	0°	15°
SGM3-020-15L	3	L	3	0.2	●	●		●			20	5	15°	0°
SGM4-030	4	N	4	0.3	●	●	●	●	●	●	20	5	0°	0°
SGM4-030-4R	4	R	4	0.3	●	●		●			20	5	0°	4°
SGM4-030-4L	4	L	4	0.3	●	●		●			20	5	4°	0°
SGM5-030	5	N	5	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGM6-030	6	N	6	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGM8-040	8	N	8	0.4	●		●		●	●	30	6.7	0°	0°

● : Line up

Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246

DGS

External grooving and parting



P	Steel	★	★	☆	★	☆	★		★							
M	Stainless		★	☆	★	★	★									
K	Cast iron		★		★	☆	★		☆			☆				
N	Non-ferrous											☆				
S	Superalloys		★	☆	★							★				
H	Hard materials															

★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated						Cermet		Uncoated		INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530		KS05F					
DGS1.2-003	0.9	N	1.2	0.03			●								16	4.7	0°	0°
DGS1.4-005	1	N	1.4	0.05			●								16	4.3	0°	0°
DGS1.4-010	1	N	1.4	0.1			●								16	4.3	0°	0°
DGS1.4-016	1	N	1.4	0.16		●	●		●						16	4.3	0°	0°
DGS2-005	2	N	2	0.05			●								20	5	0°	0°
DGS2-010	2	N	2	0.1			●								20	5	0°	0°
DGS2-020	2	N	2	0.2	●	●	●	●	●	●	●		●		20	5	0°	0°
DGS2-020-6R	2	R	2	0.2		●	●		●						20	5	0°	6°
DGS2-020-6L	2	L	2	0.2		●	●		●						20	5	6°	0°
DGS2-002-6R	2	R	2	0.02			●		●						19.5	5	0°	6°
DGS2-002-6L	2	L	2	0.02			●		●						19.5	5	6°	0°
DGS2-020-15R	2	R	2	0.2		●	●		●						20	5	0°	15°
DGS2-020-15L	2	L	2	0.2		●	●		●						20	5	15°	0°
DGS2-002-15R	2	R	2	0.02			●		●						19.5	5	0°	15°
DGS2-002-15L	2	L	2	0.02			●		●						19.5	5	15°	0°
DGS2.39-020	2	N	2.39	0.2		●		●		●					20	5	0°	0°
DGS3-020	3	N	3	0.2	●	●	●	●	●	●	●		●		20	5	0°	0°
DGS3-020-6R	3	R	3	0.2		●	●		●						20	5	0°	6°
DGS3-020-6L	3	L	3	0.2		●	●		●						20	5	6°	0°
DGS3-002-6R	3	R	3	0.02			●		●						19.45	5	0°	6°
DGS3-002-6L	3	L	3	0.02			●		●						19.45	5	6°	0°
DGS3-020-15R	3	R	3	0.2		●	●		●						20	5	0°	15°
DGS3-020-15L	3	L	3	0.2		●	●		●						20	5	15°	0°
DGS3-002-15R	3	R	3	0.02			●		●						19.45	5	0°	15°
DGS3-002-15L	3	L	3	0.02			●		●						19.45	5	15°	0°
DGS3.18-020	3	N	3.18	0.2		●		●		●					20	5	0°	0°
DGS4-030	4	N	4	0.3	●	●	●	●	●	●	●		●		20	5	0°	0°
DGS4-030-4R	4	R	4	0.3		●	●		●						20	5	0°	4°
DGS4-030-4L	4	L	4	0.3		●	●		●						20	5	4°	0°
DGS4.76-040	5	N	4.76	0.4		●		●		●					25	5.5	0°	0°
DGS5-030	5	N	5	0.3	●	●	●	●	●	●	●		●		25	5.5	0°	0°
DGS6-030	6	N	6	0.3	●	●	●	●	●	●			●		25	5.5	0°	0°
DGS6.35-040	6	N	6.35	0.4		●		●		●					25	5.5	0°	0°
DGS8-040	8	N	8	0.4		●		●		●			●		30	6.7	0°	0°

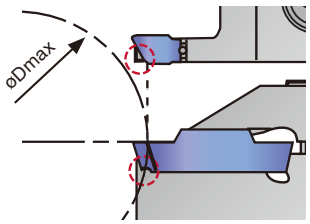
● : Line up

Caution

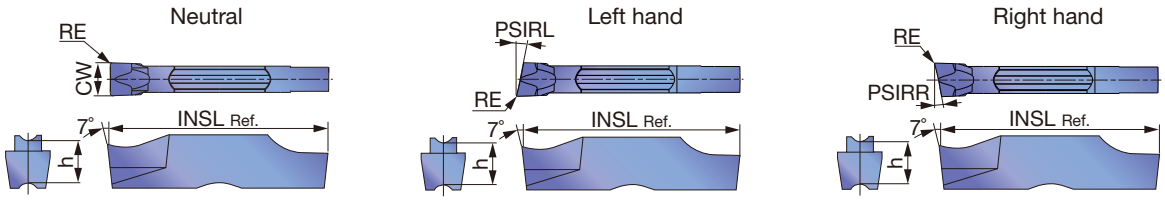
The tool will interfere with the workpiece when grooving larger diameters than øDmax.

Designation	øDmax (mm)
DGM2-002-15R/L	28
DGM3-002-15R/L	29
DGM4-030-15R/L	30
SGM3-020-15R/L	103

Designation	øDmax (mm)
DGS2-002-15R/L	28
DGS3-002-15R/L	29
SGS3-020-15R/L	103
SGS3-002-15R/L	34



Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246



		AH7025	AH725	AH8005	GH130	AH6235	KS05F
P	Steel	★	☆	★	☆	★	
M	Stainless	★	☆	★	★	★	
K	Cast iron	★		★	☆	★	☆
N	Non-ferrous						☆
S	Superalloys	★	☆	★			★
H	Hard materials						

★ : First choice
☆ : Second choice

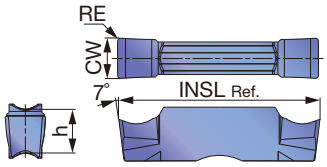
Designation	Seat size	HAND	CW±0.05	RE	Coated AH7025	Coated AH725	Coated AH8005	Coated GH130	Coated AH6235	Uncoated KS05F	INSL	h	PSIRL	PSIRR
SGS2-020	2	N	2	0.2	●	●	●	●	●	●	20	5	0°	0°
SGS2-020-6R	2	R	2	0.2	●	●		●			20	5	0°	6°
SGS2-020-6L	2	L	2	0.2	●	●		●			20	5	6°	0°
SGS2-020-15R	2	R	2	0.2	●	●		●			20	5	0°	15°
SGS2-020-15L	2	L	2	0.2	●	●		●			20	5	15°	0°
SGS3-020	3	N	3	0.2	●	●	●	●	●	●	20	5	0°	0°
SGS3-020-6R	3	R	3	0.2	●	●		●			20	5	0°	6°
SGS3-020-6L	3	L	3	0.2	●	●		●			20	5	6°	0°
SGS3-002-6R	3	R	3	0.02		●		●			19.8	5	0°	6°
SGS3-002-6L	3	L	3	0.02		●		●			19.8	5	6°	0°
SGS3-020-15R	3	R	3	0.2	●	●		●			20	5	0°	15°
SGS3-020-15L	3	L	3	0.2	●	●		●			20	5	15°	0°
SGS3-002-15R	3	R	3	0.02		●		●			19.8	5	0°	15°
SGS3-002-15L	3	L	3	0.02		●		●			19.8	5	15°	0°
SGS4-030	4	N	4	0.3	●	●	●	●	●	●	20	5	0°	0°
SGS5-030	5	N	5	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGS6-030	6	N	6	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGS8-040	8	N	8	0.4	●		●		●		30	6.7	0°	0°

● : Line up

Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246

DGG

External grooving and parting (for high precision)



P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	☆
N	Non-ferrous			★
S	Superalloys	★		☆
H	Hard materials			

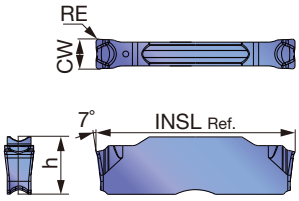
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated	Cermet	Uncoated	INSL	h
				AH7025	NS9530	KS05F		
DGG200-020	2	2	0.2	●	●	●	20	5
DGG300-020	3	3	0.2	●	●	●	20	5
DGG400-040	4	4	0.4	●	●	●	20	5
DGG500-040	5	5	0.4	●	●	●	25	5.5
DGG600-040	6	6	0.4	●	●	●	25	5.5

●: Line up

DGL

External grooving and parting



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

★ : First choice
☆ : Second choice

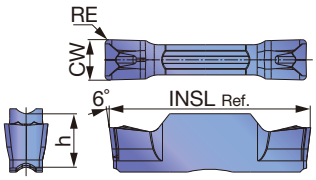
Designation	Seat size	CW±0.05	RE	Coated			INSL	h
				AH7025	AH8005	AH6235		
DGL2-020	2	2	0.2	●	●	●	20	5
DGL3-025	3	3	0.25	●	●	●	20	5
DGL4-030	4	4	0.3	●	●	●	20	5
DGL5-030	5	5	0.3	●	●	●	25	5.5
DGL6-080	6	6	0.8	●	●	●	25	5.5

●: Line up

Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246

DTM

External/face grooving, turning and parting



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

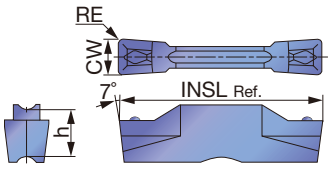
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	Coated AH8005	Coated AH6235	INSL	h
DTM2-020	2	2	0.2	●	●	●	20	5
DTM3-030	3	3	0.3	●	●	●	20	5
DTM4-040	4	4	0.4	●	●	●	20	5
DTM4-080	4	4	0.8	●	●	●	20	5
DTM5-080	5	5	0.8	●	●	●	25	5.5
DTM6-080	6	6	0.8	●	●	●	25	5.5
DTM8-080	8	8	0.8	●	●	●	30	6.7

● : Line up

DTE

External/face grooving, turning and parting (for high precision)



P	Steel	★	★	☆	☆	★
M	Stainless		★	☆	★	
K	Cast iron		★		☆	
N	Non-ferrous					
S	Superalloys		★	☆		
H	Hard materials					

★ : First choice
☆ : Second choice

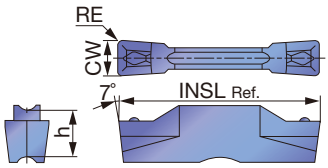
Designation	Seat size	CW±0.02	RE	Coated T9225	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	INSL	h
DTE265-015	3	2.65	0.15	●	●	●	●	●	20	5
DTE300-020	3	3	0.2	●	●	●	●	●	20	5
DTE300-040	3	3	0.4	●	●	●	●	●	20	5
DTE315-015	3	3.15	0.15	●	●	●	●	●	20	5
DTE400-040	4	4	0.4	●	●	●	●	●	20	5
DTE400-080	4	4	0.8	●	●	●	●	●	20	5
DTE415-015	4	4.15	0.15	●	●	●	●	●	20	5
DTE478-055	5	4.78	0.55	●	●	●	●	●	25	5.5
DTE500-040	5	5	0.4	●	●	●	●	●	25	5.5
DTE500-080	5	5	0.8	●	●	●	●	●	25	5.5
DTE515-015	5	5.15	0.15	●	●	●	●		25	5.5
DTE600-080	6	6	0.8	●	●	●	●		25	5.5
DTE600-120	6	6	1.2	●	●	●	●		25	5.5
DTE800-080	8	8	0.8	●	●	●	●		30	6.7
DTE800-120	8	8	1.2	●	●	●	●		30	6.7

●: Line up

Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246

DTE

External/face grooving, turning and parting



P	Steel	★		★	☆	★	☆	★		★			
M	Stainless			★	☆	★	★	★					
K	Cast iron		★	★		★	☆	★					
N	Non-ferrous												
S	Superalloys			★	☆	★							
H	Hard materials												

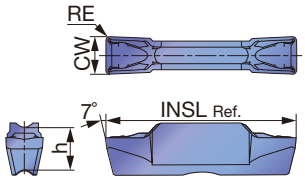
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated							Cermet						INSL	h
				T9225	T515	AH7025	AH725	AH8005	GH130	AH6235	NS9530							
DTE3-020	3	3	0.2			●		●		●							20	5
DTE3-040	3	3	0.4	●	●	●	●	●	●	●	●						20	5
DTE4-040	4	4	0.4	●	●	●	●	●	●	●	●						20	5
DTE4-080	4	4	0.8			●		●		●							20	5
DTE5-040	5	5	0.4		●	●		●		●							25	5.5
DTE5-080	5	5	0.8			●		●		●							25	5.5
DTE6-080	6	6	0.8		●	●		●		●							25	5.5

● : Line up

DTX

External/internal/face grooving, turning and parting



P	Steel	★	★	☆	★	☆	★		★									
M	Stainless		★	☆	★	★	★											
K	Cast iron		★		★	☆	★		☆					☆				
N	Non-ferrous													☆				
S	Superalloys		★	☆	★									★				
H	Hard materials																	

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated						Cermet				Uncoated				INSL	h
				T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530				KS05F					
DTX2-020	2	2	0.2		●		●		●					●				20	5
DTX3-030	3	3	0.3	●	●	●	●	●	●	●				●				20	5
DTX4-040	4	4	0.4	●	●	●	●	●	●	●				●				20	5
DTX5-040	5	5	0.4	●	●	●	●	●	●	●				●				25	5.5
DTX6-080	6	6	0.8		●	●	●	●	●					●				25	5.5
DTX8-080	8	8	0.8		●		●		●					●				30	6.7

● : Line up

Reference pages: Toolholders → F229 - F235, Standard cutting conditions → F246

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Wear resistance	T9225, AH8005	80 - 300
		< 300 HB	Impact resistance	AH6235, GH130	50 - 120
		< 300 HB	Surface quality	NS9530	80 - 220
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Wear resistance	AH8005	50 - 120
		< 200 HB	Impact resistance	AH6235, GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	T515	150 - 700
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	T515	150 - 300
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
		-	First choice	KS05F	100 - 600
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	20 - 60
		< HRC 40	Impact resistance	AH7025, AH725, AH6235	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	20 - 100
		< HRC 40	Impact resistance	AH7025, AH725	20 - 80

Please see page F236, F237 for feed: *f* (mm/rev).

STH

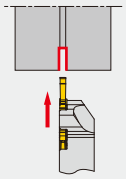
ISO	Grade	CW	Application	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
H	BXA10	3	External turning	100 - 230	0.08 - 0.12	0.4 - 1
			Face turning	100 - 230	0.08 - 0.12	0.4 - 0.8
		5	External turning	100 - 230	0.08 - 0.12	0.5 - 1.5
			Face turning	100 - 230	0.08 - 0.12	0.5 - 0.8

SGN

ISO	Grade	Edge preparation	Workpiece condition	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
H	BX360	No symbol	Continuous	80 - 150	0.03 - 0.08
		-S	Light interrupted	50 - 120	0.03 - 0.08
		-H	Heavy interrupted	40 - 100	0.03 - 0.06

JSXXR/L

Parting-off and grooving toolholders



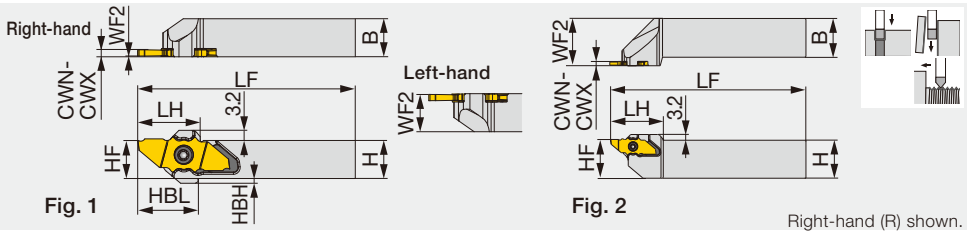


Fig. 1 Fig. 2

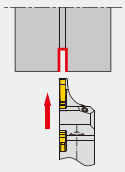
Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBL(1)	HBH	Insert	Torque*	Fig.
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2/9.8	19	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2/11.8	19	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2/11.8	19	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2/15.8	-	-	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2/19.8	-	-	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L2525Z09	0.6	2.5	25	25	135	34	25	30	-	-	JX**06...,12...,16..., 20...	1.2	2

*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20...inserts, and 4 mm shorter for JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/H/X-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes



Direct connection

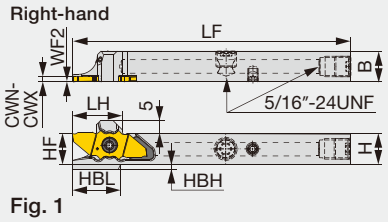


Fig. 1

Tube connection

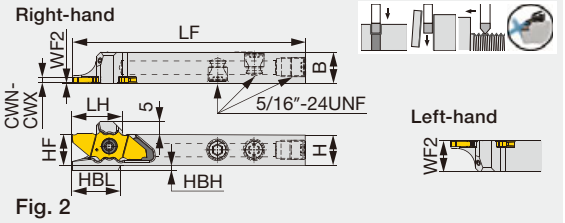


Fig. 2

Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBL(1)	HBH	Insert	Torque*	Fig.
JSXXR/L1012H09-CHP(3)	0.6	2.5	10	12	102	19.2	10	0.2/11.8	18.7	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09-CHP	0.6	2.5	12	12	85	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-CHP(3)	0.6	2.5	12	12	120	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR1616X09-CHP(3),(4)	0.6	2.5	16	16	120	19.4	16	0.2	18.7	2.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-CHP(3)	0.6	2.5	16	16	120	19.4	16	0.2/15.8	18.7	-	JX**06...,12...,16..., 20...	1.2	1

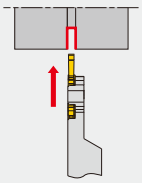
*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20... inserts, and 4 mm shorter for JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

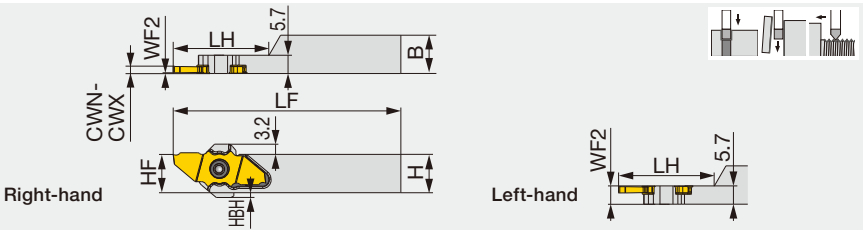
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**09	CSTC-4L100DL	T-1008/5	-	-	-	-
JSXXL**09	CSTC-4L100DR	T-1008/5	-	-	-	-
JSXXR**F**-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F**-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X**-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X**-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: Inserts → F249, F250, Standard cutting conditions → F251
Parts for coolant hose → F266

Parting-off toolholders, for swiss lathes (for sub spindle)





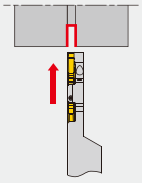
Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBH	Insert	Torque*
JSXXR/L1010X09-S	0.6	2.5	10	10	120	26	10	0.2/5.5	3	JX**06...,12...,16...(3)	1.2
JSXXR/L1212F09-S	0.6	2.5	12	12	85	26	12	0.2/5.5	1.5	JX**06...,12...,16...(3)	1.2
JSXXR/L1212X09-S	0.6	2.5	12	12	120	30	12	0.2/5.5	1.5	JX**06...,12...,16...(3)	1.2
JSXXR/L1616X09-S	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2

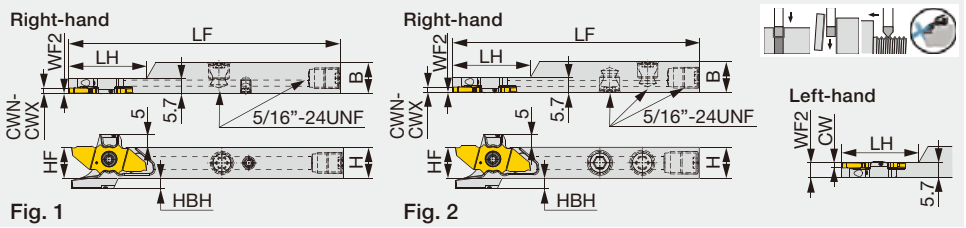
*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(3) JX**20... insert will not fit.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/X-S-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes (for sub spindle)

Direct connection | Tube connection





Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBH	Insert	Torque*	Fig.
JSXXR1212F09-S-CHP(4)	0.6	2.5	12	12	85	26	12	0.2	4	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212F09B-S-CHP	0.6	2.5	12	12	85	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-S-CHP(3),(4)	0.6	2.5	12	12	120	30	12	0.2/5.5	4	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212X09B-S-CHP(3)	0.6	2.5	12	12	120	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR1616X09-S-CHP(3),(4)	0.6	2.5	16	16	120	30	16	0.2	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-S-CHP(3)	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2	1

*Torque: Recommended clamping torque (N·m)
(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.
(2) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS





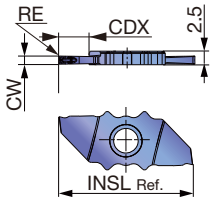



Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**-S	CSTC-4L055DL	T-1008/5	-	-	-	-
JSXXL**-S	CSTC-4L055DR	T-1008/5	-	-	-	-
JSXXR**F**-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F**-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**X**-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**X**-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: Inserts → F249, F250, Standard cutting conditions → F251
Parts for coolant hose → F266

JXPS**R/L-F (with 3D chipbreaker, sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.025	RE	Coated	CUTDIA	CDX*	INSL
				SH725			
JXPS06R06F	R	0.6	0.05	●	6	3.5	21
JXPS06L06F	L	0.6	0.05	●	6	3.5	21
JXPS12R08F	R	0.8	0.05	●	12	6.5	25
JXPS12L08F	L	0.8	0.05	●	12	6.5	25
JXPS12R10F	R	1	0.05	●	12	6.5	25
JXPS12L10F	L	1	0.05	●	12	6.5	25
JXPS12R15F	R	1.5	0.05	●	12	6.5	25
JXPS12L15F	L	1.5	0.05	●	12	6.5	25
JXPS16R15F	R	1.5	0.05	●	16	8.5	29
JXPS16L15F	L	1.5	0.05	●	16	8.5	29
JXPS20R20F	R	2	0.05	●	20	10.5	33
JXPS20L20F	L	2	0.05	●	20	10.5	33

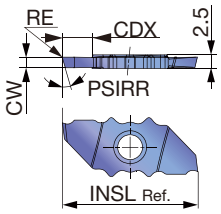
*Max grooving depth (CDX) varies depending on workpiece diameters.

● : Line up

Reference pages: Toolholders → F247, F248, Standard cutting conditions → F251

JXPG**R/L-F (Sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.025	RE	Coated	CUTDIA	CDX*	INSL	PSIRR
				SH725				
JXPG06R10F	R	1	0.05	●	6	3.5	21	0°
JXPG06L10F	L	1	0.05	●	6	3.5	21	0°
JXPG06R15F	R	1.5	0.05	●	6	3.5	21	0°
JXPG06L15F	L	1.5	0.05	●	6	3.5	21	0°
JXPG06R10F-15	R	1	0.05	●	6	3.5	21	15°
JXPG06L10F-15	L	1	0.05	●	6	3.5	21	15°
JXPG06R15F-15	R	1.5	0.05	●	6	3.5	21	15°
JXPG06L15F-15	L	1.5	0.05	●	6	3.5	21	15°
JXPG12R15F	R	1.5	0.05	●	12	6.5	25	0°
JXPG12L15F	L	1.5	0.05	●	12	6.5	25	0°
JXPG12R20F	R	2	0.05	●	12	6.5	25	0°
JXPG12L20F	L	2	0.05	●	12	6.5	25	0°
JXPG12R15F-15	R	1.5	0.05	●	12	6.5	25	15°
JXPG12L15F-15	L	1.5	0.05	●	12	6.5	25	15°
JXPG12R20F-15	R	2	0.05	●	12	6.5	25	15°
JXPG12L20F-15	L	2	0.05	●	12	6.5	25	15°
JXPG16R15F	R	1.5	0.05	●	16	8.5	29	0°
JXPG16L15F	L	1.5	0.05	●	16	8.5	29	0°
JXPG16R20F	R	2	0.05	●	16	8.5	29	0°
JXPG16L20F	L	2	0.05	●	16	8.5	29	0°
JXPG16R15F-15	R	1.5	0.05	●	16	8.5	29	15°
JXPG16L15F-15	L	1.5	0.05	●	16	8.5	29	15°
JXPG16R20F-15	R	2	0.05	●	16	8.5	29	15°
JXPG16L20F-15	L	2	0.05	●	16	8.5	29	15°
JXPG20R15F	R	1.5	0.05	●	20	10.5	33	0°
JXPG20L15F	L	1.5	0.05	●	20	10.5	33	0°
JXPG20R20F	R	2	0.05	●	20	10.5	33	0°
JXPG20L20F	L	2	0.05	●	20	10.5	33	0°
JXPG20R15F-15	R	1.5	0.05	●	20	10.5	33	15°
JXPG20L15F-15	L	1.5	0.05	●	20	10.5	33	15°
JXPG20R20F-15	R	2	0.05	●	20	10.5	33	15°
JXPG20L20F-15	L	2	0.05	●	20	10.5	33	15°

*Max grooving depth (CDX) varies depending on workpiece diameters.

● : Line up

Reference pages: Toolholders → F247, F248

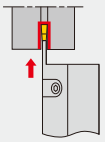
STANDARD CUTTING CONDITIONS

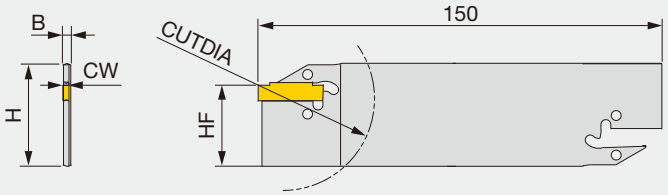
Parting, Grooving

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 200	0.01 - 0.05
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200	0.01 - 0.05
P	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 200	0.01 - 0.05
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 200	0.01 - 0.05
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.05
N	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.05
S	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.05

CCH-W

External grooving and parting blade, for 2 corner inserts





Designation	CW	CUTDIA	H	B	HF	Insert
CCH32-W20	2	33	32	1.6	24.6	WGE20, WGE20R/L
CCH32-W30	3	33	32	2.2	24.6	WG*30, WGE30R/L
CCH32-W40	4	42	32	3.2	24.5	WG*40, WGE40R/L
CCH32-W50	5	42	32	4.2	24.3	WG*50, WGE50R/L

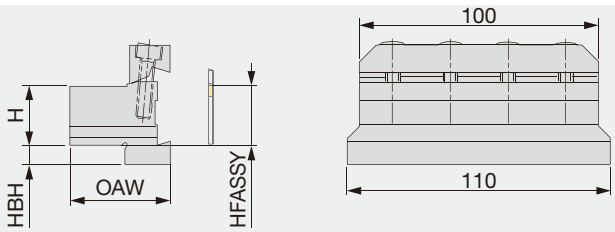
SPARE PARTS



Designation	Wrench (Optional)
CCH32-W...	CRW33

CCBS-32

Tool block for CCH blade



Designation	H	HFASSY	HBH	OAW	Blade
CCBS20-32	20	20	13	38	CCH32...
CCBS25-32	25	25	8	42	CCH32...
CCBS32-32	32	32	5	42	CCH32...

SPARE PARTS





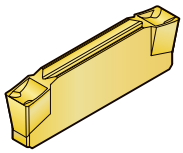
Designation	Clamp	Screw	Wrench
CCBS**-32	CC-32	CM6X25	P-5

External
Internal
Face
Parting
Others

Reference pages: Inserts → F253 - F255, Standard cutting conditions → F255

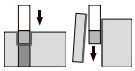
External grooving and parting

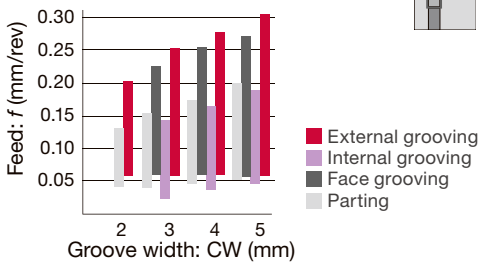
WGE



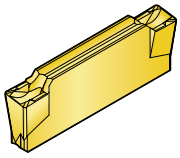
F254

1st choice for external grooving and parting
Excellent chip control for grooving
CW = 2 - 5 mm





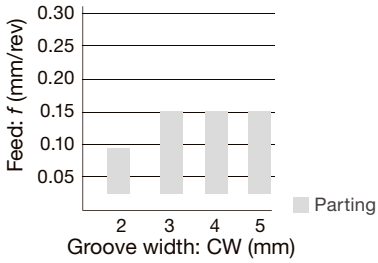
WGE R/L



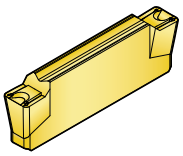
F255

Handed insert
Minimize burr generation when workpiece is cut off
CW = 2 - 5 mm



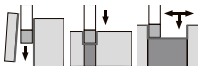


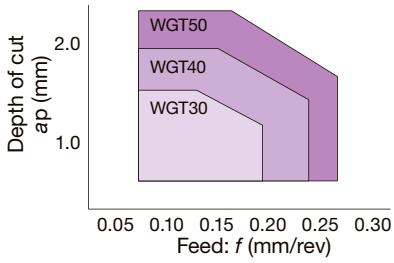
WGT



F254

1st choice for turning
Low cutting force and good chip control for traversing
CW = 3 - 5 mm



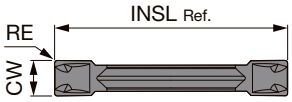


Please see page F*** for the product details.

INSERTS (2 corners)

WGE

For external grooving and parting





		T9225	AH120	GH730	NS9530
P	Steel	★	★	★	★
M	Stainless		★	★	
K	Cast iron		★	☆	☆
N	Non-ferrous				
S	Superalloys		☆		
H	Hard materials				

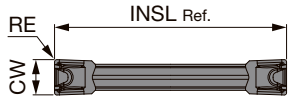
★ : First choice
☆ : Second choice

Designation	CW$^{+0.1}_{0}$	RE	Coated T9225	Coated AH120	Coated GH730	Cermet NS9530	INSL	h
WGE20	2	0.2	●	●	●	●	20	4.7
WGE30	3	0.2	●	●	●	●	20	5.5
WGE40	4	0.2	●	●	●	●	25	5.7
WGE50	5	0.2	●	●	●	●	25	5.9

●: Line up

WGT

For external grooving, parting and turning





		T9225	AH120	GH730	NS9530
P	Steel	★	★	★	★
M	Stainless		★	★	
K	Cast iron		★	☆	☆
N	Non-ferrous				
S	Superalloys		☆		
H	Hard materials				

★ : First choice
☆ : Second choice

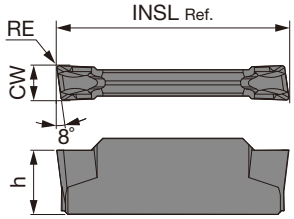
Designation	CW$^{+0.1}_{0}$	RE	Coated T9225	Coated AH120	Coated GH730	Cermet NS9530	INSL	h
WGT30	3	0.4	●		●	●	20	5.5
WGT40	4	0.4	●		●	●	25	5.7
WGT50	5	0.4	●	●	●	●	25	5.9

●: Line up

Reference pages: Toolholders → F252

WGE(R/L)

For parting off (handed inserts)



Right hand (R) shown.

		AH120	GH730
P	Steel	★	★
M	Stainless	★	★
K	Cast iron	★	☆
N	Non-ferrous		
S	Superalloys	☆	
H	Hard materials		

★ : First choice
☆ : Second choice

Designation	HAND	$CW^{+0.1}_{0}$	RE	Coated AH120	Coated GH730	INSL	h
WGE20R	R	2	0.2		●	20	4.7
WGE20L	L	2	0.2		●	20	4.7
WGE30R	R	3	0.2	●	●	20	5.5
WGE30L	L	3	0.2		●	20	5.5
WGE40R	R	4	0.2		●	25	5.7
WGE40L	L	4	0.2		●	25	5.7
WGE50R	R	5	0.2		●	25	5.9
WGE50L	L	5	0.2		●	25	5.9

●: Line up

STANDARD CUTTING CONDITIONS (for 2 corner inserts)

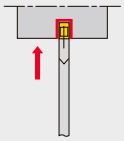
ISO	Workpiece material	Recommended grade	Cutting speed *Vc* (m/min)
P	Low carbon steels Alloy steels (~ HB150)	T9225	80 - 300
		NS9530	100 - 200
		GH730, AH120	50 - 180
	Medium carbon steels Alloy steels (HB150 ~ 250)	T9225	80 - 220
		NS9530	80 - 180
		GH730, AH120	50 - 150
	High carbon steels Alloy steels (HB250 ~)	T9225	80 - 220
		NS9530	80 - 150
		GH730, AH120	50 - 150
M	Stainless steels	GH730, AH120	50 - 120
K	Grey and ductile cast irons	GH730, AH120	50 - 180

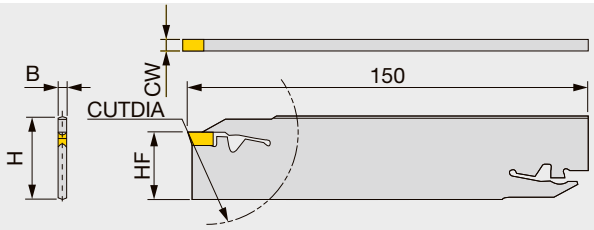
Operation	Feed: *f* (mm/rev) Groove width: CW (mm) 2	3	4	5
Grooving (WGE□□)	0.06 ~ 0.20	0.06 ~ 0.25	0.07 ~ 0.27	0.07 ~ 0.30
Parting-off (WGE□□R/L)	0.04 ~ 0.10	0.04 ~ 0.14	0.04 ~ 0.14	0.04 ~ 0.14
Turning (WGT□□)	-	*ap* = 0.5 ~ 1.5 *f* = 0.06 ~ 0.2	*ap* = 0.5 ~ 2.0 *f* = 0.06 ~ 0.25	*ap* = 0.5 ~ 2.5 *f* = 0.06 ~ 0.27

Reference pages: Toolholders → F252

CCH

External grooving and parting blade, for 1 corner inserts





Designation	CW	CUTDIA	H	B	HF	Insert
CCH32-30	3	100	32	2.2	24.6	GE30,GE30R/L,GE30-AL
CCH32-40	4	100	32	3.2	24.5	GE40,GE40R/L,GE40-AL
CCH32-50	5	120	32	4.2	24.3	GE50,GE50R/L

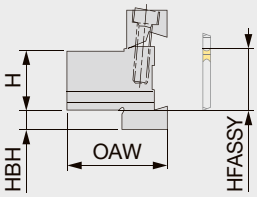
SPARE PARTS

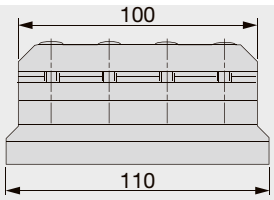


Designation	Wrench
CCH32-...	CTL-2

CCBS-32

Tool block for CCH blade





Designation	H	HFASSY	HBH	OAW	Blade
CCBS20-32	20	20	13	38	CCH32...
CCBS25-32	25	25	8	42	CCH32...
CCBS32-32	32	32	5	42	CCH32...

SPARE PARTS



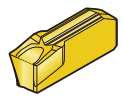


Designation	Clamp	Screw	Wrench
CCBS**-32	CC-32	CM6X25	P-5

Reference pages: Inserts → F257 - F261, Standard cutting conditions → F261

External grooving and parting

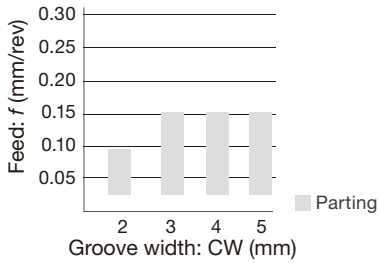
GE R/L



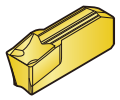
F258

Handed insert
Minimize burr generation when workpiece is cut off

CW = 3 - 5 mm



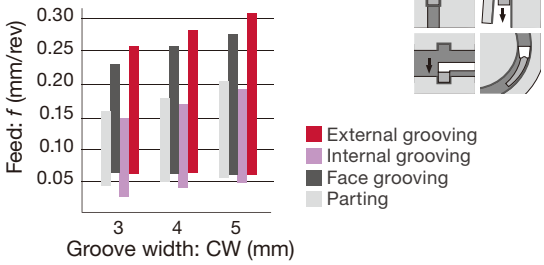
GE



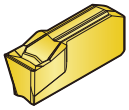
F259

1st choice for external grooving and parting
Excellent chip control for grooving

CW = 3 - 5 mm



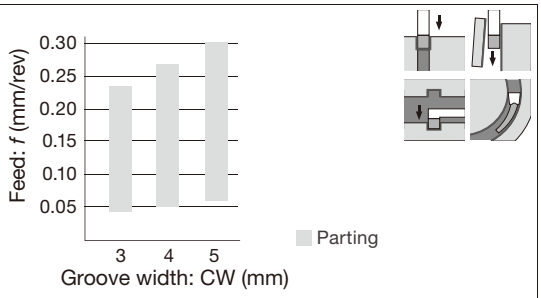
GF



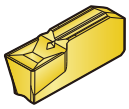
F259

1st choice for face grooving
Low cutting force and good chip control for face grooving

CW = 3 - 5 mm



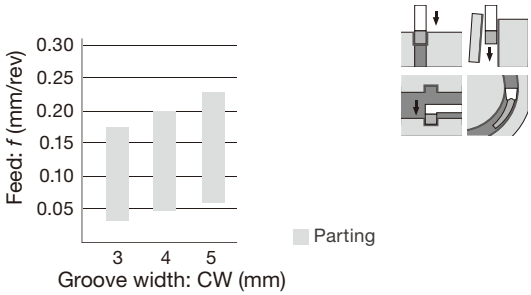
GN



F260

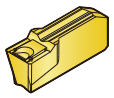
1st choice for internal grooving
Low cutting force and good chip control for internal grooving

CW = 3 - 5 mm



External grooving and turning

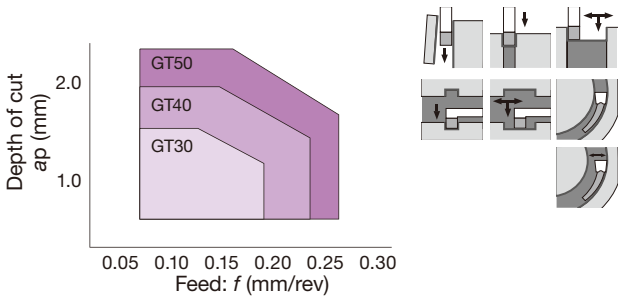
GT



F260

1st choice for turning
Low cutting force and good chip control for traversing

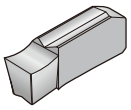
CW = 3 - 5 mm



Please see page F*** for the product details.

For aluminium and non-ferrous metal

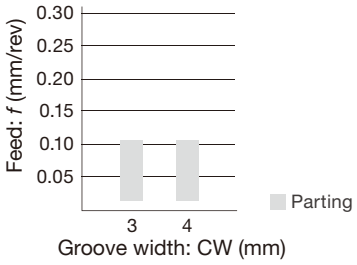
GE-AL

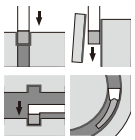


F261

Reduce cutting force and welding due to sharp chipbreaker

CW = 3 - 4 mm



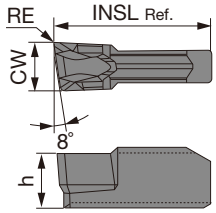


Please see page F*** for the product details.

INSERTS (1 corner)

GE-R/L

For parting off (handed inserts)



Right hand (R) shown.

P	Steel	★	★
M	Stainless	★	★
K	Cast iron	★	☆
N	Non-ferrous		
S	Superalloys	☆	
H	Hard materials		

★ : First choice
☆ : Second choice

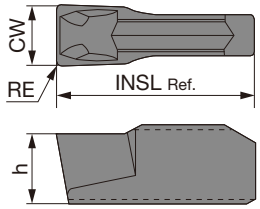
Designation	HAND	$CW^{+0.1}_{0}$	RE	Coated AH120	Coated GH730	INSL	h
GE30R	R	3	0.2	●	●	10	3.5
GE30L	L	3	0.2		●	10	3.5
GE40R	R	4	0.2	●	●	10	4
GE40L	L	4	0.2		●	10	4
GE50R	R	5	0.2		●	12	4.5
GE50L	L	5	0.2	●	●	12	4.5

●: Line up

Reference pages: Toolholders → F256, Standard cutting conditions → F261

GE

For external grooving and parting



P	Steel	★	★	★				★			
M	Stainless		★	★							
K	Cast iron		★	☆				☆			
N	Non-ferrous										
S	Superalloys		☆								
H	Hard materials										

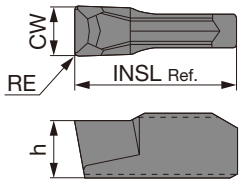
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated						Cermet						INSL	h
			T9225	AH120	GH730				NS9530							
GE30	3	0.2	●	●	●				●						10	3.5
GE40	4	0.2	●	●	●				●						10	4
GE50	5	0.2	●	●	●				●						12	4.5

●: Line up

GF

For face grooving



P	Steel	★			★						
M	Stainless	★									
K	Cast iron	☆			☆						
N	Non-ferrous										
S	Superalloys										
H	Hard materials										

★ : First choice
☆ : Second choice

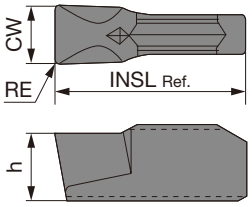
Designation	$CW^{+0.1}_{0}$	RE	Coated						Cermet						INSL	h
			GH730						NS9530							
GF30	3	0.2	●						●						10	3.5
GF40	4	0.2	●						●						10	4
GF50	5	0.2	●						●						12	4.5

● : Line up

Reference pages: Toolholders → F256, Standard cutting conditions → F261

GN

For internal grooving



P	Steel	★
M	Stainless	★
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

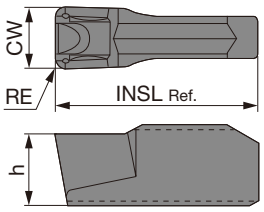
★ : First choice
☆ : Second choice

Designation	$CW^{+0.1}_{0}$	RE	Coated	INSL	h
			GH730		
GN30	3	0.2	●	10	3.5
GN40	4	0.2	●	10	4
GN50	5	0.2	●	12	4.5

● : Line up

GT

For external grooving and turning



P	Steel	★	★	★	★
M	Stainless		★	★	
K	Cast iron		★	☆	☆
N	Non-ferrous				
S	Superalloys		☆		
H	Hard materials				

★ : First choice
☆ : Second choice

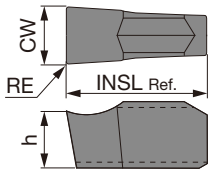
Designation	$CW^{+0.1}_{0}$	RE	Coated			Cermet	INSL	h
			T9225	AH120	GH730	NS9530		
GT30	3	0.4		●	●	●	10	3.5
GT40	4	0.4		●	●	●	10	4
GT50	5	0.4	●	●	●	●	12	4.5

●: Line up

Reference pages: Toolholders → F256

GE-AL

For aluminium and non-ferrous metal



P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	CW$^{+0.1}_{0}$	RE	Uncoated KS05F	INSL	h
GE30-AL	3	0.2	●	10	3.5
GE40-AL	4	0.2	●	10	4

●: Line up

STANDARD CUTTING CONDITIONS (for 1 corner inserts)

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)
P	Low carbon steel, Alloy steel (~ HB150)	T9225	80 - 300
		NS9530	100 - 200
		GH730, AH120	50 - 180
	Medium carbon steel, Alloy steel (HB150 ~ 250)	T9225	80 - 220
		NS9530	80 - 180
		GH730, AH120	50 - 150
	High carbon steel, Alloy steel (HB250 ~)	T9225	80 - 220
		NS9530	80 - 150
		GH730, AH120	50 - 120
M	Stainless steel	GH730, AH120	50 - 120
K	Grey iron, Ductile cast iron	GH730, AH120	50 - 180
N	Aluminium alloy, Non-ferrous metal	KS05F	200 - 300

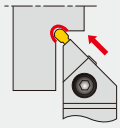
For Parting

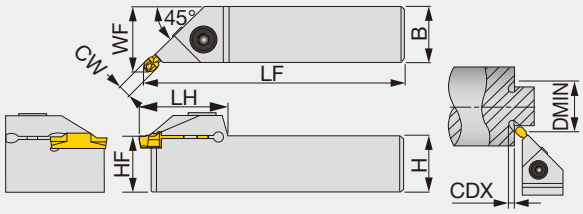
Operation	Feed: *f* (mm/rev) Groove width: CW (mm)		
	3	4	5
Grooving (GE**)	0.06 - 0.25	0.07 - 0.27	0.07 - 0.3
Parting-off (GE**R/L)	0.04 - 0.14	0.04 - 0.14	0.04 - 0.14
Traversing (GT**)	*ap* = 0.5 - 1.5 *f* = 0.06 - 0.2	*ap* = 0.5 - 2 *f* = 0.06 - 0.25	*ap* = 0.5 - 2.5 *f* = 0.06 - 0.27
Parting-off for Aluminium alloys (GE**-AL)	0.03 - 0.1	0.03 - 0.1	-

Reference pages: Toolholders → F256

CGEUR/L

External 45° undercutting toolholder





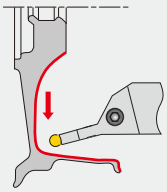
Right hand (R) shown.

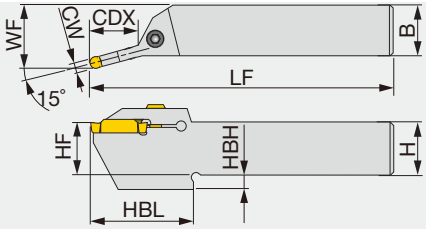
Designation	CW	DMIN	Seat size	CDX	H	B	LF	LH	HF	WF (1)	Insert	Torque*
CGEUR/L1616-3T02	3	32	3	2.8	16	16	110	30	16	19.3	DTIU...	5
CGEUR/L2020-3T02	3	32	3	2.8	20	20	125	30	20	23.3	DTIU...	5
CGEUR/L2525-3T02	3	32	3	2.8	25	25	150	30	25	28.3	DTIU...	5
CGEUR/L1616-4T02	4	32	4	2.8	16	16	110	31	16	19.5	DTIU...	8.5
CGEUR/L2020-4T02	4	32	4	2.8	20	20	125	31	20	23.5	DTIU...	8.5
CGEUR/L2525-4T02	4	32	4	2.8	25	25	150	31	25	28.5	DTIU...	8.5
CGEUR/L2525-6T03	6	34	5, 6	3.4	25	25	150	35	25	28.9	DTIU...	8.5

(1) "WF" value is calculated with groove width "CW" shown in the table.
Torque*: Recommended clamping torque (N·m)

CTER/L-15A

Square shank toolholder for profiling aluminium wheel





Right hand (R) shown.

Designation	CW	Seat size	CDX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
CTER/L2525-6T25-15A	6	6	25	25	25	150	25	32.2	7	50.5	DTA...	5
CTER/L2525-8T30-15A	8	8	30	25	25	150	25	32.9	7	55	DTA...	5

Torque*: Recommended clamping torque (N·m)

SPARE PARTS

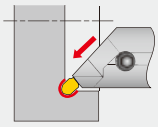
Designation	Clamping screw	Wrench
CGEUR/L****-3T02	CM5X0.8X16-A	P-4
CGEUR/L1616-4T02	CM6X1X16-A	P-5
CGEUR/L2020-4T02	CM6X1X20-A	P-5
C**R/L2525-...	CM6X1X25-A	P-5

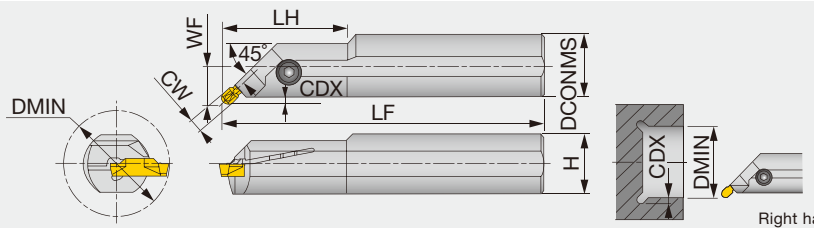
External
Internal
Face
Parting
Others

Reference pages: Inserts → F264, F265, Standard cutting conditions → F265

CGIUR/L

Internal 45° undercutting toolholder





Right hand (R) shown.

Designation	CW	DMIN	Seat size	CDX	DCONMS	H	LF	LH	WF (1)	Insert	Torque*
CGIUR/L20-3T02-D380	3	38	3	2.8	20	19	160	-	12.8	DTIU...	5
CGIUR/L25-3T02-D380	3	38	3	2.8	25	23	200	40	14.8	DTIU...	5
CGIUR/L20-4T02-D380	4	38	4	2.8	20	19	160	-	12.9	DTIU...	5
CGIUR/L25-4T02-D460	4	46	4	2.8	25	23	200	40	14.9	DTIU...	5
CGIUR/L25-6T02-D460	6	46	5, 6	2.8	25	23	200	-	15.2	DTIU...	8.5

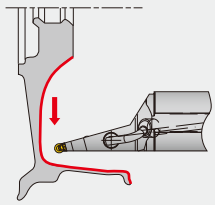
(1) WF is calculated with the groove width CW in the above table.
Torque*: Recommended clamping torque (N·m)

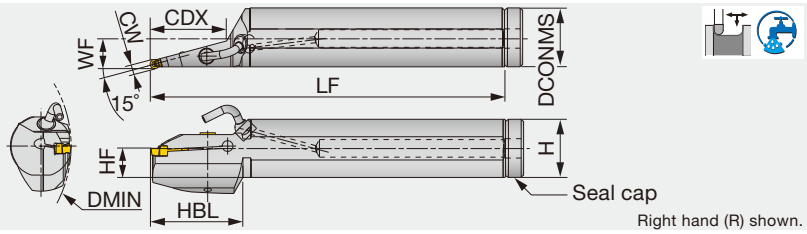
SPARE PARTS

Designation	Clamping screw	Wrench
CGIUR/L20-3T02-D380	CM5X0.8X12-A	P-4
CGIUR/L25-3T02-D380	CM5X0.8X16-A	P-4
CGIUR/L**-4T02-D...	CM5X0.8X16-A	P-4
CGIUR/L25-6T02-D460	CM6X1X25-A	P-5

CGIUR/L-15A

Round-shank toolholder for profiling aluminium wheel





Right hand (R) shown.

Designation	CW	DMIN	Seat size	CDX	DCONMS	H	WF	LF	HF	HBL	Insert	Seal cap	Torque*
CGIUR/L40-6T50-D160-15A	6	160	6	50	40	38.5	19.7	320	19	60	DTA...	CA-40	5
CGIUR/L40-8T83-D160-15A	8	160	8	83	40	38.5	20.5	320	19	85	DTA...	CA-40	5
CGIUR/L50-6T85-D200-15A	6	200	6	85	50	48.5	25.2	350	23.5	85	DTA...	-	5
CGIUR/L50-8T85-D200-15A	8	200	8	85	50	48.5	25.9	350	23.5	85	DTA...	-	5

Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench	Seal cap
CGIUR/L**-15A	CM6X1X25-A	P-5	CA-40

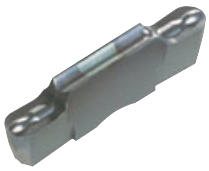
NOZZLE

Coolant pipe	Coolant nozzle
PNZ5	CNZ125

Reference pages: Inserts → F264, F265, Standard cutting conditions → F265

Profiling and undercutting

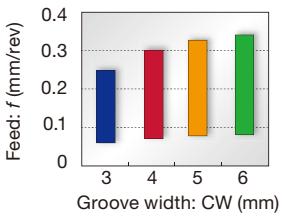
DTIU type (2 corners)

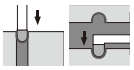


Full radius type

Excellent chip control for undercutting
CW = 3 - 6 mm

Standard feed and DoC





Aluminium wheel machining

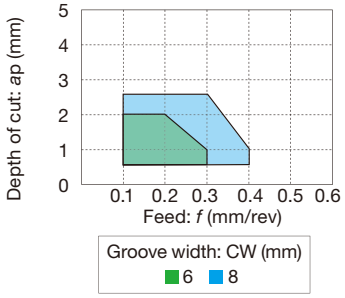
DTA type (2 corners)

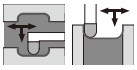


Full radius type

Excellent chip control
For aluminium wheel profiling
Ground insert
CW = 6 - 8 mm

Standard feed and DoC (for turning)

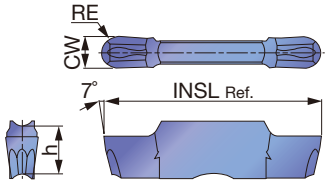




INSERTS

DTIU

Profiling and undercutting (for high precision)



P	Steel	★	☆	☆
M	Stainless	★	☆	★
K	Cast iron	★		☆
N	Non-ferrous			
S	Superalloys	★	☆	
H	Hard materials			

★ : First choice
☆ : Second choice

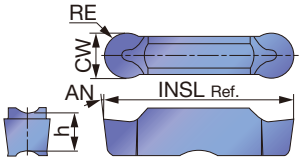
Designation	Seat size	CW±0.02	RE	Coated AH7025	Coated AH725	Coated GH130	INSL	h
DTIU300-150	3	3	1.5	●	●	●	20	5
DTIU400-200	4	4	2	●	●	●	20	5
DTIU500-250	5	5	2.5	●	●	●	25	5.5
DTIU600-300	6	6	3	●	●	●	25	5.5

●: Line up

Reference pages: Toolholders → F262, F263

DTA

Aluminium wheel machining (for high precision)



P	Steel
M	Stainless
K	Cast iron
N	Non-ferrous
S	Superalloys
H	Hard materials

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Uncoated TH10	INSL	h	AN
DTA600-300	6	6	3	●	25	5.5	7°
DTA800-400	8	8	4	●	30	6.7	10°

●: Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Impact resistance	GH130	50 - 120
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Impact resistance	GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	AH7025	150 - 700
		-	Impact resistance	GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	AH7025	150 - 300
		-	Impact resistance	GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH7025, AH725	20 - 60
		< HRC 40	Impact resistance	GH130	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	Impact resistance	AH7025, AH725	20 - 80

Please see page F264 for feed: *f* (mm/rev).

Reference pages: Toolholders → F262, F263

Connecting hose

Fig.1

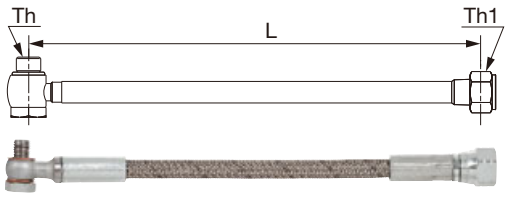
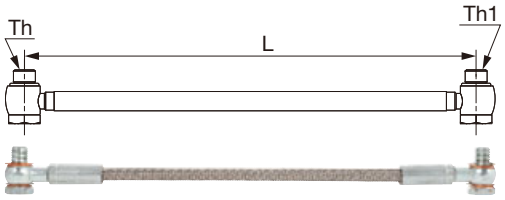
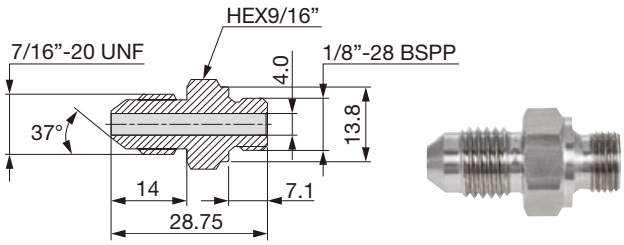


Fig.2



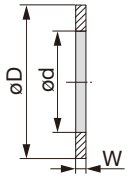
Designation	Length L	Screw Th	Screw Th1	Max. pressure (Mpa)	Fig.
CHP-HOSE-G1/8-7/16-200BS	200	G1/8"-28 BSPP	7/16"-20 UNF	26	1
CHP-HOSE-G1/8-7/16-250BS	250	G1/8"-28 BSPP	7/16"-20 UNF	26	1
CHP-HOSE-5/16-7/16-200BS	200	5/16"-24UNF	7/16"-20 UNF	20	1
CHP-HOSE-5/16-G1/8-200BS	200	5/16"-24UNF	G1/8"-28 BSPP	20	1
CHP-HOSE-G1/8-G1/8-200BB	200	G1/8"-28 BSPP	G1/8"-28 BSPP	26	2
CHP-HOSE-G1/8-G1/8-250BB	250	G1/8"-28 BSPP	G1/8"-28 BSPP	26	2

Connector



Designation
CHP-NIPPLE-G1/8-7/16UNF

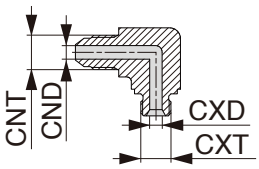
Seal washer





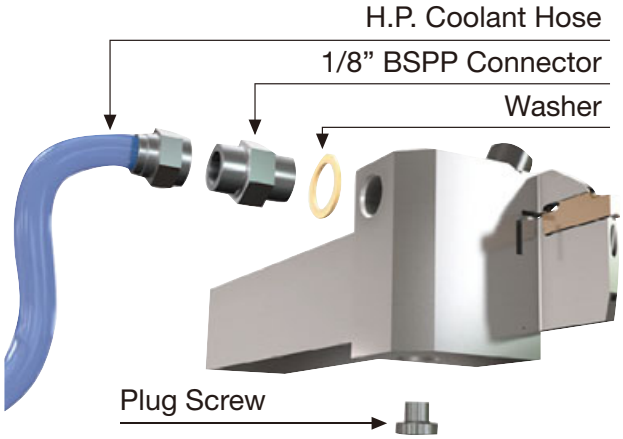
Designation	øD	ød	W
CHP-COPPER-SEAL1/8	15	10	1
CHP-COPPER-SEAL5/16	11.9	8.15	1.35
CHP-COPPER-SEAL5/16-2.5	9.4	8	2.5

Connector elbow





Designation	CNT	CND	CXT	CXD
CHP-ELBOW-90-G1/8-7/16UNF	7/16"-20 UNF	4.4	1/8"-28 BSPP	4
CHP-ELBOW-90-5/16-7/16UNF	7/16"-20 UNF	4.4	5/16"-24 UNF	4



Miniature Machining



Miniature Machining - Content structure

- Products are listed by application.
- In the same application, products are listed by cutting edge shape.
- The same cutting edge shape are sorted by insert.
- Items are listed by product series.
- Toolholders in the catalog are our standard items.

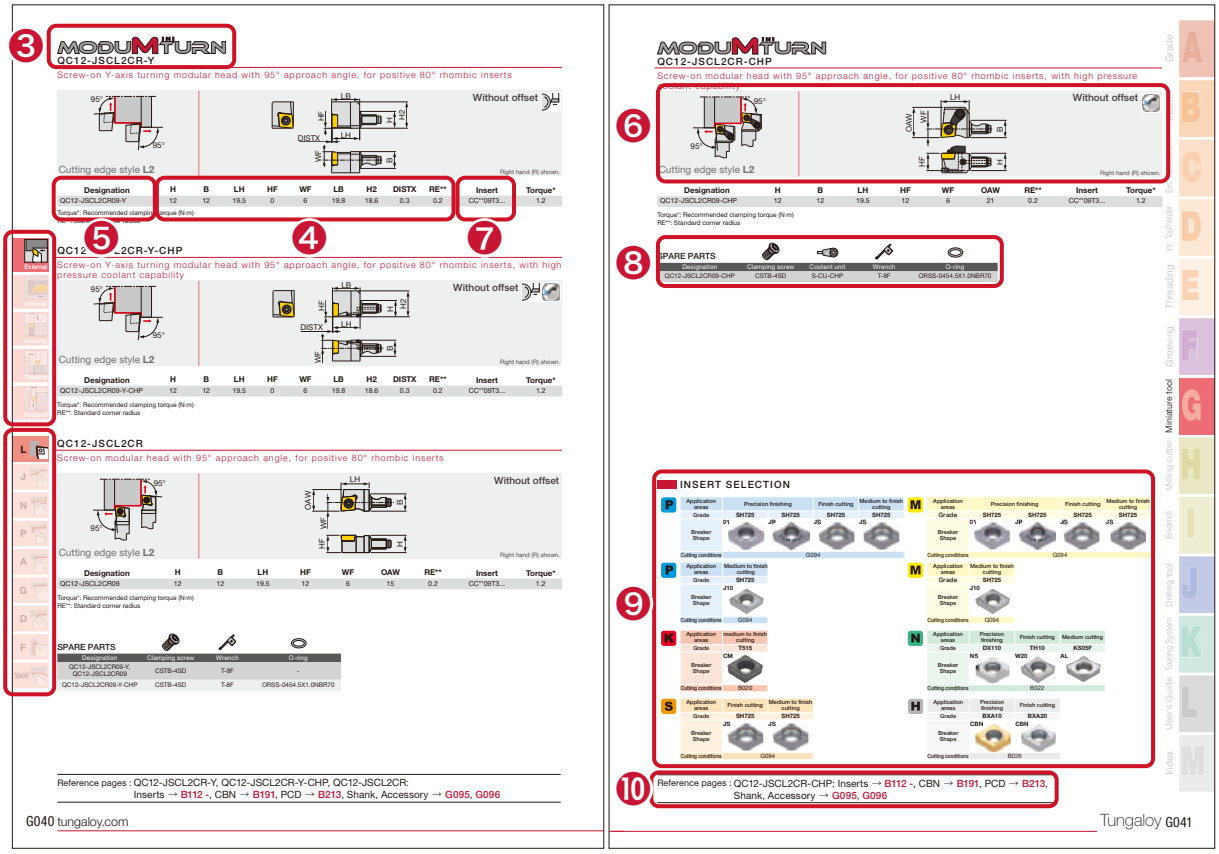
How to use the page

Method ① Select the application and the cutting edge shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (❺) in the dimension table (❹). Applicable inserts are shown in (❼) and (❾).

Method ② Select the cutting edge on G003 and check the details on the product page.

Method ③ Select the series name on G003 and check the details on each page.

Method ④ Select an item from Quick Guide on G004 - G035.



❶ : Application
❷ : Cutting edge shape
❸ : Tool series name
❹ : Dimension table
❺ : Toolholder designation
e.g. right-hand, 25x25 square shank

→ **JSDJ2X**R **1212** **X07-CHP**

❻ : Dimension drawing (conforming to ISO13399)
❼ : Applicable insert
❽ : Spare parts
❾ : Insert selection
❿ : Reference page

When ordering
- Please specify the designation and quantity.

e.g. **JSWL2XR1212X04-CHP** ... 1 (one toolholder per package)
* Inserts are not included. Please order those separately.

Main products

L 95° G040
J 93° G052
N 63° G070
P 62.5° G073
A 91° G074
G 91° G078
D 45° G079
F 91° G080
Special G081



MODUMINITURN
Modular head turning toolholder system
G036



MINIVLOCKGROOVE
High precision grooving and threading tool series for CNC automatic lathes
G022, G030, G110 -, G150 -



MINIFORCETURN
Economical double-sided inserts with excellent sharpness
G039



J-SERIES
Toolholders for small-part machining
G004 -, G042 -
G051, G054 -, G063 -
G070 -, G073 -, G084 -
G088 -, G133 -, G164 -



TETRAMINICUT
Unique insert pocket geometry for grooving with high quality and precision
CW = 0.33 - 3.18 mm
G022 -
G026 -, G030 -
G113 -, G147 -, G152 -



TETRAFORCECUT
4-cornered insert with good clamping rigidity for highly precise grooving and parting
CW = 0.5 - 3.18 mm
G022, G126 -



DUOFORCECUT
New flexible turning tool series for CNC automatic lathes and cam-driven lathes
CW = 0.5 - 1 mm
G026, G086 -, G167 -



DUOJUSTCUT
Innovative clamping system for high rigidity in parting
CW = 0.6 - 2 mm
G026 -, G032 -
G158 -, G169 -



TUNGCUT
Multi-functional tool series for various grooving operations
CW = 1.2 - 4 mm
G028 -, G177 -

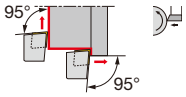
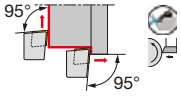
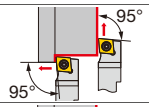
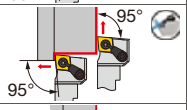
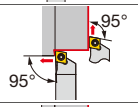
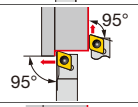
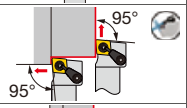
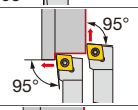
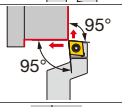
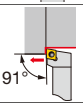


TINYMINITURN
Solid boring bar for turning small diameters with high precision
G034 -, G097 -



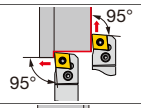
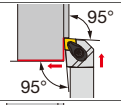
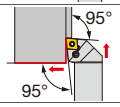
TUNGHEAVYGROOVE
Highly rigid clamping for wide grooving and profiling in one pass
CW = 10 - 25 mm
G024, G138 -

CC** inserts

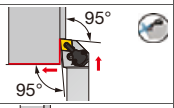
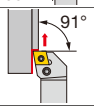
Cutting edge angle	Application	Designation	Insert	Square shank (height x width)						Holder			Clamping style		Offset	Page
				8 x 8	10 x 10	12 x 12	12 x 16	16 x 16	16 x 20	MODUMTURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
95°		QC12-JSCL2CR-Y	CC**09			○	○			○	○		✓		without*	G040
		QC12-JSCL2CR-Y-CHP	CC**09			○	○			○	○	○	✓		without	G040
		QC12-JSCL2CR	CC**09			○	○			○			✓		without*	G040
		QC12-JSCL2CR-CHP	CC**09			○	○			○		○	✓		without*	G041
		JSCL2CR/L	CC**06/09		○	○		○					✓		without*	G042
		JTCL2CR/L	CC**06/09		○	○		○						✓	without	G042
		JSCL2CR/L-CHP	CC**09			○		○				○	✓		without*	G042
		JSCLCR/L	CC**06/09	○	○	○		○					✓		with	G043
		JSCLCR-F15	CC**09				○		○				✓		with	G043
91°		JSCGCR/L	CC**06/09			○		○						✓	with	G078

* When using stepped-head shank, the “Offset” will be “with”.

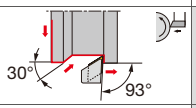
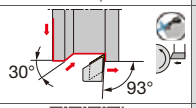
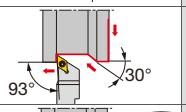
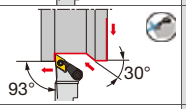
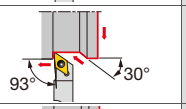
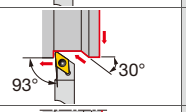
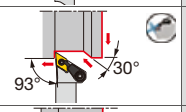
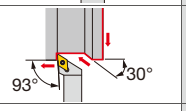
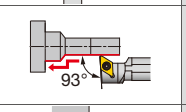
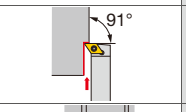
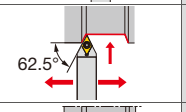
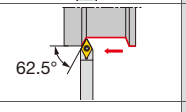
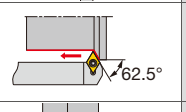
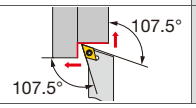
CN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank 16 x 16	Square shank 20 x 20	Clamping style Lever-lock	Clamping style Double-clamp	Offset	Page
95°		**PCL2NR**	CN**1204		○	✓		without	G050
		**ACLNR/L**	CN**0904/ 1204		○		✓	with	C015
		**PCLNR**	CN**1204		○	✓		with	G050

CN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank 16 x 16	Square shank 20 x 20	Holder TUNGTJET (Through-coolant)	Clamping style Lever-lock	Clamping style Double-clamp	Offset	Page
95°		**PCLNR/L-CHP**	CN**0904/ 1204		○	○	✓		with	C019
91°		**PCFNR/L**	CN**1204		○		✓		with	C087

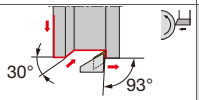
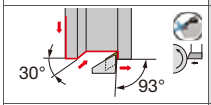
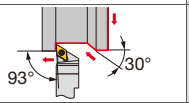
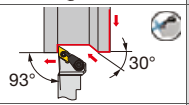
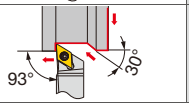
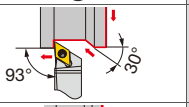
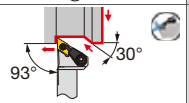
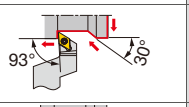
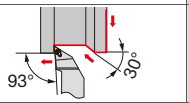
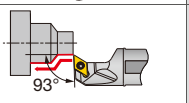
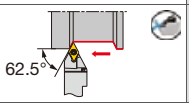
DC** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)									Cylindrical shank (shank dia.)			
				8 x 8	10 x 10	10 x 12	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	ø19.05	ø20	ø22	ø25.4
93°		QC12-JSDJ2CR-Y	DC**11					○	○							
		QC12-JSDJ2CR-Y-CHP	DC**11					○	○							
		QC12-JSDJ2CR	DC**07/11					○	○							
		QC12-JSDJ2CR-CHP	DC**07/11					○	○							
		JSDJ2CR/L	DC**07/11	○	○			○		○						
		JTDJ2CR/L	DC**07/11		○			○		○						
		JSDJ2CR/L-CHP	DC**07/11			○		○		○						
		JSDJCR-F15	DC**07/11				○		○		○					
		JSDJCR/L	DC**07/11	○	○			○		○						
		JS***-SDUCL	DC**07/11										○	○	○	○
91°		JSDFCR/L	DC**07/11					○		○						
62.5°		JSDNCN	DC**07/11		○			○		○						
		SDNCN	DC**11							○		○				
		JSDN3CR	DC**07/11					○		○						
107.5°		SDQCR/L	DC**11								○					

* When using stepped-head shank, the “Offset” will be “with”.

Holder			Clamping style		Offset	Page
MODUMTURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
○	○		✓		without*	G052
○	○	○	✓		without	G052
○			✓		without*	G053
○		○	✓		without*	G053
			✓		without	G054
				✓	without	G054
		○	✓		without	G055 G056
			✓		with	G057
			✓		with	G056
			✓		–	G081
			✓		with	G080
			✓		with	G070
			✓		with	C073
			✓		with	G070
			✓		with	C096

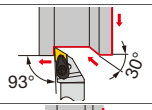
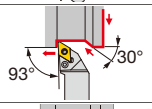
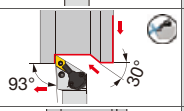
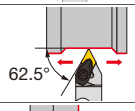
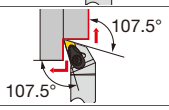
DX*U inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)								Cylindrical shank (shank dia.)				
				10 x 10	10 x 12	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	ø14	ø15.875	ø16	ø19.05	ø20
93°		QC12-JSDJ2XR-Y	DX*U				○	○								
		QC12-JSDJ2XR-Y-CHP	DX*U				○	○								
		QC12-JSDJ2XR	DX*U				○	○								
		QC12-JSDJ2XR-CHP	DX*U				○	○								
		JSDJ2XR/L	DX*U	○			○		○		○					
		JPDJ2XR/L	DX*U	○			○		○							
		JSDJ2XR/L-CHP	DX*U		○		○		○							
		JSDJXR-F15	DX*U			○		○		○						
		JSDJXR/L	DX*U								○					
		JS***-SDUXL	DX*U									○	○	○	○	○
62.5°		QC12-JSDNXR-CHP	DX*U				○	○								

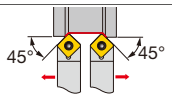
* When using stepped-head shank, the “Offset” will be “with”.

				Holder			Clamping style		Offset	Page
	ø22	ø25	ø25.4	MODUMINI TURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
				○	○		✓		without*	G058
				○	○	○	✓		without*	G058
				○			✓		without*	G058
				○		○	✓		without*	G059
							✓		without	G059
								✓	without	G060
						○	✓		without	G060
							✓		with	G061
							✓		with	C045
	○	○	○				✓		–	G082
				○		○	✓		with	G072

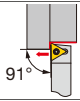
DN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank 16 x 16	Square shank 20 x 20	Holder TUNGTJET (Through-coolant)	Clamping style Lever-lock	Clamping style Double-clamp	Offset	Page
93°		**ADJNR/L**	DN**1104/ 1504/1506		○			✓	with	C034
93°		**PDJNR/L**	DN**1104/ 1504/1506	○	○		✓		with	G068
93°		**PDJNR/L-CHP**	DN**1104/ 1504		○	○	✓		with	C037
62.5°		**ADPNN**	DN**1504		○			✓	with	C108
107.5°		**ADQNR/L**	DN**1104/ 1504/1506		○			✓	with	C092

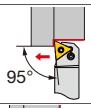
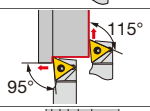
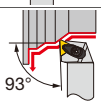
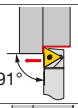
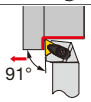
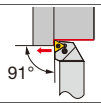
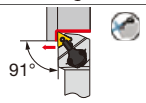
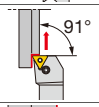
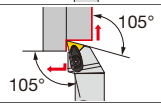
SC/P** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 10 x 10	Square shank (height x width) 12 x 12	Square shank (height x width) 16 x 16	Clamping style Screw-on	Clamping style Back-clamp	Offset	Page
93°		**SSDC/PN**	SC**07/09 SP**04	○	○	○	✓		with	G079

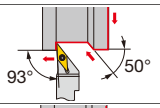
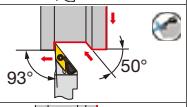
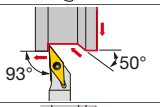
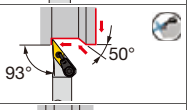
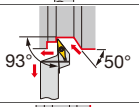
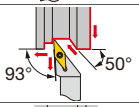
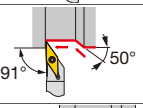
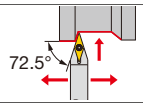
TC** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 8 x 8	Square shank (height x width) 10 x 10	Square shank (height x width) 12 x 12	Square shank (height x width) 16 x 16	Clamping style Screw-on	Clamping style Back-clamp	Offset	Page
91°		**JSTACR/L**	TC**08/11	○	○	○	○	✓		without*	G074

TN** inserts

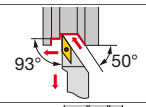
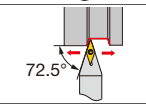
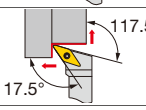
Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Holder	Clamping style			Offset	Page
				12 x 16	16 x 16	20 x 20	TUNGTJET (Through-coolant)	Lever-lock	Back-clamp	Double-clamp		
95°		**PTL2NR/L**	TN**1604			○		✓			without	G051
		**JTTLNR/L**	TN**1604	○	○				✓		without	G051
93°		**ATJNR/L**	TN**1604			○				✓	with	C032
91°		**JTTANR/L**	TN**1604	○	○				✓		without	G077
		**ATGNR/L**	TN**1604			○				✓	with	C057
		**PTGNR/L**	TN**1104/ 1604		○	○		✓			with	C058
		**PTGNR/L -CHP**	TN**1104/ 1604			○	○	✓			with	C059
		**ATFNR/L**	TN**1604			○				✓	with	C088
		**PTFNR/L**	TN**1104/ 1604		○	○		✓			with	C089
105°		**ATQNR/L**	TN**1604			○				✓	with	C091

VB** inserts

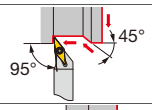
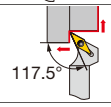
Cutting edge angle	Application	Designation	Insert	Square shank (height x width)					Holder		Clamping style		Offset	Page
				10 x 10	12 x 12	12 x 16	16 x 16	16 x 20	MODUMTURN (Modular head)	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
93°		**QC12-JSVJ2BR**	VB**11		○	○			○		✓		without*	G062
		**QC12-JSVJ2BR-CHP**	VB**11		○	○			○	○	✓		without	G062
		**JSVJ2BR/L**	VB**11	○	○		○				✓		without	G062
		**JSVJ2BR/L-CHP**	VB**11		○		○			○	✓		without	G063
		**JSVJBR-F15**	VB**11			○		○			✓		with	G064
		**JSVJBR/L**	VB**11	○	○		○				✓		with	G064
91°		**JSVABR/L**	VB**11	○	○						✓		without	G076
72.5°		**JSVNBN**	VB**11	○	○		○				✓		with	G071

* When using stepped-head shank, the “Offset” will be “with”.

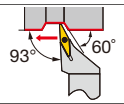
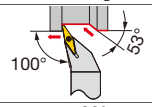
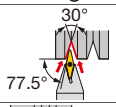
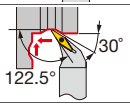
VC** inserts

Cutting edge angle	Application	Designation	Insert	Square shank		Clamping style		Offset	Page
				16 x 16	20 x 20	Screw-on	Back-clamp		
93°		**SVJCR**	VC**16	○	○	✓		with	C048
72.5°		**SVVCN**	VC**16**		○	✓		with	C052
117.5°		**SVQCR/L**	VC**16		○	✓		with	C097

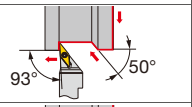
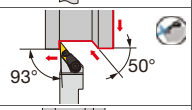
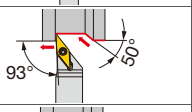
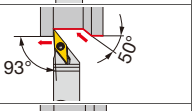
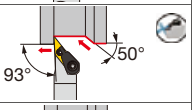
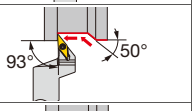
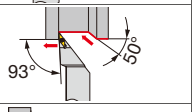
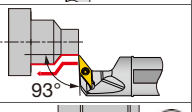
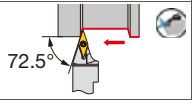
VP** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	16 x 16	Clamping style Screw-on	Back-clamp	Offset	Page
95°		**JSVL2PR/L**	VP**08/11	○	○	○	✓		without	G044
117.5°		**JSVP2PR/L**	VP**08/11	○	○	○	✓		without	G073

YWMT inserts

Cutting edge angle	Application	Designation	Insert	Square shank 20 x 20	Clamping style Screw-on	Back-clamp	Offset	Page
93°		**SYJBR/L**	YWMT16	○	✓		with	C049
100°		**SYHBR/L**	YWMT16	○	✓		with	C099
77.5°		**SYIBN**	YWMT16	○	✓		with	C053
122.5°		**SYQBR/L**	YWMT16	○	✓		with	C098

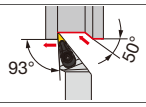
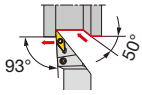
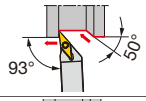
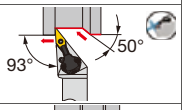
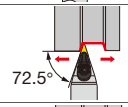
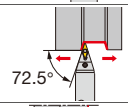
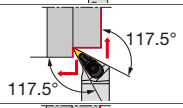
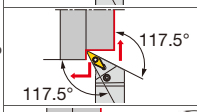
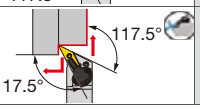
VXGU inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)								Cylindrical shank (shank dia.)				
				10 x 10	10 x 12	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	ø15.875	ø16	ø19.05	ø20	ø22
93°		**QC12-JSVJ2XR**	VXGU				○	○								
		**QC12-JSVJ2XR-CHP**	VXGU				○	○								
		**JSVJ2XR/L**	VXGU	○			○		○		○					
		**JPVJ2XR/L**	VXGU	○			○		○							
		**JSVJ2XR/L-CHP**	VXGU		○		○		○							
		**JSVJXR-F15**	VXGU			○		○		○						
		**JSVJXR/L**	VXGU								○					
		**JS***-SVUXL**	VXGU									○	○	○	○	○
72.5°		**QC12-JSVVXR-CHP**	VXGU				○	○								

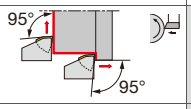
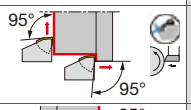
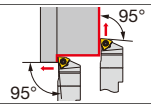
* When using stepped-head shank, the “Offset” will be “with”.

			Holder		Clamping style			
	ø25	ø25.4	MODULMTURN (Modular head)	TUNGTJET (Through-coolant)	Screw-on	Back-clamp	Offset	Page
			○		✓		without*	G065
			○	○	✓		without*	G066
					✓		without	G065
						✓	without	G066
					✓		without	G067
					✓		with	G067
				○	✓		with	C047
	○	○			✓		–	C114
			○	○	✓		with	G083

V/YN** inserts

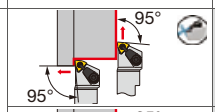
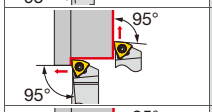
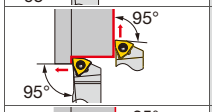
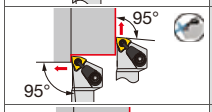
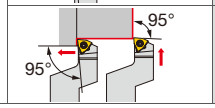
Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 12 x 12	16 x 16	20 x 20	Holder TUNGTJET (Through-coolant)	Clamping style Lever-lock	Back-clamp	Double-clamp	Offset	Page
93°		**AVJNR/L**	VN**1204 V/YN**1604			○				✓	with	C041
		**PVJNR/L**	VN**1204		○	○		✓			with	C042
		**JPVJ2NR/L**	VN**1204	○	○				✓		without	G069
		**PVJNR/L-CHP**	VN**1204 V/YN**1604			○	○	✓			with	C043
72.5°		**AVVNN**	VN**1204 V/YN**1604			○				✓	with	C050
		**PVVNN**	VN**1204			○		✓			with	C050
117.5°		**AVQNR/L**	VN**1204 V/YN**1604			○				✓	with	C094
		**PVQNR/L**	VN**1204			○		✓			with	C094
		**PVQNR/L-CHP**	V/YN**1604			○	○	✓			with	C095

WXGU inserts

Cutting edge angle	Application	Designation	Insert	Square shank 12 x 12	12 x 16	Holder MODUMTURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Clamping style Screw-on	Back-clamp	Offset	Page
95°		**QC12-JSWL2XR-Y**	WXGU	○	○	○	○		✓		without*	G045
		**QC12-JSWL2XR-Y-CHP**	WXGU	○	○	○	○	○	✓		without	G045
		**QC12-JSWL2XR**	WXGU	○	○	○			✓		without*	G046

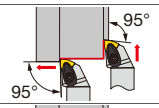
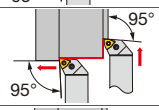
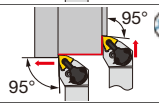
* When using stepped-head shank, the “Offset” will be “with”.

WXGU inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)							Holder		Clamping style		Offset	Page
				10 x 10	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	MODUMTURN (Modular head)	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
95°		QC12-JSWL2XR-CHP	WXGU			○	○				○	○	✓		without*	G046
		JSWL2XR/L	WXGU	○		○		○		○			✓		without	G046
		JPWL2XR/L	WXGU	○		○		○						✓	without	G047
		JSWL2XR/L-CHP	WXGU			○		○				○	✓		without	G048
		JSWLXR-F15	WXGU		○		○		○				✓		with	G049

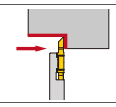
* When using stepped-head shank, the “Offset” will be “with”.

WN** inserts

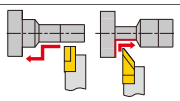
Cutting edge angle	Application	Designation	Insert	Square shank	Holder	Clamping style		Offset	Page
				20 x 20	TUNGTJET (Through-coolant)	Lever-lock	Double-clamp		
95°		AWLNR/L	WN**0604/ 0804	○			✓	with	C024
		PWLNR/L	WN**0604	○		✓		with	C026
		PWLNR/L-CHP	WN**0604/ 0804	○	○	✓		with	C026

Miniature External Turning - Quick Guide

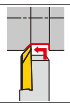
JV*N inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 6 x 6	7 x 7	8 x 8	10 x 10	Clamping style Screw-on	Back-clamp	Offset	Page
Front turning		**JSXXR/L*05**	JVFN45R/L	○	○	○	○	✓		without	G086

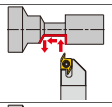
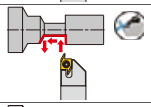
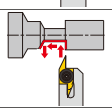
JXF inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	16 x 16	20 x 20	Clamping style Screw-on	Back-clamp	Offset	Page
Front turning, Reverse turning		**JSXGR/L**	JXFR/L8 JXRR/L8	○	○	○	○	✓		without	G088

JXB inserts

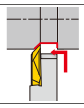
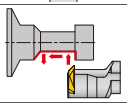
Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	16 x 16	20 x 20	Clamping style Screw-on	Back-clamp	Offset	Page
Front turning		**JSXBR/L**	JXBR/L	○	○	○	○	✓		without	G092

J10E inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	12 x 16	16 x 16	Holder MODUMTURN (Modular head)	TUNGTJET (Through-coolant)	Clamping style Screw-on	Back-clamp	Offset	Page
Back turning		**QC12-JSEGR**	J10ER		○	○		○		✓		without*	G089
		**QC12-JSEGR-CHP**	J10ER		○	○		○	○	✓		without	G089
		**JSEGR/L**	J10ER/L	○	○		○			✓		without	G089

* When using stepped-head shank, the “Offset” will be “with”.

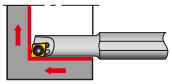
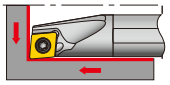
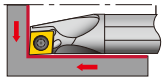
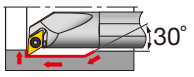
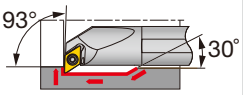
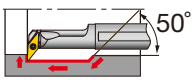
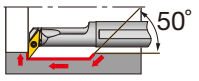
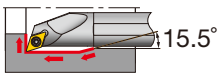
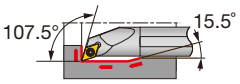
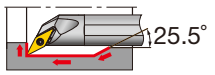
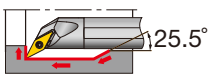
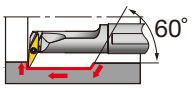
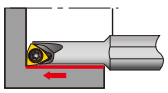
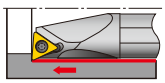
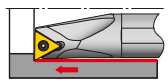
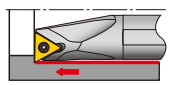
JTB inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Cylindrical shank (shank dia.)				Clamping style		Offset	Page
				10 x 10	12 x 12	16 x 16	ø19.05	ø20	ø22	ø25.4	Screw-on	Back-clamp		
Back turning		**JSTBR/L3**	JTBR/L3	○	○	○					✓		without	G083
		**JS-TBL3**	JTBR3				○	○	○	○	✓		–	G084

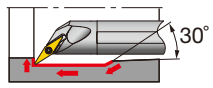
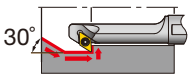
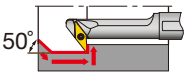
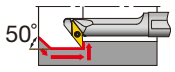
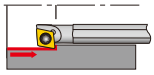
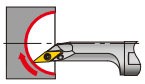
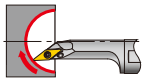
Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

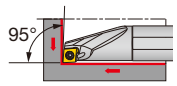
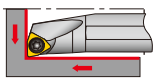
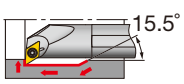
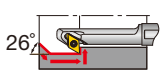
Appli-cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	Y-PRO	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Boring & Internal facing		**SEXPR/L**	EP...	Steel Carbide	○	✓		ø4.5 ø7 ø4.5 ø7	D034 D035
		**SCLCR/L**	CC...	Steel Carbide	○	✓		ø5 ø27 ø5 ø27	D014 D016
		**SCLPR/L**	CP...	Steel Carbide	○	✓		ø10 ø27 ø10 ø20	D018 D019
Boring & internal profiling		**SDUCR/L**	DC...	Steel Carbide	○	✓		ø13 ø32 ø13 ø27	D056
		**SDUPR/L**	DPMT...	Steel Carbide	○	✓		ø15 ø22 ø15 ø22	D058
		**SVUCR/L**	VC...	Steel Carbide	○	✓		ø16 ø32 ø18 ø32	D061 D062
		**SVUBR/L**	VB...	Steel Carbide	○	✓		ø20 ø32 ø24.5 ø34	D059 D060
		**SDQCR/L**	DC...	Steel Carbide	○	✓		ø13 ø30 ø13 ø25	D076 D077
		**SDQPR/L**	DPMT...	Steel Carbide	○	✓		ø15 ø22 ø15 ø22	D078
		**SVQCR/L**	VC...	Steel Carbide	○	✓		ø13.5 ø21.5 ø13.5 ø21.5	D081 D082
		**SVQBR/L**	VB...	Steel Carbide	○	✓		ø17 ø30.5 ø17 ø30.5	D079 D080
		**SYUBR/L**	YW...	Steel Carbide	○		✓	ø20 ø20 ø24.5	D064
Boring		**SWUBR/L**	WB...	Steel Carbide	○	✓		ø6 ø8 ø6 ø8	D052
		**STUPR/L**	TP...	Steel Carbide	○	✓		ø8 ø34 ø8 ø27	D053 D055
Blind hole boring		**STFPR/L**	TP...	Steel Carbide	○	✓		ø10 ø27 ø10 ø22	D046
		**STFCR/L**	TC...	Steel Carbide	○	✓		ø12 ø18 ø12 ø18	D045

StreamJet-Bar

Appli-cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	Y-PRO	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Internal undercut & profiling		**SYQBR/L**	YW...	Steel Carbide	○		✓	ø17 ø21.5 ø17 ø21.5	D083
Back boring		**SDZCR/L**	DC...	Steel Carbide	○	✓		ø14 ø25 ø18 ø22	D085
		**SVZCR/L**	VC...	Steel	○	✓		ø16	D088
		**SVZBR/L**	VB...	Steel	○	✓		ø20 ø40	D087
		**SEZPR/L**	EP...	Steel Carbide	○	✓		ø5.5 ø6.5 ø5.5 ø6.5	D084
Internal sphere cutting		**SVJCR/L**	VC...	Steel	○	✓		ø16 ø20	D039
		**SVJBR/L**	VB...	Steel	○	✓		ø25 ø30	D038

Double-sided insert with positive cutting edges

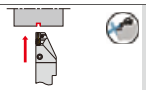
MiniForce-Turn

Appli-cation	Style	Designation	Insert	Material	Through coolant	MINIFÜRN	Min. bore diameter DMIN (mm) 0 10 20 30 40 50	Page
Boring & Internal facing		**SCLXR/L**	CXMU...	Steel Carbide	○	✓	ø12 ø22 ø12 ø22	D021
		**SWLXR/L**	WX*U...	Steel Carbide	○	✓	ø12 ø22 ø12 ø22	D023
Boring & internal profiling		**SDXXR/L**	DX*U...	Steel Carbide	○	✓	ø13 ø24 ø13 ø24	D036
Back boring		**SDZXR/L**	DX*U...	Steel Carbide	○	✓	ø14 ø20 ø18 ø22	D086

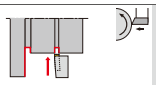
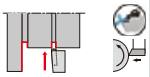
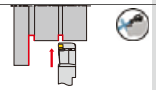
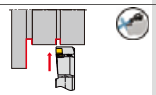
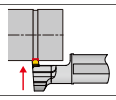
Miniature Grooving - Quick Guide

External Grooving

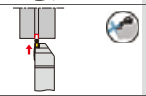
MiniVLockGroove

Application	Designation	Insert	Square shank (height x width) 8 x 8	10 x 10	10 x 12	12 x 12	12 x 16	Holder: ModuMini-Turn (Modular head)	TungTurn (Through-coolant)	Direct connection	Groove width (mm) 0 1 2	Max. groove depth (mm)	Page
	**QC12-SVER/L-CHP** Modular head	VGP...				○	○	○	○	○	0.33 — 1	2.5 - 4	G110
	**SVER/L**	VGP...	○	○	○						0.5 — 1	2 - 4	G110
	**SVER/L-CHP**	VGP...			○	○			○	○	0.5 — 1	2.5 - 4	G110

TetraMini-Cut

Application	Designation	Insert	Square shank (height x width) 10 x 10	10 x 12	12 x 12	12 x 16	16 x 16	20 x 20	Cylindrical shank (shank dia.) ø14	ø15.875	ø16	ø19.05	ø20	ø22	ø25	ø25.4
	**QC12-STCR/L-Y** Modular head	TC*18R/L...			○	○										
	**QC12-STCR/L-Y-CHP** Modular head	TC*18R/L...			○	○										
	**QC12-STCR/L** Modular head	TC*18R/L...			○	○										
	**QC12-STCR/L-CHP** Modular head	TC*18R/L...			○	○										
	**STCR/L-18**	TC*18R/L...	○		○		○	○								
	**STCR/L-18-CHP**	TC*18R/L...		○	○		○	○								
	**JS-STCL18**	TC*18R...							○	○	○	○	○	○	○	○

TetraForce-Cut

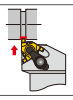
Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	16 x 16	20 x 20	Holder: TungTurn (Through-coolant)	Direct connection	Groove width (mm) 0 1 2 3 4 5	Max. groove depth (mm)	Page
	**STCR/L-27**	TC*27...	○	○	○	○			0.5 — 3.18	1 - 6.4	G126
	**STCR/L-27-CHP**	TC*27...		○		○	○	○	0.5 — 3.18	1 - 6.4	G126
	**STCR/L-38**	TCL38...				○			0.5 — 4	9 - 10	G132

Holder				Groove width (mm)						Max. groove depth (mm)	Page
MODUMTURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Direct connection	0	1	2	3	4	5		
○	○			0.33					3.18	0.8 - 3.5	G113
○	○	○	○	0.33					3.18	0.8 - 3.5	G113
○				0.33					3.18	0.8 - 3.5	G114
○		○	○	0.33					3.18	0.8 - 3.5	G114
				0.33					3.18	0.8 - 3.5	G115
		○	○	0.33					3.18	0.8 - 3.5	G115 G116
				0.33					3.18	0.8 - 3.5	G116

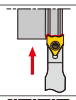
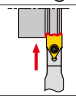
Miniature Parting - Quick Guide

External Grooving

GTGN

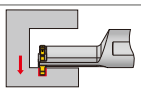
Application	Designation	Insert	Square shank (height x width) 12 x 12	16 x 16	20 x 20	Groove width (mm) 0 1 2 3 4 5	Max. groove depth (mm)	Page
	**CER/L**	GTGN-16E...	○	○	○	1 — 2.25	1 - 1.8	F093

TungHeavyGroove

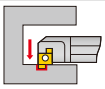
Application	Designation	Insert	Square shank (height x width) 12 x 12	16 x 16	20 x 20	Groove width (mm) 0 10 20 30 40 50	Max. groove depth (mm)	Page
	**FPGN**	PSGB...	○	○	○	10 — 25	-	G138
	**SPGN**	PSGB...	○	○	○	10 — 25	-	G139

Internal Grooving

AddInternalCut

Application	Designation	Insert	Cylindrical shank ø12	ø16	Groove width (mm)	Max. groove depth (mm)	Through coolant
	**A/E-STCIR/L**	TCIG10/12...	○	○	0.5 - 3	1 - 3	○

SNG

Application	Designation	Insert	Cylindrical shank (shank dia.) ø8	ø10	ø12	ø16	ø20	Groove width (mm)	Max. groove depth (mm)	Through coolant
	**A/E-SNGR**	*GR/L... *GMR...	○	○	○	○	○	1 - 3.5	1.5 - 3	○

Min. bore diameter DMIN (mm)

0	5	10	15	20	25	Page
		ø10.5		ø20		G140

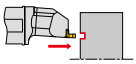
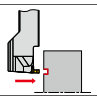
Min. bore diameter DMIN (mm)

0	5	10	15	20	25	Page
	ø8			ø24		G142

Miniature Parting - Quick Guide

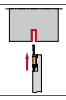
Face Grooving

TetraMini-Cut

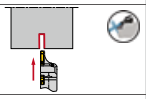
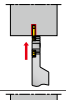
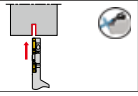
Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	16 x 16	Cylindrical shank (shank dia.) ø14	ø15.875	ø16	ø19.05	ø20	ø22	ø25	ø25.4
	**JS-STCFL18**	TCF18L...				○	○	○	○	○	○	○	○
	**STCFVR-18**	TCF18L...	○	○	○								

Parting

DuoForceCut

Application	Designation	Insert	Square shank (height x width) 6 x 6	7 x 7	8 x 8	10 x 10	Groove width (mm)	Max. parting diameter (mm) 0 10 20 30 40 50	Page
	**JSXXR/L*05**	JVPN...	○	○	○	○	0.5 - 1	ø4 ø12	G167

DuoJustCut

Application	Designation	Insert	Square shank (height x width) 10 x 10	10 x 12	12 x 12	16 x 16	20 x 20	Groove width (mm)	Holder TUNGTJET (Through-coolant)
	**JSXXR/L*09**	JXP...	○		○	○	○	0.6 - 2	
	**JSXXR/L*09-CHP**	JXP...		○	○	○		0.6 - 2	○
	**JSXXR/L-S**	JXP...			○	○		0.6 - 2	
	**JSXXR/L*09-S-CHP**	JXP...	○		○	○		0.6 - 2	○

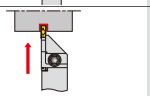
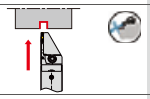
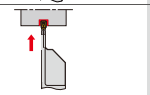
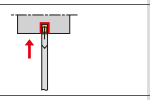
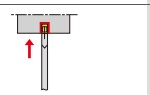
Groove width (mm)	Max. groove depth (mm)	Min. face groove outside diameter (mm) 0 5 10 15 20 25	Page
0.5 - 2.5	1 - 3	ø6	G147
0.5 - 2.5	1 - 3	ø6	G147

Max. parting diameter (mm) 0 10 20 30 40 50	Page
ø6 ø20	G169
ø6 ø20	G170
ø6 ø20	G169
ø6 ø20	G170

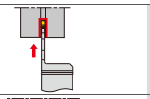
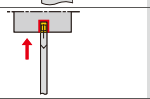
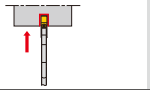
Miniature Parting - Quick Guide

Parting

TungCut

Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	12 x 16	16 x 16	20 x 12	20 x 20	Groove width (mm)	Holder MODUMTURN (Modular head)	TUNGTJET (Through-coolant)	Direct connection
	**QC12-JTTER/L-CHP** Modular head	DG.../ SG...		○	○				1.2 - 2.39	○	○	○
	**J*TER/L**	DG.../ SG...	○	○		○	○	○	1.2 - 3.18			
	**JCTER/L-CHP**	DG.../ SG...		○		○		○	2 - 2.39		○	○
	**CGER/L**	DG.../ SG...		○		○		○	1.4 - 4			
	**CHGP**	DG.../ SG...						○	2 - 4			
	**CGP**	DG.../ SG...						○	1.4 - 8			

AddForceCut

Application	Designation	Insert	Square shank 20 x 20	Groove width (mm)	Max. parting diameter (mm) 0 25 50 75 100 125	Page
	**QSER/L**	QG...	○	2 - 4	ø52 ø66	G191
	**QSG**	QG...	○	2 - 4	ø52 ø82	G192
	**QSP**	QG...	○	2 - 5	ø50 ø120	G191

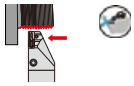
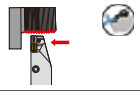
Max. parting diameter (mm)

10	25	50	75	100	125	Page
ø20						G178
ø12	ø42					G177 G178 G179
	ø25	ø32				G180
	ø29	ø55				G179
		ø52	ø82			G180
	ø26				ø120	G181

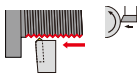
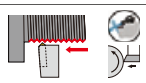
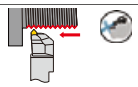
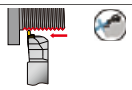
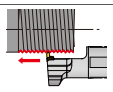
Miniature Threading - Quick Guide

External Threading

MiniVLockGroove

Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	12 x 16	Corner R (mm)	Holder MODUMTURN (Modular head)	TUNGTJET (Through-coolant)	Direct connection	Pitch (mm) 0 1 2 3 4 5	Page
	**QC12-SVER/L-CHP** Modular head	VGT10F...		○	○	0.05 - 0.1	○	○	○	0.4 — 2	G150
	**SVER/L**	VGT10F...	○	○		0.05 - 0.1				0.4 — 2	G150
	**SVER/L-CHP**	VGT10F...		○		0.05 - 0.1		○	○	0.4 — 2	G150

TetraMini-Cut

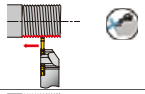
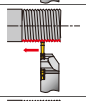
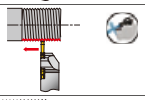
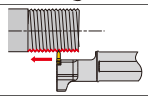
Application	Designation	Insert	Square shank (height x width) 10 x 10	12 x 12	12 x 16	16 x 16	20 x 20	Cylindrical shank (shank dia.) ø14	ø15.875	ø16	ø19.05	ø20	ø22	ø25	ø25.4
	**QC12-STCR/L-Y** Modular head	TCT18R/L...		○	○										
	**QC12-STCR/L-Y-CHP** Modular head	TCT18R/L...		○	○										
	**QC12-STCR/L** Modular head	TCT18R/L...		○	○										
	**QC12-STCR/L-CHP** Modular head	TCT18R/L...		○	○										
	**STCR/L-18**	TCT18R/L...	○	○		○	○								
	**STCR/L-18-CHP**	TCT18R/L...	○	○		○	○								
	**JS-STCL18**	TCT18R...						○	○	○	○	○	○	○	○

Corner R (mm)	Holder: MODUMTURN (Modular head)	Holder: Y-axis feed	Holder: TUNGTJET (Through-coolant)	Holder: Direct connection	Pitch (mm) 0	1	2	3	4	5	Page
0.05 - 0.2	○	○				0.4			3		G152
0.05 - 0.2	○	○	○	○		0.4			3		G152
0.05 - 0.2	○					0.4			3		G153
0.05 - 0.2	○		○	○		0.4			3		G153
0.05 - 0.2						0.4			3		G154
0.05 - 0.2			○	○		0.4			3		G154 G155
0.05 - 0.2						0.4			3		G155

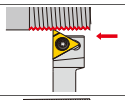
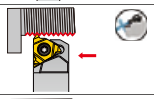
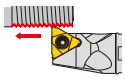
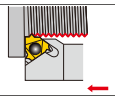
Miniature Threading - Quick Guide

External Threading

DuoJust-Cut

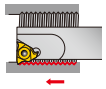
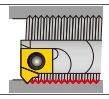
Application	Designation	Insert	Square shank (height x width) 10 x 10	10 x 12	12 x 12	16 x 16	20 x 20	Cylindrical shank (shank dia.) ø19.05	ø20	ø22	ø25	ø25.4	Corner R (mm)	Holder TUNGTJET (Through-coolant)	Holder Direct connection
	**JSXXR/L*09**	JXTG12...	○		○	○	○						0.05Max. - 0.1		
	**JSXXR/L*09-CHP**	JXTG12...		○	○	○							0.05Max. - 0.1	○	○
	**JSXXR/L*09-S**	JXTG12...	○		○	○							0.05Max. - 0.1		
	**JSXXR/L*09-S-CHP**	JXTG12...			○	○							0.05Max. - 0.1	○	○
	**JS-SXXL09**	JXTG12R...						○	○	○	○	○	0.05Max. - 0.1		

TungThread

Application	Designation	Insert	Square shank (height x width) 8 x 8	10 x 10	12 x 12	16 x 16	20 x 10	20 x 20	24 x 12	24 x 16	32 x 16	Cylindrical shank (shank dia.) ø16	ø19.05	ø20	ø25	ø25.4
	**SER*11**	11ER...	○	○												
	**JSE2R16-CHP**	16ER...			○	○										
	**CER/L**	16ER/L...			○	○		○								
	**JS-SEL16**	16ER...										○	○	○	○	○
	**B-S/CER/L**	16ER/L...					○		○		○					
	**BC-SER/L**	16ER/L...								○						

Internal Threading

TungThread

Application	Designation	Insert	Min. bore diameter DMIN (mm)	Corner R (mm)	Pitch (mm) 0 1 2 3 4 5	Page
	**SIR**	6/8IR...	ø6.4 - ø8	0.04 - 0.17	0.5 — 2	E054
	**SNR**	6IR...	ø8 - ø10	0.04 - 0.1	0.5 — 1.75	E054

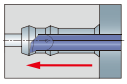
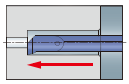
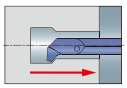
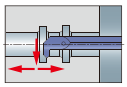
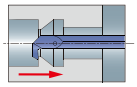
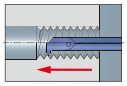
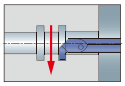
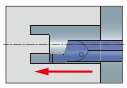
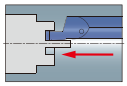
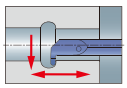
	Pitch (mm) 0 1 2 3 4 5	Page
	0.2 1.5	G158
	0.2 1.5	G159
	0.2 1.5	G158
	0.2 1.5	G159
	0.2 1.5	G160

Corner R (mm)	Holder: MODUMTURN (Modular head)	Holder: TUNGTJET (Through-coolant)	Holder: Direct connection	Pitch (mm) 0 1 2 3 4 5	Page
0.04 - 0.19				0.35 1.5	G164
0.05 - 0.22	○	○	○	0.5 3	G162
0.05 - 0.22				0.5 3	E036
0.05 - 0.22				0.5 3	G163
0.05 - 0.22				0.5 3	G163
0.05 - 0.22				0.5 3	G163

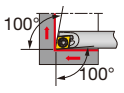
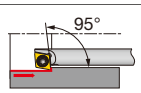
Miniature Internal Turning - Quick Guide

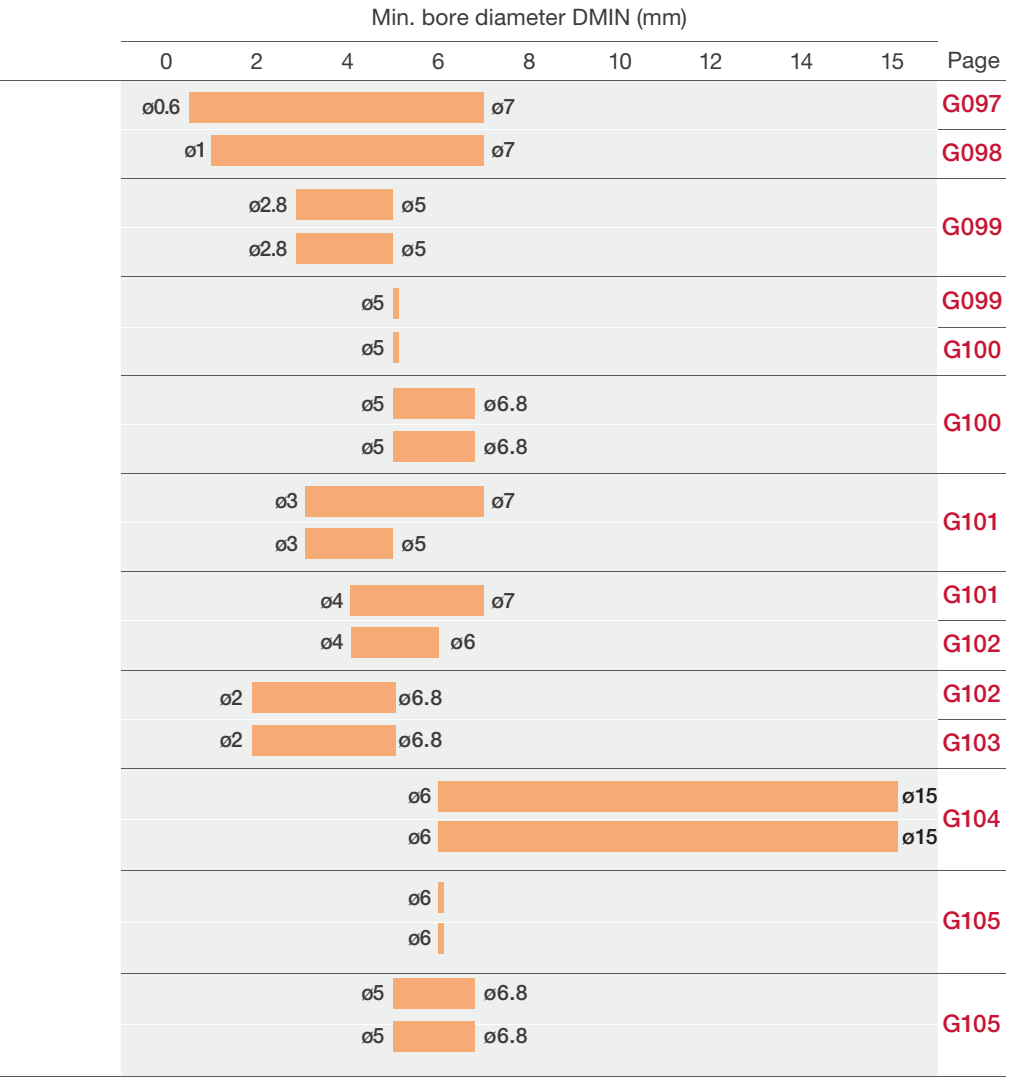
TinyMini-Turn

Solid carbide tools for small diameters turning

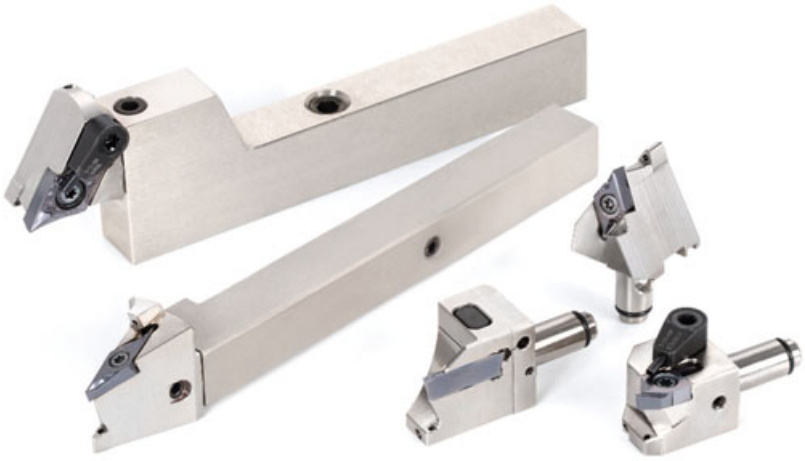
Application		Description	Material	Through coolant	Cylindrical shank ø4	Cylindrical shank ø7	Groove width
Boring, profiling & chamfering		**TBT**	Carbide		○	○	-
		JBT	Carbide	○	○	○	
Internal, Face grooving		**TBP**	Carbide		○	○	-
		JBP	Carbide	○	○	○	
Back boring & chamfering		**TBU**	Carbide			○	-
		JBU	Carbide	○		○	
Boring & 45°chamfering		**TBC**	Carbide			○	-
		JBC	Carbide	○		○	
Back boring		**TBB**	Carbide		○	○	-
		JBB	Carbide	○	○	○	
Threading (Metric thread)		**TBI**	Carbide		○	○	-
		JBI	Carbide	○	○	○	
Internal Grooving		**TBG**	Carbide		○	○	0.5 - 2
		JBG	Carbide	○	○	○	
Face grooving		**TBF**	Carbide			○	1 - 3
		JBF	Carbide	○		○	
Face grooving (for shaft)		**TBS**	Carbide			○	2
		JBS	Carbide	○		○	
Boring & profiling (full radius type)		**TBR**	Carbide			○	1
		JBR	Carbide	○		○	

Indexable tools for small diameters turning

Application		Description	Cylindrical shank ø7	Through coolant	Min. bore diameter DMIN (mm) 0 2 4 6 8 10	Page
Boring & internal facing		**SEXPR**	○	○	ø5 ø6	G106
Back boring		**SEZPR**	○	○	ø5.5	G106


Min. bore diameter DMIN (mm)
0
2
4
6
8
10
12
14
15
Page
ø0.6
ø7
G097
ø1
ø7
G098
ø2.8
ø5
ø2.8
ø5
G099
ø5
G099
ø5
G100
ø5
ø6.8
ø5
ø6.8
G100
ø3
ø7
ø3
ø5
G101
ø4
ø7
G101
ø4
ø6
G102
ø2
ø6.8
G102
ø2
ø6.8
G103
ø6
ø15
ø6
ø15
G104
ø6
ø6
G105
ø5
ø6.8
ø5
ø6.8
G105

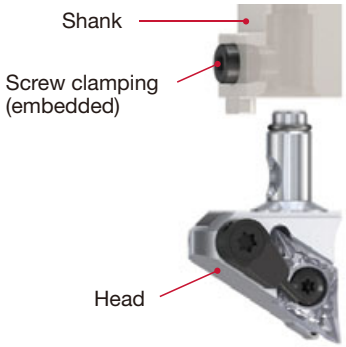
MODUMINI TURN

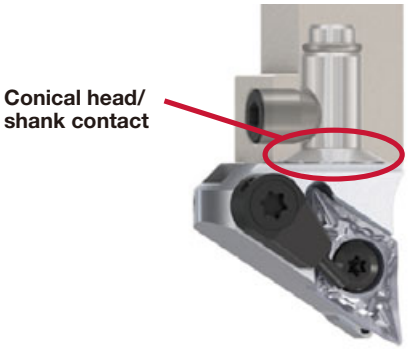


Modular style Swiss turning tool system facilitates tool changes with high repeatability

Unique coupling design

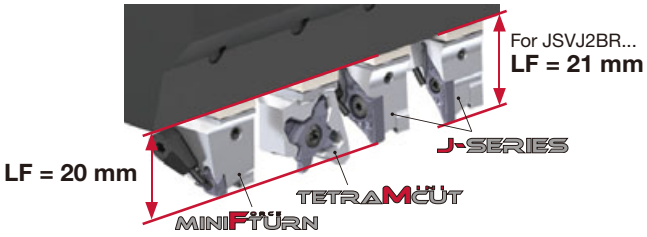
Simply loosen the clamping screw for easy tool exchanges.
Unique coupling design allows extremely high repeatability.





Benefits of Y-axis feed

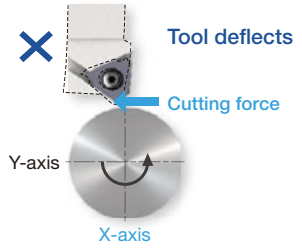
Designed with common functional lengths (LF), the cutting heads allow easy tool changes without removing the shank from the tool post.

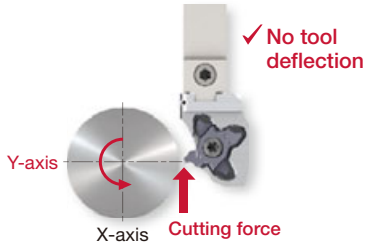


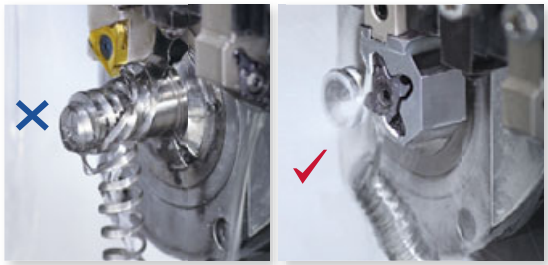
Benefits of Y-axis feed

No chip entanglements — Chips are directed downward and away from the cutting zone

Conventional X-axis feed	Y-axis feed	Conventional X-axis feed	Y-axis feed







Reference pages : G040 -, G045 -, G052 -, G058 -, G062, G065, G072, G083, G089, G110, G113 -, G150, G152 -, G178
Shank, Accessory : G095, G096

TUNGTURN JET



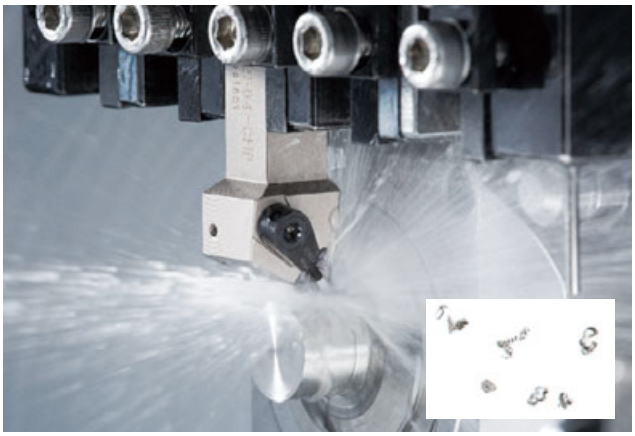
Thru-coolant holder system

High pressure coolant is supplied through the holder to facilitate smooth chip evacuation, improved chip breaking and reduced machine down-time

External coolant supply at normal pressure



High pressure coolant (7 MPa)

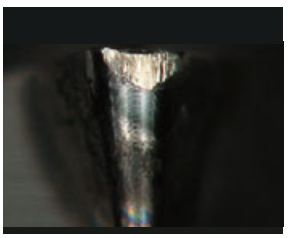


Coolant jets from two outlets ensure high cutting efficiency and extended tool life

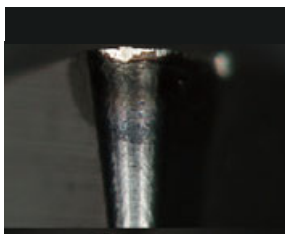
Directly to the cutting edge

Reliable chip control
Reduces crater and notch wears

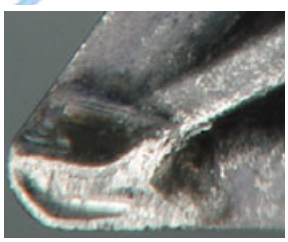




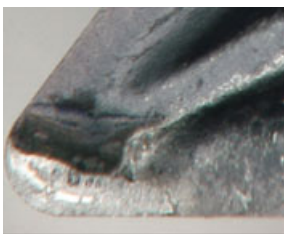
Excessive wear with external coolant supply (at normal pressure)



High pressure coolant (7 MPa)



Excessive crater wear with external coolant supply (at normal pressure)

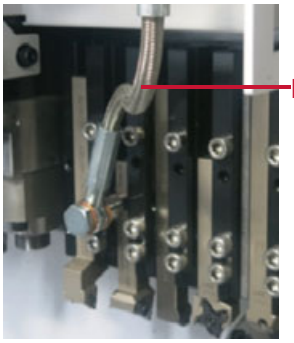


High pressure coolant (7 MPa)

Reference pages: G040 -, G045, G052 -, G055 -, G058 -, G062 -, G065 -, G072, G083, G089, G095, G110, G113 - G126, G132, G148, G150, G152 -, G159, G162, G170, G178 -

Tube-free design streamlines tool setup.
Through-coolant supply enables high productivity

Conventional

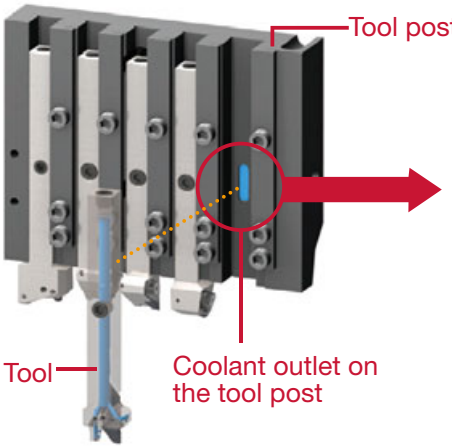


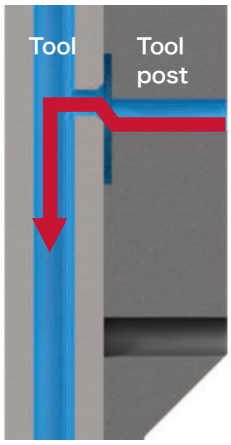
DirectTung-Jet system

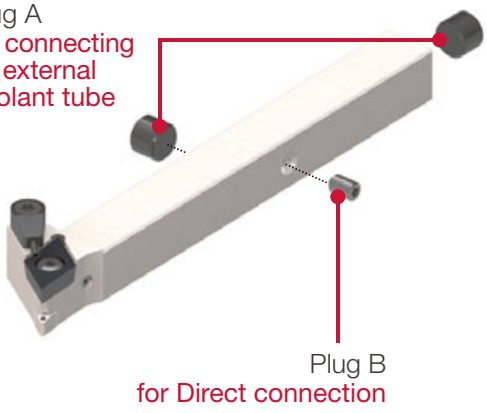


No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools.







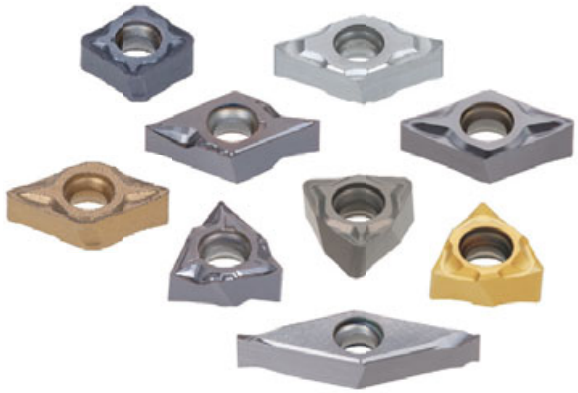
Use a non-coolant-through tool when a coolant supply is not needed through the tool.





Nozzle tube delivers coolant directly to the cutting edge

MINI FORCE TURN



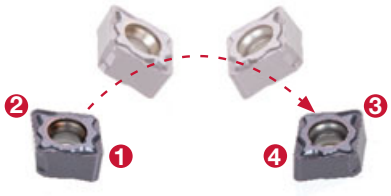


Economical double-sided positive insert

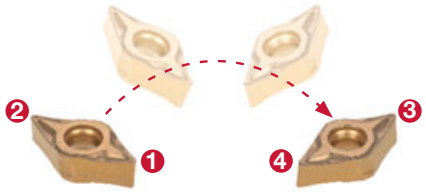
Innovative geometry and seat interface ensures stability and high performance.

Insert

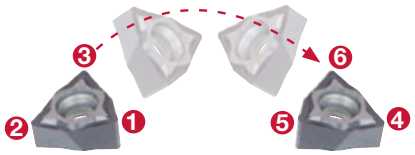
CXMU0603... 4 edges, rhombic 80°



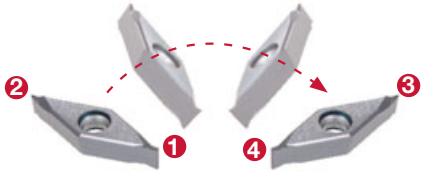
DXM/GU0703... 4 edges, rhombic 55°



WXGU0403... 6 positive cutting edges



VXGU09T2... 4 positive cutting edges



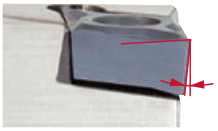
High rake angle

WXGU0403...

External turning



External turning

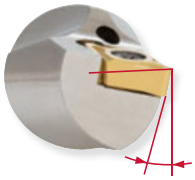


DXGU0703...

Internal turning



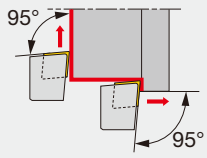
Internal turning



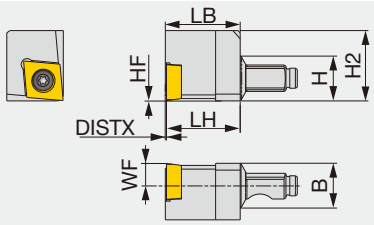
Reference pages : G045 - G058 -, G065 -, G072, G082 -

QC12-JSCL2CR-Y

Screw-on Y-axis turning modular head with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L2**



Without offset

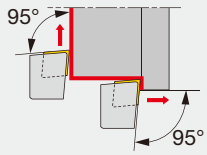
Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSCL2CR09-Y	12	12	19.5	0	6	19.8	18.6	0.3	0.2	CC**09T3...	1.2

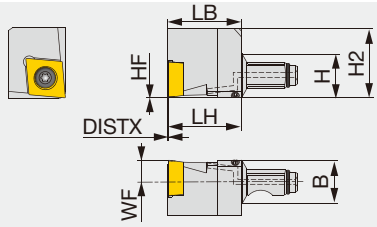
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

QC12-JSCL2CR-Y-CHP

Screw-on Y-axis turning modular head with 95° approach angle, for positive 80° rhombic inserts, with high pressure coolant capability



Cutting edge style **L2**



Without offset

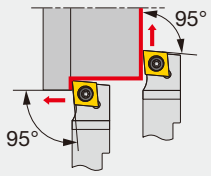
Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSCL2CR09-Y-CHP	12	12	19.5	0	6	19.8	18.6	0.3	0.2	CC**09T3...	1.2

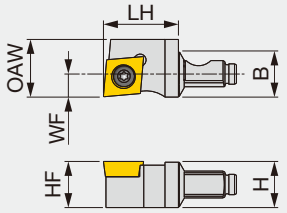
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

QC12-JSCL2CR

Screw-on modular head with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR09	12	12	19.5	12	6	15	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

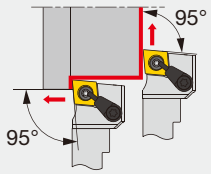
SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSCL2CR09-Y, QC12-JSCL2CR09	CSTB-4SD	T-8F	-
QC12-JSCL2CR09-Y-CHP	CSTB-4SD	T-8F	ORSS-0454.5X1.0NBR70

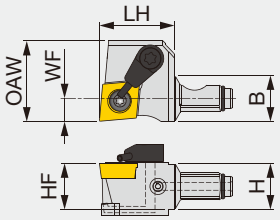
Reference pages : QC12-JSCL2CR-Y, QC12-JSCL2CR-Y-CHP, QC12-JSCL2CR:
Inserts → B112 -, CBN → B191, PCD → B213, Shank, Accessory → G095, G096

QC12-JSCL2CR-CHP

Screw-on modular head with 95° approach angle, for positive 80° rhombic inserts, with high pressure coolant capability



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR09-CHP	12	12	19.5	12	6	21	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSCL2CR09-CHP	CSTB-4SD	S-CU-CHP	T-8F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX110	TH10	KS05F
Breaker Shape	NS	W20	AL
Cutting conditions	B022		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

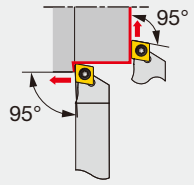
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

Reference pages : QC12-JSCL2CR-CHP: Inserts → B112 -, CBN → B191, PCD → B213, Shank, Accessory → G095, G096

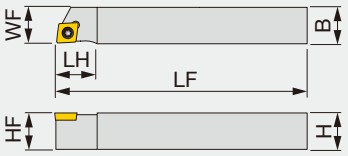
JSCL2CR/L

Screw-on toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L2**

Without offset



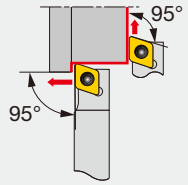
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCL2CR/L1010X06	10	10	120	12	10	10	0.2	CC**0602...	1.2
JSCL2CR/L1212F06	12	12	85	12	12	12	0.2	CC**0602...	1.2
JSCL2CR/L1212X06	12	12	120	12	12	12	0.2	CC**0602...	1.2
JSCL2CR/L1212F09	12	12	85	16	12	12	0.2	CC**09T3...	1.2
JSCL2CR/L1212X09	12	12	120	16	12	12	0.2	CC**09T3...	1.2
JSCL2CR/L1616X09	16	16	120	16	16	16	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

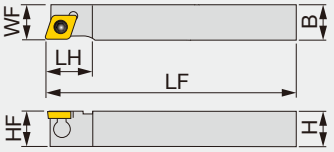
JTCL2CR/L

Back-clamp toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L2**

Without offset



Right hand (R) shown.

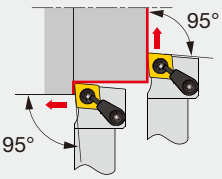
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTCL2CR/L1010X06	10	10	120	12	10	10	0.2	CC**0602...	0.9
JTCL2CR/L1212F09	12	12	85	16	12	12	0.2	CC**09T3...	1.2
JTCL2CR/L1212X09	12	12	120	16	12	12	0.2	CC**09T3...	1.2
JTCL2CR/L1616X09	16	16	120	16	16	16	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

JSCL2CR-CHP

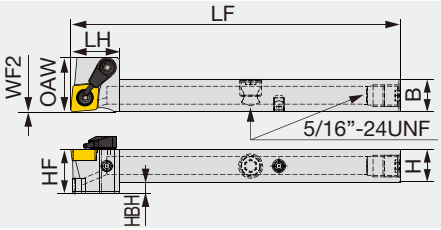
Direct connection

Screw-on toolholder without offset, 95° approach angle for positive 80° rhombic inserts, high pressure coolant compatible



Cutting edge style **L2**





Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	HBH	WF2	OAW	RE	Insert	Torque*
JSCL2CR1212X09B-CHP	12	12	120	18	12	1.5	0	20	0.2	CC**09T3	1.2
JSCL2CR1616X09-CHP	16	16	120	18	16	0	0	20	0.2	CC**09T3	1.2

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

SPARE PARTS



Designation	Clamping screw	Clamp	Clamping screw	Wrench	Wrench 1	Wrench 2 (Optional)
JTCL2CR/L**06	-	JCP-2	JDS-3525	P-2F	-	-
JTCL2CR/L**09	-	JCP-3	JDS-5040	P-2.5F	-	-
JSCL2CR/L**06	CSTB-2.5	-	-	-	T-8F	(T-8L)
JSCL2CR/L**09	CSTB-4SD	-	-	-	T-8F	(T-8L)

SPARE PARTS

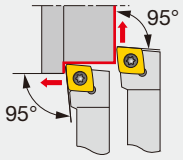


Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench 1	DirectJet plug	Wrench 2	Wrench 3 (Optional)
JSCL2CR**-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2	-

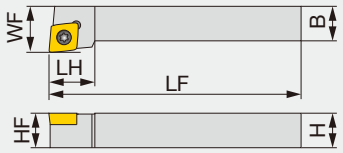
Reference pages : JSCL2CR/L, JTCL2CR/L, JSCL2CR-CHP: Inserts → B112 -, CBN → B191, PCD → B213

JSCLCR/L

Screw-on toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L**



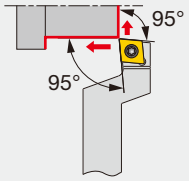
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCLCR/L0808H06	8	8	100	12	8	10	0.4	CC**0602...	1.2
JSCLCR/L1010H06	10	10	100	12	10	12	0.4	CC**0602...	1.2
JSCLCR/L1212H09	12	12	100	16	12	16	0.8	CC**09T3...	1.2
JSCLCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...	1.2

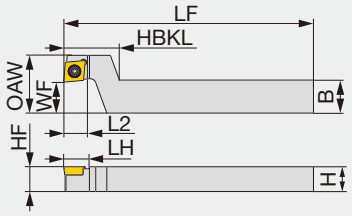
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

JSCLCR-F

Screw-on stepped-head toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSCLCR1216F09-F15	12	16	85	12	27	12.5	12	15	28	0.2	CC**09T3...	1.2
JSCLCR1216X09-F15	12	16	120	12	27	12.5	12	15	28	0.2	CC**09T3...	1.2
JSCLCR1620X09-F15	16	20	120	12	27	12.5	16	15	28	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSCLCR/L**H06	CSTB-2.5	T-8F	-
JSCLCR/L**H09	CSTB-4SD	T-8F	-
JSCLCR**F15	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX110	TH10	KS05F
Breaker Shape	NS	W20	AL
Cutting conditions	B022		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

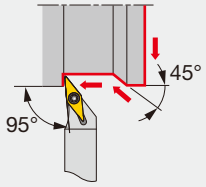
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

Reference pages : JSCLCR/L, JSCLCR-F: Inserts → B112 -, CBN → B191, PCD → B213

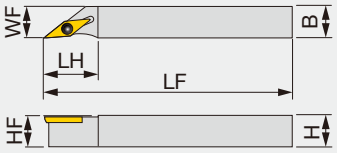
JSVL2PR/L

Screw-on toolholder with 95° approach angle, for positive 35° rhombic inserts



Cutting edge style **L2**

Without offset



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVL2PR/L1010X08	10	10	120	16	10	10	0.2	VP**0802...	0.6
JSVL2PR/L1010K08	10	10	125	16	10	10	0.2	VP**0802...	0.6
JSVL2PR/L1212F08	12	12	85	16	12	12	0.2	VP**0802...	0.6
JSVL2PR/L1212F11	12	12	85	21	12	12	0.2	VP**1103...	1.2
JSVL2PR/L1212X08	12	12	120	16	12	12	0.2	VP**0802...	0.6
JSVL2PR/L1212X11	12	12	120	21	12	12	0.2	VP**1103...	1.2
JSVL2PR/L1212K08	12	12	125	16	12	12	0.2	VP**0802...	0.6
JSVL2PR/L1616X08	16	16	120	16	16	16	0.2	VP**0802...	0.6
JSVL2PL1616K08	16	16	125	16	16	16	0.2	VP**0802...	0.6
JSVL2PR/L1616X11	16	16	120	21	16	16	0.2	VP**1103...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVL2PR/L**08	CSTB-2L	T-6F	(T-6L)
JSVL2PR/L**11	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G094	

M

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G094	

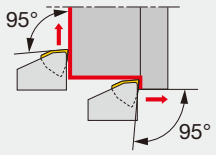
S

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G094	

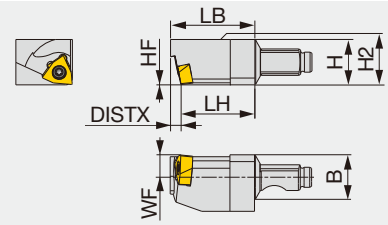
Reference pages : JSVL2PR/L: Inserts → B154 -

QC12-JSWL2XR-Y

Screw-on Y-axis turning modular head with 95° approach angle, for WXGU inserts



Cutting edge style **L2**



Without offset

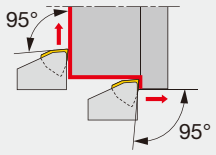
Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSWL2XR04-Y	12	12	19.5	0	6	22.3	12	2.8	0.2	WXGU0403**L...	0.9

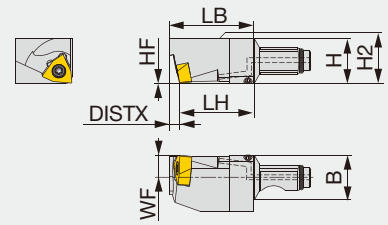
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSWL2XR-Y-CHP

Screw-on Y-axis turning modular head with 95° approach angle, for WXGU inserts, with high pressure coolant capability



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSWL2XR04-Y-CHP	12	12	19.5	0	6	22.3	12	2.8	0.2	WXGU0403**L...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSWL2XR04-Y	SR34-514	T-7F	-
QC12-JSWL2XR04-Y-CHP	SR34-514	T-7F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

For Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

H

Application areas	Precision finishing
Grade	BXA10
Breaker Shape	HP
Cutting conditions	B026

For Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

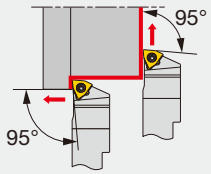
N

Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

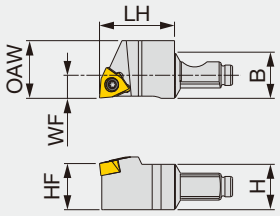
Reference pages : JSCLCR-F: Inserts → B157 -, CBN → B210, Standard cutting conditions → G094

QC12-JSWL2XR

Screw-on modular head with 95° approach angle, for WXGU inserts



Cutting edge style **L2**



Without offset

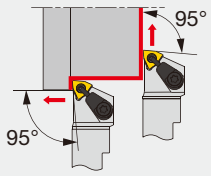
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSWL2XR04	12	12	19.5	12	6	15	0.2	WXGU0403**L...	0.9

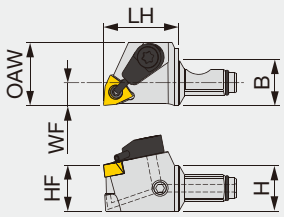
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSWL2XR-CHP

Screw-on modular head with 95° approach angle, for WXGU inserts, with high pressure coolant capability



Cutting edge style **L2**



Without offset

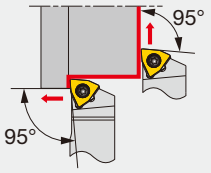
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSWL2XR04-CHP	12	12	19.5	12	6	16.5	0.2	WXGU0403**L...	0.9

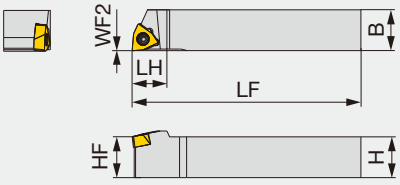
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

JSWL2XR/L

Screw-on toolholder with 95° approach angle, for WXGU inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSWL2XR/L1010X04	10	10	120	11	10	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1212F04	12	12	85	11	12	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1212X04	12	12	120	11	12	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1616X04	16	16	120	13	16	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L2020H04	20	20	100	13	20	0	0.2	WXGU0403**L/R...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

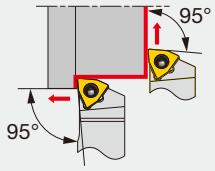
SPARE PARTS

Designation	Clamping screw 1	Coolant unit	Wrench 1	O-ring
QC12-JSWL2XR04-CHP	SR34-514	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70
QC12-JSWL2XR04 JSWL2XR/L...	SR34-514	-	T-7F	-

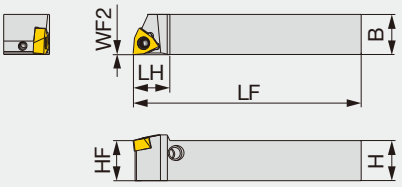
Reference pages : QC12-JSWL2XR, QC12-JSWL2XR-CHP, JSWL2XR/L: Inserts → B157 -, CBN → B210
Shank, Accessory → G095, G096, Standard cutting conditions → G094

JPWL2XR/L

Lever-lock toolholder with 95° approach angle, for WXGU inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPWL2XR/L1010X04	10	10	120	11	10	0	0.2	WXGU0403**L/R...	0.9
JPWL2XR/L1212F04	12	12	85	11	12	0	0.2	WXGU0403**L/R...	0.9
JPWL2XR/L1212X04	12	12	120	11	12	0	0.2	WXGU0403**L/R...	0.9
JPWL2XR/L1616X04	16	16	120	13	16	0	0.2	WXGU0403**L/R...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw 1	Lever	Pin	Clamping screw 2	Wrench 1	Wrench 2
JSWL2XR/L...	SR34-514	-	-	-	T-7F	-
JPWL2XR/L...	-	SLLV-2	SL-PI-2	SR10400611	-	HW2.0/5RED

INSERT SELECTION

For Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

H

Application areas	Precision finishing
Grade	BXA10
Breaker Shape	HP
Cutting conditions	B026

For Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

N

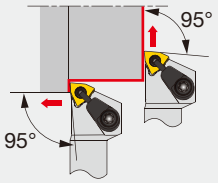
Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

Reference pages : JPWL2XR/L: Inserts → B157 -, CBN → B210, Standard cutting conditions → G094

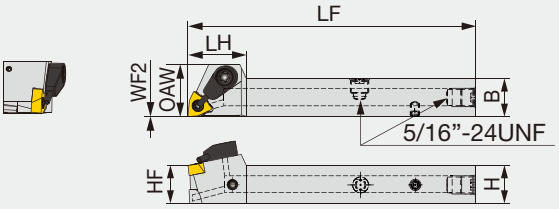
JSWL2XR/L-CHP

Direct connection

Screw-on toolholder without offset, 95° approach angle, for WXGU inserts, high pressure coolant compatible



Cutting edge style **L2**

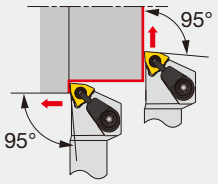


Without offset

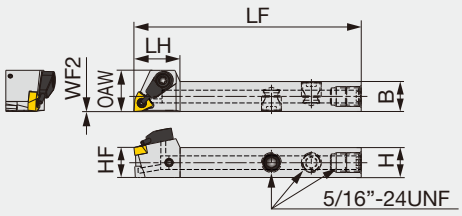
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSWL2XR1212X04-CHP	12	12	120	18.5	12	0	16.5	0.2	WXGU0403**L	0.9
JSWL2XR1616X04-CHP	16	16	120	18.5	16	0	16.5	0.2	WXGU0403**L	0.9

Tube connection



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSWL2XR/L1212F04-CHP	12	12	85	18	12	0	16.5	0.2	WXGU0403**L/R...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Note: Right-hand toolholders (R) are used with left-hand inserts (L). Left-hand toolholders (L) are used with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSWL2XR**04-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSWL2XR/L1212F04-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-

INSERT SELECTION

For Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

H

Application areas	Precision finishing
Grade	BXA10
Breaker Shape	HP
Cutting conditions	B026

For Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

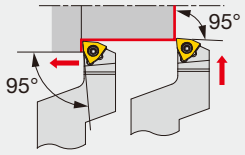
N

Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

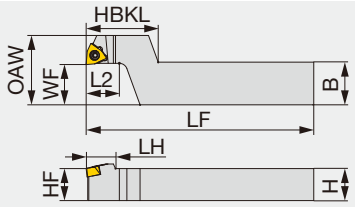
Reference pages : JSWL2XR/L-CHP: Inserts → B157 -, CBN → B210
Standard cutting conditions → G094

JSWLXR-F

Screw-on stepped-head toolholder with 95° approach angle, for WXGU inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSWLXR1016X04-F15	10	16	120	12	27	11	10	15	26	0.2	WXGU0403**L...	0.9
JSWLXR1216F04-F15	12	16	85	12	27	11	12	15	26	0.2	WXGU0403**L...	0.9
JSWLXR1216X04-F15	12	16	120	12	27	11	12	15	26	0.2	WXGU0403**L...	0.9
JSWLXR1620X04-F15	16	20	120	12	27	11	16	15	26	0.2	WXGU0403**L...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
JSWLXR**-F15	SR34-514	T-7F

INSERT SELECTION

For Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

H

Application areas	Precision finishing
Grade	BXA10
Breaker Shape	HP
Cutting conditions	B026

For Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

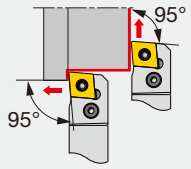
N

Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

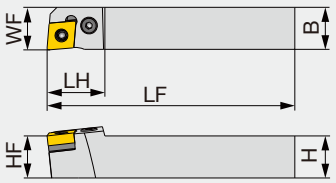
Reference pages : JSWLXR-F: Inserts → B157 -, CBN → B210, Standard cutting conditions → G094

PCL2NR

Lever-lock toolholder with 95° approach angle, for negative 80° rhombic inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCL2NR2020H12	20	20	100	26	20	20	0.8	CN/GN**1204...	3

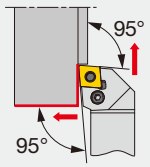
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

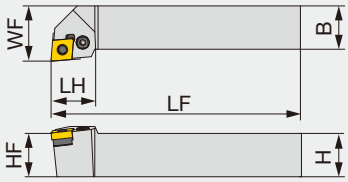
Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCL2NR2020H12	LSC42	LCS4	LCL4	LSP4	P-3

PCLNR

Lever-lock toolholder with 95° approach angle, for negative 80° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR2020H12	20	20	100	26	20	25	0.8	CN/GN**1204...	3

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCLNR2020H12	LSC42	LCS4	LCL4	LSP4	P-3

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application areas	Finish cutting	Medium cutting	
Grade	DX110	TH10	KS05F
Breaker Shape	DIA	P	28
Cutting conditions	B010		

S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

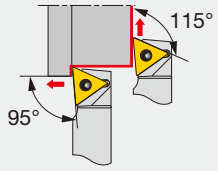
H

Application areas	Precision finishing
Grade	BXA10
Breaker Shape	HP
Cutting conditions	B014

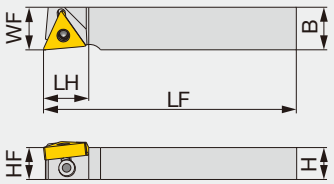
Reference pages : PCL2NR, PCLNR: Inserts → B054 -, CBN → B168 -, PCD → B211

JTTLNR/L

Back-clamp toolholder with 95° approach angle, for negative 60° triangular inserts



Cutting edge style **L**



Without offset

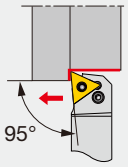
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTTLNR/L1216F16	12	16	85	17	12	16	0.4	TN**1604...	1
JTTLNR/L1216X16	12	16	120	17	12	16	0.4	TN**1604...	1
JTTLNR/L1616X16	16	16	120	17	16	16	0.4	TN**1604...	1

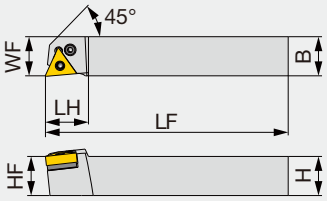
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

PTL2NR/L

Lever-lock toolholder with 95° approach angle, for negative 60° triangular inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTL2NR/L2020H16	20	20	100	22	20	20	0.4	TN**1604...	2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamp	Shim	Clamping screw	Clamping screw 1	Wrench	Wrench 1	Spring pin	Lever
JTTLNR/L...	JCP-3N	-	JDS-5040	-	P-2.5F	-	-	-
PTL2NR/L...	-	LST317 D30	-	LCS3	-	P-2.5	LSP3	LCL3

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting		Medium cutting
Grade	SH725	SH725	GT9530	T9215
Breaker Shape	01	JRP	TSF	TM
Cutting conditions	G094		B004	

P

Application areas	Medium to heavy cutting
Grade	T9215
Breaker Shape	TH
Cutting conditions	B004

N

Application areas	Precision finishing	Finish cutting	Medium cutting	
Grade	DX110	DX140	TH10	KS05F
Breaker Shape	DIA with rake	DIA	P	28
Cutting conditions	B010			

H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B014	

M

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	SH725	SH725	AH6225
Breaker Shape	01	JRP	SM
Cutting conditions	G094		B006

K

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

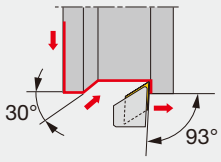
S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

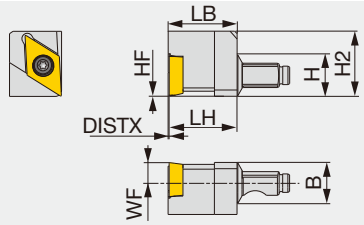
Reference pages : JTTLNR/L, PTL2NR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

QC12-JSDJ2CR-Y

Screw-on Y-axis turning modular head with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J2**



Without offset

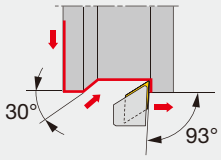
Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2CR11-Y	12	12	19.5	0	6	19.8	18.7	0.3	0.2	DC**11T3...	1.2

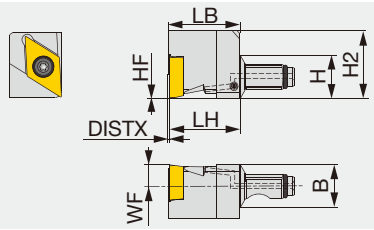
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

QC12-JSDJ2CR-Y-CHP

Screw-on Y-axis turning modular head with 93° approach angle, for positive 55° rhombic inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2CR11-Y-CHP	12	12	19.5	0	6	19.8	18.7	0.3	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSDJ2CR11-Y, QC12-JSDJ2CR11	CSTB-4SD	T-8F	-
QC12-JSDJ2CR11-Y-CHP	CSTB-4SD	T-8F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

N

Application areas	Precision finishing	Medium cutting
Grade	DX110	KS05F
Breaker Shape	NS	AL
Cutting conditions	B022	

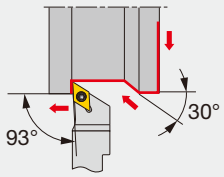
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

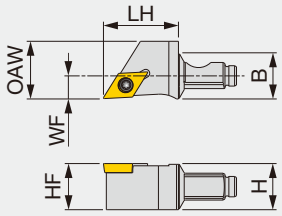
Reference pages : QC12-JSDJ2CR-Y, QC12-JSDJ2CR-Y-CHP: Inserts → B121 -, CBN → B193 -, PCD → B214
Shank, Accessory → G095, G096

QC12-JSDJ2CR

Screw-on modular head with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J2**



Without offset

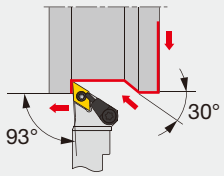
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2CR07	12	12	19.5	12	6	15	0.2	DC**0702...	1.2
QC12-JSDJ2CR11	12	12	19.5	12	6	15	0.2	DC**11T3...	1.2

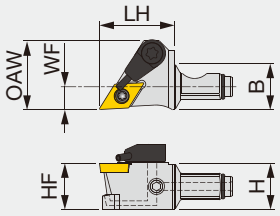
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

QC12-JSDJ2CR-CHP

Screw-on modular head with 93° approach angle, for positive 55° rhombic inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2CR07-CHP	12	12	19.5	12	6	18	0.2	DC**0702...	1.2
QC12-JSDJ2CR11-CHP	12	12	19.5	12	6	21	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSDJ2CR07	CSTB-2.5	-	T-8F	-
QC12-JSDJ2CR07-CHP	CSTB-2.5	S-CU-CHP	T-8F	ORSS-0454.5X1.0NBR70
QC12-JSDJ2CR11-CHP	CSTB-4SD	S-CU-CHP	T-8F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Medium cutting
Grade	DX110	KS05F
Breaker Shape	NS	AL
Cutting conditions	B022	

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

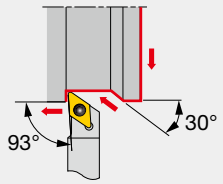
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

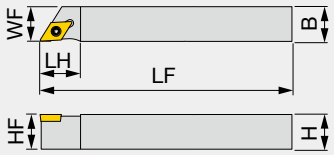
Reference pages : QC12-JSDJ2CR, QC12-JSDJ2CR-CHP: Inserts → B121 -, CBN → B193 -, PCD → B214, Shank, Accessory → G095, G096

JSDJ2CR/L

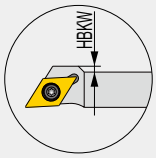
Screw-on toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J2**



Without offset



JSDJ2CR/L1010X11
JSDJ2CR/L1212F11
JSDJ2CR/L1212X11

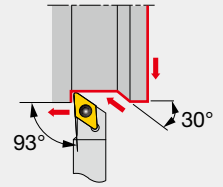
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque*
JSDJ2CR/L0808F07	8	8	85	14	8	8	-	0.2	DC**0702...	1.2
JSDJ2CR/L1010X07	10	10	120	14	10	10	-	0.2	DC**0702...	1.2
JSDJ2CR/L1010X11	10	10	120	20	10	10	4	0.2	DC**11T3...	1.2
JSDJ2CR/L1212F07	12	12	85	14	12	12	-	0.2	DC**0702...	1.2
JSDJ2CR/L1212F11	12	12	85	20	12	12	2	0.2	DC**11T3...	1.2
JSDJ2CR/L1212X07	12	12	120	14	12	12	-	0.2	DC**0702...	1.2
JSDJ2CR/L1212X11	12	12	120	20	12	12	2	0.2	DC**11T3...	1.2
JSDJ2CR/L1616X11	16	16	120	20	16	16	-	0.2	DC**11T3...	1.2

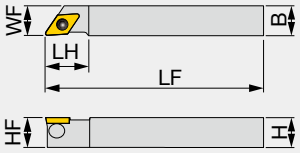
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

JTDJ2CR/L

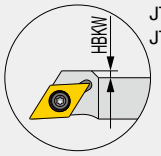
Back-clamp toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J2**



Without offset



JTDJ2CR/L1212F11
JTDJ2CR/L1212X11

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque*
JTDJ2CR/L1010X07	10	10	120	14	10	10	-	0.2	DC**0702...	0.9
JTDJ2CR/L1212F07	12	12	85	14	12	12	-	0.2	DC**0702...	0.9
JTDJ2CR/L1212X07	12	12	120	14	12	12	-	0.2	DC**0702...	0.9
JTDJ2CR/L1212F11	12	12	85	20	12	12	2	0.2	DC**11T3...	1.2
JTDJ2CR/L1212X11	12	12	120	20	12	12	2	0.2	DC**11T3...	1.2
JTDJ2CR/L1616X11	16	16	120	20	16	16	-	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS







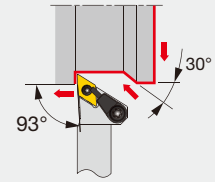
Designation	Clamping screw	Clamp	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDJ2CR/L**07	CSTB-2.5	-	-	T-8F	(T-8L)
JSDJ2CR/L**11	CSTB-4SD	-	-	T-8F	(T-8L)
JTDJ2CR/L**07	-	JCP-2	JDS-3525	P-2F	-
JTDJ2CR/L**11	-	JCP-3	JDS-5040	P-2.5F	-

Reference pages : JSDJ2CR/L, JTDJ2CR/L: Inserts → B121 -, CBN → B193 -, PCD → B214,
Shank, Accessory → G095, G096

JSDJ2CR-CHP

Direct connection

Screw-on toolholder without offset, 93° approach angle for positive 55° rhombic inserts, high pressure coolant compatible



Cutting edge style **J2**

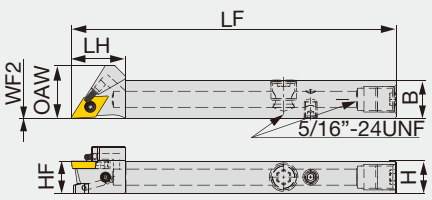


Fig.1

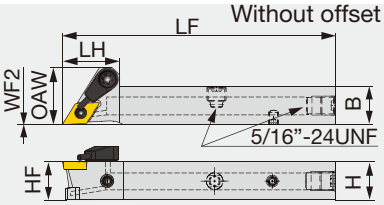


Fig.2

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*	Fig.
JSDJ2CR1012H07-CHP	10	12	100	17	10	0	16.4	0.2	DC**0702	1.2	1
JSDJ2CR1212X11-CHP	12	12	120	19	12	0	20.5	0.2	DC**11T3	1.2	2
JSDJ2CR1616X11-CHP	16	16	120	19	16	0	20.5	0.2	DC**11T3	1.2	2

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant nozzle	Nozzle retainer screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSDJ2CR1012H07-CHP	CSTB-2.5	NZ-1.10-7-CHP	SSHM4-4-TB	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSDJ2CR**11-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Medium cutting
Grade	DX110	KS05F
Breaker Shape	NS	AL
Cutting conditions	B022	

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

H

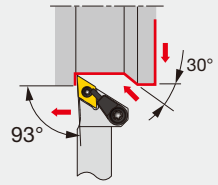
Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

Reference pages : JSDJ2CR-CHP: Inserts → B121 -, CBN → B193 -, PCD → B214
Shank, Accessory → G095, G096

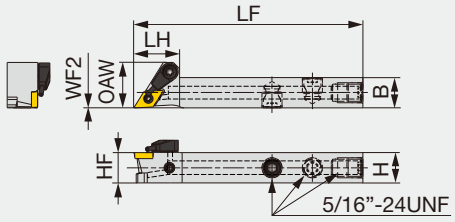
JSDJ2CR/L-CHP

Tube connection

Screw-on toolholders without offset – 93° approach angle. For positive 55° rhombic insert. High-pressure coolant capability.



Cutting edge style **J2**



Without offset

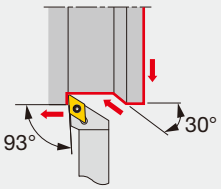
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSDJ2CR/L1212F07-CHP	12	12	85	18	12	0	18	0.2	DC**0702...	1.2
JSDJ2CR/L1212F11-CHP	12	12	85	19	12	0	20.5	0.2	DC**11T3...	1.2

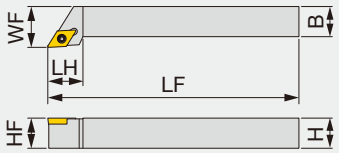
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

JSDJCR/L

Screw-on toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDJCR/L0808H07	8	8	100	14	8	10	0.4	DC**0702...	1.2
JSDJCR/L1010H11	10	10	100	18	10	12	0.8	DC**11T3...	1.2
JSDJCR/L1212H07	12	12	100	14	12	16	0.4	DC**0702...	1.2
JSDJCR/L1212H11	12	12	100	18	12	16	0.8	DC**11T3...	1.2
JSDJCR/L1616H11	16	16	100	18	16	20	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

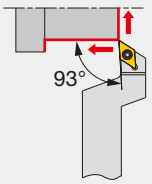
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Wrench 2 (Optional)
JSDJ2CR/L1212F07-CHP	CSTB-2.5	S-CU-CHP	T-8F	-
JSDJ2CR/L1212F11-CHP	CSTB-4SD	S-CU-CHP	T-8F	-

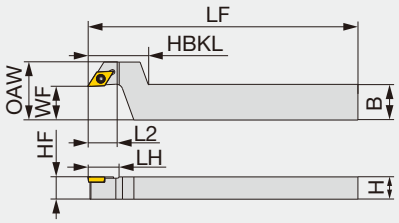
Reference pages : JSDJ2CR/L-CHP, JSDJCR/L: Inserts → B121 -, CBN → B193 -, PCD → B214
Shank, Accessory → G095, G096

JSDJCR-F

Screw-on stepped-head toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJCR1016X07-F15	10	16	120	12.5	27	14	10	15	26	0.2	DC**0702...	1.2
JSDJCR1216F07-F15	12	16	85	12.5	27	14	12	15	26	0.2	DC**0702...	1.2
JSDJCR1216X07-F15	12	16	120	12.5	27	14	12	15	26	0.2	DC**0702...	1.2
JSDJCR1216F11-F15	12	16	85	12.5	27	20	12	15	28	0.2	DC**11T3...	1.2
JSDJCR1216X11-F15	12	16	120	12.5	27	20	12	15	28	0.2	DC**11T3...	1.2
JSDJCR1620X11-F15	16	20	120	12.5	27	20	16	15	28	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDJC**H07, JSDJCR**07-F15	CSTB-2.5	T-8F	(T-8L)
JSDJC**H11, JSDJCR**11-F15	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Medium cutting
Grade	DX110	KS05F
Breaker Shape	NS	AL
Cutting conditions	B022	

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

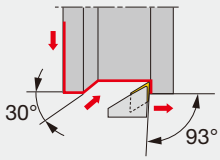
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

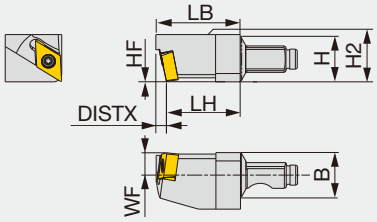
Reference pages : JSDJCR-F: Inserts → B121 -, CBN → B193 -, PCD → B214
Shank, Accessory → G095, G096

QC12-JSDJ2XR-Y

Screw-on Y-axis turning modular head with 93° approach angle, for DX*U inserts



Cutting edge style **J2**



Without offset

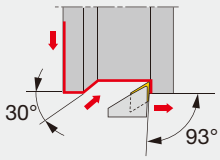
Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2XR07-Y	12	12	19.5	0	6	22.3	12.5	2.8	0.2	DX*U0703**L...	0.9

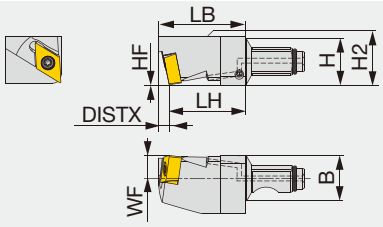
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSDJ2XR-Y-CHP

Screw-on Y-axis turning modular head with 93° approach angle, for DX*U inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset

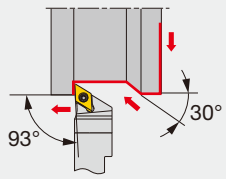
Right hand (R) shown.

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2XR07-Y-CHP	12	12	19.5	0	6	22.3	12.5	2.8	0.2	DX*U0703**L...	0.9

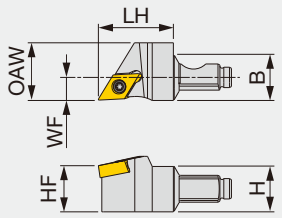
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSDJ2XR

Screw-on modular head with 93° approach angle, for DX*U inserts



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2XR07	12	12	19.5	12	6	15	0.2	DX*U0703**L...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

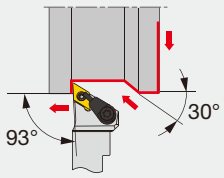
SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSDJ2XR07-Y	SR34-514	T-7F	-
QC12-JSDJ2XR07-Y-CHP, QC12-JSDJ2XR07	SR34-514	T-7F	ORSS-0454.5X1.0NBR70

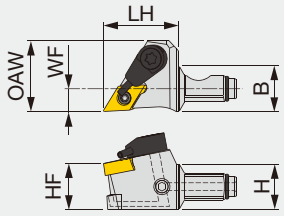
Reference pages : QC12-JSDJ2XR-Y, QC12-JSDJ2XR-Y-CHP, QC12-JSDJ2XR: Inserts → B126
Shank, accessory → G095, G096, Standard cutting conditions → G094

QC12-JSDJ2XR-CHP

Screw-on modular head with 93° approach angle, for DX*U inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset

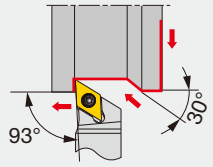
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2XR07-CHP	12	12	19.5	12	6	18.4	0.2	DX*U0703**L...	0.9

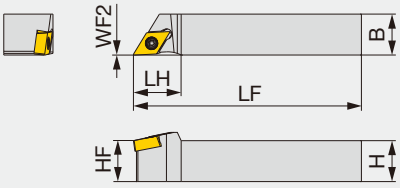
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

JSDJ2XR/L

Screw-on toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L2020H07	20	20	100	18	20	0	0.2	DX*U0703**L/R...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSDJ2XR07-CHP	SR34-514	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70
JSDJ2XR/L...	SR34-514	-	T-7F	-

INSERT SELECTION

for Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	**SH725**	**SH725**
Breaker Shape	**JSS**	**JS**
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	**SH725**	**SH725**
Breaker Shape	**JSS**	**JS**
Cutting conditions	G094	

for Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	**AH725**	**AH725**
Breaker Shape	**SS**	**TS**
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	**AH8015**	**AH8015**
Breaker Shape	**SS**	**TS**
Cutting conditions	G094	

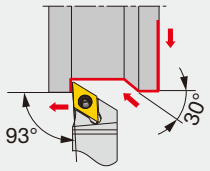
N

Application areas	Medium to finish cutting	
Grade	**KS05F**	**KS05F**
Breaker Shape	**SS**	**TS**
Cutting conditions	B022	

Reference pages : QC12-JSDJ2XR-CHP, JSDJ2XR/L: Inserts → B126
Shank, accessory → G095, G096, Standard cutting conditions → G094

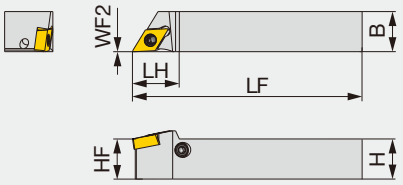
JPDJ2XR/L

Lever-lock toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **J2**

Without offset



Right hand (R) shown.

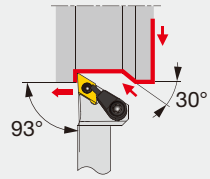
Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**L/R...	0.9
JPDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**L/R...	0.9
JPDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**L/R...	0.9
JPDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**L/R...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

JSDJ2XR-CHP

Direct connection

Screw-on toolholder without offset, 93° approach angle, for DX*U inserts, high pressure coolant compatible



Cutting edge style **J2**

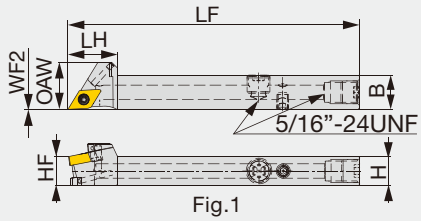


Fig.1

Without offset

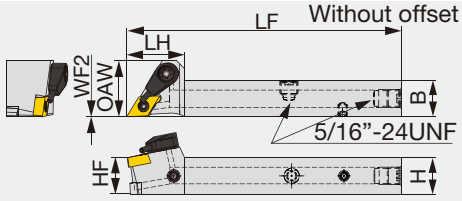
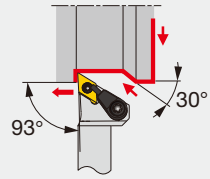


Fig.2

Right hand (R) shown.

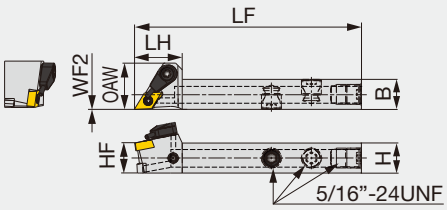
Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*	Fig.
JSDJ2XR1012H07-CHP	10	12	100	17	10	0	14.7	0.2	DX*U0703**L	0.9	1
JSDJ2XR1212X07-CHP	12	12	120	19	12	0	18.5	0.2	DX*U0703**L	0.9	2
JSDJ2XR1616X07-CHP	16	16	120	19	16	0	18.5	0.2	DX*U0703**L	0.9	2

Tube connection



Cutting edge style **J2**

Without offset

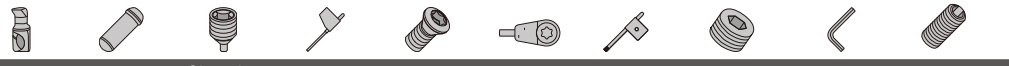


Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE **	Insert	Torque*
JSDJ2XR/L1212F07-CHP	12	12	85	19	12	0	18.5	0.2	DX*U0703**L/R...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Right-hand toolholders (R) are used with left-hand inserts (L). Left-hand toolholders (L) are used with right-hand inserts (R).

SPARE PARTS

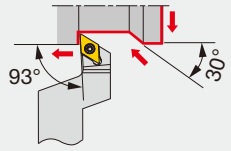


Designation	Lever	Pin	Clamping screw 1	Wrench 1	Clamping screw 2	Coolant unit	Wrench 2	Coolant plug	Wrench 3	DirectJet plug	Wrench 4
JPDJ2XR/L**07	SLLV-2	SL-PI-2	SR10400611	HW2.0/5RED	-	-	-	-	-	-	-
JSDJ2XR1012H07-CHP	-	-	-	-	SR34-514	-	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSDJ2XR**07-CHP	-	-	-	-	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSDJ2XR/L1212F07-CHP	-	-	-	-	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-
JSDJXR**-F15	-	-	-	-	SR34-514	-	T-7F	-	-	-	-

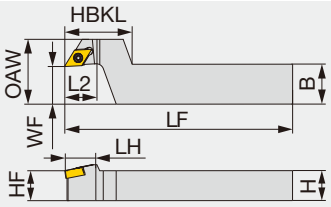
Reference pages : JPDJ2XR/L, JSDJ2XR-CHP: : Inserts → B126 -
Standard cutting conditions → G094

JSDJXR-F

Screw-on stepped-head toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJXR1016X07-F15	10	16	120	12	27	14	10	15	26	0.2	DX*U0703**L...	0.9
JSDJXR1216F07-F15	12	16	85	12	27	14	12	15	26	0.2	DX*U0703**L...	0.9
JSDJXR1216X07-F15	12	16	120	12	27	14	12	15	26	0.2	DX*U0703**L...	0.9
JSDJXR1620X07-F15	16	20	120	12	27	14	16	15	26	0.2	DX*U0703**L...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
JSDJXR**-F15	SR34-514	T-7F

INSERT SELECTION

for Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

for Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

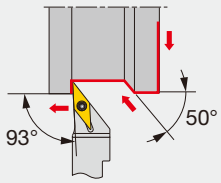
N

Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

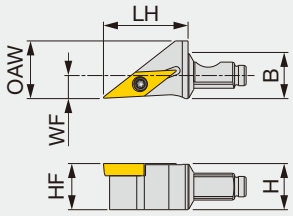
Reference pages : JSDJXR-F: Inserts → B126 -, Standard cutting conditions → G094

QC12-JSVJ2BR

Screw-on modular head with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style **J2**



Without offset

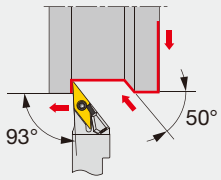
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2BR11	12	12	22	12	6	15	0.2	VB**1103...	1.2

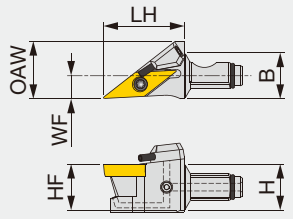
Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

QC12-JSVJ2BR-CHP

Screw-on modular head with 93° approach angle, for positive 35° rhombic inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset

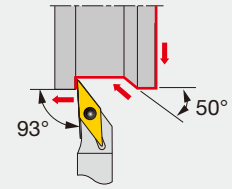
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2BR11-CHP	12	12	21	12	6	15	0.2	VB**1103...	1.2

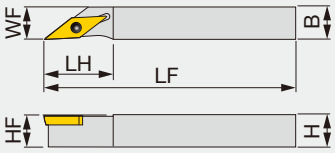
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

JSVJ2BR/L

Screw-on toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJ2BR/L1010X11	10	10	120	21	10	10	0.2	VB**1103...	1.2
JSVJ2BR/L1212F11	12	12	85	21	12	12	0.2	VB**1103...	1.2
JSVJ2BR/L1212X11	12	12	120	21	12	12	0.2	VB**1103...	1.2
JSVJ2BR/L1616X11	16	16	120	21	16	16	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

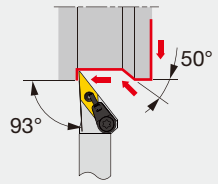
SPARE PARTS

Designation	Clamping screw	Wrench 1	O-ring	Coolant nozzle	Screw	Wrench 2
QC12-JSVJ2BR11, JSVJ2BR/L...	CSTB-2.5	T-8F	-	-	-	-
QC12-JSVJ2BR11-CHP	CSTB-2.5	T-8F	ORSS-0454.5X1.0NBR70	NZ-1.10-7-CHP	SSHM4-4-TB	P-2

Reference pages : QC12-JSVJ2BR, QC12-JSVJ2BR-CHP, JSVJ2BR/L: Inserts → B150 -, CBN → B207 -, Shank, Accessory → G095, G096

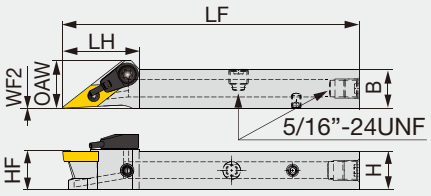
Direct connection

Screw-on toolholder without offset, 93° approach angle for positive 35° rhombic inserts, high pressure coolant compatible



Cutting edge style **J2**



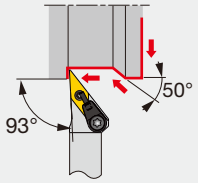


Without offset 

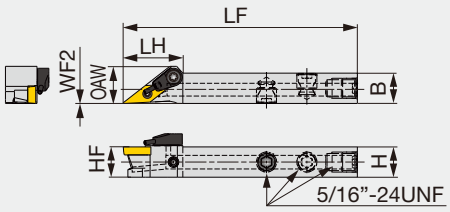
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE	Insert	Torque*
JSVJ2BR1212X11-CHP	12	12	120	23.6	12	0	14.7	0.2	VB**1103	1.2
JSVJ2BR1616X11-CHP	16	16	120	23.6	16	0	16	0.2	VB**1103	1.2

Tube connection



Cutting edge style **J2**



Without offset 

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSVJ2BR/L1212F11-CHP	12	12	85	23.6	12	0	14.7	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSVJ2B**X11-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSVJ2B**F11-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	-	-

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G094			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G094			

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

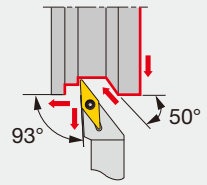
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B026	

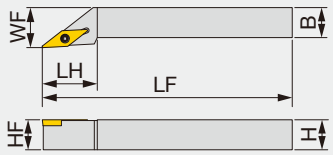
Reference pages : JSVJ2BR/L-CHP: Inserts → B150 -, CBN → B207 -

JSVJBR/L

Screw-on toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style **J**



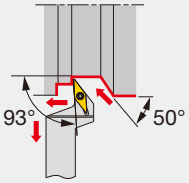
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJBR/L1010H11	10	10	100	20	10	12	0.4	VB**1103...	1.2
JSVJBR/L1212H11	12	12	100	22	12	16	0.4	VB**1103...	1.2
JSVJBR/L1616H11	16	16	100	22	16	20	0.4	VB**1103...	1.2

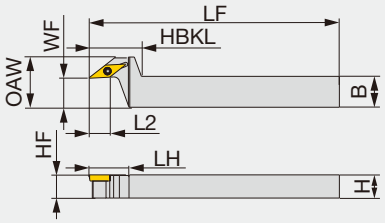
Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

JSVJBR-F

Screw-on stepped-head toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSVJBR1216F11-F15	12	16	85	12.6	27	21	12	15	26	0.2	VB**1103...	1.2
JSVJBR1216X11-F15	12	16	120	12.6	27	21	12	15	26	0.2	VB**1103...	1.2
JSVJBR1620X11-F15	16	20	120	12.6	27	21	16	15	26	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

SPARE PARTS





Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVJBR/L..., JSVJBR**-F15	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to Finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G053			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G053			

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS	JS
Cutting conditions	G053	

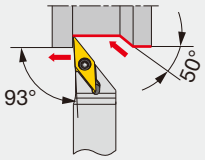
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B028	

Reference pages : JSVJBR/L, JSVJBR-F: Inserts → B150 -, CBN → B207 -

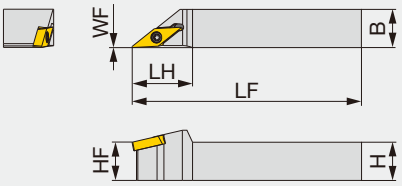
JSVJ2XR/L

Screw-on toolholder with 93° approach angle, for VXGU inserts



Cutting edge style **J2**

Without offset



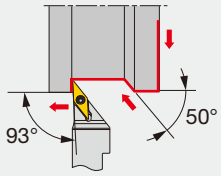
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJ2XR/L1010X09	10	10	120	17	10	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L1212F09	12	12	85	19	12	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L1212X09	12	12	120	19	12	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L1616X09	16	16	120	19	16	0	0.2	VXGU09T2**L/R...	0.9
JSVJ2XR/L2020H09	20	20	100	19	20	0	0.2	VXGU09T2**L/R...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).
Use left-hand toolholders (L) with right-hand inserts (R).

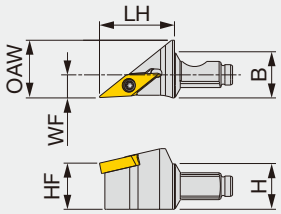
QC12-JSVJ2XR

Screw-on modular head with 93° approach angle, for VXGU inserts



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2XR09	12	12	19.5	12	6	15	0.2	VXGU09T2**L...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS




Designation	Clamping screw	Wrench
JSVJ2XR/L..., QC12-JSVJ2XR09	SR34-508	T-7F

INSERT SELECTION

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP 	JS 
	Cutting conditions	G094	

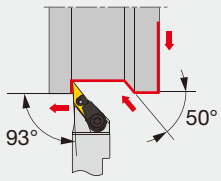
M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP 	JS 
	Cutting conditions	G094	

Reference pages : JSVJ2XR/L, QC12-JSVJ2XR: Inserts → B155, Shank, Accessory → G095, G096
Standard cutting conditions → G094

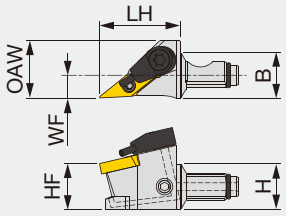
MINIFORCE TURN

QC12-JSVJ2XR-CHP

Screw-on modular head with 93° approach angle, for VXGU inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset

Right hand (R) shown.

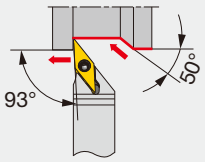
Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2XR09-CHP	12	12	21	12	6	15	0.2	VXGU09T2**L...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

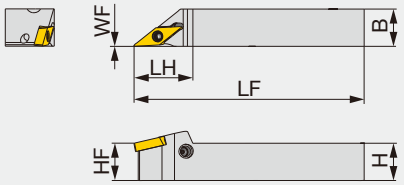
External
Internal
Grooving
Threading
Parting-off

JPVJ2XR/L

Lever-lock toolholder with 93° approach angle, for VXGU inserts



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JPVJ2XR/L1010X09	10	10	120	19	10	0	0.2	VXGU09T2**L/R...	0.9
JPVJ2XR/L1212F09	12	12	85	19	12	0	0.2	VXGU09T2**L/R...	0.9
JPVJ2XR/L1212X09	12	12	120	19	12	0	0.2	VXGU09T2**L/R...	0.9
JPVJ2XR/L1616X09	16	16	120	19	16	0	0.2	VXGU09T2**L/R...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).
Use left-hand toolholders (L) with right-hand inserts (R).

L
J
N
P
A
G
D
F
Special

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring	Lever	Pin	Clamping screw	Wrench
QC12-JSVJ2XR09-CHP	SR34-508	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-
JPVJ2XR/L...	-	-	-	-	SLLV-1	SL-PI-2	SR10400611	HW2.0/5RED

INSERT SELECTION

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JRP 	JS 
Cutting conditions	G094	

M

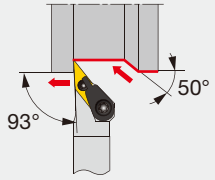
Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JRP 	JS 
Cutting conditions	G094	

Reference pages : QC12-JSVJ2XR-CHP, JPVJ2XR/L: Inserts → B155
Shank, Accessory → G095, G096, Standard cutting conditions → G094

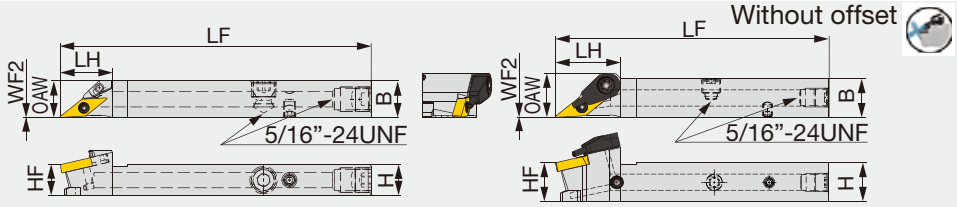
JSVJ2XR/L-CHP

Direct connection

Screw-on toolholder without offset, 93° approach angle, for VXGU inserts, high pressure coolant compatible



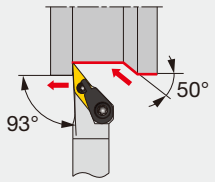
Cutting edge style **J2**



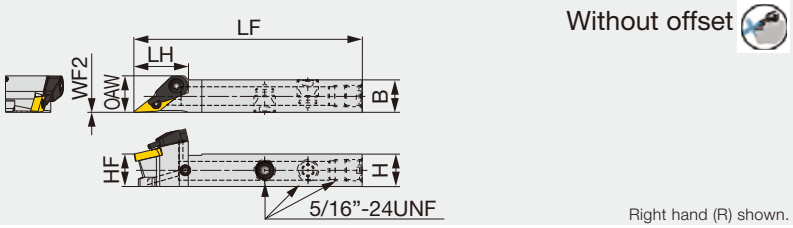
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*	Fig.
JSVJ2XR1012H09-CHP	10	12	100	17	10	0	12	0.2	VXGU09T2**L	0.9	1
JSVJ2XR1212X09-CHP	12	12	120	19.5	12	0	13.4	0.2	VXGU09T2**L	0.9	2
JSVJ2XR1616X09-CHP	16	16	120	19.5	16	0	16	0.2	VXGU09T2**L	0.9	2

Tube connection



Cutting edge style **J2**



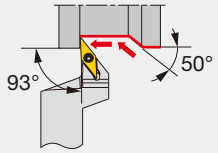
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSVJ2XR/L1212F09-CHP	12	12	85	20	12	0	13.5	0.2	VXGU09T2**L/R...	0.9

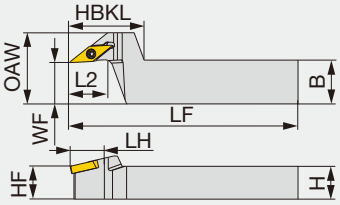
Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Right-hand toolholders (R) are used with left-hand inserts (L). Left-hand toolholders (L) are used with right-hand inserts (R).

JSVJXR-F

Screw-on stepped-head toolholder with 93° approach angle, for VXGU inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSVJXR1016X09-F15	10	16	120	12	27	19	10	15	26	0.2	VXGU09T2**L...	0.9
JSVJXR1216F09-F15	12	16	85	12	27	19	12	15	26	0.2	VXGU09T2**L...	0.9
JSVJXR1216X09-F15	12	16	120	12	27	19	12	15	26	0.2	VXGU09T2**L...	0.9
JSVJXR1620X09-F15	16	20	120	12	27	19	16	15	26	0.2	VXGU09T2**L...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

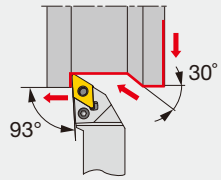
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSVJ2XR1012H09-CHP	SR34-508	-	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSVJ2XR**X09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSVJ2XR/L1212F09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-
JSVJXR**-F15	SR34-508	-	T-7F	-	-	-	-

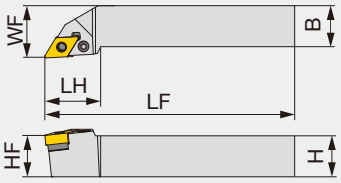
Reference pages : JSVJ2XR/L-CHP, JSVJXR-F: Inserts → B155, Standard cutting conditions → G094

PDJNR

Lever-lock toolholder with 93° approach angle, for negative 55° rhombic inserts



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR2020H15	20	20	100	32	20	25	0.8	DN**1504...	3

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PDJNR2020H15	LSD42	LCS4	LCL4	LSP4	P-3

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions	B006		

K

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application areas	Precision finishing	Finish cutting	Medium cutting	
Grade	DX110	DX140	TH10	KS05F
Breaker Shape	DIA with rake	DIA	P	28
Cutting conditions	B010			

S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

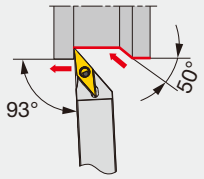
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	HS
Cutting conditions	B014	

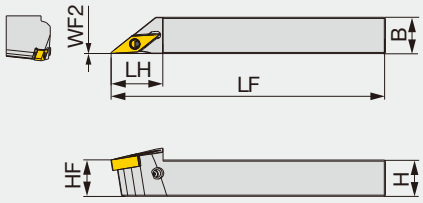
Reference pages : PDJNR: Inserts → B066 -, CBN → B172 -, PCD → B211

JPVJ2NR/L-Eco

Back-clamp toolholder with 93° approach angle, for negative 35° rhombic inserts



Cutting edge style **J**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPVJ2NR/L1212X1204	12	12	120	23	12	0	0.2	VN**1204...	0.9
JPVJ2NR/L1616X1204	16	16	120	23	16	0	0.2	VN**1204...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: The holder measurements are true with this insert radius

SPARE PARTS

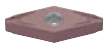
Designation	Lever	Pin	Clamping screw	Wrench
JPVJ2NR/L**1204	SLLV-4	SL-PI-2	SR10400611	HW2.0/5RED

INSERT SELECTION

P

Application	Finishing	Medium cutting
Grade	T9215	T9215
Chipbreaker shape	TSF 	TM 
Cutting conditions	B004	

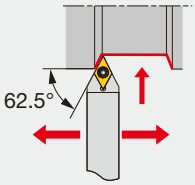
M

Application	Finishing	Medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	SS 	SM 
Cutting conditions	B006	

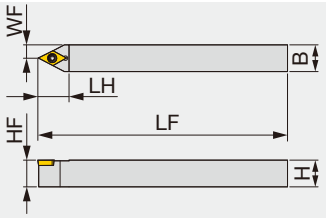
Reference pages : JTTANR/L: Inserts → B098 -

JSDNCN

Screw-on toolholder with 62.5° approach angle, for positive 55° rhombic inserts



Cutting edge style **N**

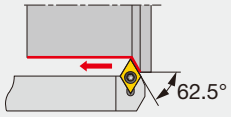


Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDNCN1010X07	10	10	120	15	10	5	0.2	DC**0702...	1.2
JSDNCN1010X11	10	10	120	21	10	5	0.2	DC**11T3...	1.2
JSDNCN1212F07	12	12	85	15	12	6	0.2	DC**0702...	1.2
JSDNCN1212X07	12	12	120	15	12	6	0.2	DC**0702...	1.2
JSDNCN1212F11	12	12	85	21	12	6	0.2	DC**11T3...	1.2
JSDNCN1212X11	12	12	120	21	12	6	0.2	DC**11T3...	1.2
JSDNCN1616X11	16	16	120	21	16	8	0.2	DC**11T3...	1.2

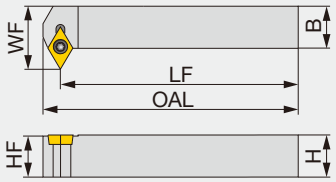
Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

JSDN3CR

Screw-on toolholder with 62.5° approach angle (N3-style), for positive 55° rhombic inserts



Cutting edge style **N3**



Right hand (R) shown.

Designation	H	B	OAL	LF	HF	WF	RE**	Insert	Torque*
JSDN3CR1212H07	12	12	105	100	12	18	0.4	DC**0702...	1.2
JSDN3CR1616H11	16	16	107	100	16	25	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDNCN**07, JSDN3CR1212H07	CSTB-2.5	T-8F	(T-8L)
JSDNCN**11, JSDN3CR1616H11	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX110	DX140	KS05F
Breaker Shape	NS	DIA	AL
Cutting conditions	B022		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

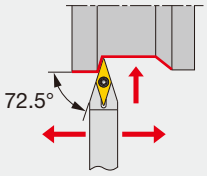
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B026	

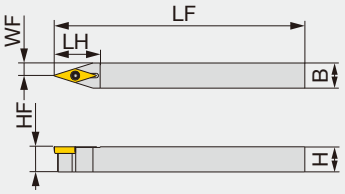
Reference pages : JSDNCN, JSDN3CR/L: Inserts → B121 -, CBN → B193 -, PCD → B214

JSVNBN

Screw-on toolholder with 72.5° approach angle, for positive 35° rhombic inserts



Cutting edge style **N**



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVNBN1010X11	10	10	120	22	10	5	0.2	VB**1103...	1.2
JSVNBN1212F11	12	12	85	22	12	6	0.2	VB**1103...	1.2
JSVNBN1212X11	12	12	120	22	12	6	0.2	VB**1103...	1.2
JSVNBN1616X11	16	16	120	22	16	8	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVNBN...	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G094			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G094			

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

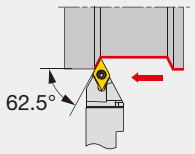
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B026	

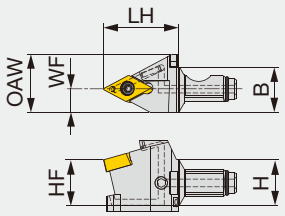
Reference pages : JSVNBN: Inserts → B150 -, CBN → B207 -

QC12-JSDNXR-CHP

Screw-on modular head with 62.5° approach angle, for DX*U inserts, with high pressure coolant capability



Cutting edge style **N**



Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDNXR07-CHP	12	12	19.5	12	6	15	0.2	DX*U0703**L...	0.9

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSDNXR07-CHP	SR34-508	T-7F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

for Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

for Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

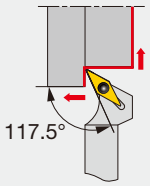
N

Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

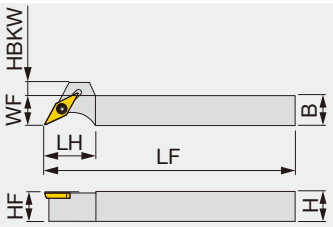
Reference pages : JSVJ2XR/L-CHP: Inserts → B126 -, Shank, Accessory → G095, G096
Standard cutting conditions → G094

JSVP2PR/L

Screw-on toolholder with 117.5° approach angle, for positive 35° rhombic inserts



Cutting edge style **P2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque*
JSVP2PR/L1010K08	10	10	125	16	10	10	4	0.2	VP**0802...	0.6
JSVP2PR/L1010K11	10	10	125	20	10	10	8	0.2	VP**1103...	1.2
JSVP2PR/L1212K08	12	12	125	16	12	12	2	0.2	VP**0802...	0.6
JSVP2PR/L1212K11	12	12	125	20	12	12	6	0.2	VP**1103...	1.2
JSVP2PR/L1616K08	16	16	125	16	16	16	2	0.2	VP**0802...	0.6
JSVP2PR/L1616K11	16	16	125	20	16	16	6	0.2	VP**1103...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVP2PR/L**08	CSTB-2L	T-6F	(T-6L)
JSVP2PR/L**11	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G094	

M

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G094	

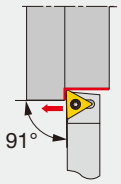
S

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G094	

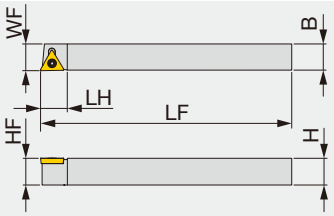
Reference pages : JSVP2PR/L: Inserts → B154

JSTACR/L

Screw-on toolholder with 91° approach angle, for positive 60° triangular inserts



Cutting edge style **A**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSTACR/L0808K08	8	8	125	10	8	8	0.2	TC**0802...	0.6
JSTACR/L1010K08	10	10	125	10	10	10	0.2	TC**0802...	0.6
JSTACR/L1212K11	12	12	125	12	12	12	0.4	TC**1102...	1.2
JSTACR/L1616H11	16	16	100	12	16	16	0.4	TC**1102...	1.2

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTACR/L**K08	CSTB-2L	T-6F	(T-6L)
JSTACR/L**11	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Medium cutting
Grade	DX120	KS05F
Breaker Shape	DIA	with rake AL
Cutting conditions	B022	

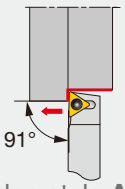
H

Application areas	Finish cutting
Grade	BXA10
Breaker Shape	CBN
Cutting conditions	B026

Reference pages : JSTACR/L: Inserts → B138 -, CBN → B198, PCD → B215

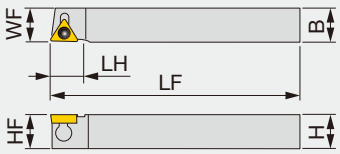
JTTACR/L

Back-clamp toolholder with 91° approach angle, for positive 60° triangular inserts



Cutting edge style **A**

Without offset



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTTACL0810K08	8	10	125	10	8	10	0.2	TC**0802...	0.9
JTTACR/L1212M11	12	12	150	12	12	12	0.4	TC**1102...	0.9
JTTACR/L1616M11	16	16	150	12	16	16	0.4	TC**1102...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

SPARE PARTS





Designation	Clamp	Clamping screw	Wrench
JTTACL0810K08	JCP-1	JDS-3525	P-2F
JTTACR/L**M11	JCP-2	JDS-3525	P-2F

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Medium cutting
Grade	DX120	KS05F
Breaker Shape	DIA	AL (with rake)
Cutting conditions	B022	

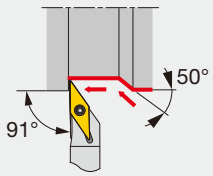
H

Application areas	Finish cutting
Grade	BXA10
Breaker Shape	CBN
Cutting conditions	B026

Reference pages : JTTACR/L: Inserts → B138 -, CBN → B198, PCD → B215

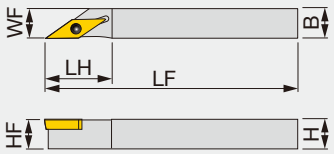
JSVABR/L

Screw-on toolholder with 91° approach angle, for positive 35° rhombic inserts



Cutting edge style **A**

Without offset



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVABR/L1010K11	10	10	125	21	10	10	0.2	VB**1103...	1.2
JSVABL1212K11	12	12	125	21	12	12	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVABR/L...	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G094			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	JP	JS	JS	J10
Cutting conditions	G094			

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

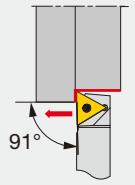
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B026	

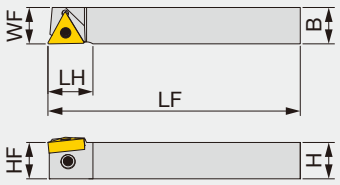
Reference pages : JSVABR/L: Inserts → B150 -, CBN → B207 -

JTTANR/L

Back-clamp toolholder with 91° approach angle, for negative 60° triangular inserts



Cutting edge style **A**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTTANR/L1216K16	12	16	125	19.8	12	16	0.4	TN**1604...	1.2
JTTANR/L1616K16	16	16	125	19.8	16	16	0.4	TN**1604...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
JTTANR/L...	JCP-3N	JDS-5040	P-2.5F

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting		Medium cutting
Grade	SH725	SH725	GT9530	T9215
Breaker Shape	01	JRP	TSF	TM
Cutting conditions	G094			B004

P

Application areas	Medium to heavy cutting
Grade	T9215
Breaker Shape	TH
Cutting conditions	B004

N

Application areas	Precision finishing	Finish cutting	Medium cutting	
Grade	DX110	DX140	TH10	KS05F
Breaker Shape	DIA with rake	DIA	P	28
Cutting conditions	B010			

H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	HS
Cutting conditions	B014	

M

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	SH725	SH725	AH6225
Breaker Shape	01	JRP	SM
Cutting conditions	G094		B006

K

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

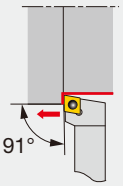
S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

Reference pages : JTTANR/L: Inserts → B087 -, CBN → B182 -, PCD → B212

JSCGCR/L

Screw-on toolholder with 91° approach angle, for positive 80° rhombic inserts



Cutting edge style **G**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCGCR/L1212H06	12	12	100	12	12	16	0.4	CC**0602...	1.2
JSCGCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSCGCR/L1212H06	CSTB-2.5	T-8F	(T-8L)
JSCGCR/L1616H09	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX110	TH10	KS05F
Breaker Shape	NS	W20	AL
Cutting conditions	B022		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

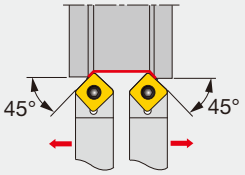
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

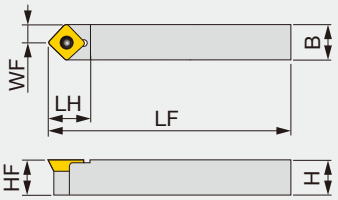
Reference pages : JSCGCR/L: Inserts → B112 -, CBN → B191, PCD → B213
Shank, Accessory → G095, G096

SSDC/PN

Screw-on toolholder with 45° approach angle, for positive square inserts



Cutting edge style **D**



Designation	H	B	LF	LH	HF	WF	RE**	Insert
SSDCN1010K07	10	10	125	12	10	5	0.4	SC**0702...
SSDPN1010H	10	10	100	12	10	5	0.4	SP*P042...
SSDCN1212K09	12	12	125	15	12	6	0.8	SC**09T3...
SSDPN1212H	12	12	100	12	12	6	0.4	SP*P042...
SSDCN1616H09	16	16	100	15	16	8	0.8	SC**09T3...
SSDPN1616H	16	16	100	14	16	8	0.8	SP*M322...

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SSDCN1010K07	CSTB-3	-	-	-	T-9F
SSDPN1010H	CSTA-NO3	-	-	-	T-9F
SSDCN1212K09	CSTB-4	-	-	-	T-15F
SSDPN1212H	CSTA-NO3	-	-	-	T-9F
SSDCN1616H09	CSTB-3.5L	DTS5-3.5	SSS32	P-3.5	T-15F
SSDPN1616H	CSTA-NO5	-	-	-	T-9F

INSERT SELECTION

P

Application areas	Medium to finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	PS 	PM 
Cutting conditions	B016	

M

Application areas	Medium cutting
Grade	AH725
Breaker Shape	PM 
Cutting conditions	B018

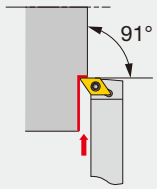
K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM 
Cutting conditions	B020

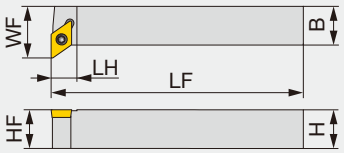
Reference pages : SSDC/PN: Inserts → B134 -

JSDFCR/L

Screw-on toolholder for facing with 91° approach angle, for positive 55° rhombic inserts



Cutting edge style **F**



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDFCR/L1212H07	12	12	100	8	12	16	0.4	DC**0702...	1.2
JSDFCR/L1616H11	16	16	100	10.5	16	22	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS





Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDFCR/L1212H07	CSTB-2.5	T-8F	(T-8L)
JSDFCR/L1616H11	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	J10
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX110	DX140	KS05F
Breaker Shape	NS	DIA	AL
Cutting conditions	B022		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

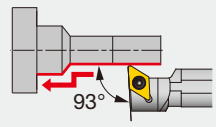
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	HP	CBN
Cutting conditions	B026	

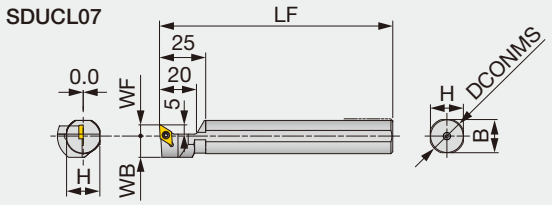
Reference pages : JSDFCR/L: Inserts → B121 -, CBN → B193 -, PCD → B214

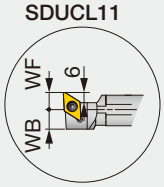
JS-SDUCL

Screw-on round-shank toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **U**





Left hand (L) shown.

Designation	DCONMS	WF	LF	H	B	WB	RE**	Insert	Torque*
JS19K-SDUCL07	19.05	6	125	18	18	11.5	0.4	DC**0702...	1.2
JS20K-SDUCL07	20	6	125	19	19	11.5	0.4	DC**0702...	1.2
JS22K-SDUCL07	22	6	125	21	21	11.5	0.4	DC**0702...	1.2
JS19K-SDUCL11	19.05	10	125	18	18	11.5	0.8	DC**11T3...	1.2
JS20K-SDUCL11	20	10	125	19	19	11.5	0.8	DC**11T3...	1.2
JS22K-SDUCL11	22	11	125	21	21	11.5	0.8	DC**11T3...	1.2
JS25K-SDUCL11	25	12	125	24	24	12.5	0.8	DC**11T3...	1.2
JS254K-SDUCL11	25.4	12	125	24	24	12.7	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)
RE**: Standard corner radius

SPARE PARTS





Designation	Clamping screw	Wrench
JS**K-SDUCL07	CSTB-2.5	T-8F
JS**K-SDUCL11	CSTB-4SD	T-8F

INSERT SELECTION

P

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

M

Application areas	Precision finishing		Finish cutting	Medium to finish cutting
Grade	SH725	SH725	SH725	SH725
Breaker Shape	01	JP	JS	JS
Cutting conditions	G094			

P

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

M

Application areas	Medium to finish cutting
Grade	SH725
Breaker Shape	01
Cutting conditions	G094

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B020

N

Application areas	Precision finishing	Medium cutting
Grade	DX110	KS05F
Breaker Shape	NS	AL
Cutting conditions	B022	

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JS	JS
Cutting conditions	G094	

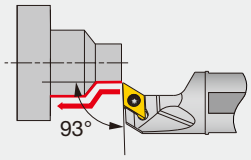
H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA20
Breaker Shape	CBN	CBN
Cutting conditions	B026	

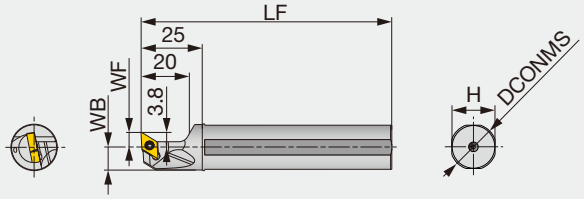
Reference pages : JS-SDUCL: Inserts → B121 -, CBN → B193 -, PCD → B214

JS-SDUXL

Screw-on round-shank toolholder with 93° approach angle, for DX*U inserts



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	WF	LF	H	WB	RE**	Insert	Torque*
JS14H-SDUXL07	14	6	100	13	6.75	0.2	DX*U0703**L...	0.9
JS159F-SDUXL07	15.875	6	85	15	7.687	0.2	DX*U0703**L...	0.9
JS16F-SDUXL07	16	6	85	15	7.75	0.2	DX*U0703**L...	0.9
JS19G-SDUXL07	19.05	6	90	18	9.275	0.2	DX*U0703**L...	0.9
JS19X-SDUXL07	19.05	6	120	18	9.275	0.2	DX*U0703**L...	0.9
JS20G-SDUXL07	20	6	90	19	9.75	0.2	DX*U0703**L...	0.9
JS20X-SDUXL07	20	6	120	19	9.75	0.2	DX*U0703**L...	0.9
JS22X-SDUXL07	22	10	120	21	10.75	0.2	DX*U0703**L...	0.9
JS25H-SDUXL07	25	10	100	24	12.25	0.2	DX*U0703**L...	0.9
JS254X-SDUXL07	25.4	10	120	24	12.45	0.2	DX*U0703**L...	0.9

Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius
Use left-hand toolholders (L) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-SDUXL07	SR34-514	T-7F

INSERT SELECTION

for Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G094	

for Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G094	

M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G094	

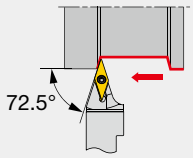
N

Application areas	Medium to finish cutting	
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	B022	

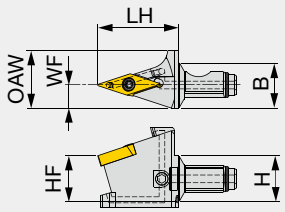
Reference pages : JS-SDUXL: Inserts → B126 -, Standard cutting conditions → G094

QC12-JSVVXR-CHP

高圧クーラント対応スクリューオン式ヘッド、アプローチ角72.5°、使用インサートVXGU形



切れ刃形状記号 **V**



本図は右勝手(R)を示す。

形 番	H	B	LH	HF	WF	OAW	RE**	インサート	トルク*
QC12-JSVVXR09-CHP	12	12	21	12	6	15	0.2	VXGU09T2**L...	0.9

トルク * : 推奨締付けトルク (N·m)
RE** : 基準コーナ
右勝手のホルダ (R) には左勝手のインサート (L) を使用。

部 品

形 番	締付けねじ	スパナ	O リング
QC12-JSVVXR09-CHP	SR34-508	T-7F	ORSS-0454.5X1.0NBR70

インサート基本選択

P

適応領域	仕上げ	仕上げ ~ 中切削
材 種	SH725	SH725
ブレーカ形状	JRP 	JS 
標準切削条件	G094	

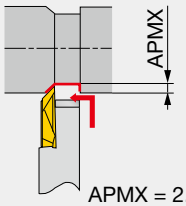
M

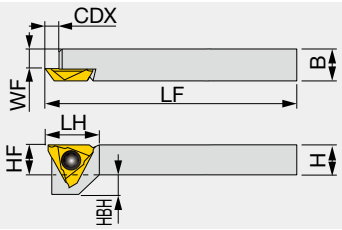
適応領域	仕上げ	仕上げ ~ 中切削
材 種	SH725	SH725
ブレーカ形状	JRP 	JS 
標準切削条件	G094	

J-SERIES

JSTBR/L

スクリューオン式バイト、後挽き用





本図は右勝手(R)を示す。

形 番	H	B	LF	LH	CDX	HF	WF	HBH	インサート	トルク*
JSTBR/L1010X3	10	10	120	15	5	10	6	5	JTBR/L3...	1.2
JSTBL1010K3	10	10	125	15	5	10	6	5	JTBR/L3...	1.2
JSTBR/L1212F3	12	12	85	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1212X3	12	12	120	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1616X3	16	16	120	15	5	16	12	-	JTBR/L3...	1.2

トルク * : 推奨締付けトルク (N·m)

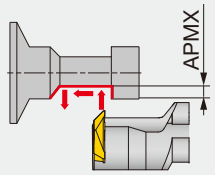
部 品

形 番	締付けねじ	スパナ 1	スパナ 2 (オプション)
JSTBR/L...	CSTB-4SD	T-8F	(T-8L)

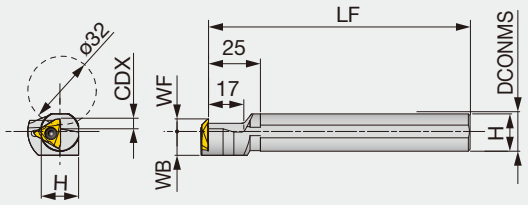
参照ページ : QC12-JSVVXR-CHP: インサート → B155, シャンク, 関連部品 → G095, G096, 標準切削条件 → G094
JSTBR/L: インサート → G084, G085, 標準切削条件 → G085

JS-TBL3

Screw-on toolholder for back turning



APMX = 2.5 mm



Designation	DCONMS	H	LF	CDX	WF	WB	Insert	Torque*
JS19K-TBL3	19.05	18	125	4.5	6	11.5	JTBR3...	3
JS20K-TBL3	20	19	125	4.5	6	11.5	JTBR3...	3
JS22K-TBL3	22	21	125	4.5	6	11.5	JTBR3...	3
JS25K-TBL3	25.4	24	125	4.5	10	12.7	JTBR3...	3

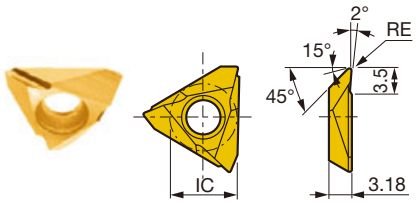
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-TBL3	CSTB-4S	T-15F

INSERT

JTB (Sharp edge)



Right hand (R) shown.

		Coated		Cermet	Uncoated
P	Steel	★	☆	★	
M	Stainless	★	☆		
K	Cast iron	★		☆	☆
N	Non-ferrous				★
S	Superalloys	☆	☆		★
H	Hard materials				★

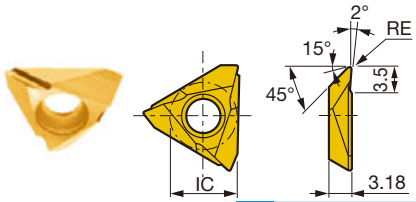
★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated SH725	Coated J740	Cermet NS9530	Uncoated TH10	IC	Max. depth of cut
JTBR3000F	R	0.03	●	●		●	9.438	2.5
JTBL3000F	L	0.03	●	●		●	9.438	2.5
JTBR3005F	R	0.05	●	●		●	9.438	2.5
JTBL3005F	L	0.05	●	●		●	9.438	2.5
JTBR3010F	R	0.1	●	●	●	●	9.438	2.5
JTBL3010F	L	0.1	●	●	●	●	9.438	2.5
JTBR3015F	R	0.15	●	●			9.438	2.5
JTBL3015F	L	0.15	●				9.438	2.5

● : Line up

INSERT

JTBR/L (Honed edge)



Right hand (R) shown.

P	Steel	★	★
M	Stainless	★	
K	Cast iron	★	☆
N	Non-ferrous		
S	Superalloys	☆	
H	Hard materials		

★ : First choice
☆ : Second choice

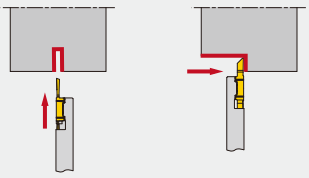
Designation	HAND	RE	Coated J740	Coated cermet J9530	IC	Max. depth of cut
JTBR3005	R	0.05	●	●	9.438	2.5
JTBL3005	L	0.05	●		9.438	2.5
JTBR3010	R	0.1	●	●	9.438	2.5
JTBL3010	L	0.1	●		9.438	2.5

● : Line up

STANDARD CUTTING CONDITIONS (JTB type insert)

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel (S45C, etc. C45, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
	Free-cutting steel (SUM22, etc. 11SMn28, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel (SUS304, etc. X5CrNi18-9, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
N	Aluminium alloys, Brass (Si < 12%, C3604B, etc. CW614N, etc.)	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-machine material, Titanium alloys (Ti-6Al-4V, etc.)	TH10	10 - 30	0.01 - 0.1

Parting-off and front turning toolholders



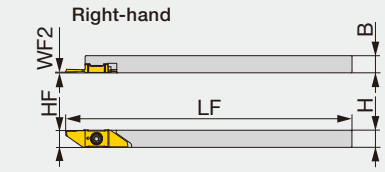


Fig. 1

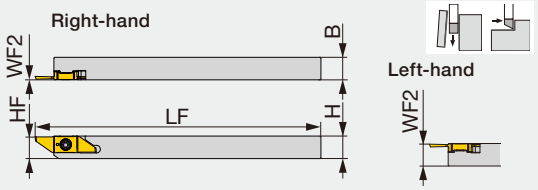


Fig. 2

Designation	H	B	LF	HF	WF2(1)	Insert	Torque*	Fig.
JSXXL0606X05	6	6	120	5.6	5.8	JV*N..., JVN...	1.3	1
JSXXR/L0707X05	7	7	120	6.6	0.2/6.8	JV*N..., JVN...	1.3	1
JSXXR/L0808F05	8	8	85	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L0808H05	8	8	100	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L1010H05	10	10	100	9.7	0.2/9.8	JV*N..., JVN...	1.3	2

Torque*: Recommended clamping torque (N·m)
(1) The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
Use the right-hand insert (JV****R...) for a right-hand holder (JSXXR...); the left-hand insert (JV****L...) for a left-hand holder (JSXXL...).

SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR...05	CSTB-2.5L054DL	T-7F
JSXXL...05	CSTB-2.5L054DR	T-7F

INSERT

JVFN45R/L (For front turning)



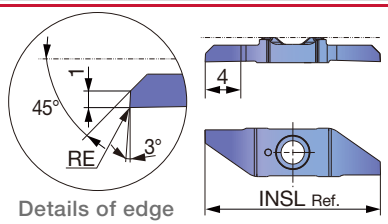


Fig. 1 Details of edge

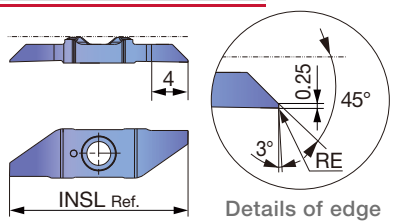


Fig. 2 Details of edge

P	Steel	★
M	Stainless	★
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	

★ : First choice

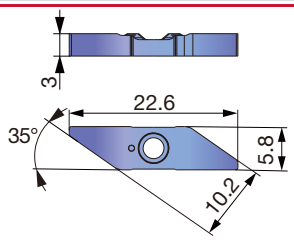
Designation	HAND	RE	Coated SH725	INSL	Fig.
JVFN45R0310F	R	0	●	21	1
JVFN45L0302FL	L	0	●	21	2

● : Line up

INSERT

JVNR/L (Semi-finished blanks)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	Uncoated
		KS15F
JVNR30	R	●
JVNL30	L	●

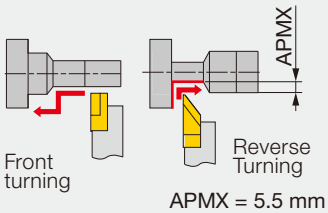
● : Line up

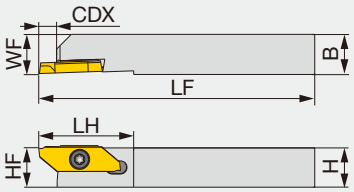
STANDARD CUTTING CONDITIONS

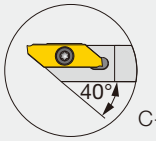
ISO	Workpiece materials	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 180	0.01 - 0.03
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 180	0.01 - 0.03
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 180	0.01 - 0.03
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 120	0.01 - 0.03
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.03
	Copper alloys C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.03
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.03
	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.03

JSXGR/L

Screw-on toolholder for front/reverse turning and external grooving







Right hand (R) shown.

Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXGR/L1010K8-C	10	10	125	29	6.7	10	10	JXFR/L8..., JXRR/L8...
JSXGR/L1212K8-C	12	12	125	29	6.7	12	12	JXFR/L8..., JXRR/L8...
JSXGR/L1616K8	16	16	125	29	6.5	16	16	JXFR/L8..., JXRR/L8...
JSXGR/L2020K8	20	20	125	29	6.5	20	20	JXFR/L8..., JXRR/L8...
JSXGR/L2525K8	25	25	125	29	6.5	25	25	JXFR/L8..., JXRR/L8...

Can be used with JXG insert for parting and grooving.
Can be wrenched also from the back with a double-head screw.

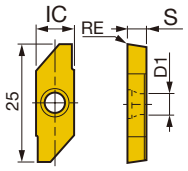
SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSXGR/L...	CSTB-4SD	T-8F	(T-8L)

INSERT

JXF (For front turning)





P	Steel	★						
M	Stainless	★						
K	Cast iron							
N	Non-ferrous	★						
S	Superalloys	★						
H	Hard materials							

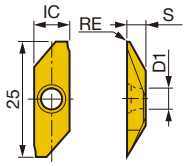
★ : First choice

Designation	HAND	RE	Coated	Uncoated	IC	S	D1
			J740	TH10			
JXFR8000F	R	0.03	●	●	8	3.97	4.4
JXFR8010F	R	0.1	●	●	8	3.97	4.4

● : Line up

JXR (For reverse turning)





P	Steel	★						
M	Stainless	★						
K	Cast iron							
N	Non-ferrous	★						
S	Superalloys	★						
H	Hard materials							

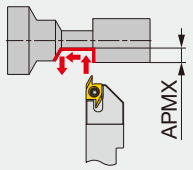
★ : First choice

Designation	HAND	RE	Coated	Uncoated	IC	S	D1
			J740	TH10			
JXRR8000F	R	0.03	●	●	8	3.97	4.4
JXRR8010F	R	0.1	●	●	8	3.97	4.4

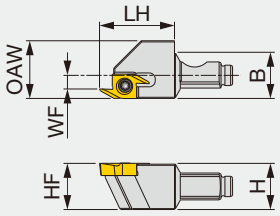
● : Line up

QC12-JSEGR

Screw-on modular head for back turning



APMX = 3 mm



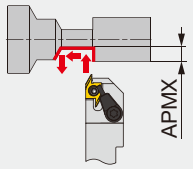
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	Insert	Torque*
QC12-JSEGR10	12	12	19.5	12	3.5	15	J10ER...	1.2

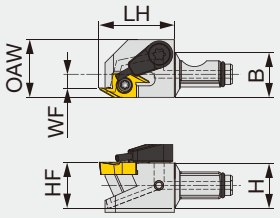
Torque*: Recommended clamping torque (N·m)

QC12-JSEGR-CHP

Screw-on modular head for back turning, with high pressure coolant capability



APMX = 3 mm



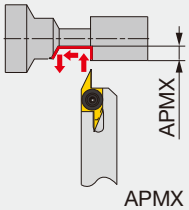
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	Insert	Torque*
QC12-JSEGR10-CHP	12	12	19.5	12	3.5	15	J10ER...	1.2

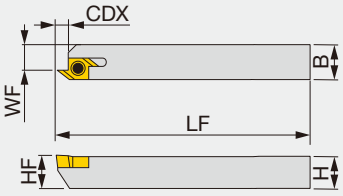
Torque*: Recommended clamping torque (N·m)

JSEGR/L

Screw-on toolholder for back turning



APMX = 3 mm



Designation	H	B	LF	CDX	HF	WF	Insert	Torque*
JSEGR/L1010K10	10	10	125	3.3	10	7.5	J10ER/L...	1.2
JSEGR/L1212K10	12	12	125	3.3	12	9.5	J10ER/L...	1.2
JSEGR/L1616K10	16	16	125	3.3	16	13.5	J10ER/L...	1.2

Torque*: Recommended clamping torque (N·m)

SPARE PARTS





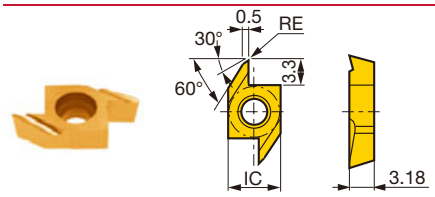


Designation	Clamping screw	Coolant unit	Wrench	Wrench 2 (Optional)	O-ring
QC12-JSEGR10	CSTB-2.5		T-8F		
QC12-JSEGR10-CHP	CSTB-2.5	S-CU-CHP	T-8F		ORSS-0454.5X1.0NBR70
JSEGR/L...	CSTB-2.5		T-8F	(T-8L)	

Reference pages : QC12-JSEGR, QC12-JSEGR-CHP, JSEGR/L: Inserts→ G090
Shank, Accessory → G095, G096, Standard cutting conditions → G091

INSERT

J10E (Sharp edge)



Right hand (R) shown.

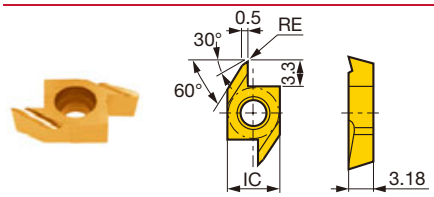
P	Steel	★	☆			★						
M	Stainless	★	☆									
K	Cast iron	★				☆			☆			
N	Non-ferrous								★			
S	Superalloys	☆							★			
H	Hard materials								★			

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated				Cermet			Uncoated						IC	Max. depth of cut
			SH725	J740			NS9530			TH10							
J10ER/L005BF	R	0.05	●	●						●						6.35	3
J10ER/L005BF	L	0.05	●	●						●						6.35	3
J10ER/L010BF	R	0.1	●	●						●						6.35	3
J10ER/L010BF	L	0.1	●	●						●						6.35	3
J10ER/L015BF	R	0.15	●				●									6.35	3
J10ER/L015BF	L	0.15	●				●									6.35	3

● : Line up

J10E (Honed edge)



Right hand (R) shown.

P	Steel	★			★							
M	Stainless	★										
K	Cast iron	★			☆							
N	Non-ferrous											
S	Superalloys	☆										
H	Hard materials											

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated			Coated cermet										IC	Max. depth of cut
			J740			J9530											
J10ER005B	R	0.05	●			●										6.35	3
J10EL005B	L	0.05	●													6.35	3
J10ER010B	R	0.1	●			●										6.35	3
J10EL010B	L	0.1	●													6.35	3

● : Line up

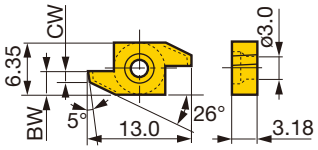
Reference pages : Toolholder → G089

STANDARD CUTTING CONDITIONS (J10E type insert)

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel S45C, etc. C45, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel SUS303, SUS304 etc. X10CrNiS18-9, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
N	Aluminium alloys, Brass Si < 12% C3604B, etc. CW614N, etc.	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.1

INSERT

10E (Insert blank)



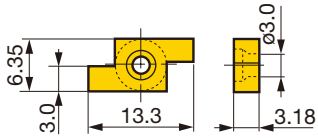
Right hand (R) shown.

Designation	HAND	Uncoated TH10			
10ER100B	R	●			
10EL100B	L	●			
10ER150B	R	●			
10EL150B	L	●			

● : Line up

Note: Right hand holder (JSEGR...) use right hand insert (10ER...) and left hand holder (JSEGL...) use left hand insert (10EL...)

10E (Insert blank)



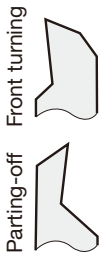
Right hand (R) shown.

Designation	HAND	Uncoated TH10			
10ER300	R	●			
10EL300	L	●			

● : Line up

Note: Right hand holder (JSEGR...) use right hand insert (10ER...) and left hand holder (JSEGL...) use left hand insert (10EL...)

Formed examples of insert blanks



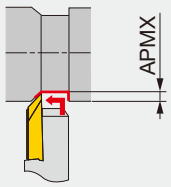
Notes:
- Front relief angle, side relief angle, edge width can be ground depending on the application.
- Insert blanks can be formed to a profiling tool which has a width up to 3 mm

Standard cutting conditions

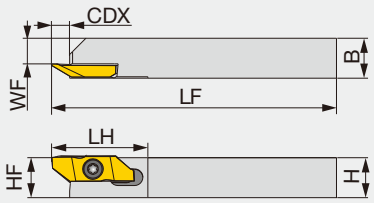
Operations	Workpiece material		Carbon steels	Stainless steels	Brass
Lateral feed (external turning)	Cutting speed (m/min)		~ 100	~ 50	~ 200
	Feed (mm/rev)	Roughing	~ 0.06	~ 0.03	~ 0.1
		Medium	~ 0.03	~ 0.025	~ 0.06
		Finishing	~ 0.02	~ 0.015	~ 0.04
Parting-off Grooving Forming	Cutting speed (m/min)		~ 80	~ 30	~ 150
	Feed (mm/rev)	Roughing	~ 0.02	~ 0.015	~ 0.05
		Medium	~ 0.015	~ 0.01	~ 0.03
		Finishing	~ 0.01	~ 0.008	~ 0.015

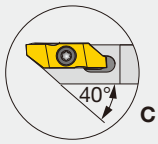
JSXBR/L

Screw-on toolholder for back turning and threading



APMX = 5.5 mm





C type

Right hand (R) shown.

Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR/L1010K8-C	10	10	125	29	6.7	10	5.7	JXBR/L8..., JXT*R...
JSXBR/L1212K8-C	12	12	125	29	6.7	12	7.7	JXBR/L8..., JXT*R...
JSXBR/L1616K8	16	16	125	29	6.4	16	11.7	JXBR/L8..., JXT*R...
JSXBR/L2020K8	20	20	125	29	6.4	20	15.7	JXBR/L8..., JXT*R...
JSXBR/L2525K8	25	25	125	29	6.4	25	20.7	JXBR/L8..., JXT*R...

Can be used with JXT insert for threading.
Can be wrenched also from the back with a double-head screw.

SPARE PARTS



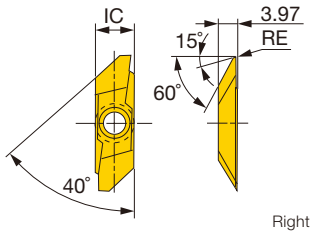


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSXBR/L...	CSTB-4SD	T-8F	(T-8L)

INSERT

JXB (Sharp edge)





Right hand (R) shown.

		Coated	Uncoated
P	Steel	★	
M	Stainless	★	
K	Cast iron	★	☆
N	Non-ferrous		★
S	Superalloys	☆	★
H	Hard materials		★

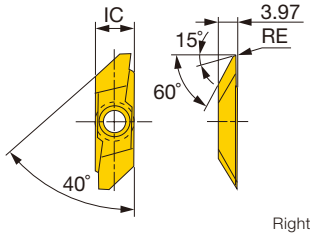
★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated J740	Uncoated TH10	IC	Max. depth of cut
JXBR8000F	R	0.03	●	●	8	5.5
JXBL8000F	L	0.03	●	●	8	5.5
JXBR8005F	R	0.05	●	●	8	5.5
JXBL8005F	L	0.05	●	●	8	5.5
JXBR8010F	R	0.1	●	●	8	5.5
JXBL8010F	L	0.1	●	●	8	5.5
JXBR8015F	R	0.15	●	●	8	5.5
JXBL8015F	L	0.15	●	●	8	5.5

● : Line up

JXB (Honed edge)





Right hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	☆
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated J740	IC	Max. depth of cut
JXBR/L8005	R	0.05	●	8	5.5
JXBR/L8005	L	0.05	●	8	5.5
JXBR/L8010	R	0.1	●	8	5.5
JXBR/L8010	L	0.1	●	8	5.5
JXBR/L8015	R	0.15	●	8	5.5
JXBR/L8015	L	0.15	●	8	5.5

● : Line up

STANDARD CUTTING CONDITIONS (JXB type insert)

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving	Turning
P	General steel S45C, etc. C45, etc.	J740	10 - 100	0.01 - 0.03	0.02 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	J740	10 - 100	0.01 - 0.03	0.02 - 0.1
M	Stainless steel SUS303, etc. X10CrNiS18-9, etc.	J740	10 - 100	0.01 - 0.02	0.02 - 0.08
N	Aluminium alloys, Brass Si < 12% C3604B, etc. CW614N, etc	TH10	50 - 200	0.01 - 0.05	0.02 - 0.1
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.02	0.02 - 0.05

MINI FORCE TURN
STANDARD CUTTING CONDITIONS
FOR EXTERNAL TURNING

Applications	ISO	Workpiece material	Priority	Chip breaker	Grade	Cutting speed *Vc* (m/min)	Depth of cut *ap* (mm)	Feed *f* (mm/rev)
For swiss type automatic lathes	P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	JS	SH725	50 - 180	0.1 - 3	0.03 - 0.1
			With high sharpness	JSS	SH725	50 - 180	0.1 - 1.5	0.03 - 0.1
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	JS	SH725	50 - 180	0.1 - 1.25	0.03 - 0.1
			With high sharpness	JSS	SH725	50 - 180	0.1 - 1.5	0.03 - 0.1
For small size CNC lathes	P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	SS	AH725	50 - 180	0.15 - 1.5	0.05 - 0.2
				TS	AH725	50 - 180	0.3 - 2	0.08 - 0.3
			For improved surface finish	SS	NS9530	50 - 200	0.15 - 1.5	0.05 - 0.2
				TS	NS9530	50 - 200	0.3 - 2	0.08 - 0.3
			For wear resistance	SS	GT9530	50 - 250	0.15 - 1.5	0.05 - 0.2
				TS	GT9530	50 - 250	0.3 - 2	0.08 - 0.3
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	SS	AH8015	50 - 150	0.15 - 1.5	0.05 - 0.2
			For impact resistance	TS	AH8015	50 - 150	0.3 - 2	0.08 - 0.3

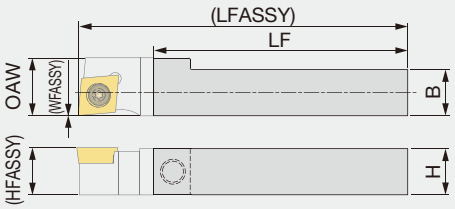
J-SERIES
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Priority	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	SH725	50 - 200	0.01 - 0.2
		For impact resistance	AH725	50 - 200	0.01 - 0.2
M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	SH725	50 - 200	0.01 - 0.2
		For impact resistance	AH725	50 - 200	0.01 - 0.2
S	Titanium alloys Ti-6Al-4V, etc. Superalloys Inconel718, etc.	First choice	SH725	20 - 80	0.01 - 0.2
		For impact resistance	AH725	20 - 80	0.01 - 0.2

MODUMINI TURN

QC-1212

Shank for modular heads



Designation	H	B	WFASSY	LF	OAW	HFASSY	LFASSY(1)	Torque*
QC-1212F	12	12	0	65	15	12	85	3
QC-1212X	12	12	0	100	15	12	120	3

Torque* : Recommended clamping torque (N·m)
(1) The size is true when the modular head with LH = 19.5 mm is mounted.

QC-1212-CHP

Shank for modular heads, with high pressure coolant capability

Tube connection

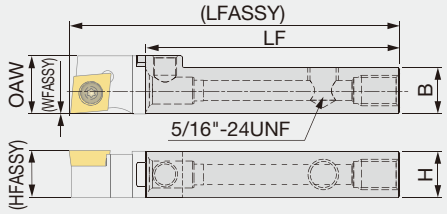


Fig.1

Direct connection

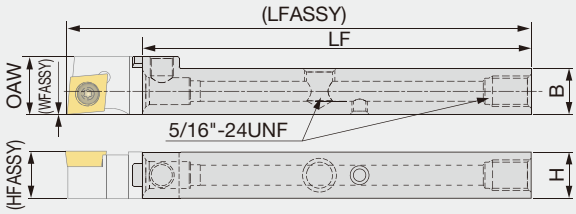


Fig.2

Designation	H	B	LF	WFASSY	OAW	HFASSY	LFASSY(1)	Torque*	Fig.
QC-1212F-CHP	12	12	65	0	15	12	85	3	1
QC-1212X-CHP (*)	12	12	100	0	15	12	120	3	2

Torque* : Recommended clamping torque (N·m)
Through-coolant shank
(*) : Compatible to the direct internal coolant supply system without the use of external coolant hose.
(1) The size is true when the modular head with LH = 19.5 mm is mounted.

QC-1216-F15-CHP

Stepped-head shank for modular heads, with high pressure coolant capability

Tube connection

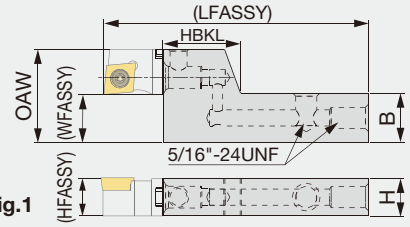


Fig.1

Direct connection

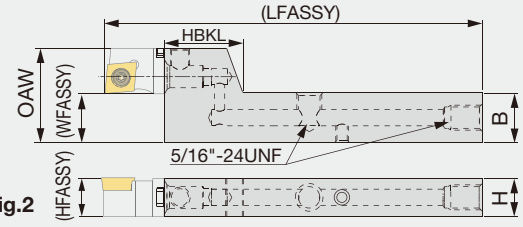


Fig.2

Designation	H	B	LF	OAW	WFASSY	HFASSY	LFASSY(1)	HBKL	Torque*	Fig.
QC-1216F-F15-CHP	12	16	65	30	15	12	85	25	3	1
QC-1216X-F15-CHP (1)	12	16	100	30	15	12	120	25	3	2

Torque* : Recommended clamping torque (N·m)
QC12 heads only can be mounted on these shanks.
(*) : Compatible to the direct internal coolant supply system without the use of external coolant hose.
(1) The size is true when the modular head with LH = 19.5 mm is mounted.

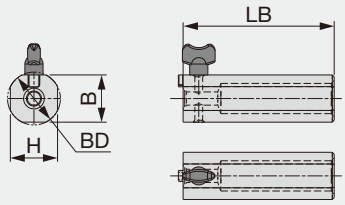
SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
QC-1212*	SRM6X0.5-26977	P-3	-	-	-	-
QC-1212F-CHP, QC-1216F-F15-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	-	-
QC-1212X-CHP, QC-1216X-F15-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

QC-12D28EXC

Modular head holder for insert change





Designation	BD	LB	H	B
QC-12D28EXC	28	80	25	25

Note: This is a dedicated modular-head holder designed to facilitate insert changes. Do not use this holder for machining as it may cause damages to tool, workpiece, machine, and possible human injury.

SPARE PARTS



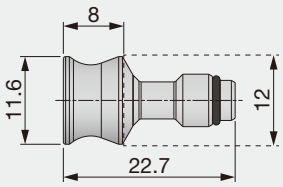
Designation	Fixing screw
QC-12D28EXC	KNOBM5X10



ModuMini-Turn modular heads are small. When it is difficult to change inserts while holding the modular head with fingers, use the dedicated holder to facilitate insert changes.

QC12-STOPPER

Protective plug for shank



Designation
QC12-STOPPER

SPARE PARTS



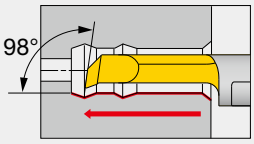
Designation	O-ring
QC12-STOPPER	ORSS-0454.5X1.0NBR70

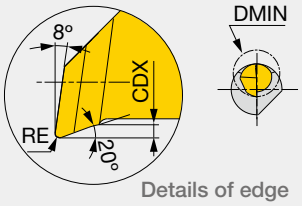


The cutting head located in the feed direction of the Y-axis tool can be removed to make room for machining larger-sized barstock. If this is the case, attach the plug to the shank to protect the coupling surface from chips, as well as prevent coolant leakage during machining.

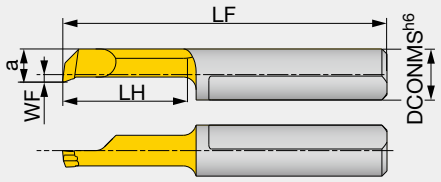
TBTR/L

Solid boring bar for boring, profiling, and chamfering





Details of edge



Right hand (R) shown.

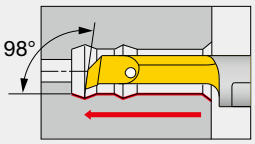
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
TBTR04045005-D010	●	1	4	-1.1	0.9	21	4.5	0.1	0.05
TBTR04065005-D010	●	1	4	-1.1	0.9	23	6.5	0.1	0.05
TBTR04040005-D020	●	2	4	-0.3	1.7	20.5	4	0.1	0.05
TBTR04090005-D020	●	2	4	-0.3	1.7	25.5	9	0.1	0.05
TBTR04140005-D020	●	2	4	-0.3	1.7	30.5	14	0.1	0.05
TBTR/L04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
TBTR04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
TBTR04190010-D028	●	2.8	4	0.9	2.6	35.5	19	0.2	0.1
TBTR04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
TBTR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
TBTR04190010-D040	●	4	4	1.5	3.5	35.5	19	0.3	0.1
TBTR04230010-D040	●	4	4	1.5	3.5	39.5	23	0.3	0.1
TBTR04270010-D040	●	4	4	1.5	3.5	43.5	27	0.3	0.1
TBTR07090015-D050	●	5	7	0.9	4.4	25	9	0.5	0.15
TBTR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
TBTR07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15
TBTR07240015-D050	●	5	7	0.9	4.4	40	24	0.5	0.15
TBTR07290015-D050	●	5	7	0.9	4.4	45	29	0.5	0.15
TBTR07340015-D050	●	5	7	0.9	4.4	50	34	0.5	0.15
TBTR07140015-D060	●	6	7	1.8	5.3	30	14	0.5	0.15
TBTR/L07210015-D060	●	6	7	1.8	5.3	37	21	0.5	0.15
TBTR07240015-D060	●	6	7	1.8	5.3	40	24	0.5	0.15
TBTR07290015-D060	●	6	7	1.8	5.3	45	29	0.5	0.15
TBTR07340015-D060	●	6	7	1.8	5.3	50	34	0.5	0.15
TBTR07410015-D060	●	6	7	1.8	5.3	57	41	0.5	0.15
TBTR07190015-D068	●	6.8	7	2.8	6.3	35	19	0.6	0.15
TBTR07240015-D068	●	6.8	7	2.8	6.3	40	24	0.6	0.15
TBTR07290015-D068	●	6.8	7	2.8	6.3	45	29	0.6	0.15
TBTR07340015-D070	●	7	7	2.8	6.3	50	34	0.6	0.15
TBTR07390015-D070	●	7	7	2.8	6.3	55	39	0.6	0.15
TBTR07440015-D070	●	7	7	2.8	6.3	60	44	0.6	0.15
TBTR07490015-D070	●	7	7	2.8	6.3	65	49	0.6	0.15

● : Line up

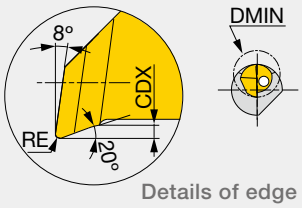
Reference pages : TBTR/L: Standard cutting conditions → G109

JBTR/L

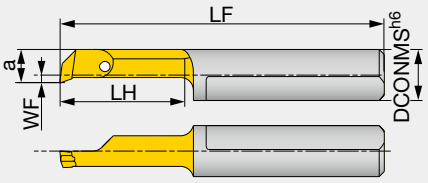
Solid boring bar for boring, profiling, and chamfering



with coolant hole



Details of edge



Right hand (R) shown.

Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
JBTR04020004-D006	●	0.6	4	-1.5	0.5	18.5	2	0.08	0.04
JBTR04030004-D006	●	0.6	4	-1.5	0.5	19.5	3	0.08	0.04
JBTR04045005-D010	●	1	4	-1.1	0.9	21	4.5	0.1	0.05
JBTR04065005-D010	●	1	4	-1.1	0.9	23	6.5	0.1	0.05
JBTR04040005-D020	●	2	4	-0.3	1.7	20.5	4	0.1	0.05
JBTR04090005-D020	●	2	4	-0.3	1.7	25.5	9	0.1	0.05
JBTR04140005-D020	●	2	4	-0.3	1.7	30.5	14	0.1	0.05
JBTR/L04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBTR/L04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBTR/L04190010-D028	●	2.8	4	0.9	2.6	35.5	19	0.2	0.1
JBTR/L04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
JBTR/L04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
JBTR/L04190010-D040	●	4	4	1.5	3.5	35.5	19	0.3	0.1
JBTR04230010-D040	●	4	4	1.5	3.5	39.5	23	0.3	0.1
JBTR04270010-D040	●	4	4	1.5	3.5	43.5	27	0.3	0.1
JBTR/L07090015-D050	●	5	7	0.9	4.4	25	9	0.5	0.15
JBTR/L07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
JBTR/L07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15
JBTR/L07240015-D050	●	5	7	0.9	4.4	40	24	0.5	0.15
JBTR07290015-D050	●	5	7	0.9	4.4	45	29	0.5	0.15
JBTR07340015-D050	●	5	7	0.9	4.4	50	34	0.5	0.15
JBTL07340015-D050	●	5	7	0.9	4.4	50	34	0.5	0.15
JBTR/L07140015-D060	●	6	7	1.8	5.3	30	14	0.5	0.15
JBTR/L07210015-D060	●	6	7	1.8	5.3	37	21	0.5	0.15
JBTR/L07240015-D060	●	6	7	1.8	5.3	40	24	0.5	0.15
JBTR/L07290015-D060	●	6	7	1.8	5.3	45	29	0.5	0.15
JBTR07340015-D060	●	6	7	1.8	5.3	50	34	0.5	0.15
JBTR07410015-D060	●	6	7	1.8	5.3	57	41	0.5	0.15
JBTR/L07190015-D068	●	6.8	7	2.8	6.3	35	19	0.6	0.15
JBTR07240015-D068	●	6.8	7	2.8	6.3	40	24	0.6	0.15
JBTR/L07290015-D068	●	6.8	7	2.8	6.3	45	29	0.6	0.15
JBTR/L07340015-D070	●	7	7	2.8	6.3	50	34	0.6	0.15
JBTR07390015-D070	●	7	7	2.8	6.3	55	39	0.6	0.15
JBTR07440015-D070	●	7	7	2.8	6.3	60	44	0.6	0.15
JBTR07490015-D070	●	7	7	2.8	6.3	65	49	0.6	0.15

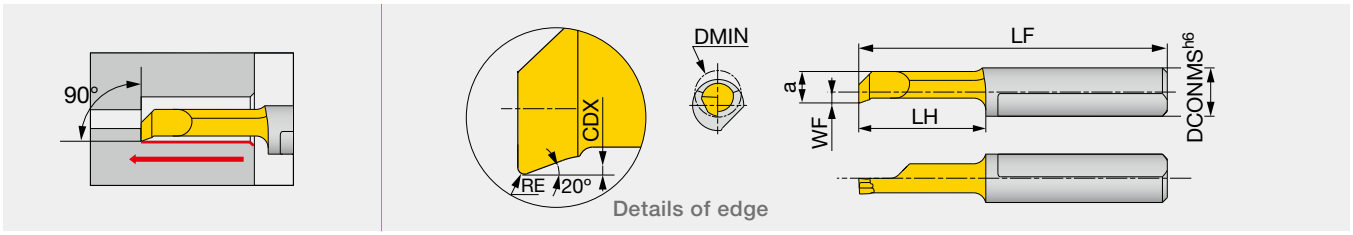
● : Line up

External
Internal
Grooving
Threading
Parting-off

Reference pages : JBTR/L: Standard cutting conditions → G109

TBPR

Solid boring bar for boring and chamfering

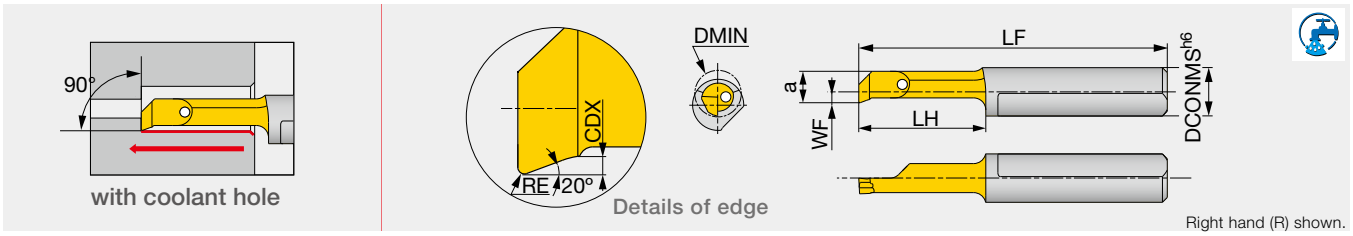


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
TBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
TBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
TBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
TBPR07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15

● : Line up

JBPR

Solid boring bar for boring and chamfering

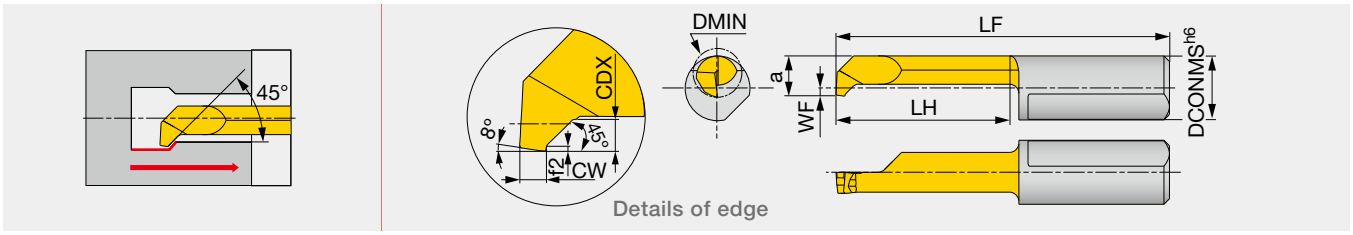


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
JBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBPR04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBPR04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
JBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
JBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
JBPR07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15

● : Line up

TBUR

Solid boring bar for back boring and chamfering



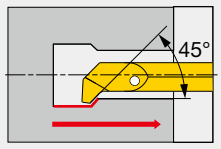
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW $^{+0.05}_{0}$
TBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1
TBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1

● : Line up

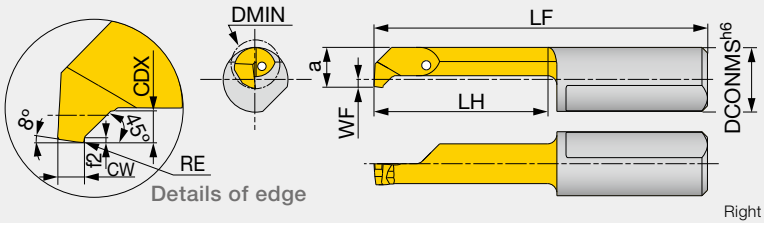
Reference pages : TBPR, JBPR, TBUR: Standard cutting conditions → G109

JBUR

Solid boring bar for back boring and chamfering



with coolant hole



Details of edge

Right hand (R) shown.

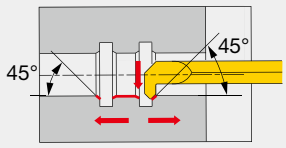
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW $^{+0.05}_{0}$	RE
JBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1	0.1
JBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1	0.1

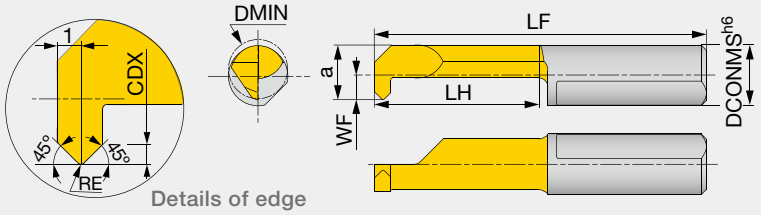
● : Line up

External
Internal
Grooving
Threading
Parting-off

TBCR

Solid boring bar for boring and 45° chamfering





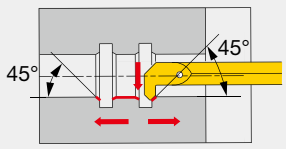
Details of edge

Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
TBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
TBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

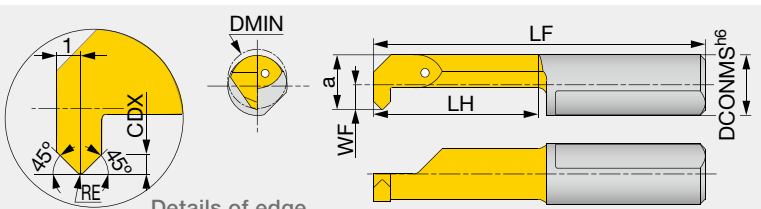
● : Line up

JBCR

Solid boring bar for boring and 45° chamfering



with coolant hole



Details of edge

Right hand (R) shown.

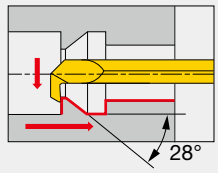
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{\pm 0.05}$
JBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
JBCR07190020-D050	●	5	7	0.9	4.4	35	19	0.7	0.2
JBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

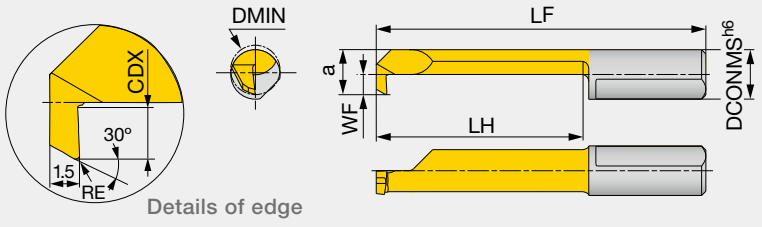
● : Line up

Reference pages : JBUR, TBCR, JBCR: Standard cutting conditions → G109

TBBR

Solid boring bar for back boring



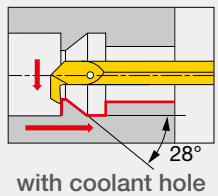


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
TBBR04140020-D030	●	3	4	0.6	2.6	30	14	0.5	0.2
TBBR04140015-D040	●	4	4	1.5	3.5	30	14	0.8	0.15
TBBR07190020-D050	●	5	7	0.9	4.4	35	19	1	0.2

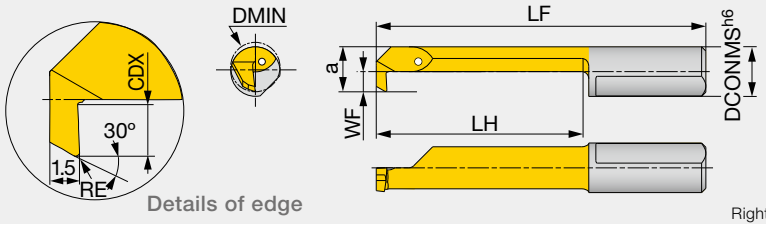
● : Line up

JBBR

Solid boring bar for back boring



with coolant hole



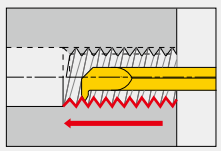
Right hand (R) shown.

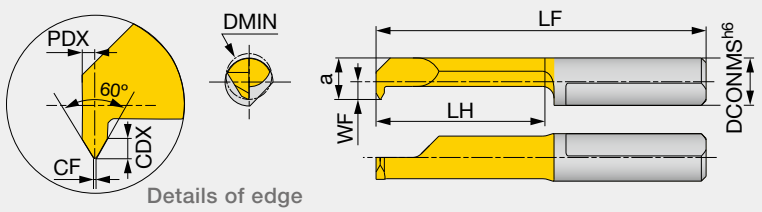
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}$
JBBR04140020-D030	●	3	4	0.6	2.6	30	14	0.5	0.2
JBBR04190020-D030	●	3	4	0.6	2.6	35	19	0.5	0.2
JBBR04140015-D040	●	4	4	1.5	3.5	30	14	0.8	0.15
JBBR04240015-D040	●	4	4	1.5	3.5	40	24	0.8	0.15
JBBR07190020-D050	●	5	7	0.9	4.4	35	19	1	0.2
JBBR07290020-D050	●	5	7	0.9	4.4	45	29	1	0.2
JBBR07190020-D060	●	6	7	1.8	5.3	35	19	1.8	0.2
JBBR07290020-D060	●	6	7	1.8	5.3	45	29	1.8	0.2
JBBR07190020-D070	●	7	7	2.8	6.3	35	19	2.5	0.2
JBBR07290020-D070	●	7	7	2.8	6.3	45	29	2.5	0.2

● : Line up

TBIR

Solid boring bar for threading (metric)





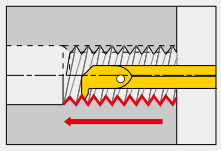
Designation	SH725	Pitch	DMIN	CF $^{0}_{-0.02}$	DCONMS	WF	a	LF	LH	CDX	PDX
TBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
TBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
TBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
TBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
TBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
TBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75

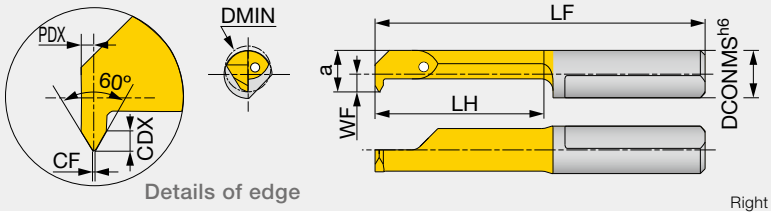
● : Line up

Reference pages : TBBR, JBBR, TBIR: Standard cutting conditions → G109

JBIR

Solid boring bar for threading (metric)



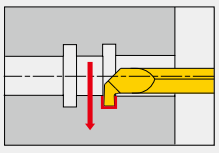


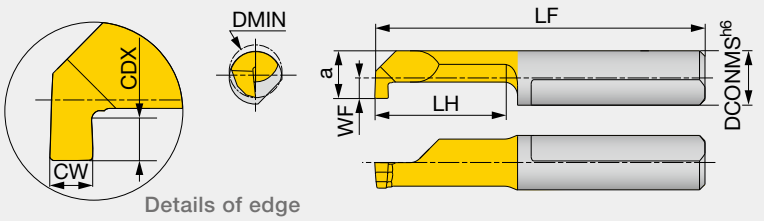
Designation	SH725	Pitch	DMIN	CF $^{0}_{-0.02}$	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
JBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
JBIR07140125-D060	●	1.25	6	0.15	7	1.8	5.3	30	14	0.7	0.65
JBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75
JBIR07140150-D070	●	1.5	7	0.18	7	2.8	6.3	30	14	0.8	0.75

● : Line up

TBGR

Solid boring bar for internal grooving





Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	WF	a	LF	LH	CDX
TBGR04100050-D020	●	0.5	2	4	-0.2	1.8	26	10	0.4
TBGR04090100-D040	●	1	4	4	1.5	3.5	25.5	9	0.8
TBGR04150100-D040	●	1	4	4	1.5	3.5	31.5	15	0.8
TBGR07090200-D050	●	2	5	7	0.9	4.4	25	9	1
TBGR07090100-D060	●	1	6	7	1.8	5.3	25	9	1.8
TBGR07140100-D060	●	1	6	7	1.8	5.3	30	14	1.8
TBGR07090150-D060	●	1.5	6	7	1.8	5.3	25	9	1.8
TBGR07090200-D060	●	2	6	7	1.8	5.3	25	9	1.8
TBGR07140200-D060	●	2	6	7	1.8	5.3	30	14	1.8
TBGR07090100-D068	●	1	6.8	7	2.7	6.2	25	9	2.5
TBGR07090150-D068	●	1.5	6.8	7	2.7	6.2	25	9	2.5
TBGR07140150-D068	●	1.5	6.8	7	2.7	6.2	30	14	2.5
TBGR07090200-D068	●	2	6.8	7	2.7	6.2	25	9	2.5
TBGR07140200-D068	●	2	6.8	7	2.7	6.2	30	14	2.5
TBGR07210200-D068	●	2	6.8	7	2.7	6.2	37	21	2.5
TBGR07290200-D068	●	2	6.8	7	2.7	6.2	45	29	2.5

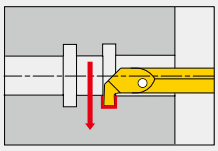
Corner radius : less than 0.1 mm.

● : Line up

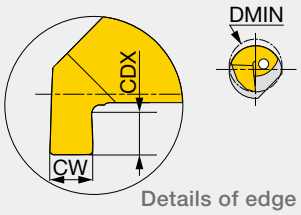
Reference pages : JBIR, TBGR: Standard cutting conditions → G109

JBGR/L

Solid boring bar for internal grooving



with coolant hole



Details of edge

Right hand (R) shown.

Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	WF	a	LF	LH	CDX
JBGR04050050-D020	●	0.5	2	4	0.2	1.8	21	5	0.4
JBGR04100050-D020	●	0.5	2	4	0.2	1.8	26	10	0.4
JBGR04050070-D030	●	0.7	3	4	0.7	2.7	21	5	0.6
JBGR04100070-D030	●	0.7	3	4	0.7	2.7	26	10	0.6
JBGR04090100-D040	●	1	4	4	1.5	3.5	25.5	9	0.8
JBGR04150100-D040	●	1	4	4	1.5	3.5	31.5	15	0.8
JBGR07090100-D050	●	1	5	7	0.9	4.4	25	9	1
JBGR07140100-D050	●	1	5	7	0.9	4.4	30	14	1
JBGR07090150-D050	●	1.5	5	7	0.9	4.4	25	9	1
JBGR07140150-D050	●	1.5	5	7	0.9	4.4	30	14	1
JBGR07090200-D050	●	2	5	7	0.9	4.4	25	9	1
JBGR07190200-D050	●	2	5	7	0.9	4.4	35	19	1
JBGR/L07090100-D060	●	1	6	7	1.8	5.3	25	9	1.8
JBGR07140100-D060	●	1	6	7	1.8	5.3	30	14	1.8
JBGR07210100-D060	●	1	6	7	1.8	5.3	37	21	1.8
JBGR07290100-D060	●	1	6	7	1.8	5.3	45	29	1.8
JBGR/L07090150-D060	●	1.5	6	7	1.8	5.3	25	9	1.8
JBGR07140150-D060	●	1.5	6	7	1.8	5.3	30	14	1.8
JBGR07210150-D060	●	1.5	6	7	1.8	5.3	37	21	1.8
JBGR07240150-D060	●	1.5	6	7	1.8	5.3	40	24	1.8
JBGR07290150-D060	●	1.5	6	7	1.8	5.3	45	29	1.8
JBGR07090200-D060	●	2	6	7	1.8	5.3	25	9	1.8
JBGR07140200-D060	●	2	6	7	1.8	5.3	30	14	1.8
JBGR07210200-D060	●	2	6	7	1.8	5.3	37	21	1.8
JBGR07240200-D060	●	2	6	7	1.8	5.3	40	24	1.8
JBGR07290200-D060	●	2	6	7	1.8	5.3	45	29	1.8
JBGR07090100-D068	●	1	6.8	7	2.7	6.2	25	9	2.5
JBGR07140100-D068	●	1	6.8	7	2.7	6.2	30	14	2.5
JBGR07210100-D068	●	1	6.8	7	2.7	6.2	37	21	2.5
JBGR07090150-D068	●	1.5	6.8	7	2.7	6.2	25	9	2.5
JBGR07140150-D068	●	1.5	6.8	7	2.7	6.2	30	14	2.5
JBGR07210150-D068	●	1.5	6.8	7	2.7	6.2	37	21	2.5
JBGR07290150-D068	●	1.5	6.8	7	2.7	6.2	45	29	2.5
JBGR07090200-D068	●	2	6.8	7	2.7	6.2	25	9	2.5
JBGR/L07140200-D068	●	2	6.8	7	2.7	6.2	30	14	2.5
JBGR07210200-D068	●	2	6.8	7	2.7	6.2	37	21	2.5
JBGR07250200-D068	●	2	6.8	7	2.7	6.2	40	24	2.5
JBGR07290200-D068	●	2	6.8	7	2.7	6.2	45	29	2.5

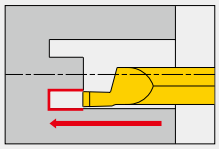
Corner radius: less than 0.1 mm

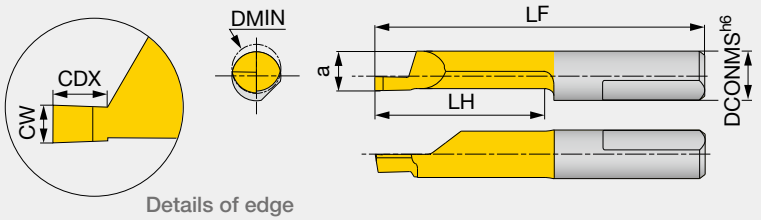
● : Line up

Reference pages : JBGR/L: Standard cutting conditions → G109

TBFR

Solid boring bar for face grooving





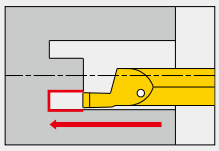
Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	a	LF	LH	CDX
TBFR07110100-D060	●	1	6	7	5.2	26	10	1.5
TBFR07110200-D060	●	2	6	7	5.2	26	10	3
TBFR07110100-D080	●	1	8	7	5.9	27	11	1.5
TBFR07110250-D080	●	2.5	8	7	5.9	27	11	3.5
TBFR07300300-D080	●	3	8	7	5.9	46	30	3.5
TBFR07200250-D150	●	2.5	15	7	5.9	36	20	20
TBFR07200300-D150	●	3	15	7	5.9	36	20	20
TBFR07300300-D150	●	3	15	7	5.9	46	30	30

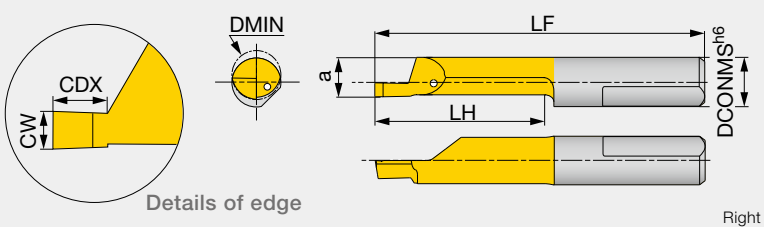
Corner radius : less than 0.1 mm.

● : Line up

JBFR/L

Solid boring bar for face grooving





Right hand (R) shown.

Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	a	LF	LH	CDX
JBFR07110100-D060	●	1	6	7	5.2	26	10	1.5
JBFR07110150-D060	●	1.5	6	7	5.2	26	10	2
JBFR07110200-D060	●	2	6	7	5.2	26	10	3
JBFR07110100-D080	●	1	8	7	5.9	27	11	1.5
JBFR07110150-D080	●	1.5	8	7	5.9	27	11	2.5
JBFR07110200-D080	●	2	8	7	5.9	27	11	3
JBFR07110250-D080	●	2.5	8	7	5.9	27	11	3.5
JBFR07110300-D080	●	3	8	7	5.9	27	11	3.5
JBFR/L07210150-D080	●	1.5	8	7	5.9	36	21	2.5
JBFR07210200-D080	●	2	8	7	5.9	36	21	3
JBFR07210250-D080	●	2.5	8	7	5.9	36	21	3.5
JBFR07210300-D080	●	3	8	7	5.9	36	21	3.5
JBFR/L07300200-D080	●	2	8	7	5.9	46	30	3
JBFR07300300-D080	●	3	8	7	5.9	46	30	3.5
JBFR07200200-D080	●	2	8	7	5.9	36	20	3
JBFR07200250-D150	●	2.5	15	7	5.9	36	20	20
JBFR07200300-D150	●	3	15	7	5.9	36	20	20
JBFR07300300-D150	●	3	15	7	5.9	46	30	30

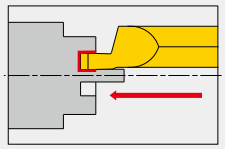
Corner radius: less than 0.1 mm

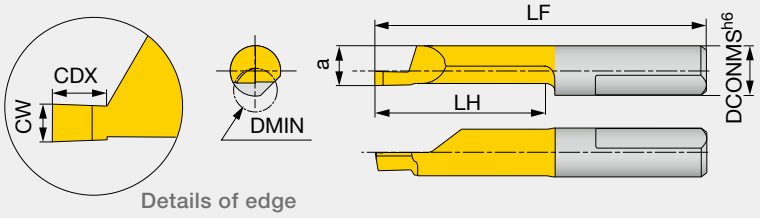
● : Line up

Reference pages : TBFR, JBFR/L: Standard cutting conditions → G109

TBSR

Solid boring bar for face grooving (for shaft)





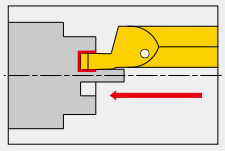
Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	a	LF	LH	CDX
TBSR07200200-D060	●	2	6	7	5.2	36	20	4

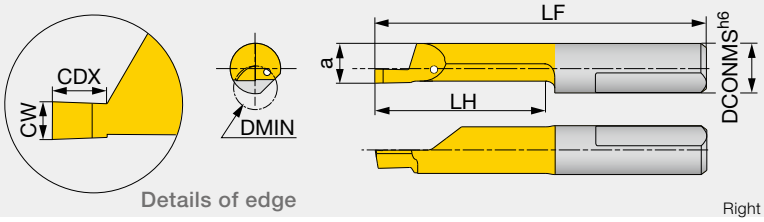
Corner radius : less than 0.1 mm.

● : Line up

JBSR

Solid boring bar for face grooving (for shaft)





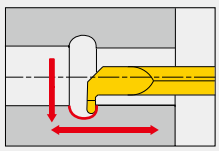
Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	a	LF	LH	CDX
JBSR07200200-D060	●	2	6	7	5.2	36	20	4

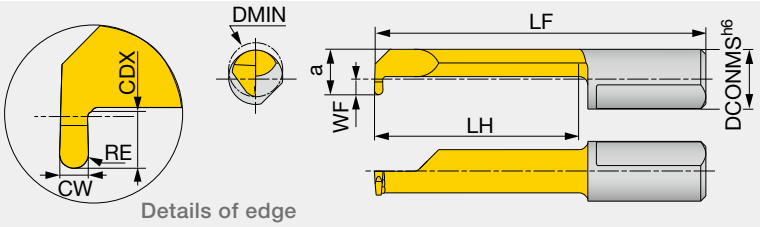
Corner radius: less than 0.1 mm

● : Line up

TBRR

Solid boring bar for boring and profiling



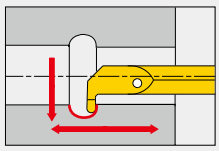


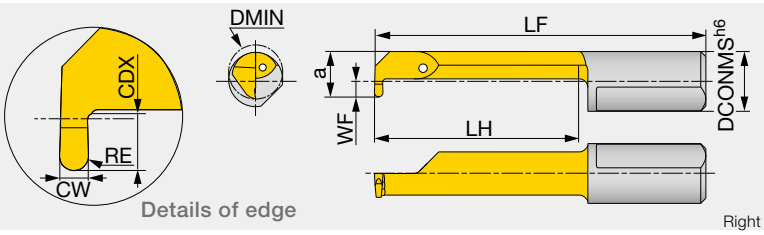
Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	WF	a	LF	LH	CDX	RE
TBRR07190050-D050	●	1	5	7	0.9	4.4	35	19	1	0.5
TBRR07240050-D060	●	1	6	7	1.8	5.3	40	24	1.8	0.5
TBRR07290050-D068	●	1	6.8	7	2.8	6.3	45	29	2.5	0.5

● : Line up

JBRR

Solid boring bar for boring and profiling





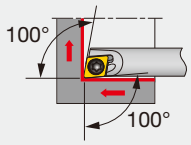
Designation	SH725	CW $^{+0.05}_{0}$	DMIN	DCONMS	WF	a	LF	LH	CDX	RE
JBRR07190050-D050	●	1	5	7	0.9	4.4	35	19	1	0.5
JBRR07240050-D060	●	1	6	7	1.8	5.3	40	24	1.8	0.5
JBRR07290050-D068	●	1	6.8	7	2.8	6.3	45	29	2.5	0.5

● : Line up

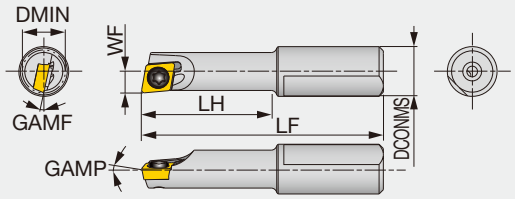
Reference pages : TBSR, JBSR, TBRR, JBRR: Standard cutting conditions → G109

A/E-SEXPR

Screw-on boring bar, for positive 75° rhombic inserts



Cutting edge style **X**

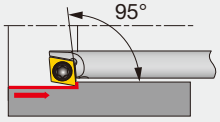


Designation	Material	DMIN	DCONMS	WF	LF	LH	GAMP	GAMF	RE**	Insert	Torque*
A07050-SEXPR03-3	Steel	5	7	2.5	31	15	0°	-13°	0.2	EPGT03X1...	0.6
A07060-SEXPR04-3	Steel	6	7	3.1	34	18	0°	-12°	0.2	EPGT0401...	0.6
E07050-SEXPR03-4	Carbide	5	7	2.5	37	20	0°	-13°	0.2	EPGT03X1...	0.6
E07050-SEXPR03-5	Carbide	5	7	2.5	42	25	0°	-13°	0.2	EPGT03X1...	0.6
E07060-SEXPR04-5	Carbide	6	7	3.1	46	30	0°	-12°	0.2	EPGT0401...	0.6

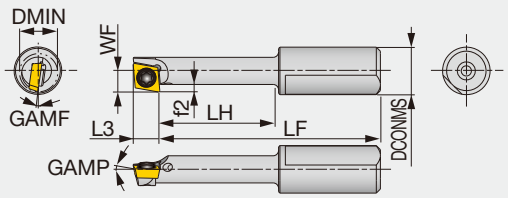
*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SEXPR**) with left-hand inserts (L).

A/E-SEZPR

Screw-on boring bar, for positive 75° rhombic inserts



Cutting edge style **Z**



Designation	Material	DMIN	DCONMS	WF	LF	LH	f2	L3	GAMP	GAMF	RE**	Insert	Torque*
A07055-SEZPR03-3	Steel	5.5	7	3.2	32.5	16.5	1.2	3.9	0°	-8°	0.2	EPGT03X1...	0.6
E07055-SEZPR03-5	Carbide	5.5	7	3.2	44.7	27.5	1.2	3.9	0°	-8°	0.2	EPGT03X1...	0.6

*Torque: Recommended clamping torque (N·m)
**RE : Standard corner radius
Note: Use right-hand toolholders (SEZPR**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A/E070**03-...	CSTA-1.6	T-6F
A/E070**04-...	CSTB-2	T-6F

INSERT SELECTION

P

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B016

M

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B018

K

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B020

S

Application	Finishing
Grade	SH725
Breaker Shape	JS
Cutting conditions	B024

N

Application	Precision finishing	Finishing
Grade	DX140	SH725
Breaker Shape	DIA	JS
Cutting conditions	B022	

H

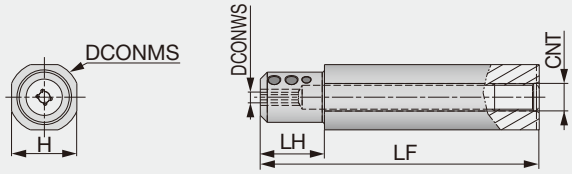
Application	Precision finishing
Grade	BX310
Breaker Shape	CBN
Cutting conditions	B026

Reference pages: A/E-SEXPR, A/E-SEZPR: Insert → B128 -, CBN → B195, PCD → B214

JBBS-4N

Sleeve for internal coolant supply with 4 coolant holes



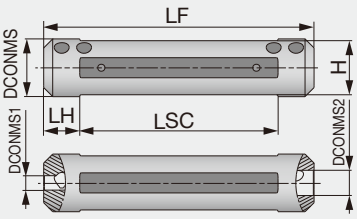


Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBS12-4-L80C-4N	12	4	80	10	10.3	Rc1/16
JBBS127-4-L80C-4N	12.7	4	80	10	11.6	Rc1/16
JBBS14-4-L80C-4N	14	4	80	10	12	Rc1/8
JBBS159-4-L100C-4N	15.875	4	100	10	14.58	Rc1/8
JBBS159-7-L100C-4N	15.875	7	100	10	14.58	Rc1/8
JBBS16-4-L100C-4N	16	4	100	10	15	Rc1/8
JBBS16-7-L100C-4N	16	7	100	10	15	Rc1/8
JBBS19-4-L100C-4N	19.05	4	100	20	17.2	Rc1/8
JBBS19-7-L100C-4N	19.05	7	100	20	17.2	Rc1/8
JBBS20-4-L100C-4N	20	4	100	20	18	Rc1/8
JBBS20-7-L100C-4N	20	7	100	20	18	Rc1/8
JBBS22-4-L100C-4N	22	4	100	20	20	Rc1/8
JBBS22-7-L100C-4N	22	7	100	20	20	Rc1/8
JBBS25-4-L100C-4N	25	4	100	23	23	Rc1/8
JBBS25-7-L100C-4N	25	7	100	23	23	Rc1/8
JBBS254-4-L100C-4N	25.4	4	100	23	23.4	Rc1/8
JBBS254-7-L100C-4N	25.4	7	100	23	23.4	Rc1/8

JBBS

Sleeve for external coolant supply





Designation	DCONMS	DCONWS1	DCONWS2	LF	LH	LSC	H
JBBS12-4-4	12	4	4	75	10	55	10.3
JBBS127-4-4	12.7	4	4	76.2	10	56.2	11.6
JBBS14-4-4	14	4	4	75	10	55	12
JBBS159-4-7	15.875	4	7	76.2	10	56.2	14
JBBS16-4-7	16	4	7	75	10	55	15
JBBS19-4-7	19.05	4	7	89	10	69	17.2
JBBS20-4-7	20	4	7	90	10	70	18
JBBS22-4-7	22	4	7	90	10	70	20
JBBS25-4-7	25	4	7	100	10	80	23
JBBS254-4-7	25.4	4	7	90	10	70	23.4

SPARE PARTS





Designation	Clamping screw	Wrench
JBBS**-4-L***C-4N, JBBS127-4-4, JBBS**-4-7	SSHM5-6PF-S	P-2.5
JBBS**-7-L***C-4N, JBBS12-4-4, JBBS14-4-4	SSHM5-4PF-S	P-2.5

JBBS-C

Sleeve for internal coolant supply



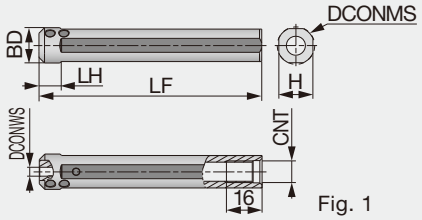


Fig. 1

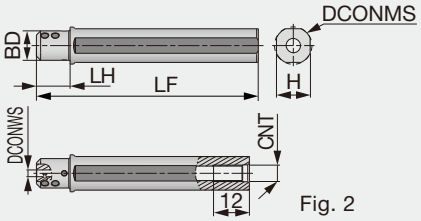


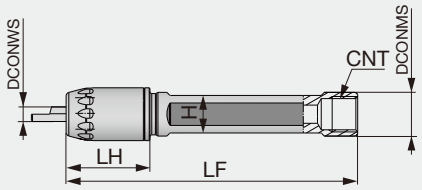
Fig. 2

Designation	DCONMS	BD	DCONWS	LF	LH	H	CNT	Fig.
JBBS159-4-L100C	15.875	15.875	4	100	10	14.58	Rc1/8	1
JBBS159-7-L100C	15.875	15.875	7	100	10	14.58	Rc1/8	1
JBBS16-4-L100C	16	16	4	100	10	15	Rc1/8	1
JBBS16-7-L100C	16	16	7	100	10	15	Rc1/8	1
JBBS19-4-L100C	19.05	17.5	4	100	20	17.2	Rc1/8	2
JBBS19-7-L100C	19.05	17.5	7	100	20	17.2	Rc1/8	2
JBBS20-4-L100C	20	17.5	4	100	20	18	Rc1/8	2
JBBS20-7-L100C	20	17.5	7	100	20	18	Rc1/8	2
JBBS22-4-L100C	22	17.5	4	100	20	20	Rc1/8	2
JBBS22-7-L100C	22	17.5	7	100	20	20	Rc1/8	2
JBBS25-4-L100C	25	18	4	100	23	23	Rc1/8	2
JBBS25-7-L100C	25	18	7	100	23	23	Rc1/8	2
JBBS254-4-L100C	25.4	18	4	100	23	23.4	Rc1/8	2
JBBS254-7-L100C	25.4	18	7	100	23	23.4	Rc1/8	2

JBBSA-C

Collet chuck sleeve for solid carbide bars





Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBSA16-4-L100C	16	4	100	23	14	Rc1/8
JBBSA16-7-L100C	16	7	100	23	14	Rc1/8
JBBSA20-4-L120C	20	4	120	23	18	Rc1/8
JBBSA20-7-L120C	20	7	120	23	18	Rc1/8

SPARE PARTS

Designation	Clamping screw	Cap	Wrench	Wrench 1
JBBS**-4-L100C	SSHM5-6PF-S		P-2.5	-
JBBS**-7-L100C	SSHM5-4PF-S		P-2.5	-
JBBSA**-4-L100C	-	CAP-A-4	-	WRENCH-A-4
JBBSA**-7-L100C	-	CAP-A-7	-	WRENCH-A-7

STANDARD CUTTING CONDITIONS

Boring, profiling, chamfering, back boring

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, S25C, etc. C15E, C15E4, etc.	SH730, SH725	40 - 140	0.01 - 0.08
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH730, SH725	40 - 140	0.01 - 0.08
P	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	0.01 - 0.08
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	SH730, SH725	40 - 140	0.01 - 0.08
K	Grey cast irons FC250, FCD300, etc. GG25, 250, GG30, 300, etc.	SH730, SH725	30 - 100	0.01 - 0.08
K	Ductile cast irons FC450, FCD600, etc. GGG60, 600-3, etc.	SH730, SH725	30 - 100	0.01 - 0.08
N	Aluminium alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	0.01 - 0.08
S	Titanium alloys Ti-6Al-4V, etc.	SH730, SH725	30 - 100	0.01 - 0.08
S	Superalloys Inconel718, etc.	SH730, SH725	30 - 100	0.01 - 0.08

Threading (metric thread)

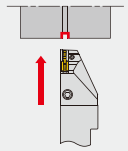
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Number of passes Pitch (mm) 0.5	0.75	1	1.25	1.5
P	Low carbon steels S15C, S25C, etc. C15E, C15E4, etc.	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
P	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	SH730, SH725	40 - 140	8	10	12	15	18
K	Grey cast irons FC250, FCD300, etc. GG25, 250, GG30, 300, etc.	SH730, SH725	30 - 100	7	9	12	14	17
K	Ductile cast irons FC450, FCD600, etc. GGG60, 600-3, etc.	SH730, SH725	30 - 100	7	9	12	14	17
N	Aluminium alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	6	8	10	12	15

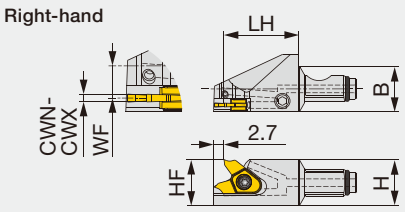
Internal and face grooving

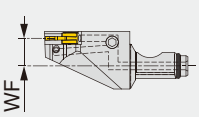
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) Internal grooving	Face grooving
P	Low carbon steels S15C, S25C, etc. C15E, C15E4, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05
P	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05
K	Grey cast irons FC250, FCD300, etc. GG25, 250, GG30, 300, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05
K	Ductile cast irons FC450, FCD600, etc. GGG60, 600-3, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05
N	Aluminium alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	0.01 - 0.03	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05
S	Superalloys Inconel718, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05

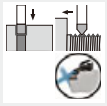
QC12-SVER/L-CHP

Modular head for external grooving and threading, with high pressure coolant capability







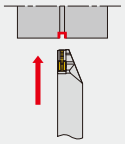


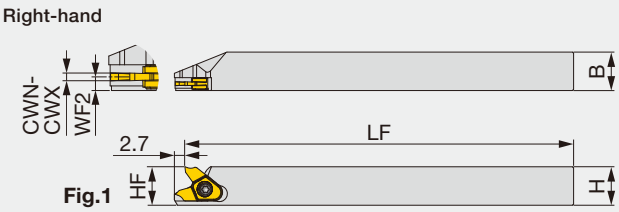
Designation	CWN	CWX	H	B	LH	HF	WF (1)	Insert	Torque*
QC12-SVER/L10-CHP	0.5	1	12	12	19.5	12	4.19/7.19	VG*10...	1.3

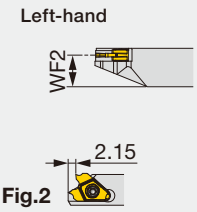
Torque*: Recommended clamping torque (N·m)
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

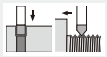
SVER/L

External grooving and threading toolholder







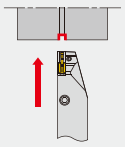


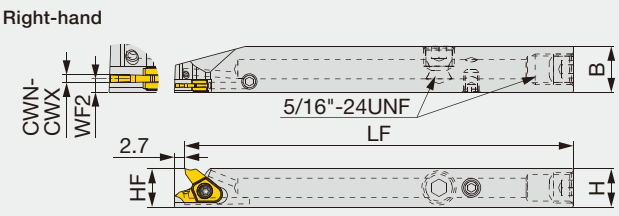
Designation	CWN	CWX	H	B	LF	HF	WF2(1)	Insert	Torque*	Fig.
SVER/L0808H08	0.33	1	8	8	100	8	1.23/6.78	VGP08...	1.1	2
SVER/L1010H10	0.5	1	10	10	100	10	1.78/8.23	VG*10...	1.3	1
SVER/L1212X10	0.5	1	12	12	120	12	1.78/10.23	VG*10...	1.3	1

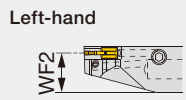
Torque*: Recommended clamping torque (N·m)
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

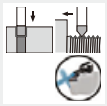
SVER/L-CHP

External grooving and threading toolholder, with high pressure coolant capability









Designation	CWN	CWX	H	B	LF	HF	WF2 (1)	Insert	Torque*
SVER/L1012H10-CHP	0.5	1	10	12	100	10	1.78/10.23	VG*10...	1.3
SVER/L1212X10-CHP	0.5	1	12	12	120	12	1.78/10.23	VG*10...	1.3

Compatible to the direct internal coolant supply system without the use of external coolant hose.
Torque*: Recommended clamping torque (N·m)
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

SPARE PARTS







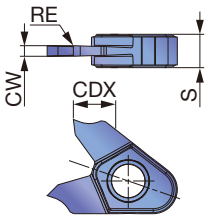


Designation	Clamping screw	Coolant plug	DirectJet plug	Wrench	Wrench 1	Wrench 2	O-ring
QC12-SVER10-CHP	CSTB-2.5L054DL	-	-	-	-	-	ORSS-0454.5X1.0NBR70
QC12-SVEL10-CHP	CSTB-2.5L054DR	-	-	-	-	-	ORSS-0454.5X1.0NBR70
SVER0808...	CSTB-2.2L053DL	-	-	T-7F	-	-	-
SVEL0808...	CSTB-2.2L053DR	-	-	T-7F	-	-	-
SVER1012/1212...	CSTB-2.5L054DL	SR5/16UNFTL360	SSHM4-6-TB	T-7F	P-4	P-2	-
SVEL1012/1212...	CSTB-2.5L054DR	SR5/16UNFTL360	SSHM4-6-TB	T-7F	P-4	P-2	-

Reference pages : QC12-SVER/L-CHP, SVER/L, SVER/L-CHP:
Shank, accessory →G095, G096, Standard cutting condition → G112

VGP08/10 (For grooving / sharp edge)





P	Steel	★
M	Stainless	★
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	

★ : First choice

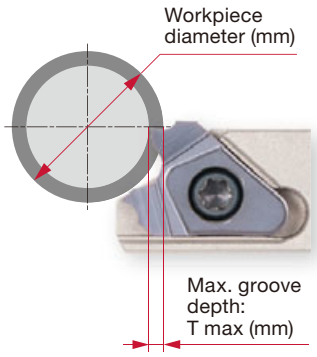
Designation	CW±0.025	RE	Coated SH725	CDX*	CUTDIA	S
VGP08-033F-000	0.33	0	●	2	4	2.2
VGP08-050F-000	0.5	0	●	2	4	2.2
VGP08-075F-000	0.75	0	●	2.5	5	2.2
VGP08-100F-000	1	0	●	2.5	5	2.2
VGP10-050F-000	0.5	0	●	2.5	5	3.15
VGP10-050F-005	0.5	0.05	●	2.5	5	3.15
VGP10-075F-000	0.75	0	●	3	6	3.15
VGP10-075F-005	0.75	0.05	●	3	6	3.15
VGP10-100F-000	1	0	●	4	8	3.15
VGP10-100F-005	1	0.05	●	4	8	3.15

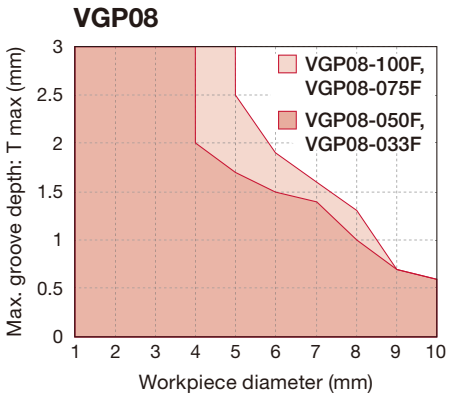
*Max grooving depth varies depending on workpiece diameters.
See below for details.

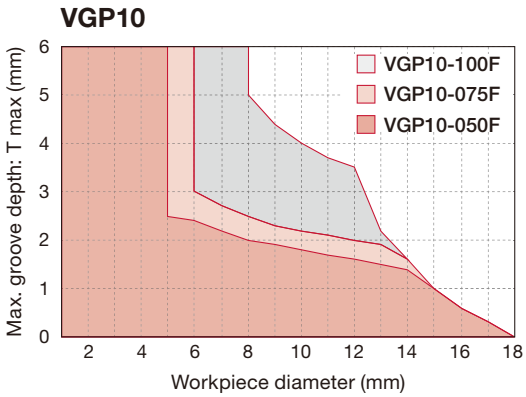
● : Line up

Note: Max grooving depths vs workpiece diameters

To avoid tool interference with the workpiece, max grooving depths (T max) for the insert used may be smaller than the CDX values listed above depending on the workpiece diameter.







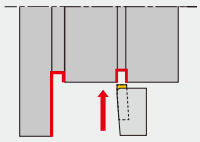
STANDARD CUTTING CONDITIONS

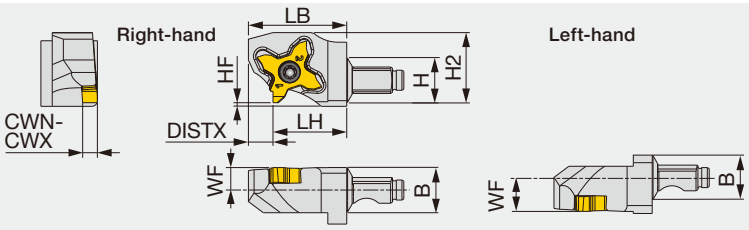
Grooving

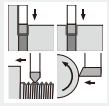
ISO	Workpiece materials	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 150	0.005 - 0.1
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 150	0.005 - 0.1
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 150	0.005 - 0.1
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 100	0.005 - 0.1
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.005 - 0.1
	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.005 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.005 - 0.1
	Superalloys Inconel718, etc.	SH725	30 - 80	0.005 - 0.1

QC12-STCR/L-Y

Y-axis turning modular head for external grooving and threading





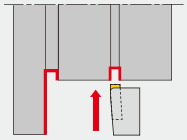


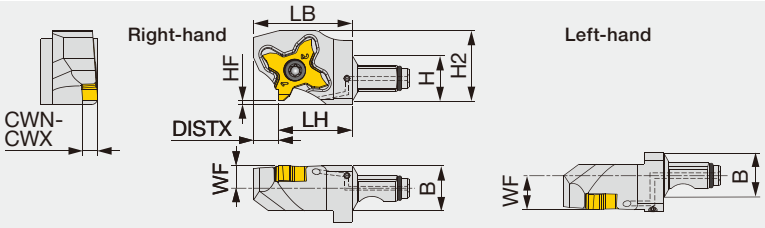
Designation	CWN	CWX	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	0.33	3.18	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

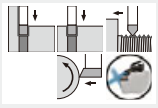
Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

QC12-STCR/L-Y-CHP

Y-axis turning modular head for external grooving and threading, with high pressure coolant capability







Designation	CWN	CWX	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	0.33	3.18	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).
Through-coolant head

SPARE PARTS



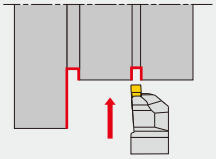


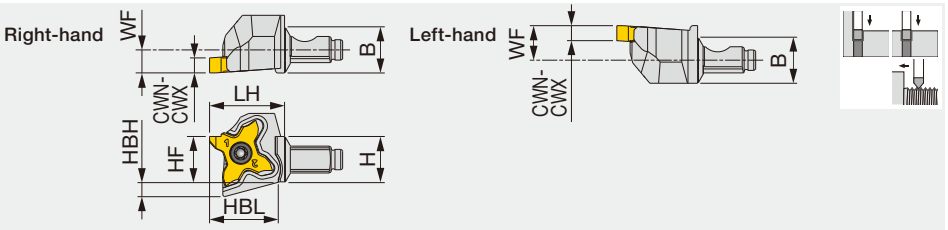
Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y, QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18-Y, QC12-STCL18	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-Y-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-Y-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

Reference pages : QC12-STCR/L-Y, QC12-STCR/L-Y-CHP: Inserts → G117 -
Shank, Accessory → G095, G096, Standard cutting conditions → G124

QC12-STCR/L

Modular head for external grooving and threading





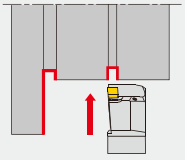
Designation	CWN	CWX	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18	0.33	3.18	12	12	19.5	12	3.9	17.9	6	TC*18R...	1.2
QC12-STCL18	0.33	3.18	12	12	21	12	3.9	18.3	9	TC*18L...	1.2

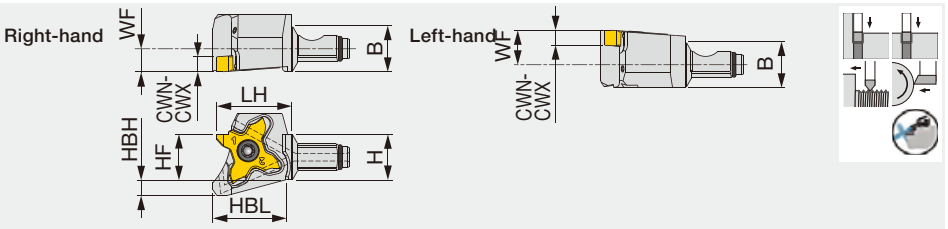
Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

External
Internal
Grooving
Threading
Parting-off

QC12-STCR/L-CHP

Modular head for external grooving and threading, with high pressure coolant capability





Designation	CWN	CWX	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR/L18-CHP	0.33	3.18	12	12	21	12	4.2	19.3	9	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

SPARE PARTS



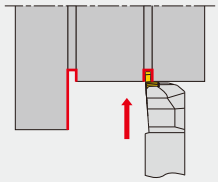


Designation	Clamping screw	Wrench	O-ring
QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

Reference pages : QC12-STCR/L, QC12-STCR/L-CHP: Inserts → G117 -
Shank, Accessory → G095, G096, Standard cutting conditions → G124

STCR/L-18

External grooving and threading toolholder



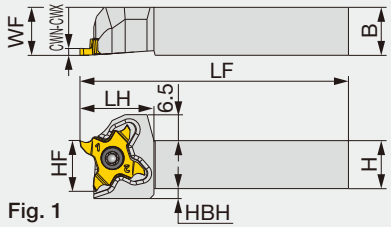


Fig. 1

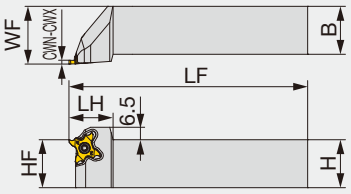


Fig. 2

Right-hand (R) shown.

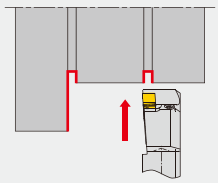
Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2

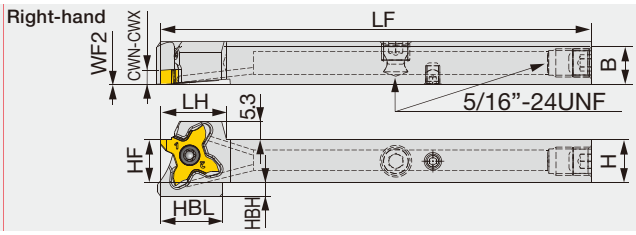
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert is used for the left hand toolholders (STCL...).
*Torque: Recommended clamping torque: N·m

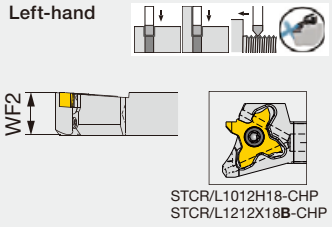
STCR/L-H/X18-CHP

Direct connection

External grooving and threading toolholder, with high pressure coolant capability







Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.33	3.18	10	12	100	17.1	17.1	10	0/12	4	TC**18	1.2
STCR/L1212X18B-CHP	0.33	3.18	12	12	120	18.5	17.5	12	0/12	4	TC**18	1.2
STCR/L1616X18-CHP	0.33	3.18	16	16	120	18.5	-	16	0/16	0	TC**18	1.2

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).
*Torque: Recommended torque (N·m) for clamping

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCR**18	CSTC-4L100DL	T-1008/5	-	-	-	-
STCL**18	CSTC-4L100DR	T-1008/5	-	-	-	-
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

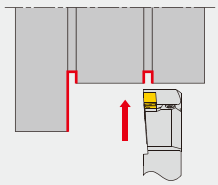
Threading pitch range: 0.8 ~ 3.0 mm

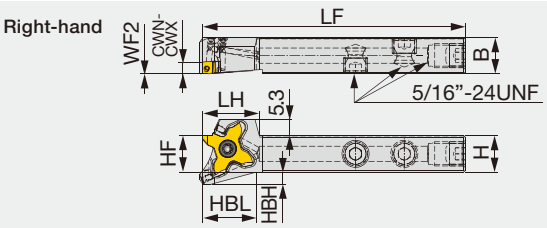
Reference pages : STCR/L-18, STCR/L-H/X18-CHP: Inserts → G117 -, Standard cutting conditions → G124

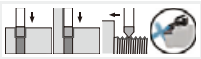
STCR/L-18-CHP

Tube connection

External grooving and threading toolholder, with high pressure coolant capability







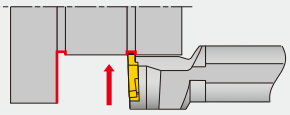
Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2(1)	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.33	3.18	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

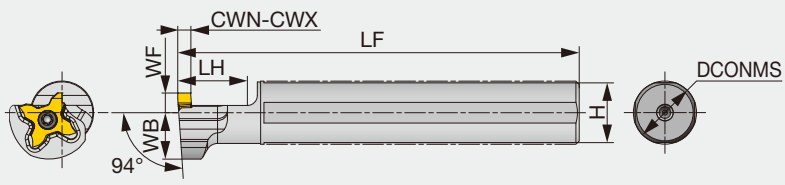
The right hand insert (TC*18R***) is used for the right hand toolholders (STCR***), and the left hand insert (TC*18L***) is used for the left hand toolholders (STCL***).
(1) "0/12" for the WF dimension indicates WF = 0 for the right handed tool, WF = 12 for the left handed tool.
*Torque: Recommended torque (N·m) for clamping

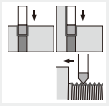
External
Internal
Grooving
Threading
Parting-off

JS-STCL18

External grooving and threading toolholder with round shank, for Swiss lathes







Left-hand (L) shown.

Designation	CWN	CWX	DCONMS	LF	LH	H	WB	WF	Insert	Torque*
JS14H-STCL18	0.33	3.18	14	100	20	13	14	6	TC*18R...	1.2
JS159F-STCL18	0.33	3.18	15.875	85	20	15	14	6	TC*18R...	1.2
JS16F-STCL18	0.33	3.18	16	85	20	15	14	6	TC*18R...	1.2
JS19G-STCL18	0.33	3.18	19.05	90	20	18	14	6	TC*18R...	1.2
JS19X-STCL18	0.33	3.18	19.05	120	20	18	14	6	TC*18R...	1.2
JS20G-STCL18	0.33	3.18	20	90	20	19	14	6	TC*18R...	1.2
JS20X-STCL18	0.33	3.18	20	120	20	19	14	6	TC*18R...	1.2
JS22X-STCL18	0.33	3.18	22	120	20	21	12.25	10	TC*18R...	1.2
JS25H-STCL18	0.33	3.18	25	100	20	24	12.25	10	TC*18R...	1.2
JS254X-STCL18	0.33	3.18	25.4	120	20	24	12.25	10	TC*18R...	1.2

The left hand toolholder (STCL...) is used with the right hand inserts (TC*18R...)
*Torque: Recommended clamping torque: N·m

SPARE PARTS






Designation	Clamping screw	Wrench	Coolant plug	Wrench
STCL**F18B-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4
STCR**F18B-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
JS...STCL18	CSTC-4L100DL	T-1008/5	-	-

Threading pitch range: 0.8 - 3.0 mm

Reference pages : STCR/L-18-CHP, JS-STCL18: Inserts → G117 -, Standard cutting conditions → G124

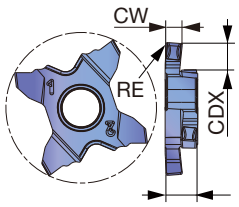
Selection guide for TetraMini-Cut inserts

Groove width CW (mm)	Corner rad. RE (mm)	TCL18R/L (G118 page)	TCS18R/L (G118 page -)	TCG18R/L (G120 page -)	TCP18R/L (G122 page)	TCP18R/L-F (G123 page)
		AH7025	AH7025	AH7025	AH725	SH725
0.33	0.05				●	●
0.43	0.05				●	●
0.50	0.05				●	●
0.75	0.05				●	●
0.95	0.05				●	●
1.00	0.05					●
	0.1		●	●	●	●
	0.5			●		
1.20	0.05					●
	0.1		●	●	●	●
1.25	0.05					●
	0.1		●	●	●	●
	0.2		●	●		
1.30	0.2		●	●		
1.40	0.1		●	●	●	●
	0.2		●	●		
1.45	0.05					●
	0.1		●	●	●	●
	0.2			●		
1.50	0.05					●
	0.1	●	●	●	●	●
	0.2	●	●	●		
1.58	0.79			●		
1.60	0.2		●	●		
1.70	0.2		●	●		
1.75	0.05					●
	0.1		●	●	●	●
	0.2	●	●	●		
1.85	0.2		●	●		
1.95	0.2		●	●		
2.00	0.05					●
	0.1	●	●	●	●	●
	0.2	●	●	●		
	1.0			●		
2.25	0.2		●	●		
2.30	0.2		●	●		
2.39	1.2			●		
2.50	0.1		●	●	●	●
	0.2		●	●		
	0.3	●	●	●		
2.65	0.3		●	●		
2.80	0.3		●	●		
3.00	0.1	●	●	●	●	●
	0.2	●	●	●		
	0.3	●	●	●		
	1.5			●		
3.18	1.59			●		

● : Line up

TCL18R/L (3D chipbreaker, honed edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCL18R150-010	R	1.5	0.1	●	3.5
TCL18L150-010	L	1.5	0.1	●	3.5
TCL18R150-020	R	1.5	0.2	●	3.5
TCL18L150-020	L	1.5	0.2	●	3.5
TCL18R175-020	R	1.75	0.2	●	3.5
TCL18L175-020	L	1.75	0.2	●	3.5
TCL18R200-010	R	2	0.1	●	3.5
TCL18L200-010	L	2	0.1	●	3.5
TCL18R200-020	R	2	0.2	●	3.5
TCL18L200-020	L	2	0.2	●	3.5
TCL18R250-030	R	2.5	0.3	●	3.5
TCL18L250-030	L	2.5	0.3	●	3.5
TCL18R300-010	R	3	0.1	●	3.5
TCL18L300-010	L	3	0.1	●	3.5
TCL18R300-020	R	3	0.2	●	3.5
TCL18L300-020	L	3	0.2	●	3.5
TCL18R300-030	R	3	0.3	●	3.5
TCL18L300-030	L	3	0.3	●	3.5

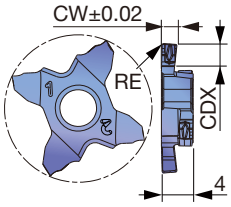
Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

TCS18R (honed edge) (3D chipbreaker, honed edge)





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCS18R100-010	R	1	0.1	●	2
TCS18L100-010	L	1	0.1	●	2
TCS18R120-010	R	1.2	0.1	●	2
TCS18L120-010	L	1.2	0.1	●	2
TCS18R125-010	R	1.25	0.1	●	2
TCS18L125-010	L	1.25	0.1	●	2

Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous		
S	Superalloys	★	
H	Hard materials		

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated	CDX
				AH7025	
TCS18R125-020	R	1.25	0.2	●	2
TCS18L125-020	L	1.25	0.2	●	2
TCS18R130-020	R	1.3	0.2	●	3.5
TCS18L130-020	L	1.3	0.2	●	3.5
TCS18R140-010	R	1.4	0.1	●	3.5
TCS18L140-010	L	1.4	0.1	●	3.5
TCS18R140-020	R	1.4	0.2	●	3.5
TCS18L140-020	L	1.4	0.2	●	3.5
TCS18R145-010	R	1.45	0.1	●	3.5
TCS18L145-010	L	1.45	0.1	●	3.5
TCS18R150-010	R	1.5	0.1	●	3.5
TCS18L150-010	L	1.5	0.1	●	3.5
TCS18R150-020	R	1.5	0.2	●	3.5
TCS18L150-020	L	1.5	0.2	●	3.5
TCS18R160-020	R	1.6	0.2	●	3.5
TCS18L160-020	L	1.6	0.2	●	3.5
TCS18R170-020	R	1.7	0.2	●	3.5
TCS18L170-020	L	1.7	0.2	●	3.5
TCS18R175-010	R	1.75	0.1	●	3.5
TCS18L175-010	L	1.75	0.1	●	3.5
TCS18R175-020	R	1.75	0.2	●	3.5
TCS18L175-020	L	1.75	0.2	●	3.5
TCS18R185-020	R	1.85	0.2	●	3.5
TCS18L185-020	L	1.85	0.2	●	3.5
TCS18R195-020	R	1.95	0.2	●	3.5
TCS18L195-020	L	1.95	0.2	●	3.5
TCS18R200-010	R	2	0.1	●	3.5
TCS18L200-010	L	2	0.1	●	3.5
TCS18R200-020	R	2	0.2	●	3.5
TCS18L200-020	L	2	0.2	●	3.5
TCS18R225-020	R	2.25	0.2	●	3.5
TCS18L225-020	L	2.25	0.2	●	3.5
TCS18R230-020	R	2.3	0.2	●	3.5
TCS18L230-020	L	2.3	0.2	●	3.5
TCS18R250-010	R	2.5	0.1	●	3.5
TCS18L250-010	L	2.5	0.1	●	3.5
TCS18R250-020	R	2.5	0.2	●	3.5
TCS18L250-020	L	2.5	0.2	●	3.5
TCS18R250-030	R	2.5	0.3	●	3.5
TCS18L250-030	L	2.5	0.3	●	3.5
TCS18R265-030	R	2.65	0.3	●	3.5
TCS18L265-030	L	2.65	0.3	●	3.5
TCS18R280-030	R	2.8	0.3	●	3.5
TCS18L280-030	L	2.8	0.3	●	3.5
TCS18R300-010	R	3	0.1	●	3.5
TCS18L300-010	L	3	0.1	●	3.5
TCS18R300-020	R	3	0.2	●	3.5
TCS18L300-020	L	3	0.2	●	3.5
TCS18R300-030	R	3	0.3	●	3.5
TCS18L300-030	L	3	0.3	●	3.5

Please see page G125 for precautions of processing.

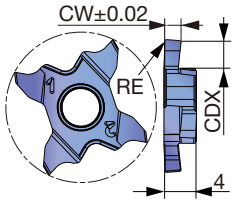
5 pieces per package
● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

INSERT

TCG18R/L (honed edge)





P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous		
S	Superalloys	★	
H	Hard materials		

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated	CDX
				AH7025	
TCG18R100-010	R	1	0.1	●	2
TCG18L100-010	L	1	0.1	●	2
TCG18R120-010	R	1.2	0.1	●	2
TCG18L120-010	L	1.2	0.1	●	2
TCG18R125-010	R	1.25	0.1	●	2
TCG18L125-010	L	1.25	0.1	●	2
TCG18R125-020	R	1.25	0.2	●	2
TCG18L125-020	L	1.25	0.2	●	2
TCG18R130-020	R	1.3	0.2	●	2
TCG18L130-020	L	1.3	0.2	●	2
TCG18R140-010	R	1.4	0.1	●	3.5
TCG18L140-010	L	1.4	0.1	●	3.5
TCG18R140-020	R	1.4	0.2	●	3.5
TCG18L140-020	L	1.4	0.2	●	3.5
TCG18R145-010	R	1.45	0.1	●	3.5
TCG18L145-010	L	1.45	0.1	●	3.5
TCG18R145-020	R	1.45	0.2	●	3.5
TCG18L145-020	L	1.45	0.2	●	3.5
TCG18R150-010	R	1.5	0.1	●	3.5
TCG18L150-010	L	1.5	0.1	●	3.5
TCG18R150-020	R	1.5	0.2	●	3.5
TCG18L150-020	L	1.5	0.2	●	3.5
TCG18R160-020	R	1.6	0.2	●	3.5
TCG18L160-020	L	1.6	0.2	●	3.5
TCG18R170-020	R	1.7	0.2	●	3.5
TCG18L170-020	L	1.7	0.2	●	3.5
TCG18R175-010	R	1.75	0.1	●	3.5
TCG18L175-010	L	1.75	0.1	●	3.5
TCG18R175-020	R	1.75	0.2	●	3.5
TCG18L175-020	L	1.75	0.2	●	3.5
TCG18R185-020	R	1.85	0.2	●	3.5
TCG18L185-020	L	1.85	0.2	●	3.5
TCG18R195-020	R	1.95	0.2	●	3.5
TCG18L195-020	L	1.95	0.2	●	3.5
TCG18R200-010	R	2	0.1	●	3.5
TCG18L200-010	L	2	0.1	●	3.5
TCG18R200-020	R	2	0.2	●	3.5
TCG18L200-020	L	2	0.2	●	3.5
TCG18R225-020	R	2.25	0.2	●	3.5
TCG18L225-020	L	2.25	0.2	●	3.5
TCG18R230-020	R	2.3	0.2	●	3.5
TCG18L230-020	L	2.3	0.2	●	3.5
TCG18R250-010	R	2.5	0.1	●	3.5
TCG18L250-010	L	2.5	0.1	●	3.5

Please see page G125 for precautions of processing.

5 pieces per package
● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous		
S	Superalloys	★	
H	Hard materials		

★ : First choice
☆ : Second choice

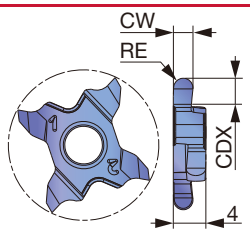
Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCG18R250-020	R	2.5	0.2	●	3.5
TCG18L250-020	L	2.5	0.2	●	3.5
TCG18R250-030	R	2.5	0.3	●	3.5
TCG18L250-030	L	2.5	0.3	●	3.5
TCG18R265-030	R	2.65	0.3	●	3.5
TCG18L265-030	L	2.65	0.3	●	3.5
TCG18R280-030	R	2.8	0.3	●	3.5
TCG18L280-030	L	2.8	0.3	●	3.5
TCG18R300-010	R	3	0.1	●	3.5
TCG18L300-010	L	3	0.1	●	3.5
TCG18R300-020	R	3	0.2	●	3.5
TCG18L300-020	L	3	0.2	●	3.5
TCG18R300-030	R	3	0.3	●	3.5
TCG18L300-030	L	3	0.3	●	3.5

Please see page G125 for precautions of processing.

5 pieces per package
● : Line up

TCG18R/L (Full R, honed edge)





Right-hand (R) shown.

P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous		
S	Superalloys	★	
H	Hard materials		

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX
TCG18R100-050	R	1	0.5	●	2
TCG18L100-050	L	1	0.5	●	2
TCG18R158-079	R	1.58	0.79	●	3.5
TCG18L158-079	L	1.58	0.79	●	3.5
TCG18R200-100	R	2	1	●	3.5
TCG18L200-100	L	2	1	●	3.5
TCG18R239-120	R	2.39	1.2	●	3.5
TCG18L239-120	L	2.39	1.2	●	3.5
TCG18R300-150	R	3	1.5	●	3.5
TCG18L300-150	L	3	1.5	●	3.5
TCG18R318-159	R	3.18	1.59	●	3.5
TCG18L318-159	L	3.18	1.59	●	3.5

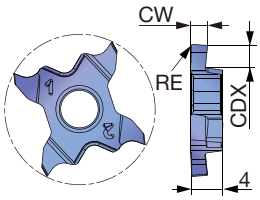
Please see page G125 for precautions of processing.

5 pieces per package
● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

TCP18R/L (lightly honed edge)





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated	CDX
				AH725	
TCP18R033-005	R	0.33	0.05	●	0.8
TCP18L033-005	L	0.33	0.05	●	0.8
TCP18R043-005	R	0.43	0.05	●	1.2
TCP18L043-005	L	0.43	0.05	●	1.2
TCP18R050-005	R	0.50	0.05	●	1.2
TCP18L050-005	L	0.50	0.05	●	1.2
TCP18R075-005	R	0.75	0.05	●	2
TCP18L075-005	L	0.75	0.05	●	2
TCP18R095-005	R	0.95	0.05	●	2
TCP18L095-005	L	0.95	0.05	●	2
TCP18R100-010	R	1	0.1	●	2
TCP18L100-010	L	1	0.1	●	2
TCP18R120-010	R	1.2	0.1	●	2
TCP18L120-010	L	1.2	0.1	●	2
TCP18R125-010	R	1.25	0.1	●	2
TCP18L125-010	L	1.25	0.1	●	2
TCP18R140-010-35	R	1.4	0.1	●	3.5
TCP18L140-010-35	L	1.4	0.1	●	3.5
TCP18R145-010	R	1.45	0.1	●	2
TCP18L145-010	L	1.45	0.1	●	2
TCP18R145-010-35	R	1.45	0.1	●	3.5
TCP18L145-010-35	L	1.45	0.1	●	3.5
TCP18R150-010	R	1.5	0.1	●	2
TCP18L150-010	L	1.5	0.1	●	2
TCP18R150-010-35	R	1.5	0.1	●	3.5
TCP18L150-010-35	L	1.5	0.1	●	3.5
TCP18R175-010	R	1.75	0.1	●	2
TCP18L175-010	L	1.75	0.1	●	2
TCP18R175-010-35	R	1.75	0.1	●	3.5
TCP18L175-010-35	L	1.75	0.1	●	3.5
TCP18R200-010	R	2	0.1	●	2.5
TCP18L200-010	L	2	0.1	●	2.5
TCP18R200-010-35	R	2	0.1	●	3.5
TCP18L200-010-35	L	2	0.1	●	3.5
TCP18R250-010	R	2.5	0.1	●	2.5
TCP18L250-010	L	2.5	0.1	●	2.5
TCP18R250-010-35	R	2.5	0.1	●	3.5
TCP18L250-010-35	L	2.5	0.1	●	3.5
TCP18R300-010	R	3	0.1	●	2.5
TCP18L300-010	L	3	0.1	●	2.5
TCP18R300-010-35	R	3	0.1	●	3.5
TCP18L300-010-35	L	3	0.1	●	3.5

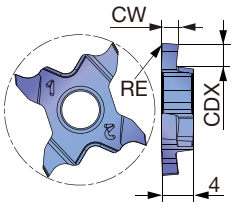
Please see page G125 for precautions of processing.

5 pieces per package
● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

TCP18R/L-F (sharp edge)





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated	CDX
				SH725	
TCP18R033F-005	R	0.33	0.05	●	0.8
TCP18L033F-005	L	0.33	0.05	●	0.8
TCP18R043F-005	R	0.43	0.05	●	1.2
TCP18L043F-005	L	0.43	0.05	●	1.2
TCP18R050F-005	R	0.5	0.05	●	1.2
TCP18L050F-005	L	0.5	0.05	●	1.2
TCP18R075F-005	R	0.75	0.05	●	2
TCP18L075F-005	L	0.75	0.05	●	2
TCP18R095F-005	R	0.95	0.05	●	2
TCP18L095F-005	L	0.95	0.05	●	2
TCP18R100F-005	R	1	0.05	●	2
TCP18R100F-010	R	1	0.1	●	2
TCP18L100F-010	L	1	0.1	●	2
TCP18R120F-005	R	1.2	0.05	●	2
TCP18R120F-010	R	1.2	0.1	●	2
TCP18L120F-010	L	1.2	0.1	●	2
TCP18R125F-005	R	1.25	0.05	●	2
TCP18R125F-010	R	1.25	0.1	●	2
TCP18L125F-010	L	1.25	0.1	●	2
TCP18R140F-010-35	R	1.4	0.1	●	3.5
TCP18R145F-005-35	R	1.45	0.05	●	3.5
TCP18R145F-010	R	1.45	0.1	●	2
TCP18L145F-010	L	1.45	0.1	●	2
TCP18R145F-010-35	R	1.45	0.1	●	3.5
TCP18L145F-010-35	L	1.45	0.1	●	3.5
TCP18R150F-005-35	R	1.5	0.05	●	3.5
TCP18R150F-010	R	1.5	0.1	●	2
TCP18L150F-010	L	1.5	0.1	●	2
TCP18R150F-010-35	R	1.5	0.1	●	3.5
TCP18L150F-010-35	L	1.5	0.1	●	3.5
TCP18R175F-005-35	R	1.75	0.05	●	3.5
TCP18R175F-010	R	1.75	0.1	●	2
TCP18L175F-010	L	1.75	0.1	●	2
TCP18R175F-010-35	R	1.75	0.1	●	3.5
TCP18L175F-010-35	L	1.75	0.1	●	3.5
TCP18R200F-005-35	R	2	0.05	●	3.5
TCP18R200F-010	R	2	0.1	●	2.5
TCP18L200F-010	L	2	0.1	●	2.5
TCP18R200F-010-35	R	2	0.1	●	3.5
TCP18L200F-010-35	L	2	0.1	●	3.5
TCP18R250F-010	R	2.5	0.1	●	2.5
TCP18L250F-010	L	2.5	0.1	●	2.5
TCP18R250F-010-35	R	2.5	0.1	●	3.5
TCP18L250F-010-35	L	2.5	0.1	●	3.5
TCP18R300F-010	R	3	0.1	●	2.5
TCP18L300F-010	L	3	0.1	●	2.5
TCP18R300F-010-35	R	3	0.1	●	3.5
TCP18L300F-010-35	L	3	0.1	●	3.5

Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

STANDARD CUTTING CONDITIONS

TCS18R (3D chipbreaker) , TCG18R/L (honed edge)

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)	
				TCG	TCS
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	AH7025	80 - 180	0.03 - 0.12	0.03 - 0.15
P	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	AH7025	80 - 180	0.03 - 0.12	0.03 - 0.15
P	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.03 - 0.15
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.03 - 0.15
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	AH7025	50 - 180	0.03 - 0.12	0.03 - 0.15
K	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	AH7025	50 - 180	0.03 - 0.12	0.03 - 0.15
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	0.03 - 0.15
S	Superalloys Inconel718, etc.	AH7025	20 - 60	0.03 - 0.12	0.03 - 0.15

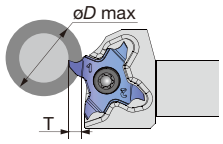
TCL18R (3D chipbreaker), TCG18R/L (Full R, honed edge)

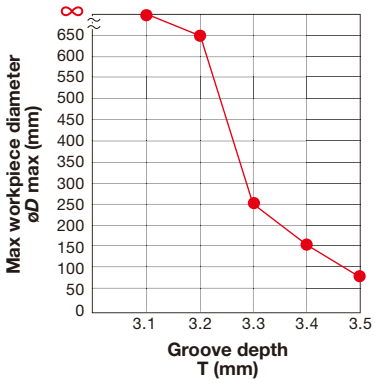
ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev)	
				TCL18	TCG18
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.14
P	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.14
P	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.14
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.04 - 0.14
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.14
K	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.14
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	0.04 - 0.14
S	Superalloys Inconel718, etc.	AH7025	20 - 60	0.03 - 0.12	0.04 - 0.14

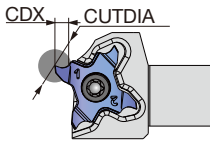
TCP18R/L (lightly honed edge) / TCP18R/L-F (sharp edge)

ISO	Workpiece materials	Priority	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	First choice	SH725	80 - 180	0.03 - 0.1
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	Toughness	AH725	80 - 180	0.03 - 0.1
P	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	First choice	SH725	80 - 180	0.03 - 0.1
P	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	Toughness	AH725	80 - 180	0.03 - 0.1
P	Prehardened steel NAK80, PX5, etc.	First choice	SH725	80 - 180	0.03 - 0.1
P	Prehardened steel NAK80, PX5, etc.	Toughness	AH725	80 - 180	0.03 - 0.1
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	First choice	SH725	50 - 120	0.03 - 0.1
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	Toughness	AH725	50 - 120	0.03 - 0.1
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	First choice	AH725	50 - 180	0.03 - 0.1
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	Sharpness	SH725	50 - 180	0.03 - 0.1
K	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	First choice	AH725	50 - 180	0.03 - 0.1
K	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	Sharpness	SH725	50 - 180	0.03 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 80	0.03 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	Toughness	AH725	30 - 80	0.03 - 0.1
S	Superalloys Inconel718, etc.	First choice	SH725	20 - 60	0.03 - 0.1
S	Superalloys Inconel718, etc.	Toughness	AH725	20 - 60	0.03 - 0.1

PRECAUTIONS OF PROCESSING







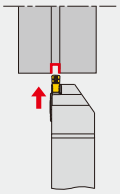
Max workpiece diameter CUTDIA (mm)
7

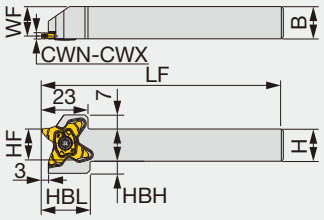
*Groove depth and max workpiece diameter (øDmax)

Maximum workpiece diameter is limited relative to depth of cut in order to avoid collision between insert and workpiece.

STCR/L-27

External grooving toolholder







Right-hand (R) shown.

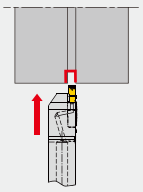
Designation	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
STCR/L1010-27	0.5	3.18	10	10	120	10	8.5	9.5	24	TC*27...	2.5
STCR/L1212-27	0.5	3.18	12	12	120	12	10.5	8	24	TC*27...	2.5
STCR/L1616-27	0.5	3.18	16	16	120	16	14.5	6	24	TC*27...	2.5
STCR/L2020-27	0.5	3.18	20	20	120	20	18.5	2	24	TC*27...	2.5

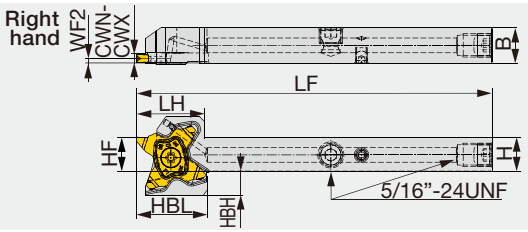
Torque*: Recommended clamping torque (N·m)

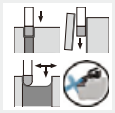
STCR/L1212-27-CHP

Direct connection

Grooving and parting-off toolholder. High pressure coolant capability.







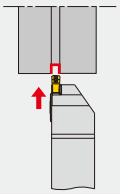
Designation	CWN	CWX	H	B	LF	LH	HF	WF2(1)	HBH	HBL	Insert	Torque*
STCR/L1212-27-CHP	0.5	3.18	12	12	120	23	12	1.5/10.5	8	24	TC*27...	2.5

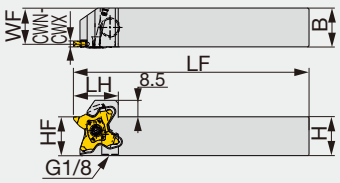
(1) The above WF value is valid when an insert width of CW=3 is mounted.
*Torque: Recommended torque (N·m) for clamping
Make sure to avoid tool interferences when used on Swiss machines

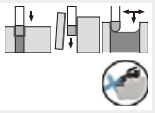
STCR/L2020-27-CHP

Tube connection

External grooving and parthing-off toolholder with high pressure coolant supply







Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque*
STCR/L2020-27-CHP	0.5	3.18	20	20	120	23	20	18.5	TC*27...	2.5

Torque*: Recommended clamping torque (N·m)

SPARE PARTS



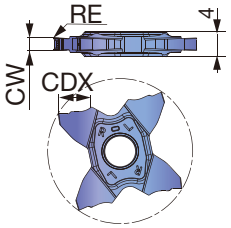


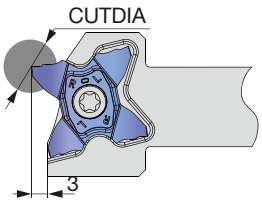
Designation	Screw	Wrench
STCR****-27, STCR...-27-CHP	SR16-212-01397L	T-2010/5
STCL****-27, STCL...-27-CHP	SR16-212-01397	T-2010/5

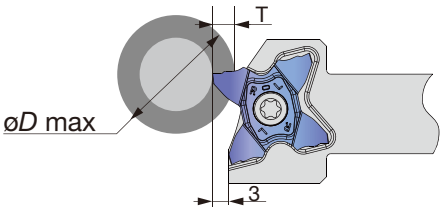
Reference pages : STCR/L-27, STCR/L1212-27-CHP, STCR/L2020-27-CHP:
Inserts → G125 - G131, Standard cutting conditions → G131

INSERT - FOR GROOVING AND PARTING OFF

TCL27







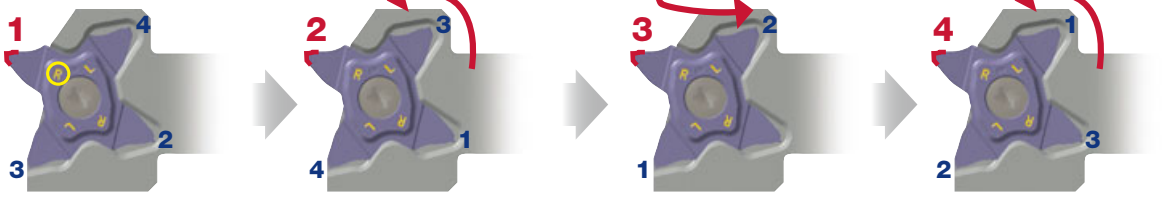
P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	CW±0.02	RE	Coated	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCL27-150-015	1.5	0.15	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCL27-200-020	2	0.2	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCL27-250-020	2.5	0.2	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCL27-300-020	3	0.2	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55

5 pieces per package
● : Line up

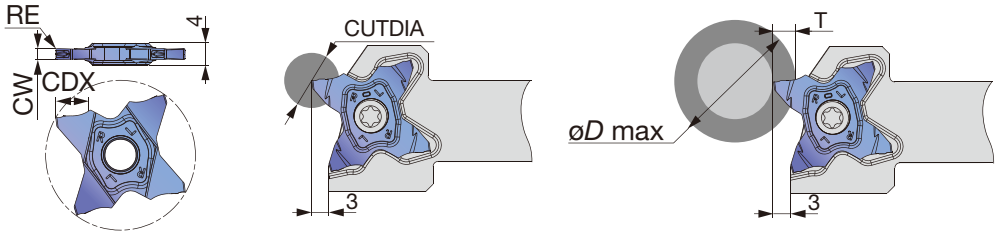
HOW TO INDEX INSERTS



1. Right-hand edge (R) is used for the right- hand toolholders.
2. Rotate the insert
3. Flip over the insert
4. Rotate the insert

INSERT - FOR GROOVING AND PARTING OFF

TCS27



P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice
☆ : Second choice

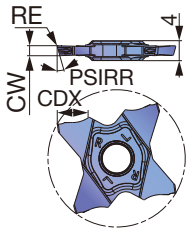
Designation	CW±0.02	RE	Coated	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)											
			AH725			T≤1	T≤2	T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCS27-050-000	0.5	0	●	1	2	∞	-	-	-	-	-	-	-	-	-	-	-
TCS27-050-004	0.5	0.04	●	2.5	5	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-075-010	0.75	0.1	●	2.5	5	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-080-000	0.8	0	●	1.6	3.2	∞	-	-	-	-	-	-	-	-	-	-	-
TCS27-100-006	1	0.06	●	3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-100-010	1	0.1	●	3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-104-000	1.04	0	●	2	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-120-000	1.2	0	●	2	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-125-010	1.25	0.1	●	3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-125-020	1.25	0.2	●	3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-140-000	1.4	0	●	2	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-147-000	1.47	0	●	2.5	5	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-150-010	1.5	0.1	●	5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-150-020	1.5	0.2	●	5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-157-015	1.57	0.15	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-170-010	1.7	0.1	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-175-010	1.75	0.1	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-175-020	1.75	0.2	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-178-018	1.78	0.18	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-185-020	1.85	0.2	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-196-015	1.96	0.15	●	3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-200-010	2	0.1	●	6.4	12.8	∞	∞	∞	600	280	180	130	105	85	60	50	30
TCS27-200-020	2	0.2	●	6.4	12.8	∞	∞	∞	600	280	180	130	105	85	60	50	30
TCS27-222-015	2.22	0.15	●	3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-230-020	2.3	0.2	●	3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-239-015	2.39	0.15	●	5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-247-020	2.47	0.2	●	5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-250-010	2.5	0.1	●	5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-250-030	2.5	0.3	●	5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-270-010	2.7	0.1	●	6.2	12.4	∞	∞	∞	600	280	180	135	105	95	85	78	-
TCS27-287-020	2.87	0.2	●	6.2	12.4	∞	∞	∞	600	280	180	135	105	95	85	78	-
TCS27-300-000	3	0	●	6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-300-020	3	0.2	●	6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-300-030	3	0.3	●	6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-300-040	3	0.4	●	6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-315-015	3.15	0.15	●	6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	68
TCS27-318-020	3.18	0.2	●	6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	68

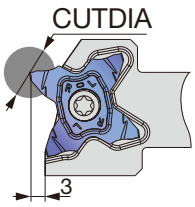
5 pieces per package
● : Line up

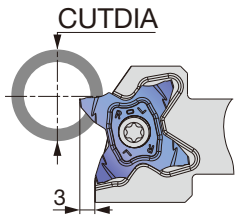
Reference pages : Toolholders → G126, Standard cutting conditions → G131

INSERT- FOR PARTING OFF

TCS27-R/L







		Coated
		AH725
P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

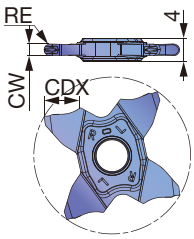
★ : First choice
☆ : Second choice

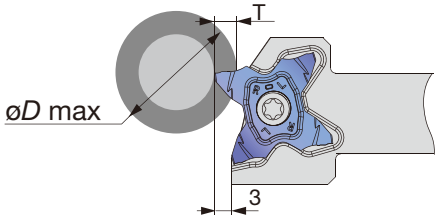
Designation	HAND	CW±0.02	RE	Coated AH725	CDX	PSIRL	PSIRR	Max. parting off dia. CUTDIA Solid bar	Max. parting off dia. CUTDIA Tube
TCS27-100-15R	R	1	0.06	●	3.5	0°	15°	7	600
TCS27-100-15L	L	1	0.06	●	3.5	15°	0°	7	600
TCS27-150-6R	R	1.5	0.06	●	5.7	0°	6°	11.4	35
TCS27-150-6L	L	1.5	0.06	●	5.7	6°	0°	11.4	35
TCS27-150-15R	R	1.5	0.06	●	5.7	0°	15°	11.4	35
TCS27-150-15L	L	1.5	0.06	●	5.7	15°	0°	11.4	35
TCS27-200-6R	R	2	0.1	●	6.4	0°	6°	12.8	30
TCS27-200-6L	L	2	0.1	●	6.4	6°	0°	12.8	30
TCS27-200-15R	R	2	0.1	●	6.4	0°	15°	12.8	30
TCS27-200-15L	L	2	0.1	●	6.4	15°	0°	12.8	30

5 pieces per package
● : Line up

INSERT- FOR GROOVING AND PROFILING

TCS27 (Full R)





		Coated
		AH725
P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

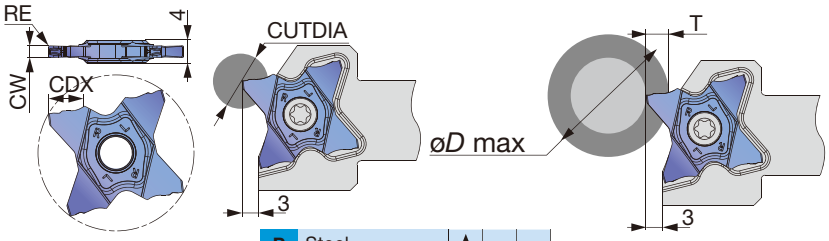
Designation	CW±0.02	RE	Coated AH725	CDX	Relation of groove depth (T) and Max. diameter (øD max) T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCS27-157-079	1.57	0.79	●	3	∞	-	-	-	-	-	-	-	-	-
TCS27-200-100	2	1	●	3	∞	-	-	-	-	-	-	-	-	-
TCS27-239-120	2.39	1.2	●	5.7	∞	600	280	180	130	50	35	-	-	-
TCS27-300-150	3	1.5	●	6.4	∞	600	280	180	135	105	95	85	78	55

5 pieces per package
● : Line up

Reference pages : Toolholders → G126, Standard cutting conditions → G131

INSERT- FOR GROOVING AND PARTING OFF

TCM27



P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice
☆ : Second choice

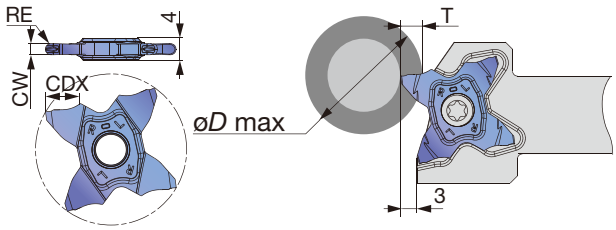
Designation	CW±0.02	RE	Coated	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCM27-150-010	1.5	0.1	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-150-020	1.5	0.2	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-157-015	1.57	0.15	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-170-010	1.7	0.1	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-175-010	1.75	0.1	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-175-020	1.75	0.2	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-178-018	1.78	0.18	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-185-020	1.85	0.2	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-196-015	1.96	0.15	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-200-010	2	0.1	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCM27-200-020	2	0.2	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCM27-222-015	2.22	0.15	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCM27-230-020	2.3	0.2	●	3.5	7	∞	600	-	-	-	-	-	-	-	-
TCM27-239-015	2.39	0.15	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-247-020	2.47	0.2	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-010	2.5	0.1	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-030	2.5	0.3	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-270-010	2.7	0.1	●	6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCM27-287-020	2.87	0.2	●	6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCM27-300-000	3	0	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-020	3	0.2	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-030	3	0.3	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-040	3	0.4	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-315-015	3.15	0.15	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	68
TCM27-318-020	3.18	0.02	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	68

5 pieces per package
● : Line up

Reference pages : Toolholders → G126, Standard cutting conditions → G131

INSERT - FOR GROOVING AND PROFILING

TCM27 (Full R)



P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice
☆ : Second choice

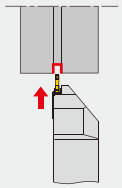
Designation	CW±0.02	RE	Coated AH725	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max) T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCM27-157-079	1.57	0.79	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-200-100	2	1	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-239-120	2.39	1.2	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-300-150	3	0.02	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55

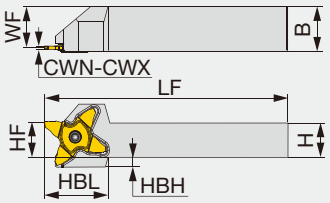
5 pieces per package
● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grades	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving, parting-off TCL27	Grooving, parting-off TCS27	Grooving, parting-off TCM27	Parting-off (with hand) TCS27	Profiling (with full radius insert) TCS27	Profiling (with full radius insert) TCM27	Depth of cut for profiling (with full radius insert)
P	Carbon steel S45C, etc. C45, etc.	AH725	100 - 200	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
	Alloy steel SCM435, etc. 34CrMo4, etc.	AH725	50 -180	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	AH725	100 - 150	0.03 - 0.12	0.05 - 0.15	0.05 - 0.20	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
K	Grey cast iron FC250, etc. 250, etc.	AH725	50 - 180	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
	Ductile cast iron FCD400, etc. 400-15, etc.	AH725	50 - 120	0.03 - 0.12	0.05 - 0.15	0.05 - 0.20	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
S	Titanium alloys Ti-6Al-4V, etc.	AH725	30 - 60	0.03 - 0.12	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.10	0.05 - 0.10	0.5
	Superalloys Inconel718, etc.	AH725	20 - 50	0.03 - 0.12	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.10	0.05 - 0.10	0.5

Reference pages : Toolholders → G126, Standard cutting conditions → G131







Right hand (R) shown.

Designation	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
STCR/L2020-38	1.5	4	20	20	120	20	18.1	5	35	TCL38...	2.5

Torque*: Recommended clamping torque (N·m)

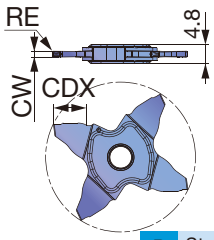
SPARE PARTS

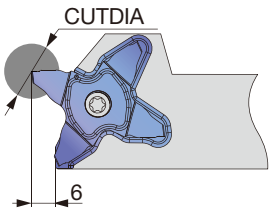


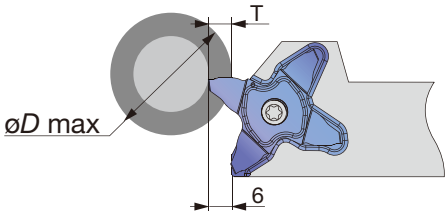

Designation	Screw	Wrench
STCR****-38 (-CHP)	SR16-212-01397L	T-2010/5
STCL****-38 (-CHP)	SR16-212-01397	T-2010/5

INSERT - FOR GROOVING AND PARTING OFF

TCL38 (for grooving and parting off)







P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	CW±0.02	RE	Coated AH7025	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max) T ≤ 5	T ≤ 6	T ≤ 7	T ≤ 8	T ≤ 9	T ≤ 10
TCL38-150-020	1.5	0.2	●	9	18	∞	950	315	190	45	-
TCL38-200-020	2	0.2	●	9	18	∞	950	315	190	45	-
TCL38-300-020	3	0.2	●	10	20	∞	950	315	190	130	50
TCL38-400-030	4	0.3	●	10	20	∞	950	315	190	130	50

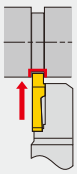
5 pieces per package
● : Line up

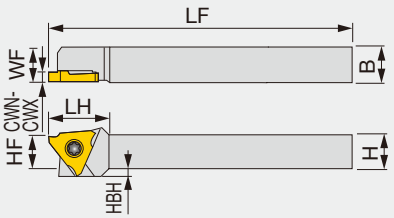
STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed Vc (m/min)	Feed: f (mm/rev) Grooving, Parting TCL38
P	Carbon steel (S45C / C45, etc.)	AH7025	80 - 180	0.03 - 0.18
	Alloy steel (SCM435 / 34CrMo4, etc.)	AH7025	50 - 180	0.03 - 0.18
M	Alloy steel (SCM435 / 34CrMo4, etc.)	AH7025	50 - 150	0.03 - 0.14
K	Grey cast iron (FC250 / 250 / GG25, etc.)	AH7025	50 - 180	0.03 - 0.14
	Ductile cast iron (FCD400 / 400-15 / GGG400, etc.)	AH7025	50 - 120	0.03 - 0.14
S	Titanium alloys (Ti-6Al-4V, etc.)	AH7025	30 - 60	0.03 - 0.14
	Superalloys (Inconel718, etc.)	AH7025	20 - 50	0.03 - 0.14

JSTGR/L

Screw-on external grooving toolholder, for Swiss lathes





Without offset

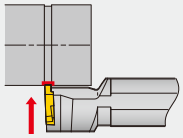
Right-hand (R) shown.

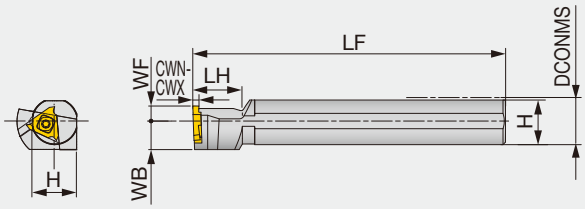
Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
JSTGR/L1010X3	0.33	3	10	10	120	18.5	10	10	2	JTGR/L3...	1.2
JSTGR/L1212F3	0.33	3	12	12	85	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1212X3	0.33	3	12	12	120	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1616X3	0.33	3	16	16	120	18.5	16	16	-	JTGR/L3...	1.2
JSTGL1616K3	0.33	3	16	16	125	18.5	16	16	-	JTGR/L3...	1.2

Torque*: Recommended clamping torque (N·m)

JS-TGL3

Screw-on external grooving toolholder, for Swiss lathes





Left-hand (L) shown.

Designation	CWN	CWX	DCONMS	WF	LF	LH	H	WB	Insert	Torque*
JS19K-TGL3	0.33	3	19.05	6	125	20	18	11.5	JTGR3...	3.0
JS20K-TGL3	0.33	3	20	6	125	20	19	11.5	JTGR3...	3.0
JS22K-TGL3	0.33	3	22	6	125	20	21	11.5	JTGR3...	3.0
JS25K-TGL3	0.33	3	25.4	10	125	20	24	12.7	JTGR3...	3.0

Torque*: Recommended clamping torque (N·m)
Use left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS





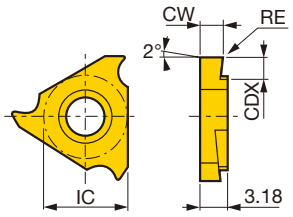
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTGR/L...	CSTB-4SD	T-8F	(T-8L)
JS**-TGL3	CSTB-4S	T-15F	-

Reference pages : JSTGR/L, JS-TGL3: Inserts → G134 - G135,
Standard cutting conditions → G135

INSERT

JTG (Sharp edge)





Right hand (R) shown.

P	Steel	★	★			★		☆	
M	Stainless	★	★						
K	Cast iron					☆		★	
N	Non-ferrous							★	
S	Superalloys							★	
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$	RE	Coated		Cermet	Uncoated	CDX	IC	Max. groove depth
				SH725	J740	NS9530	TH10			
JTGR3033F	R	0.33	0.03	●	●		●	0.7	9.53	0.7
JTGL3033F	L	0.33	0.03		●		●	0.7	9.53	0.7
JTGR3033F-005	R	0.33	0.05	●				0.7	9.53	0.7
JTGR3043F	R	0.43	0.03		●			1.1	9.53	0.7
JTGR3050F	R	0.5	0.03	●	●	●	●	1.1	9.53	1.1
JTGL3050F	L	0.5	0.03	●	●		●	1.1	9.53	1.1
JTGR3050F-005	R	0.5	0.05	●				1.1	9.53	1.1
JTGL3050F-005	L	0.5	0.05	●				1.1	9.53	1.1
JTGR3065F	R	0.65	0.03	●	●			1.9	9.53	1.1
JTGR3065F-010	R	0.65	0.1	●				1.9	9.53	1.1
JTGR3075F	R	0.75	0.03	●	●	●	●	1.9	9.53	1.9
JTGL3075F	L	0.75	0.03	●	●	●	●	1.9	9.53	1.9
JTGR3075F-010	R	0.75	0.1	●				1.9	9.53	1.9
JTGL3075F-010	L	0.75	0.1	●				1.9	9.53	1.9
JTGR3080F	R	0.8	0.03	●	●			1.9	9.53	1.9
JTGR3080F-010	R	0.8	0.1	●				1.9	9.53	1.9
JTGR3085F	R	0.85	0.03	●	●			1.9	9.53	1.9
JTGR3095F	R	0.95	0.03	●	●	●	●	1.9	9.53	1.9
JTGL3095F	L	0.95	0.03	●	●		●	1.9	9.53	1.9
JTGR3095F-010	R	0.95	0.1	●				1.9	9.53	1.9
JTGL3095F-010	L	0.95	0.1	●				1.9	9.53	1.9
JTGR3100F	R	1	0.05	●	●	●	●	2.1	9.53	1.9
JTGL3100F	L	1	0.05	●	●		●	2.1	9.53	1.9
JTGR3100F-010	R	1	0.1	●				2.1	9.53	1.9
JTGL3100F-010	L	1	0.1	●				2.1	9.53	1.9
JTGR3110F	R	1.1	0.05	●	●			2.1	9.53	1.9
JTGR3120F	R	1.2	0.05	●	●			2.1	9.53	1.9
JTGR3120F-010	R	1.2	0.1	●				2.1	9.53	1.9
JTGR3125F	R	1.25	0.05	●	●	●	●	2.1	9.53	2.1
JTGL3125F	L	1.25	0.05	●	●		●	2.1	9.53	2.1
JTGR3125F-010	R	1.25	0.1	●				2.1	9.53	2.1
JTGL3125F-010	L	1.25	0.1	●				2.1	9.53	2.1
JTGR3130F	R	1.3	0.05	●	●			2.1	9.53	2.1
JTGR3140F	R	1.4	0.05	●	●			2.1	9.53	2.1
JTGR3140F-010	R	1.4	0.1	●				2.1	9.53	2.1
JTGR3145F	R	1.45	0.05	●	●	●	●	2.1	9.53	2.1
JTGL3145F	L	1.45	0.05		●		●	2.1	9.53	2.1
JTGR3145F-010	R	1.45	0.1	●				2.1	9.53	2.1
JTGR3150F	R	1.5	0.05	●	●	●	●	2.1	9.53	2.1
JTGL3150F	L	1.5	0.05	●	●		●	2.1	9.53	2.1
JTGR3150F-010	R	1.5	0.1	●				2.1	9.53	2.1
JTGL3150F-010	L	1.5	0.1	●				2.1	9.53	2.1
JTGR3175F	R	1.75	0.05	●	●	●	●	2.1	9.53	2.1
JTGL3175F	L	1.75	0.05		●	●	●	2.1	9.53	2.1
JTGR3175F-010	R	1.75	0.1	●				2.1	9.53	2.1

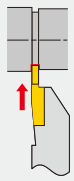
●: Line up

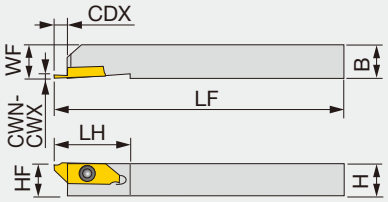
Reference pages: Toolholder → G133

| | | |

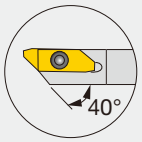
JSXGR/L

Screw-on toolholder without offset for front / reverse turning & external grooving





Without offset



C-type

Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert
JSXGR/L1010K8-C	0.7	2	6.7	10	10	125	29	10	10	JX*R/L8...
JSXGR/L1212K8-C	0.7	2	6.7	12	12	125	29	12	12	JX*R/L8...
JSXGR/L1616K8	0.7	2	6.5	16	16	125	29	16	16	JX*R/L8...
JSXGR/L2020K8	0.7	2	6.5	20	20	125	29	20	20	JX*R/L8...

Can be wrenched also from the back with a double-head screw.
This toolholders can be used for JXG insert (grooving), JFX insert (front-turning), JXK insert (reverse-turning)

SPARE PARTS



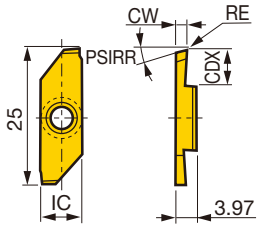


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSXGR/L	CSTB-4SD	T-8F	(T-8L)

INSERT

JXG (handed insert with sharp edge)





Right hand (R) shown.

P	Steel	★	☆
M	Stainless	★	
K	Cast iron		★
N	Non-ferrous		★
S	Superalloys	☆	★
H	Hard materials		

★ : First choice
☆ : Second choice

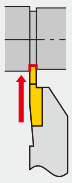
Designation	HAND	CW±0.025	RE	Coated	Uncoated	CDX	IC	PSIRR
				J740	TH10			
JXGR8070FA	R	0.7	0	●		4.5	8	15
JXGL8070FA	L	0.7	0	●	●	4.5	8	15
JXGR8070FA-005	R	0.7	0.05	●	●	4.5	8	15
JXGR8100FA	R	1	0	●		6	8	15
JXGL8100FA	L	1	0	●	●	6	8	15
JXGR8100FA-005	R	1	0.05	●	●	6	8	15
JXGR8100FA45	R	1	0	●		4.5	8	15
JXGR8100FA45-005	R	1	0.05	●	●	4.5	8	15
JXGR8150FA	R	1.5	0	●		6	8	15
JXGL8150FA	L	1.5	0	●	●	6	8	15
JXGR8150FA-005	R	1.5	0.05	●	●	6	8	15
JXGR8150FA50	R	1.5	0	●		5	8	15
JXGR8150FA50-005	R	1.5	0.05	●	●	5	8	15
JXGR8180FA	R	1.8	0	●		6	8	15
JXGR8180FA-005	R	1.8	0.05	●	●	6	8	15
JXGR8200FA	R	2	0	●		6	8	15
JXGL8200FA	L	2	0	●	●	6	8	15
JXGR8200FA-005	R	2	0.05	●	●	6	8	0
JXGR8200FN	R	2	0	●		6	8	0
JXGL8200FN	L	2	0	●	●	6	8	0
JXGR8200FN-005	R	2	0.05	●	●	6	8	0

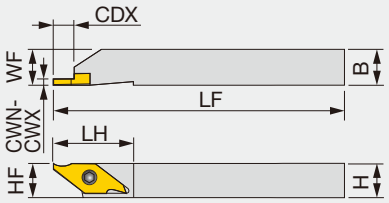
●: Line up

Reference pages: JSXGR/L: Standard cutting conditions → G138

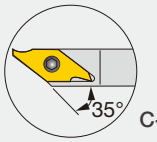
JSVGR/L

Screw-on external grooving toolholder, for Swiss lathes





Without offset



C-type

Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
JSVGR/L1010K-C	0.33	2	6.2	10	10	125	23	10	10	JVGR/L...	2.3
JSVGR/L1212K-C	0.33	2	6.2	12	12	125	23	12	12	JVGR/L...	2.3
JSVGR/L1616K	0.33	2	6.2	16	16	125	23	16	16	JVGR/L...	2.3

• Torque: Recommended torque (N·m) for clamping

SPARE PARTS



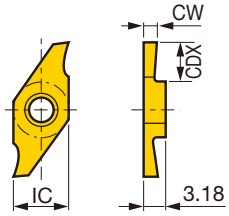


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVGR/L	CSTB-3S	T-9F	(T-9L)

INSERT

JVG (with hand, sharp edge)





Right hand (R) shown.

		Coated			Cermet		Uncoated		
P	Steel	★	★		★		☆		
M	Stainless	★	★						
K	Cast iron				☆		★		
N	Non-ferrous						★		
S	Superalloys	☆					★		
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$	RE	Coated SH725	Coated J740	Cermet NS9530	Uncoated TH10	CDX	IC
JVGR033F	R	0.33	0	●	●			0.7	7.94
JVGL033F	L	0.33	0	●			●	0.7	7.94
JVGR050F	R	0.5	0	●	●			1.1	7.94
JVGL050F	L	0.5	0	●			●	1.1	7.94
JVGR075F	R	0.75	0	●	●			1.9	7.94
JVGL075F	L	0.75	0	●			●	1.9	7.94
JVGR095F	R	0.95	0	●	●			1.9	7.94
JVGL095F	L	0.95	0	●			●	1.9	7.94
JVGR100F	R	1	0	●	●	●		5.5	7.94
JVGL100F	L	1	0	●		●	●	5.5	7.94
JVGR125F	R	1.25	0	●	●		●	5	7.94
JVGL125F	L	1.25	0	●			●	5	7.94
JVGR150F	R	1.5	0	●	●	●		5.5	7.94
JVGL150F	L	1.5	0	●		●	●	5.5	7.94
JVGR200F	R	2	0	●	●	●	●	5.5	7.94
JVGL200F	L	2	0	●			●	5.5	7.94

●: Line up

Reference pages: JSVGR/L: Standard cutting conditions → G138

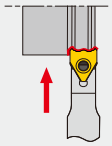
STANDARD CUTTING CONDITIONS (JXG and JVG inserts)

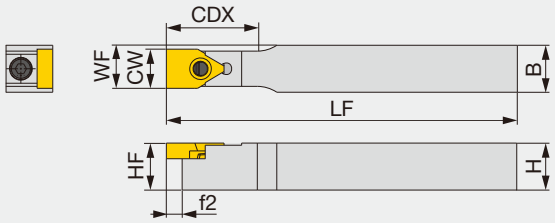
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel S45C, etc. C45, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel SUS303, etc. X5CrNi18-9, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
N	Aluminium alloys, Brass Si < 12%, C3604B, etc. CW614N, etc.	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.1

TUNGHEAVY GROOVE

FPGN

Lever-lock toolholder for external wide grooving and profiling





Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert
FPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10...
FPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10...
FPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10...
FPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15...
FPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15...
FPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20...

PSGB insert blank is available for tailored inserts.

SPARE PARTS



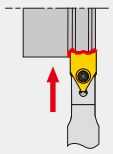


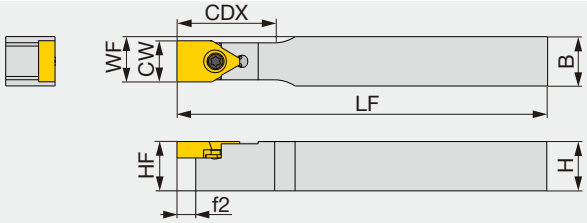

Designation	Lever	Clamping screw	Spring	Wrench
FPGN*****-10T..., 15T...	FCL4	FCS3	BP-5	P-2.5
FPGN*****-20T..., 25T...	FCL8	FCS6	BP-9	P-5

Reference pages: FPGN: Standard cutting conditions → G140

SPGN

Screw-on toolholder for external wide grooving and profiling





Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert
SPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10
SPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10
SPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10
SPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15
SPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15
SPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20

PSGB insert blank is available for tailored inserts. Can be used with profile grooving inserts, only

SPARE PARTS



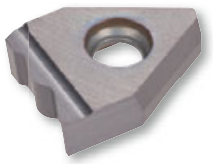


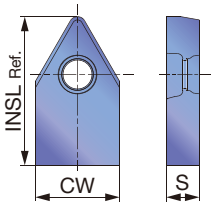
Designation	Clamping screw	Wrench
SPGN*****-10T20	CSTB-3L081	T-8F
SPGN*****-15T25	CSTB-4	T-15F
SPGN*****-20T..., 25T...	CSTB-5	T-20F

INSERT

PSGB (Blank for wide profile grooving inserts*)

Specially tailored profile insert





P	Steel	☆	★			
M	Stainless		★			
K	Cast iron	★				
N	Non-ferrous	★				
S	Superalloys	☆				
H	Hard materials					

★ : First choice
☆ : Second choice

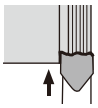
Designation	CW±0.025	Uncoated TH10	Uncoated UX30	INSL	S
PSGB10	10.2	●	●	18	4
PSGB15	15.2	●	●	20	5
PSGB20	20.2	●	●	27	6.5
PSGB25	25.2	●	●	27	6.5

These are blanks (semi-finished products) for wide profile grooving inserts that can be tailored.

Package quantity = 5pcs.
● : Line up

Reference pages: SPGN: Standard cutting conditions → G140

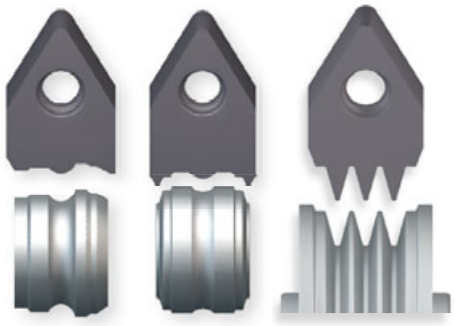
STANDARD CUTTING CONDITIONS



Wide profile grooving

ISO	Workpiece material	Hardness (HB)	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, etc. C45, etc.	< 200	UX30	50 - 150
	Alloy steel SCM440, etc. 42CrMo4, etc.	< 300	UX30	50 - 120
M	Stainless steel SUS303, etc. X5CrNi18-9, etc.	< 200	UX30	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	TH10	50 - 150
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	TH10	50 - 120
N	Aluminium alloy Si < 12%, etc.	-	TH10	100 - 500

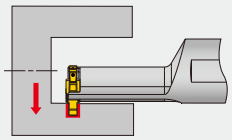
- Custom shaped inserts can be supplied on customer's request, according to the designated final shape on part drawing.
- Semi-finished blanks PSGB types are offered for purchase.

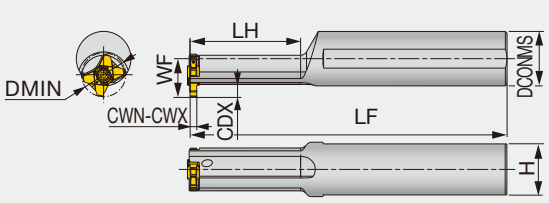


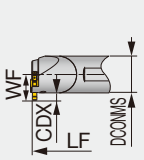
ADDICUT INTERNAL

A/E-STCIR/L

Internal grooving toolholder







Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	DCONMS	LH	LF	WF	H	Insert	Torque*
A12H-STCIR/L10-D105	Steel	1.5	3	10.5	12	25	100	8.3	11	TCIG10...	1
A12H-STCIR/L10-D120	Steel	1.5	3	12	12	31	100	8.3	11	TCIG10...	1
E12K-STCIR/L10-D150	Carbide	1.5	3	15	12	-	125	8.3	11	TCIG10...	1
A16J-STCIR/L12-D130	Steel	1.5	3	13	16	33	110	11.3	15	TCIG12...	1.3
A16J-STCIR/L12-D160	Steel	1.5	3	16	16	41	110	11.3	15	TCIG12...	1.3
E16M-STCIR/L12-D200	Carbide	1.5	3	20	16	-	150	11.3	15	TCIG12...	1.3

Torque*: Recommended clamping torque (N·m)

SPARE PARTS

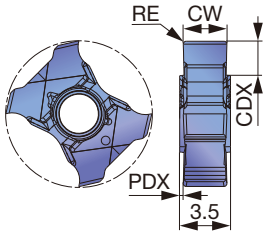


Designation	Clamping screw
A/E-STCIR10-...	CSTB-2.2L053DR
A/E-STCIL10-...	CSTB-2.2L053DL
A/E-STCIR12-...	CSTB-2.5L054DR
A/E-STCIL12-...	CSTB-2.5L054DL

INSERTS

TCIG





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

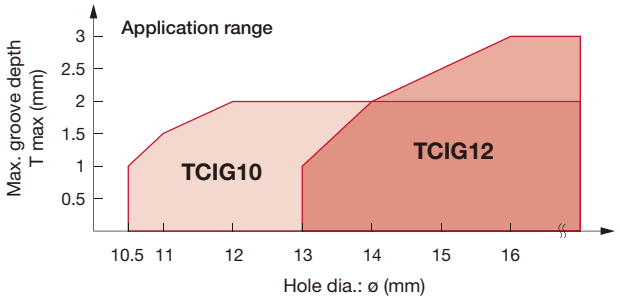
★ : First choice

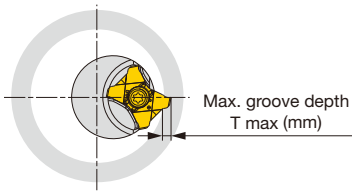
Designation	CW±0.025	RE	Coated AH725	CDX	PDX
TCIG10-050-005	0.5	0.05	●	1	1.5
TCIG10-122-008	1.22	0.08	●	2	1.14
TCIG10-142-008	1.42	0.08	●	2	1.04
TCIG10-150-010	1.5	0.1	●	2	1
TCIG10-172-008	1.72	0.08	●	2	0.89
TCIG10-200-010	2	0.1	●	2	0.75
TCIG10-250-020	2.5	0.2	●	2	0.5
TCIG10-300-020	3	0.2	●	2	0.25
TCIG12-100-010	1	0.1	●	2.5	1.25
TCIG12-150-010	1.5	0.1	●	3	1
TCIG12-197-008	1.97	0.08	●	3	0.77
TCIG12-200-020	2	0.2	●	3	0.75
TCIG12-224-008	2.24	0.08	●	3	0.63
TCIG12-250-020	2.5	0.2	●	3	0.5
TCIG12-277-015	2.77	0.15	●	3	0.37
TCIG12-300-020	3	0.2	●	3	0.25

● : Line up

Shallower groove depths (T max) for smaller bores

Maximum groove depths (T max) for TCIG10 inserts are smaller than the CDX value shown above when the grooving bore diameter is < 12 mm; and for TCIG12, when the bore diameter is < 16 mm.
See the chart below for T max values in relation to the given bore diameter.



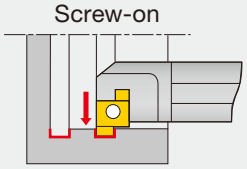


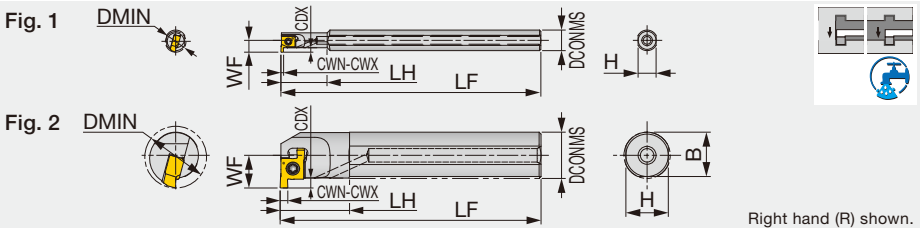
STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel S45C, C45, SCM435, 34CrMo4, etc.	< 300 HB	First choice	30 - 80	0.01 - 0.05
M	Stainless steel SUS303, X10CrNiS18-9, etc.	< 200 HB	First choice	30 - 50	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	10 - 50	0.01 - 0.05

A/E-SNGR

Toolholders for internal grooving, with through coolant





Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	B	LF	LH	WF	Insert	Torque*	Fig.
A08H-SNGR06-D080	Steel	1	2	8	1.5	8	7	-	100	18	4.73	6GMR..., 6GR...	0.7	1
A08H-SNGR07-D100	Steel	1	2	10	1.5	8	7	-	100	23	5.8	7GMR..., 7GR...	1.0	1
A10K-SNGR07-D120	Steel	1	2	12	1.5	10	9	-	125	29	6.8	7GMR..., 7GR...	1.0	1
A10K-SNGR08-D140	Steel	1.5	3.5	14	2	10	9	-	125	15	7.6	8GMR..., 8GR...	1.0	2
A12M-SNGR08-D160	Steel	1.5	3.5	16	2	12	11	11.5	150	18	8.6	8GMR..., 8GR...	1.0	2
A16Q-SNGR09-D200	Steel	1.5	3.5	20	3	16	15	15.5	180	20	11.6	9GMR..., 9GR...	1.3	2
A20R-SNGR09-D240	Steel	1.5	3.5	24	3	20	18	19	200	25	13.6	9GMR..., 9GR...	1.3	2
E08X-SNGR07-D100	Carbide	1	2	10	1.5	8	7.5	-	120.5	35	5.8	7GMR..., 7GR...	1.0	1
E10X-SNGR07-D120	Carbide	1	2	12	1.5	10	9	-	143.5	45	6.8	7GMR..., 7GR...	1.0	1
E10X-SNGR08-D140	Carbide	1.5	3.5	14	2	10	9	-	146	-	7.6	8GMR..., 8GR...	1.0	2
E12X-SNGR08-D160	Carbide	1.5	3.5	16	2	12	11	-	174.8	-	8.6	8GMR..., 8GR...	1.0	2
E16X-SNGR09-D200	Carbide	1.5	3.5	20	3	16	15	-	194.6	-	11.6	9GMR..., 9GR...	1.5	2

Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR).
Torque*: Recommended clamping torque (N·m)

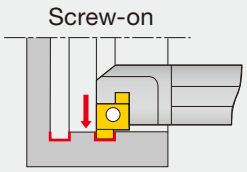
SPARE PARTS

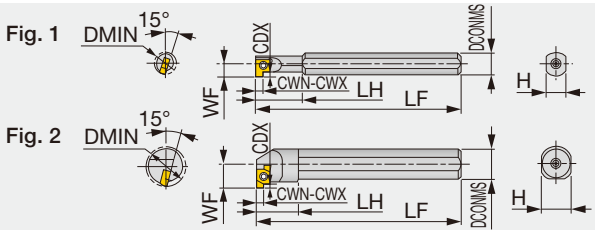
Designation	Clamping screw	Wrench
A**-SNGR06-D...	CSTB-2L040	T-6F
A**-SNGR07-D...	CSTB-2.2S	T-7F
A**-SNGR08-D...	CSTB-2.2	T-7F
A**-SNGR09-D...	CSTB-2.5L080	T-8F
E**-SNGR07-D...	CSTB-2.2S	T-7F
E**-SNGR08-D...	CSTB-2.2	T-7F
E**-SNGR09-D...	CSTB-2.5L080	T-8F

Reference pages: A/E-SNGR: Inserts → G144, G145, Standard cutting conditions → G146

SNGR/L

Toolholders for internal grooving





Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*	Fig.
SNGR/L08H06	Steel	1	2	8	1.5	8	7	100	18	4.7	6GMR..., 6GR/L...	0.7	1
SNGR/L08H07	Steel	1	2	10	1.5	8	7	100	23	5.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10K07	Steel	1	2	12	1.5	10	9	125	29	6.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10K08	Steel	1.5	3.5	14	2	10	9	125	15	7.6	8GMR..., 8GR/L...	1.0	2
SNGR/L12M08	Steel	1.5	3.5	16	2	12	11	150	18	8.6	8GMR..., 8GR/L...	1.0	2
SNGR/L16Q09	Steel	1.5	3.5	20	3	16	15	180	20	11.6	9GMR..., 9GR/L...	1.3	2
SNGR/L20R09	Steel	1.5	3.5	24	3	20	18	200	25	13.6	9GMR..., 9GR/L...	1.3	2
SNGR/L08K06SC	Carbide	1	2	8	1.5	8	7	125	28	4.7	6GMR..., 6GR/L...	0.7	1
SNGR/L08K07SC	Carbide	1	2	10	1.5	8	7	125	35	5.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10M07SC	Carbide	1	2	12	1.5	10	9	150	45	6.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10M08SC	Carbide	1.5	3.5	14	2	10	9	150	45	7.6	8GMR..., 8GR/L...	1.0	2
SNGR/L12Q08SC	Carbide	1.5	3.5	16	2	12	11	180	-	8.6	8GMR..., 8GR/L...	1.0	2
SNGR/L16R09SC	Carbide	1.5	3.5	20	3	16	15	200	-	11.6	9GMR..., 9GR/L...	1.5	2

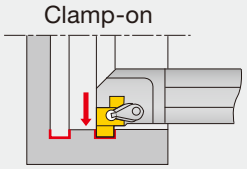
Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR), and use the left-hand insert (☐GL) with the left-hand holder (☐NGL).
Torque*: Recommended clamping torque (N·m)

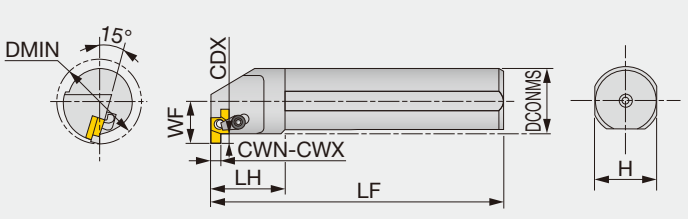
SPARE PARTS

Designation	Clamping screw	Wrench
SNGR/L***06	CSTB-2L040	T-6F
SNGR/L***07	CSTB-2.2S	T-7F
SNGR/L***08	CSTB-2.2	T-7F
SNGR/L***09	CSTB-2.5L080	T-8F
SNGR/L***06SC	CSTB-2L040	T-6F
SNGR/L***07SC	CSTB-2.2S	T-7F
SNGR/L***08SC	CSTB-2.2	T-7F
SNGR/L***09SC	CSTB-2.5L080	T-8F

CNGR/L

Toolholders for internal grooving





Right hand (R) shown.

Designation	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*
CNGR/L25S15	2	5	32	5	25	23	250	30	18.1	15GR/L...	7
CNGR/L32T15	2	5	40	5	32	30	300	35	22.1	15GR/L...	7
CNGR/L40U15	2	5	48	5	40	38	350	45	26.1	15GR/L...	7

Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR), and use the left-hand insert (☐GL) with the left-hand holder (☐NGL).
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamp set	Screw	Shim	Wrench
CNGR...	CSP22	DTS5-3.5	SGSR151	T-20F
CNGL...	CSP22	DTS5-3.5	SGSL151	T-20F

Optional parts for CNG holders

Use the following parts for screw clamp options.

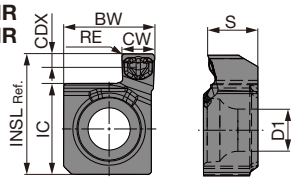


Designation	Clamping screw	Wrench
CNGR/L...	CSTB-3.5L	T-15F

Reference pages: SNGR/L, CNGR/L: Inserts → G144, G145, Standard cutting conditions → G146

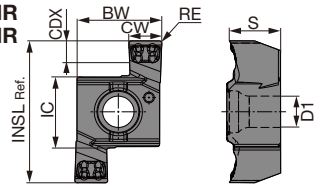
**GMR/L

6GMR
7GMR



Single edge

8GMR
9GMR



Double edge

Right hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

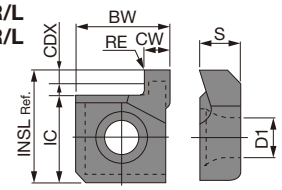
Designation	HAND	CW±0.025	RE	Coated AH7025	CDX	BW	S	IC	INSL	D1
6GMR100-015	R	1	0.15	●	1.5	5.56	2.34	4.76	6.44	2.3
7GMR200-020	R	2	0.2	●	1.5	5.56	3.08	5.56	7.36	2.58
8GMR150-020	R	1.5	0.2	●	2	6.15	3.87	5.56	10.16	2.58
9GMR200-020	R	2	0.2	●	3	7.74	4.66	6.35	12.95	2.86
9GMR300-020	R	3	0.2	●	3	7.74	4.66	6.35	12.95	2.86

● : Line up

Reference pages: Toolholder → G142, G143, Standard cutting conditions → G146

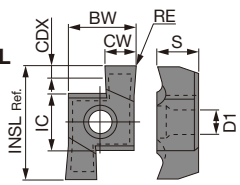
**GR/L

6GR/L
7GR/L



Single edge

8GR/L
9GR/L
15GR/L



Double edge

Right hand (R) shown.

		Cermet		Uncoated	
P	Steel	★			★
M	Stainless				★
K	Cast iron	☆		★	
N	Non-ferrous			★	
S	Superalloys			☆	
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Cermet NS9530	Uncoated TH10	Uncoated UX30	CDX	BW	S	IC	INSL	D1
6GR100	R	1	0.2	●	●	●	1.5	5.6	2.34	4.76	6.44	2.3
6GL100	L	1	0.2			●	1.5	5.6	2.34	4.76	6.44	2.3
6GR150	R	1.5	0.2	●	●	●	1.5	5.6	2.34	4.76	6.44	2.3
6GL150	L	1.5	0.2		●	●	1.5	5.6	2.34	4.76	6.44	2.3
6GR200	R	2	0.2	●	●	●	1.5	5.6	2.34	4.76	6.44	2.3
6GL200	L	2	0.2		●	●	1.5	5.6	2.34	4.76	6.44	2.3
7GR100	R	1	0.2	●	●	●	1.5	5.6	3.08	5.56	7.36	2.58
7GR150	R	1.5	0.2	●	●	●	1.5	5.6	3.08	5.56	7.36	2.58
7GR200	R	2	0.2	●	●	●	1.5	5.6	3.08	5.56	7.36	2.58
7GL200	L	2	0.2		●	●	1.5	5.6	3.08	5.56	7.36	2.58
8GR150	R	1.5	0.2	●	●	●	2	6.2	3.87	5.56	10.16	2.58
8GR200	R	2	0.2	●	●	●	2	6.2	3.87	5.56	10.16	2.58
8GL200	L	2	0.2		●		2	6.2	3.87	5.56	10.16	2.58
8GR250	R	2.5	0.2	●	●	●	2	6.2	3.87	5.56	10.16	2.58
8GL250	L	2.5	0.2		●	●	2	6.2	3.87	5.56	10.16	2.58
8GR300	R	3	0.2	●	●	●	2	6.2	3.87	5.56	10.16	2.58
8GL300	L	3	0.2		●	●	2	6.2	3.87	5.56	10.16	2.58
8GR350	R	3.5	0.2		●	●	2	6.2	3.87	5.56	10.16	2.58
9GR150	R	1.5	0.2	●	●	●	2	7.7	4.66	6.35	12.95	2.86
9GL150	L	1.5	0.2	●		●	2	7.7	4.66	6.35	12.95	2.86
9GR200	R	2	0.2	●	●	●	3	7.7	4.66	6.35	12.95	2.86
9GL200	L	2	0.2	●	●	●	3	7.7	4.66	6.35	12.95	2.86
9GR250	R	2.5	0.2	●	●	●	3	7.7	4.66	6.35	12.95	2.86
9GL250	L	2.5	0.2	●		●	3	7.7	4.66	6.35	12.95	2.86
9GR300	R	3	0.2	●	●	●	3	7.7	4.66	6.35	12.95	2.86
9GL300	L	3	0.2	●	●	●	3	7.7	4.66	6.35	12.95	2.86
9GR350	R	3.5	0.2	●	●	●	3	7.7	4.66	6.35	12.95	2.86
9GL350	L	3.5	0.2	●		●	3	7.7	4.66	6.35	12.95	2.86
15GR200	R	2	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GR250	R	2.5	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GR300	R	3	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GL300	L	3	0.2			●	3	10.8	5.1	9.2	20.8	4.8
15GR350	R	3.5	0.2	●	●	●	3	10.8	5.1	9.2	20.8	4.8
15GR400	R	4	0.2	●	●	●	4	10.8	5.1	9.2	20.8	4.8
15GR450	R	4.5	0.2		●	●	4	10.8	5.1	9.2	20.8	4.8
15GL450	L	4.5	0.2		●		4	10.8	5.1	9.2	20.8	4.8
15GR500	R	5	0.2		●	●	5	10.8	5.1	9.2	20.8	4.8

Note: Use the right-hand insert (☐GR) with the right-hand holder (☐NGR), and use the left-hand insert (☐GL) with the left-hand holder (☐NGL).

● : Line up

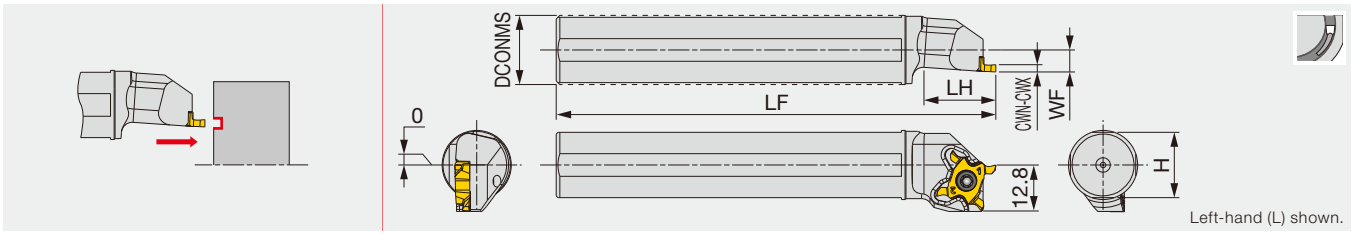
Reference pages: Toolholder → G142, G143, Standard cutting conditions → G146

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed rate: *f* (mm/rev)	
				**GMR...	**GR/L...
P	Carbon steel S45C, C45, etc.	AH7025	80 - 180	0.03 - 0.12	-
		NS9530	80 - 200	-	0.05 - 0.15
		UX30	40 - 150	-	0.05 - 0.15
	Alloy steel SCM435, 34CrMo4, etc.	AH7025	80 - 180	0.03 - 0.12	-
		NS9530	80 - 200	-	0.05 - 0.15
		UX30	40 - 150	-	0.05 - 0.15
M	Stainless steel SUS304, X5CrNi18-9, etc.	AH7025	50 - 120	0.03 - 0.12	-
		UX30	40 - 100	-	0.03 - 0.10
K	Grey cast irons F250, GG25, 250, etc.	AH7025	50 - 220	0.03 - 0.12	-
		TH10	60 - 200	-	0.05 - 0.15
	Ductile cast irons FCD400, etc.	AH7025	50 - 180	0.03 - 0.12	-
		TH10	40 - 160	-	0.05 - 0.15
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	-
		TH10	20 - 50	-	0.05 - 0.08
	Superalloys Inconel718, etc.	AH7025	20 - 60	0.03 - 0.12	-
		TH10	10 - 30	-	0.03 - 0.08

JS-STCFL18

Face grooving toolholder with round shank



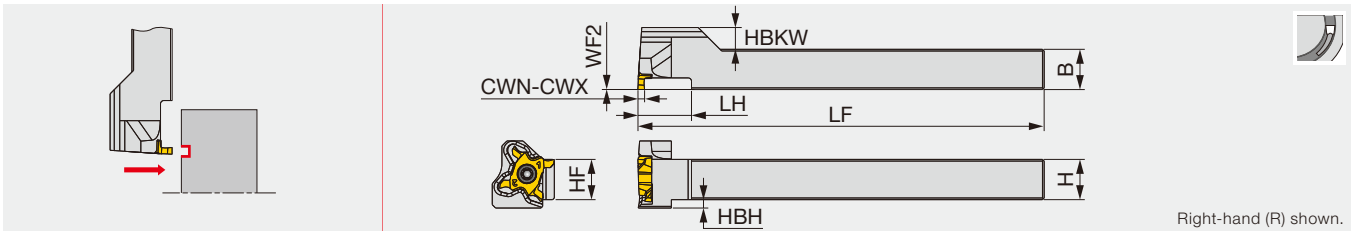
Left-hand (L) shown.

Designation	CWN	CWX	DCONMS	LF	LH	H	WF	Insert	Torque*
JS16F-STCFL18	0.5	2.5	16	85	20	15	6	TCF18L...	1.2
JS19G-STCFL18	0.5	2.5	19.05	90	20	18	6	TCF18L...	1.2
JS19X-STCFL18	0.5	2.5	19.05	120	20	18	6	TCF18L...	1.2
JS20G-STCFL18	0.5	2.5	20	90	20	19	6	TCF18L...	1.2
JS20X-STCFL18	0.5	2.5	20	120	20	19	6	TCF18L...	1.2
JS22X-STCFL18	0.5	2.5	22	120	20	21	6	TCF18L...	1.2
JS25H-STCFL18	0.5	2.5	25	100	20	24	6	TCF18L...	1.2
JS254X-STCFL18	0.5	2.5	25.4	120	20	24.5	6	TCF18L...	1.2

Note: The left hand insert (L) is used for the left hand toolholders (L).
Torque*: Recommended clamping torque: N·m

STCFVR-18

Face grooving toolholder with square shank, for Swiss lathes



Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF2	HBKW	HBH	Insert	Torque*
STCFVR1010H18	0.5	2.5	10	10	100	12	10	0	8.5	4.5	TCF18L...	1.2
STCFVR1212F18	0.5	2.5	12	12	85	16	12	0	6.5	2.5	TCF18L...	1.2
STCFVR1212X18	0.5	2.5	12	12	120	16	12	0	6.5	2.5	TCF18L...	1.2
STCFVR1616X18	0.5	2.5	16	16	120	20	16	0	2.5	0	TCF18L...	1.2

Note: The left hand insert (L) is used for the right hand toolholders (R).
Torque*: Recommended clamping torque: N·m

STCR/L-18

Precision grooving tools with uniquely shaped insert for swiss type machine and general lathes

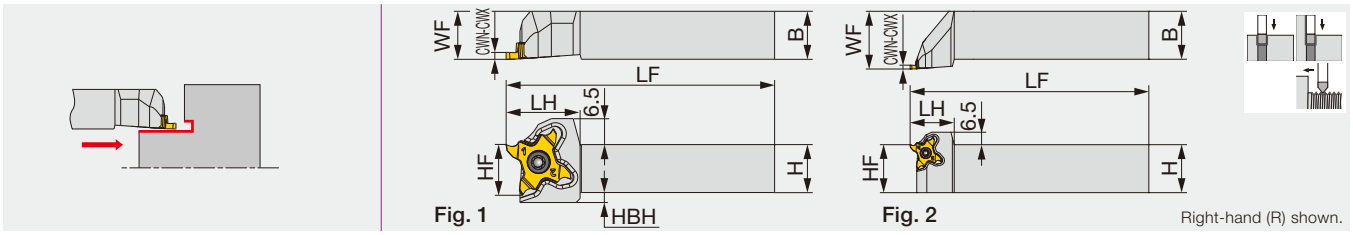


Fig. 1 Fig. 2

Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert is used for the left hand toolholders
*Torque: Recommended clamping torque: N·m

SPARE PARTS




Designation	Clamping screw	Wrench
JS**-STCFL18, STCFVR**18,STCL**18	CSTC-4L100DR	T-1008/5
STCR**18	CSTC-4L100DL	T-1008/5

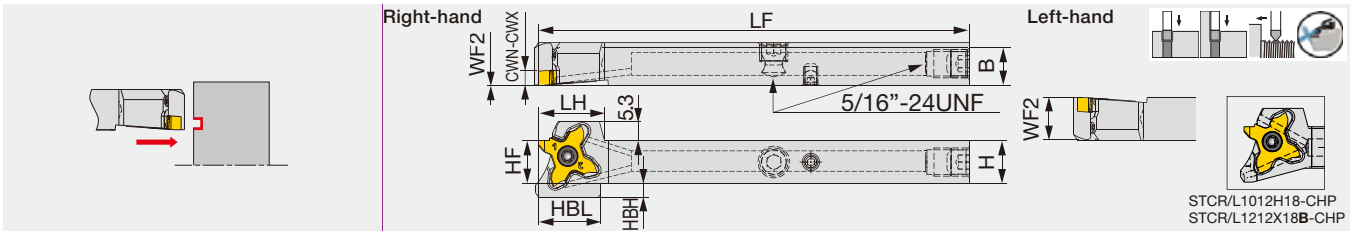
Threading pitch range: 0.8 ~ 3 mm

Reference pages :
JS-STCFL18, STCFVR-18, STCR/L-18:
Inserts, Standard cutting conditions → G149

STCR/L-18-CHP

Direct connection

External grooving and threading toolholder, high pressure coolant compatible



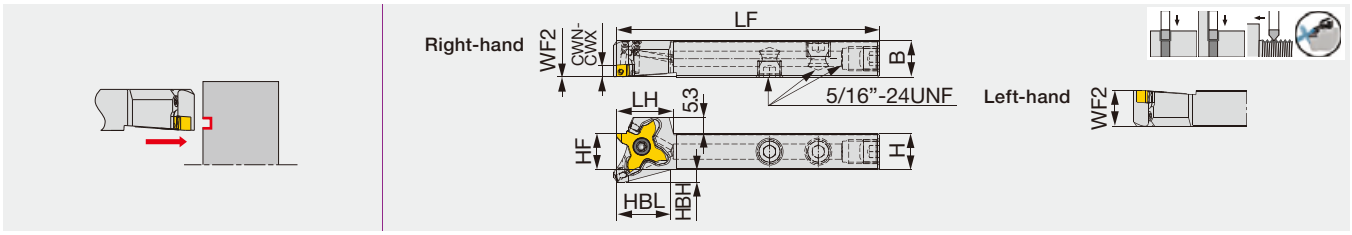
Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.33	3.18	10	12	100	17.1	17.1	10	0/12	4	TC**18	1.2
STCR/L1212X18B-CHP	0.33	3.18	12	12	120	18.5	17.5	12	0/12	4	TC**18	1.2
STCR/L1616X18-CHP	0.33	3.18	16	16	120	18.5	-	16	0/16	0	TC**18	1.2

External
Internal
Grooving
Threading
Parting-off

STCR/L-18-CHP

Tube connection

External grooving and threading toolholder. High pressure coolant capability.



Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2(1)	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.33	3.18	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

The right hand insert (TC*18R***) is used for the right hand toolholders (STCR***), and the left hand insert (TC*18L***) is used for the left hand toolholders (STCL***).
(1) "0/12" for the WF dimension indicates WF = 0 for the right handed tool, WF = 12 for the left handed tool.
*Torque: Recommended torque (N·m) for clamping

SPARE PARTS

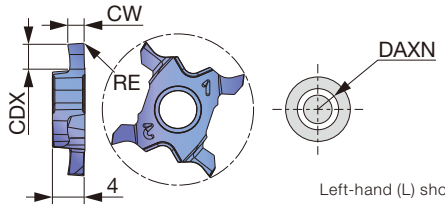
Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCL**F18B-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
STCR**F18B-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-

Threading pitch range: 0.8 ~ 3.0 mm

INSERT

TCF18L (Face grooving)





Left-hand (L) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★: First choice

Designation	HAND	CW±0.02	RE	Coated	CDX	DAXN
				SH725		
TCF18L050F-005	L	0.5	0.05	●	1	6
TCF18L100F-005	L	1	0.05	●	2.5	6
TCF18L150F-005	L	1.5	0.05	●	2.5	6
TCF18L200F-005	L	2	0.05	●	3	6
TCF18L250F-005	L	2.5	0.05	●	3	6

5 pieces per package
●: Line up

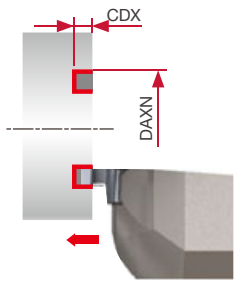
STANDARD CUTTING CONDITIONS

TCF18L (Face grooving)

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel S15C, C15E, C15E4, S20C, C20, etc.	SH725	30 - 100	0.01 - 0.04
P	Carbon steels, Alloy steel S55C, C55, SCM440, 42CrMoS4, etc.	SH725	30 - 100	0.01 - 0.04
P	Prehardened steel NAK80, PX5, etc.	SH725	30 - 100	0.01 - 0.04
M	Stainless steel SUS304, X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH725	30 - 100	0.01 - 0.04
K	Grey cast iron FC250, GG25, 250, FC300, GG30, 300, etc.	SH725	30 - 100	0.01 - 0.04
K	Ductile cast iron FCD400, 400-15, FCD600, GGG60, 600-3, etc.	SH725	30 - 100	0.01 - 0.04
S	Titanium alloys Ti-6Al-4V, etc.	SH725	20 - 40	0.01 - 0.04
S	Superalloys Inconel718, etc.	SH725	10 - 30	0.01 - 0.04

PRECAUTIONS OF PROCESSING

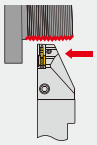
Minimum diameter for face grooving

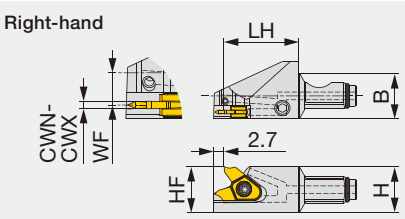


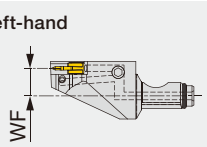
Minimum face diameter DAXN (mm)	Maximum groove depth CDX (mm)
65	3

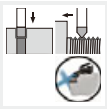
QC12-SVER/L-CHP

Modular head for external grooving and threading, with high pressure coolant capability







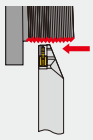


Designation	Pitch	TPI	H	B	LH	HF	WF (1)	Insert	Torque*
QC12-SVER/L10-CHP	0.4 - 1.5	64 - 12	12	12	19.5	12	4.19/7.19	VG*10...	1.3

Torque*: Recommended clamping torque (N·m)
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width.
The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

SVER/L

External grooving and threading toolholder



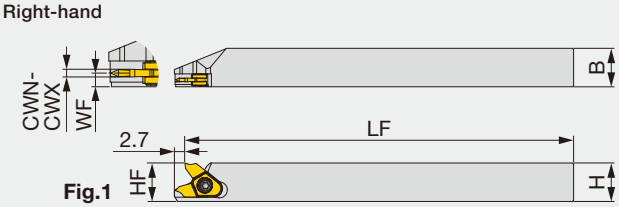


Fig.1

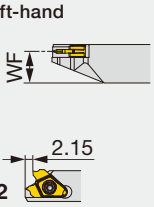
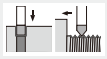


Fig.2

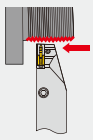


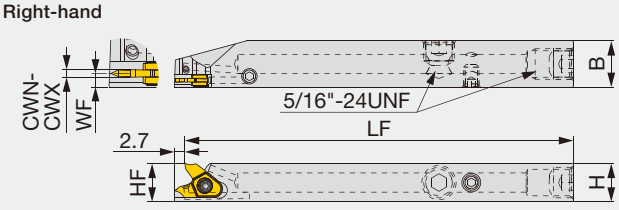
Designation	Pitch	TPI	H	B	LF	HF	WF (1)	Insert	Torque*	Fig.
SVER/L1010H10	0.4 - 1.5	64 - 12	10	10	100	10	1.78/8.23	VG*10...	1.3	1
SVER/L1212X10	0.4 - 1.5	64 - 12	12	12	120	12	1.78/10.23	VG*10...	1.3	1

Torque*: Recommended clamping torque (N·m)
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width.
The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

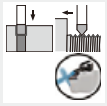
SVER/L-CHP

External grooving and threading toolholder, with high pressure coolant capability









Designation	Pitch	TPI	H	B	LF	HF	WF (1)	Insert	Torque*
SVER/L1012H10-CHP	0.4 - 1.5	64 - 12	10	12	100	10	1.78/10.23	VG*10...	1.3
SVER/L1212X10-CHP	0.4 - 1.5	64 - 12	12	12	120	12	1.78/10.23	VG*10...	1.3

Compatible to the direct internal coolant supply system without the use of external coolant hose.
Torque*: Recommended clamping torque (N·m)
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

SPARE PARTS

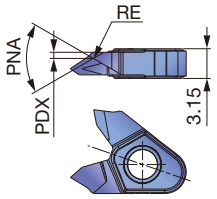
Designation	Clamping screw	Wrench 1	O-ring	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
QC12-SVER...	CSTB-2.5L054DL	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-
QC12-SVEL...	CSTB-2.5L054DR	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-
SVER1012/1212...	CSTB-2.5L054DL	T-7F	-	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
SVEL1012/1212...	CSTB-2.5L054DR	T-7F	-	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
SVER0808...	CSTB-2.2L053DL	T-7F	-	-	-	-	-
SVEL0808...	CSTB-2.2L053DR	T-7F	-	-	-	-	-
SVER1010/1212...	CSTB-2.5L054DL	T-7F	-	-	-	-	-
SVEL1010/1212...	CSTB-2.5L054DR	T-7F	-	-	-	-	-

Reference pages: QC12-SVER/L-CHP, SVER/L, SVER/L-CHP: Shank, Accessory → G095, G096

INSERT

VGT10 (For threading / sharp edge)





P	Steel	★
M	Stainless	★
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	RE	Coated SH725	Pitch	TPI	PDX	PNA
VGT10F-60A-005	0.05	●	0.4 - 1	64 - 25	0.66	60°
VGT10F-60A-010	0.1	●	1 - 2	25 - 12	0.96	60°
VGT10F-55A-005	0.05	●	0.6 - 1.5	40 - 16	0.85	55°

● : Line up

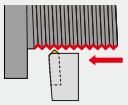
STANDARD CUTTING CONDITIONS

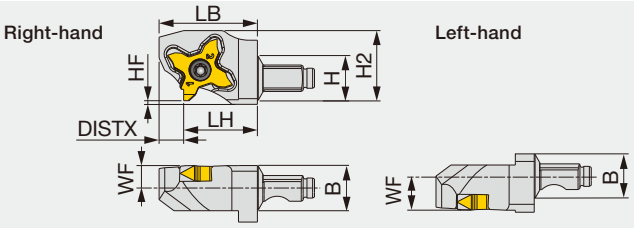
Threading

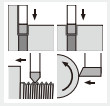
ISO	Workpiece materials	Grade	Cutting speed *Vc* (m/min)	Pitch (mm)	TPI
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 150	0.4 - 2	64 - 12
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 150	0.4 - 2	64 - 12
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 150	0.4 - 2	64 - 12
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 100	0.4 - 2	64 - 12
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.4 - 2	64 - 12
	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.4 - 2	64 - 12
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.4 - 2	64 - 12
	Superalloys Inconel718, etc.	SH725	30 - 80	0.4 - 2	64 - 12

QC12-STCR/L-Y

Y-axis turning modular head for external grooving and threading







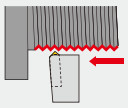
Designation	Pitch	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	0.4 - 3	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

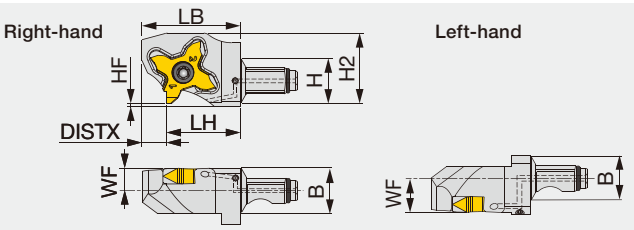
Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

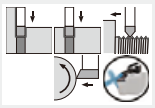
External
Internal
Grooving
Threading
Parting-off

QC12-STCR/L-Y-CHP

Y-axis turning modular head for external grooving and threading, with high pressure coolant capability







Designation	Pitch	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	0.4 - 3	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).
Through-coolant head

SPARE PARTS



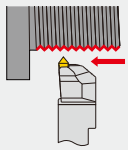


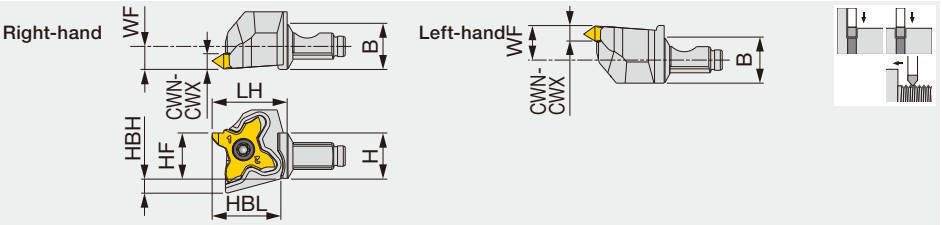
Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y	CSTC-4L100DL	T-1008/5	-
QC12-STCL18-Y	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-Y-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-Y-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

Reference pages: QC12-STC/LR-Y, QC12-STCR/L-Y-CHP: Inserts → G156, G157
Shank, Accessory → G095, G096, Standard cutting conditions → G157

QC12-STCR/L

Modular head for external grooving and threading



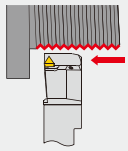


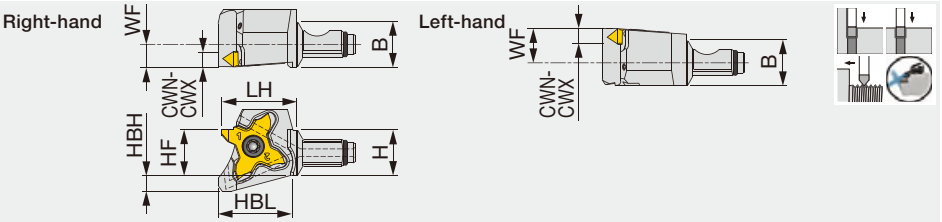
Designation	Pitch	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR/L18	0.4 - 3	12	12	21	12	3.9	18.3	9	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

QC12-STCR/L-CHP

Modular head for external grooving and threading, with high pressure coolant capability





Designation	Pitch	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR/L18-CHP	0.4 - 3	12	12	21	12	4.2	19.3	9	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).
Through-coolant head

SPARE PARTS



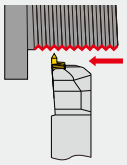


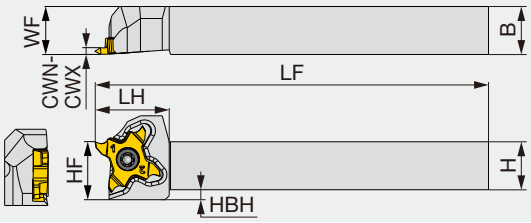
Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18	CSTC-4L100DR	T-1008/5	-

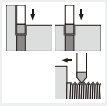
Reference pages: QC12-STCR/L, QC12-STCR/L-CHP: Inserts → G156, G157
Shank, Accessory → G095, G096, Standard cutting conditions → G157

STCR/L-18

External grooving and threading toolholder







Right-hand (R) shown.

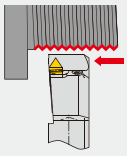
Designation	Pitch	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
STCR/L1010X18	0.4 - 3	10	10	120	18.5	10	10	4.5	TC*18...	1.2
STCR/L1212F18	0.4 - 3	12	12	85	18.5	12	12	2.5	TC*18...	1.2
STCR/L1212X18	0.4 - 3	12	12	120	18.5	12	12	2.5	TC*18...	1.2
STCR/L1616X18	0.4 - 3	16	16	120	18.5	16	16	-	TC*18...	1.2
STCR/L2020H18	0.4 - 3	20	20	100	18.5	20	20	-	TC*18...	1.2
STCR/L2020X18	0.4 - 3	20	20	120	23.0	20	25	-	TC*18...	1.2

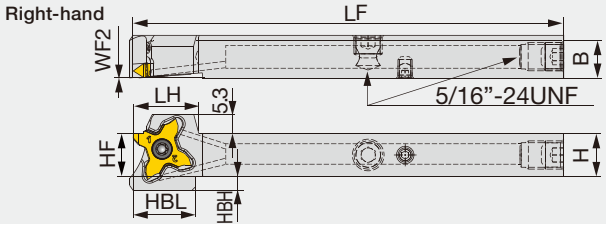
Torque*: Recommended torque (N·m) for clamping
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).

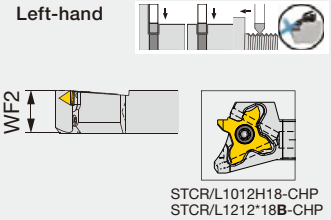
STCR/L-H/X18-CHP

Direct connection

External grooving and threading toolholder, high pressure coolant compatible







STCR/L1012H18-CHP
STCR/L1212*18**B**-CHP

Designation	Pitch	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.4 - 3	10	12	100	17.1	17.1	10	0/12	4	TC**18	1.2
STCR/L1212X18B-CHP	0.4 - 3	12	12	120	18.5	17.5	12	0/12	4	TC**18	1.2
STCR/L1616X18-CHP	0.4 - 3	16	16	120	18.5	-	16	0/16	0	TC**18	1.2

Torque*: Recommended torque (N·m) for clamping
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).

SPARE PARTS

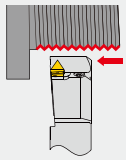
Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCR...18	CSTC-4L100DL	T-1008/5	-	-	-	-
STCL...18	CSTC-4L100DR	T-1008/5	-	-	-	-
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

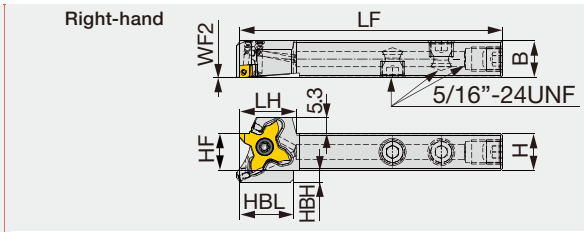
Reference pages : STCR/L-18, STCR/L-H/X18-CHP: Inserts → G156, G157, Standard cutting conditions → G157

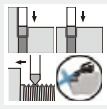
STCR/L-F18-CHP

Tube connection

External grooving and threading toolholder. High pressure coolant capability.





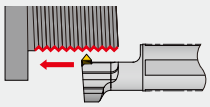


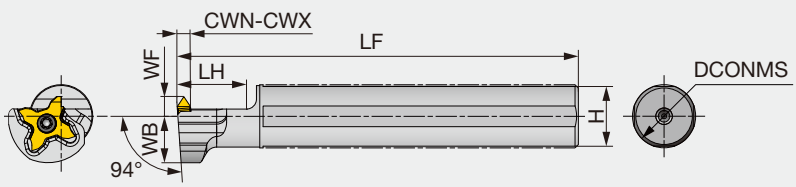
Designation	Pitch	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.4 - 3	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

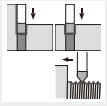
• The right hand insert (TC*18R***) is used for the right hand toolholders (STCR***), and the left hand insert (TC*18L***) is used for the left hand toolholders (STCL***).
(1) "0/12" for the WF dimension indicates WF = 0 for the right handed tool, WF = 12 for the left handed tool.
Torque*: Recommended torque (N·m) for clamping
***: To be replaced with the new design

JS-STCL18

External grooving and threading toolholder with round shank, for Swiss lathes







Left-hand (L) shown.

Designation	Pitch	DCONMS	H	LF	LH	WB	WF	Insert	Torque*
JS14H-STCL18	0.4 - 3	14	13	100	20	14	6	TC*18R...	1.2
JS159F-STCL18	0.4 - 3	15.875	15	85	20	14	6	TC*18R...	1.2
JS16F-STCL18	0.4 - 3	16	15	85	20	14	6	TC*18R...	1.2
JS19G-STCL18	0.4 - 3	19.05	18	90	20	14	6	TC*18R...	1.2
JS19X-STCL18	0.4 - 3	19.05	18	120	20	14	6	TC*18R...	1.2
JS20G-STCL18	0.4 - 3	20	19	90	20	14	6	TC*18R...	1.2
JS20X-STCL18	0.4 - 3	20	19	120	20	14	6	TC*18R...	1.2
JS22X-STCL18	0.4 - 3	22	21	120	20	12.25	10	TC*18R...	1.2
JS25H-STCL18	0.4 - 3	25	24	100	20	12.25	10	TC*18R...	1.2
JS254X-STCL18	0.4 - 3	25.4	24	120	20	12.25	10	TC*18R...	1.2

- The left hand toolholder (STCL...) is used with the right hand inserts (TC*18R...)
Torque*: Recommended torque (N·m) for clamping

SPARE PARTS



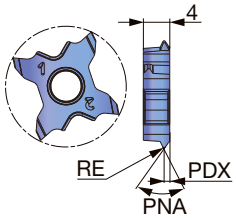



Designation	Clamping screw	Wrench	Coolant plug	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
JS...STCL18	CSTC-4L100DL	T-1008/5	-	-

Reference pages : STCR/L-F18-CHP, JS-STCL18: Inserts → G156, G157, Standard cutting conditions → G157

TCT18FR/R-ISO (Full profile threading insert)





Right-hand (R) shown.

P	Steel	★ ★
M	Stainless	★ ★
K	Cast iron	★ ★
N	Non-ferrous	
S	Superalloys	★ ★
H	Hard materials	

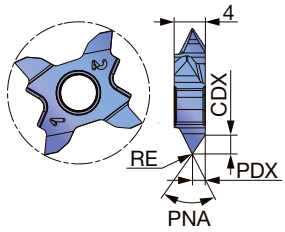
★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated		Pitch min	Pitch max	PDX	PNA
			SH725	AH725				
TCT18FR-05ISO	R	0.06	●		0.5		0.35	60°
TCT18FR-07ISO	R	0.09	●		0.7		0.45	60°
TCT18FR-075ISO	R	0.09	●		0.75		0.5	60°
TCT18FR-08ISO	R	0.1	●		0.8		0.5	60°
TCT18R-10ISO	R	0.13		●	1		0.6	60°
TCT18R-125ISO	R	0.17		●	1.25		0.7	60°
TCT18R-15ISO	R	0.2		●	1.5		0.8	60°

● : Line up

TCT18R/L (for threading)





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

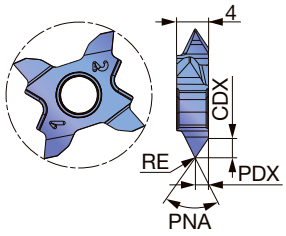
Designation	HAND	RE	Coated	Pitch min	Pitch max	PDX	CDX	PNA
			AH725					
TCT18R-60N-010	R	0.1	●	0.8	3	1.6	2.67	60°
TCT18L-60N-010	L	0.1	●	0.8	3	1.6	2.67	60°
TCT18R-60N-020	R	0.2	●	1.5	3	1.6	2.57	60°
TCT18L-60N-020	L	0.2	●	1.5	3	1.6	2.57	60°

● : Line up

Reference pages: Toolholder → G152 - G155

TCT18FR (sharp edge for threading)





Right-hand (R) shown.

P	Steel	★			
M	Stainless	★			
K	Cast iron	★			
N	Non-ferrous				
S	Superalloys	★			
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated	Pitch min	Pitch max	PDX	CDX	PNA
			SH725					
TCT18FR-60A-005	R	0.05	●	0.4	1	0.6	0.99	60°
TCT18FR-60A-010	R	0.1	●	1	2	1	1.63	60°

● : Line up

STANDARD CUTTING CONDITIONS

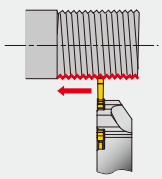
TCT18FR/R-ISO (Full profile threading insert) / TCT18FR (Threading insert)

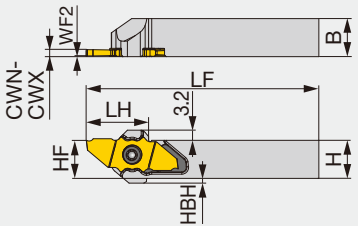
ISO	Workpiece materials	Priority	Grades	Cutting speed *Vc* (m/min)	Pitch (mm)	TPI
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 18
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 18
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 18
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
M	Stainless steel SUS304, etc X5CrNi18-9, etc	First choice	SH725	50 - 80	0.4 - 2.0	64 - 18
		Toughness	AH725	50 - 80	0.8 - 3.0	32 - 8
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	First choice	AH725	50 - 100	0.8 - 3.0	32 - 8
		Sharpness	SH725	50 - 100	0.4 - 2.0	64 - 18
	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	First choice	AH725	50 - 100	0.8 - 3.0	32 - 8
		Sharpness	SH725	50 - 100	0.4 - 2.0	64 - 18
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 100	0.4 - 2.0	64 - 18
		Toughness	AH725	30 - 100	0.8 - 3.0	32 - 8
	Superalloys Inconel718, etc.	First choice	SH725	30 - 100	0.4 - 2.0	64 - 18
		Toughness	AH725	30 - 100	0.8 - 3.0	32 - 8

Reference pages: Toolholder → G152 - G155

JSXXR/L

Parting toolholder, for Swiss lathes





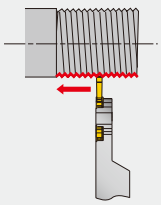
Right hand (R) shown.

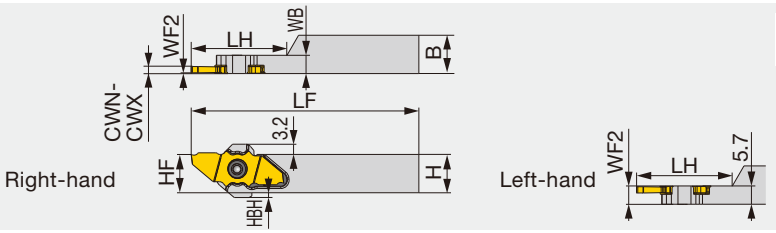
Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBL**	HBH	Insert	Torque*
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2	19	3	JX**06...,12...,16...,20...	1.2
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2	-	-	JX**06...,12...,16...,20...	1.2
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2	-	-	JX**06...,12...,16...,20...	1.2

Torque*: Recommended torque (N·m) for clamping
**LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX*G12... and JXPG20...inserts, and 4 mm shorter for JXPG06... insert.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-S

Parting toolholder, for Swiss lathes (for sub spindle)





Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBH	Insert	Torque*
JSXXR/L1010X09-S	0.6	2.5	10	10	120	26	10	0.2/5.5	3	JX**06...,12...,16...	1.2
JSXXR/L1212F09-S	0.6	2.5	12	12	85	26	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1212X09-S	0.6	2.5	12	12	120	30	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1616X09-S	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16...,20...	1.2

Torque*: Recommended torque (N·m) for clamping
**LF (Functional Length) and LH (Head Length) values shown above are true with JXPG16... insert. LF and LH will be 2 mm shorter than the above values with JX*G12... insert, and 4 mm shorter for JXPG06... insert. LF, LH, and HBL will all be 2 mm shorter with JXPG20... insert.
***JXPG20... insert will not fit.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS





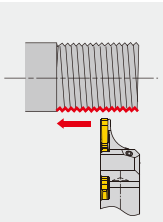
Designation	Clamping screw	Wrench
JSXXR..., JSXXR*****09-S	CSTC-4L055DL	T-1008/5
JSXXL..., JSXXL*****09-S	CSTC-4L055DR	T-1008/5

Reference pages: JSXXR/L, JSXXR/L-S: Inserts → G160, Standard cutting conditions → G161

JSXXR/L-F/H/X-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes

Direct connection | **Tube connection**



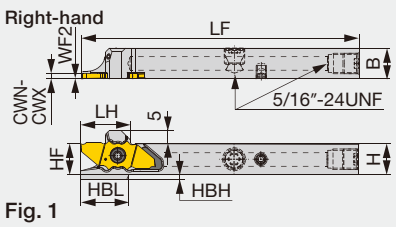


Fig. 1

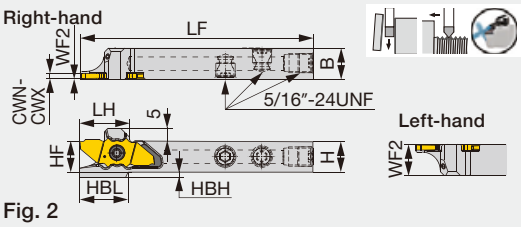


Fig. 2

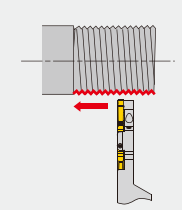
Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBL(1)	HBH	Insert	Torque*	Fig.
JSXXR/L1012H09-CHP(3)	0.6	2.5	10	12	102	19.2	10	0.2/11.8	18.7	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09-CHP	0.6	2.5	12	12	85	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-CHP(3)	0.6	2.5	12	12	120	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-CHP(3)	0.6	2.5	16	16	120	19.4	16	0.2/15.8	18.7	-	JX**06...,12...,16..., 20...	1.2	1

Torque*: Recommended clamping torque (N·m)
(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20... inserts, and 4 mm shorter for JX**06... insert.
(2) The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/X-S-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes (for sub spindle)

Direct connection | **Tube connection**



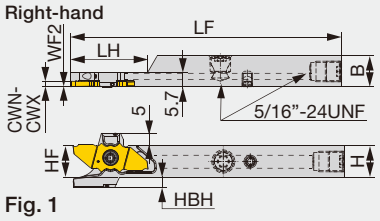


Fig. 1

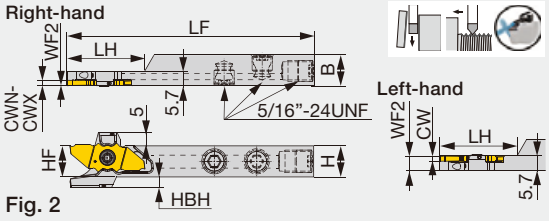


Fig. 2

Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBH	Insert	Torque*	Fig.
JSXXR1212F09-S-CHP(4)	0.6	2.5	12	12	85	26	12	0.2	4	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212F09B-S-CHP	0.6	2.5	12	12	85	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-S-CHP(3),(4)	0.6	2.5	12	12	120	30	12	0.2/5.5	4	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212X09B-S-CHP(3)	0.6	2.5	12	12	120	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR1616X09-S-CHP(3),(4)	0.6	2.5	16	16	120	30	16	0.2	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-S-CHP(3)	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2	1

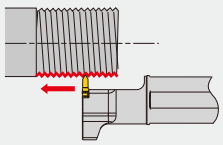
Torque*: Recommended clamping torque (N·m)
(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.
(2) The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

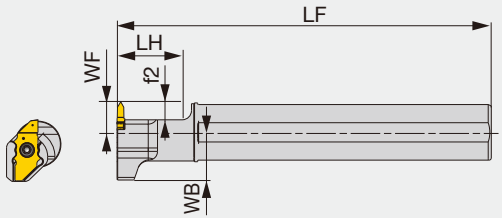
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**F...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: JSXXR/L-F/H/X-CHP, JSXXR/L-F/X-S-CHP:
Inserts → G160, Standard cutting conditions → G161

Round shanks, for threading





Designation	DCONMS	H	B	LF	LH	WB	WF(1)	f2(1)	Insert	Torque*
JS19G-SXXL09	19.05	18	18	90	21	15.43	10	6	JX**06,12*R	1.2
JS19X-SXXL09	19.05	18	18	120	21	15.43	10	6	JX**06,12*R	1.2
JS20G-SXXL09	20	19	19	90	21	15.4	10	6	JX**06,12*R	1.2
JS20X-SXXL09	20	19	19	120	21	15.4	10	6	JX**06,12*R	1.2
JS22X-SXXL09	22	21	21	120	21	15.4	10	6	JX**06,12*R	1.2
JS25H-SXXL09	25	24	24	100	21	15.4	10	6	JX**06,12*R	1.2
JS254X-SXXL09	25.4	24	24	120	21	15.4	10	6	JX**06,12*R	1.2

Torque*: Recommended clamping torque (N·m)
(1) When using JX..06... insert, both WF and f2 sizes will be 2 mm shorter than the values provided above.

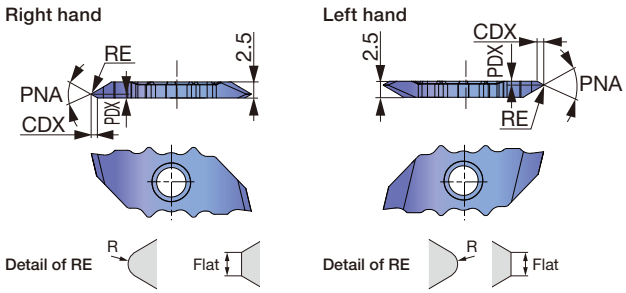
SPARE PARTS

Designation	Clamping screw	Wrench
JS***-SXXL09	CSTC-4L100DL	T-1008/5

INSERT

JXTG12FR/L-60 (For Threading / Sharp edge)





P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous	★	
S	Superalloys	★	
H	Hard materials	★	

★ : First choice

Designation	HAND	RE	Coated	Pitches	PDX	CDX	PNA
			SH725				
JXTG12FR-60A-000	R	Flat 0.05 max	●	0.2 - 0.4	0.25	0.4	60°
JXTG12FL-60A-000	L	Flat 0.05 max	●	0.2 - 0.4	0.25	0.4	60°
JXTG12FR-60B-000	R	Flat 0.05 max	●	0.2 - 0.4	0.25	0.4	60°
JXTG12FL-60B-000	L	Flat 0.05 max	●	0.2 - 0.4	0.25	0.4	60°
JXTG12FR-60A-005	R	R 0.05	●	0.4 - 1	0.6	0.99	60°
JXTG12FL-60A-005	L	R 0.05	●	0.4 - 1	0.6	0.99	60°
JXTG12FR-60B-005	R	R 0.05	●	0.4 - 1	1.9	0.99	60°
JXTG12FL-60B-005	L	R 0.05	●	0.4 - 1	1.9	0.99	60°
JXTG12FR-60N-010	R	R 0.1	●	1 - 1.5	1.25	2.07	60°
JXTG12FL-60N-010	L	R 0.1	●	1 - 1.5	1.25	2.07	60°

● : Line-up

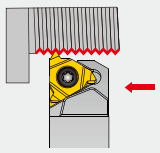
Reference pages: Toolholder → G158 - G160

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 200
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200
P	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 200
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 200
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200
N	Copper alloy C2600, C280C, etc.	SH725	100 - 200
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80
S	Superalloys Inconel718, etc.	SH725	30 - 80

JSE2R16-CHP

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection



Tube connection

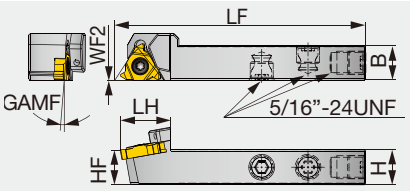


Fig.1

Direct connection

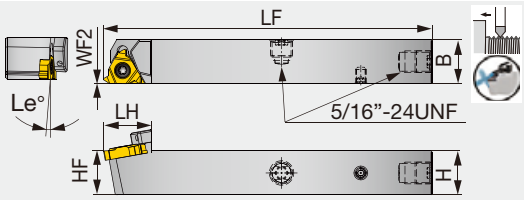


Fig.2

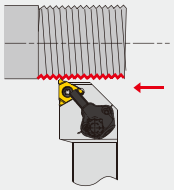
Right hand (R) shown.

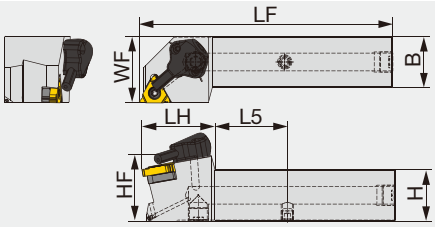
Designation	H	B	LF	LH	HF	WF2	GAMF	Insert	Fig.
JSE2R1212F16-CHP	12	12	85	19	12	0	1°	16ER...	1
JSE2R1212X16-CHP	12	12	120	19	12	0	1°	16ER...	2
JSE2R1616X16-CHP	16	16	120	19	16	0	1°	16ER...	2

External
Internal
Grooving
Threading
Parting-off

SER-X-CHP-MC

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection





Designation	H	B	LF	LH	HF	WF	L5	Insert
SER2020X16-CHP-MC	20	20	107	36	20	25	27.9	16ER...

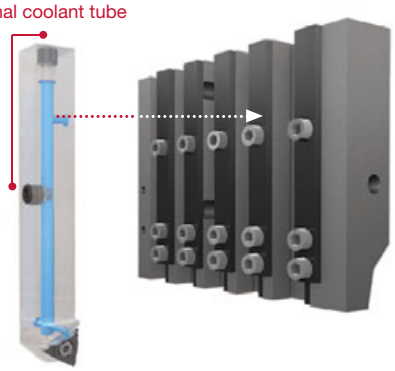
SPARE PARTS

Designation	Clamping screw	Wrench	Shim screw	Shim	Coolant unit	Coolant plug	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F	-	-	-	SR5/16UNFTL360	P-4
SER**X16-CHP-MC	CSTB-3.5ST	T-15F	DTS5-3.5	A16-1DT	CU-V-CHP	PLUGG1/8-6.5TL360	P-3.5
SER**X22-CHP-MC	CSTB-4ST	T-15F	DTS6-4	GX22-1DT	CU-CW-CHP	PLUGG1/8-6.5TL360	P-4

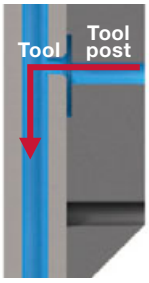
No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools

Internal thread
Optional connection with external coolant tube



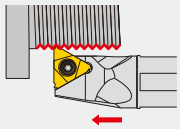
Detailed view of the coolant flow after connection

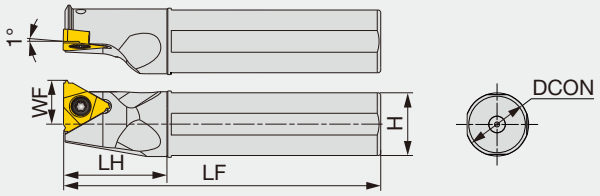


Reference pages: JSE2R16-CHP, SER-X-CHP-MC: Inserts → E010 -, Standard cutting conditions → E067

JS-SEL16

External threading toolholder, for Swiss lathes





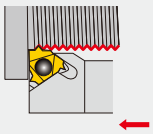
Right hand (R) shown.

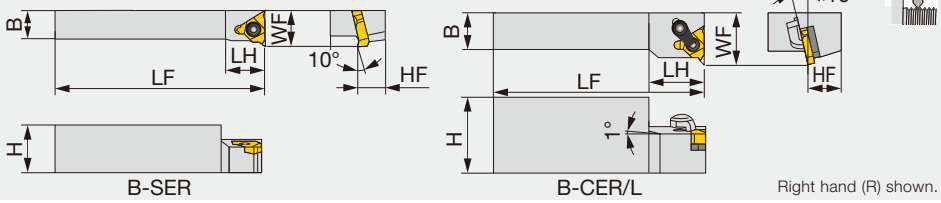
Designation	DCON	H	LF	LH	WF	Insert
JS16F-SEL16	16	15	85	25	11	16ER...
JS19G-SEL16	19.05	18	90	30	12.5	16ER...
JS19X-SEL16	19.05	18	120	30	12.5	16ER...
JS20G-SEL16	20	19	90	30	13	16ER...
JS20X-SEL16	20	19	120	30	13	16ER...
JS25H-SEL16	25	24	100	30	15.5	16ER...
JS254X-SEL16	25.4	24	120	30	15.7	16ER...

Note: Use left-hand toolholders (L) with right-hand inserts (R).

B-S/CER/L

External threading toolholder, for Swiss lathes



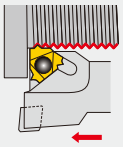


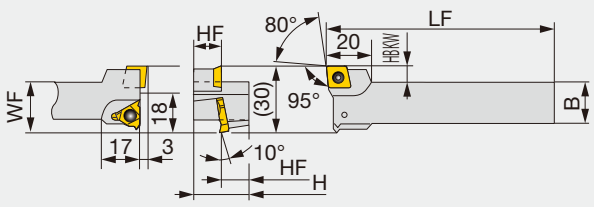
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
B-SER10H16	20	10	100	15	10	16	16ER...
B-SER12K16	24	12	125	18	12	18	16ER...
B-CER/L16M16	32	16	150	24	16	22	16ER/L...

BC-SER/L

External threading toolholder, for multi-functional Swiss lathes





Right hand (R) shown.

Designation	H	B	LF	HF	WF	HBKW	Insert
BC-SER12K16	24	16	125	12	23	7	16ER..., CC*T09T3...

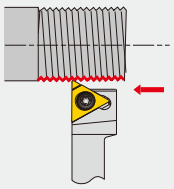
SPARE PARTS

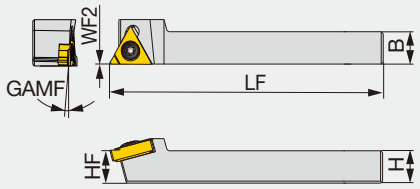
Designation	Clamp set	Shim set	Clamping screw	Wrench
JS***-SEL16, B-SER**16, BC-SER12K16	-	-	CSTB-3.5	T-15F
B-CER/L16M16	CSP16	A16-1	-	T-15F

Reference pages: JS-SEL16, B-S/CER/L: Inserts → **E010 -**, Standard cutting conditions → **E067**
BC-SER/L: Inserts → **B112 -** (CC*T09T3...), **E010 -** (16ER...),
Standard cutting conditions → **E067**

SER

Screw-on external threading toolholders



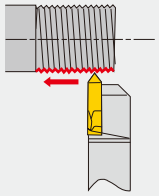


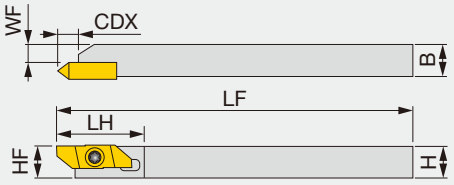
Designation	H	B	LF	HF	WF2	GAMF	Insert
SER0808H11	8	8	100	8	0	1.5°	11ER...
SER1010H11	10	10	100	10	0	1.5°	11ER...

J-SERIES

JSXBR/L

Screw-on external threading toolholder, for Swiss lathes







C-type

Right hand (R) shown.

Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR/L1010K8-C	10	10	125	29	6.7	10	5.7	JXT*R...
JSXBR/L1212K8-C	12	12	125	29	6.7	12	7.7	JXT*R...
JSXBR/L1616K8	16	16	125	29	6.4	16	11.7	JXT*R...
JSXBR/L2020K8	20	20	125	29	6.4	20	15.7	JXT*R...
JSXBR/L2525K8	25	25	125	29	6.4	25	20.7	JXT*R...

Can be wrenched from back side with both end torx screw.
This toolholder is compatible with JXB-type inserts and JXT-type inserts.

SPARE PARTS



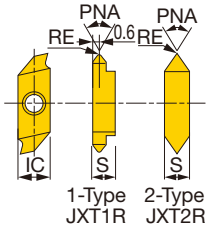


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
SER**H11	SR M2.6-L6.7-S11	T-8/5	-
JSXBR...	CSTB-4SD	T-8F	(T-8L)

INSERT

JXT (sharp edge)





P	Steel	★									
M	Stainless	★									
K	Cast iron										
N	Non-ferrous				☆						
S	Superalloys	☆			☆						
H	Hard materials				☆						

★ : First choice
☆ : Second choice

Designation	RE	Coated			Uncoated				PNA	IC	S
		J740			TH10						
JXT1R6000F	0.03	●			●				60°	8	3.97
JXT2R6000F	0.03	●			●				60°	8	3.97

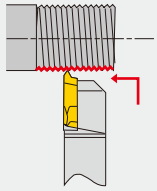
Machinable pitch range: 0.5 to 1 mm

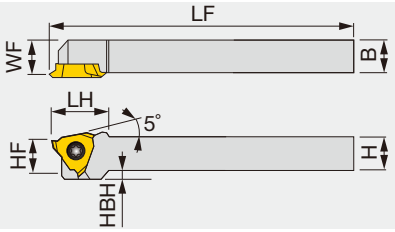
● : Line up

Reference pages: SER: Inserts → E010 -, Standard cutting conditions → E067

JSTTR/L

Screw-on external threading toolholder, for Swiss lathes





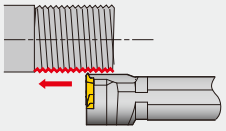
Right hand (R) shown.

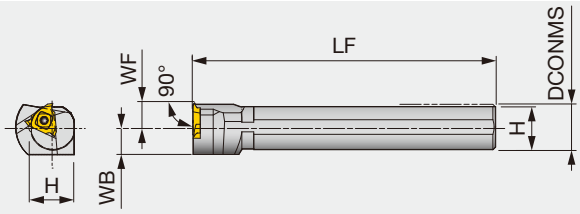
Designation	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L3...
JSTTR/L1212F3	12	12	85	18.5	12	11.5	-	JTTR/L3...
JSTTR/L1212X3	12	12	120	18.5	12	11.5	-	JTTR/L3...
JSTTR/L1616X3	16	16	120	18.5	16	15.5	-	JTTR/L3...

Recommended clamping torque: 1.2 N·m

JS-TTL3

Screw-on external threading toolholder, for Swiss lathes





Left hand (L) shown.

Designation	DCONMS	WF	LF	H	WB	Insert
JS19K-TTL3	19.05	10	125	18	11.5	JTTR30...
JS20K-TTL3	20	10	125	19	11.5	JTTR30...
JS22K-TTL3	22	10	125	21	11.5	JTTR30...
JS25K-TTL3	25.4	10	125	24	12.7	JTTR30...

Recommended clamping torque: 3.5 N·m

SPARE PARTS





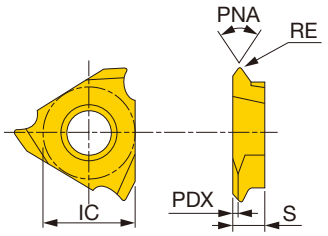
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTTR/L...	CSTB-4SD	T-8F	(T-8L)
JS**-TTL3	CSTB-4S	T-15F	-

Reference pages: JSTTR/L, JS-TTL3: Inserts, Standard cutting conditions → G166

INSERT

JTT (sharp edge)





Right hand (R) shown.

P	Steel	★	☆			★			★		
M	Stainless	★	☆								
K	Cast iron	★				☆			★		
N	Non-ferrous								★		
S	Superalloys	☆							★		
H	Hard materials	☆							★		

★ : First choice
☆ : Second choice

Designation	RE	Coated			Cermet		Uncoated			PNA	IC	S	PDX
		SH725	J740		NS9530		TH10						
JTTR3005F-55	0.05	●	●							55°	9.525	3.18	0.6
JTTL3005F-55	0.05									55°	9.525	3.18	0.6
JTTR3005F	0.05	●	●		●		●			60°	9.525	3.18	0.9
JTTL3005F	0.05	●								60°	9.525	3.18	0.9
JTTR3010F	0.1	●	●		●		●			60°	9.525	3.18	0.9
JTTL3010F	0.1	●								60°	9.525	3.18	0.9

Machinable pitch range: 0.5 to 1 mm

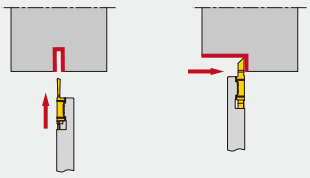
● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Pitch (mm)	TPI
P	Low carbon steel S15C, S25C, etc. C15, C25, etc.	SH725	60 - 150	0.5 - 1	50 - 25
P	Carbon steel, Alloy steel S55C, SCM440 etc. C55, 42CrMoS4, etc.	SH725	60 - 150	0.5 - 1	50 - 25
P	Pre-hardened steel NAK80, PX5 etc.	SH725	60 - 150	0.5 - 1	50 - 25
M	Stainless steel SUS304, SUS316 etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH725	50 - 80	0.5 - 1	50 - 25
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	TH10	50 - 100	0.5 - 1	50 - 25
K	Ductile cast iron FCD400, etc. 400-15S, etc.	TH10	50 - 100	0.5 - 1	50 - 25
S	Titanium alloy Ti-6Al-4V, etc.	SH725	30 - 100	0.5 - 1	50 - 25
S	Heat resistant alloy Inconel 718, etc.	SH725	30 - 100	0.5 - 1	50 - 25

Reference pages: Toolholder → G165

Parting-off and front turning toolholders



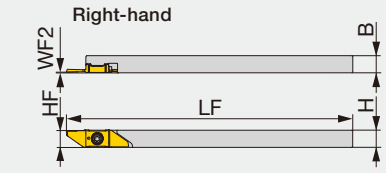


Fig. 1

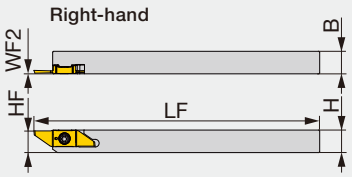


Fig. 2



Designation	H	B	LF	HF	WF2(1)	Insert	Torque*	Fig.
JSXXL0606X05	6	6	120	5.6	5.8	JV*N..., JVN...	1.3	1
JSXXR/L0707X05	7	7	120	6.6	0.2/6.8	JV*N..., JVN...	1.3	1
JSXXR/L0808F05	8	8	85	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L0808H05	8	8	100	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L1010H05	10	10	100	9.7	0.2/9.8	JV*N..., JVN...	1.3	2

Torque*: Recommended clamping torque (N·m)
(1) The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
Use the right-hand insert (JV****R...) for a right-hand holder (JSXXR...); the left-hand insert (JV****L...) for a left-hand holder (JSXXL...).

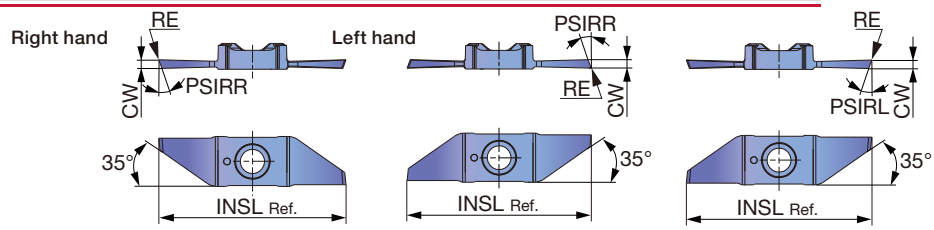
SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR...05	CSTB-2.5L054DL	T-7F
JSXXL...05	CSTB-2.5L054DR	T-7F

INSERTS

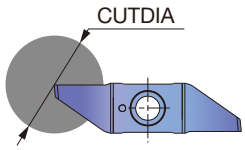
JVPN**R/L (For parting-off)





JVPN12L10F000-20L

P	Steel	★
M	Stainless	★
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	



★ : First choice

Designation	HAND	CW±0.025	RE	Coated SH725	CUTDIA	INSL	PSIRR	PSIRL
JVPN04R05F000-20	R	0.5	0	●	4	42.8	20°	-
JVPN04L05F000-20	L	0.5	0	●	4	42.8	20°	-
JVPN04R05F005-20	R	0.5	0.05	●	4	42.6	20°	-
JVPN04L05F005-20	L	0.5	0.05	●	4	42.6	20°	-
JVPN07R06F000-20	R	0.6	0	●	7	42.8	20°	-
JVPN07L06F000-20	L	0.6	0	●	7	42.8	20°	-
JVPN07R06F005-20	R	0.6	0.05	●	7	42.8	20°	-
JVPN07L06F005-20	L	0.6	0.05	●	7	42.8	20°	-
JVPN12R08F000-20	R	0.8	0	●	12	43.2	20°	-
JVPN12L08F000-20	L	0.8	0	●	12	43.2	20°	-
JVPN12R08F005-20	R	0.8	0.05	●	12	43	20°	-
JVPN12L08F005-20	L	0.8	0.05	●	12	43	20°	-
JVPN12R10F000-20	R	1	0	●	12	43.4	20°	-
JVPN12L10F000-20	L	1	0	●	12	43.4	20°	-
JVPN12R10F005-20	R	1	0.05	●	12	43.4	20°	-
JVPN12L10F005-20	L	1	0.05	●	12	43.4	20°	-
JVPN12L10F000-20L	L	1	0	●	12	43.4	-	20°

● : Line up

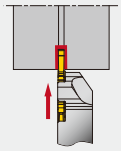
Reference pages: JSXXR/L: Standard cutting conditions → G168

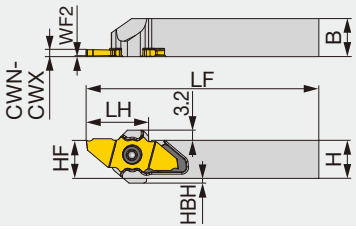
Parting-off

ISO	Workpiece materials	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 180	0.01 - 0.05
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 180	0.01 - 0.05
P	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 180	0.01 - 0.05
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 120	0.01 - 0.05
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.05
N	Copper alloys C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.05
S	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.05

JSXXR/L

Parting toolholder, for Swiss lathes





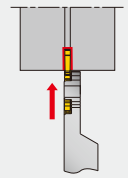
Right hand (R) shown.

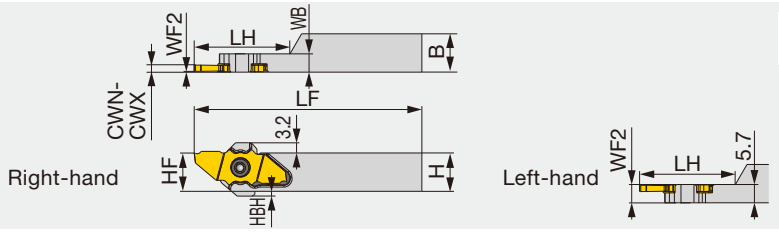
Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBL**	HBH	Insert	Torque*
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2	19	3	JX**06...,12...,16...,20...	1.2
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2	-	-	JX**06...,12...,16...,20...	1.2
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2	-	-	JX**06...,12...,16...,20...	1.2

Torque*: Recommended torque (N·m) for clamping
**LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX*G12... and JXPG20...inserts, and 4 mm shorter for JXPG06... insert.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-S

Parting toolholder, for Swiss lathes (for sub spindle)





Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBH	Insert	Torque*
JSXXR/L1010X09-S	0.6	2.5	10	10	120	26	10	0.2/5.5	3	JX**06...,12...,16...	1.2
JSXXR/L1212F09-S	0.6	2.5	12	12	85	26	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1212X09-S	0.6	2.5	12	12	120	30	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1616X09-S	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16...,20...	1.2

Torque*: Recommended torque (N·m) for clamping
**LF (Functional Length) and LH (Head Length) values shown above are true with JXPG16... insert. LF and LH will be 2 mm shorter than the above values with JX*G12... insert, and 4 mm shorter for JXPG06... insert. LF, LH, and HBL will all be 2 mm shorter with JXPG20... insert.
***JXPG20... insert will not fit.
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS



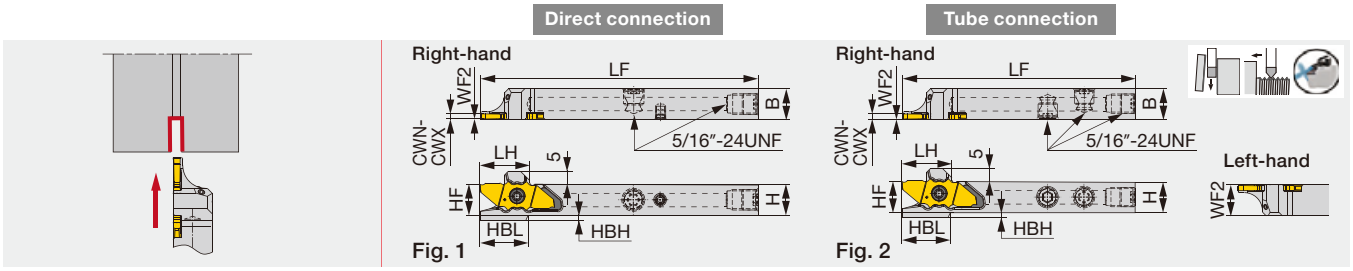


Designation	Clamping screw	Wrench
JSXXR..., JSXXR*****09-S	CSTC-4L055DL	T-1008/5
JSXXL..., JSXXL*****09-S	CSTC-4L055DR	T-1008/5

Reference pages: JSXXR/L, JSXXR/L-S: Inserts → G173 - G175, Standard cutting conditions → G176

JSXXR/L-F/H/X-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes

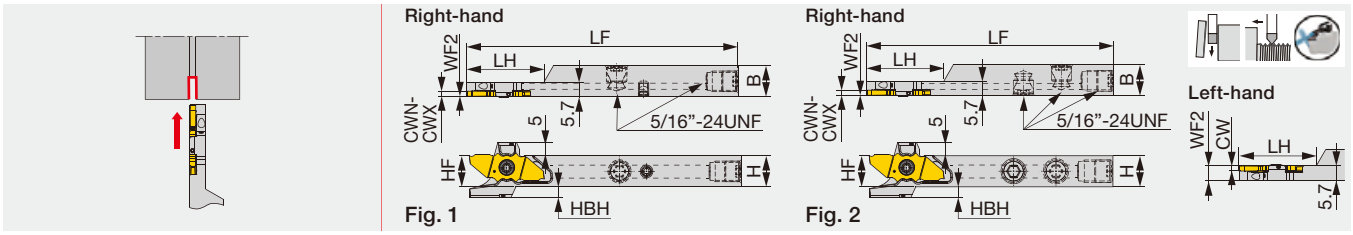


Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	WF2(2)	HBL(1)	HBH	Insert	Torque*	Fig.
JSXXR/L1012H09-CHP(3)	0.6	2.5	10	12	102	19.2	10	0.2/11.8	18.7	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09-CHP	0.6	2.5	12	12	85	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-CHP(3)	0.6	2.5	12	12	120	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-CHP(3)	0.6	2.5	16	16	120	19.4	16	0.2/15.8	18.7	-	JX**06...,12...,16..., 20...	1.2	1

Torque*: Recommended clamping torque (N·m)
(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20... inserts, and 4 mm shorter for JX**06... insert.
(2) The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/X-S-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes (for sub spindle)



Designation	CWN	CWX	H	B	LF(1)	LH(1)	HF	W2F(2)	HBH	Insert	Torque*	Fig.
JSXXR1212F09-S-CHP(4)	0.6	2.5	12	12	85	26	12	0.2	4	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212F09B-S-CHP	0.6	2.5	12	12	85	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-S-CHP(3),(4)	0.6	2.5	12	12	120	30	12	0.2/5.5	4	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212X09B-S-CHP(3)	0.6	2.5	12	12	120	30	12	0.2/5.5	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR1616X09-S-CHP(3),(4)	0.6	2.5	16	16	120	30	16	0.2	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-S-CHP(3)	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2	1

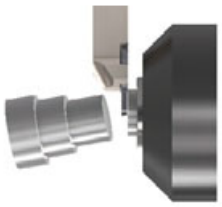
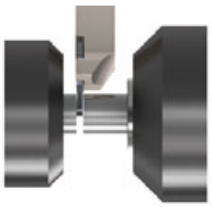
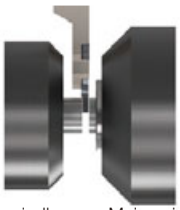
Torque*: Recommended clamping torque (N·m)
(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.
(2) The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.
(4) To be replaced with the new design
Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**F...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: JSXXR/L-F/H/X-CHP, JSXXR/L-F/X-S-CHP:
Inserts → G173 - G175, Standard cutting conditions → G176

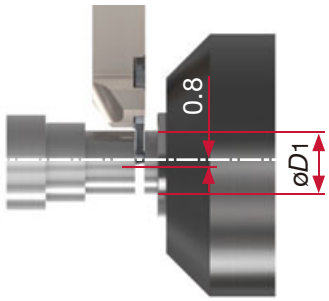
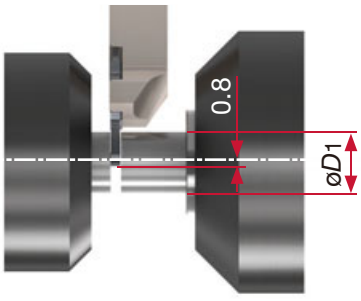
HOW TO SELECT TOOLS

Application	Large-diameter machining of workpiece with rigidity		Small-diameter machining of workpiece with short overhang	
	Main-spindle tooling	Sub-spindle tooling	Sub-spindle tooling	
			Workpiece with long overhang at the side of sub-spindle for the process after parting-off	Short workpiece with low rigidity
	 Main spindle	 Sub-spindle Main spindle	 Sub-spindle Main spindle	 Sub-spindle Main spindle
	Position of parting-off is at the side of the main spindle	Position of parting-off is at the side of the sub-spindle	Position of parting-off is at the side of the main spindle	Position of parting-off is at the side of the sub-spindle
Toolholder	R-hand (JSXXR type)	L-hand (JSXXL type)	R-hand (JSXXR-S type)	L-hand (JSXXL-S type)
Insert	Right-hand insert with lead angle to remove center core (JXPG**R***-15 type)	Left-hand insert (JXPG**L*** type)	Right-hand insert (JXPG**R*** type)	Left-hand insert (JXPG**L*** type)

HOW TO SELECT TOOLHOLDERS FOR SUB-SPINDLE

Sub-spindle dia.	Parting-off dia.	B	LF	Insert	Toolholder
ø40	~ ø6	10	116	JXPG06*	JSXXR/L1010X09-S
ø40	~ ø6	12	81	JXPG06*	JSXXR/L1212F09-S
ø40	~ ø12	10	118	JXPG12*	JSXXR/L1010X09-S
ø40	~ ø12	12	83	JXPG12*	JSXXR/L1212F09-S
ø40	~ ø16	10	120	JXPG16*	JSXXR/L1010X09-S
ø40	~ ø16	12	85	JXPG16*	JSXXR/L1212F09-S
ø40	~ ø20	12	87	JXPG20*	JSXXR/L1212F09B-S-CHP
ø50	~ ø6	12	116	JXPG06*	JSXXR/L1212X09-S
ø50	~ ø6	16	116	JXPG06*	JSXXR/L1616X09-S
ø50	~ ø12	12	118	JXPG12*	JSXXR/L1212X09-S
ø50	~ ø12	16	118	JXPG12*	JSXXR/L1616X09-S
ø50	~ ø16	12	85	JXPG16*	JSXXR/L1212F09-S
ø50	~ ø16	12	120	JXPG16*	JSXXR/L1212X09-S
ø50	~ ø16	16	120	JXPG16*	JSXXR/L1616X09-S
ø50	~ ø20	12	87	JXPG20*	JSXXR/L1212F09B-S-CHP
ø50	~ ø20	12	122	JXPG20*	JSXXR/L1212X09B-S-CHP
ø50	~ ø20	16	122	JXPG20*	JSXXR/L1616X09-S

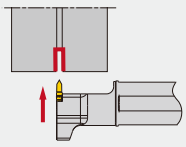
MAX. PARTING-OFF DIA. & DEPTH

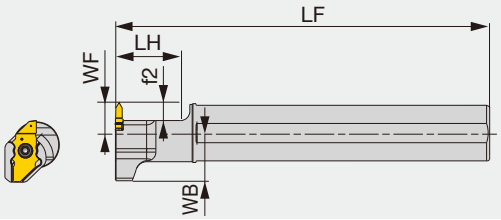
Main-spindle tooling	Sub-spindle tooling
 Main spindle	 Sub-spindle Main spindle

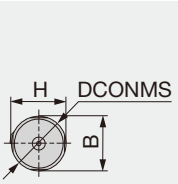
There will be no tool-workpiece interference when parting off the workpiece with the cutting edge position apart from the workpiece center by 0.8 mm or more.

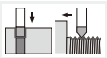
JS-SXXL09

Threading toolholder with round shank









Designation	CWN	CWX	DCONMS	H	B	LF	LH	WB	WF	f2	Insert	Torque*
JS19G-SXXL09	0.6	2.5	19.05	18	18	90	21	15.43	10	6	JX**06,12*R	1.2
JS19X-SXXL09	0.6	2.5	19.05	18	18	120	21	15.43	10	6	JX**06,12*R	1.2
JS20G-SXXL09	0.6	2.5	20	19	19	90	21	15.4	10	6	JX**06,12*R	1.2
JS20X-SXXL09	0.6	2.5	20	19	19	120	21	15.4	10	6	JX**06,12*R	1.2
JS22X-SXXL09	0.6	2.5	22	21	21	120	21	15.4	10	6	JX**06,12*R	1.2
JS25H-SXXL09	0.6	2.5	25	24	24	100	21	15.4	10	6	JX**06,12*R	1.2
JS254X-SXXL09	0.6	2.5	25.4	24	24	120	21	15.4	10	6	JX**06,12*R	1.2

* Torque: Recommended torque (N·m) for clamping

Threading insert (JXTG12FR) and parting-off inserts (JXPG06R ,12R) fit this holder.

SPARE PARTS





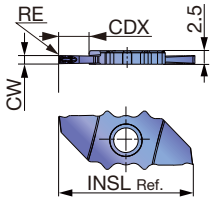
Designation	Clamping screw	Wrench
JS***-SXXL09	CSTC-4L100DL	T-1008/5

Reference pages: JS-SXXL09: Inserts → G173 - G175, Standard cutting conditions → G176

INSERT

JXPS**R/L-F (with 3D chipbreaker, sharp edge)





Right-hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

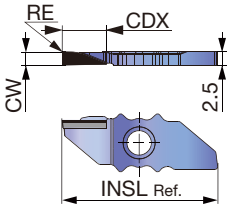
Designation	HAND	CW±0.025	RE	Coated	CUTDIA	CDX*	INSL
				SH725			
JXPS06R06F	R	0.6	0.05	●	6	3.5	21
JXPS06L06F	L	0.6	0.05	●	6	3.5	21
JXPS12R08F	R	0.8	0.05	●	12	6.5	25
JXPS12L08F	L	0.8	0.05	●	12	6.5	25
JXPS12R10F	R	1	0.05	●	12	6.5	25
JXPS12L10F	L	1	0.05	●	12	6.5	25
JXPS12R15F	R	1.5	0.05	●	12	6.5	25
JXPS12L15F	L	1.5	0.05	●	12	6.5	25
JXPS16R15F	R	1.5	0.05	●	16	8.5	29
JXPS16L15F	L	1.5	0.05	●	16	8.5	29
JXPS20R20F	R	2	0.05	●	20	10.5	33
JXPS20L20F	L	2	0.05	●	20	10.5	33

*Max grooving depth (CDX) varies depending on workpiece diameters.

● : Line up

JXDX**R-F (PCD insert)





P	Steel	
M	Stainless	
K	Cast iron	
N	Non-ferrous	★
S	Superalloys	
H	Hard materials	

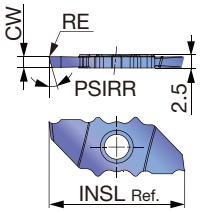
★ : First choice

Designation	HAND	CW±0.05	RE	PCD	CDX	INSL
				DX110		
JXDX12R20F	R	2	< 0.1	●	6	25
JXDX12R25F	R	2.5	< 0.1	●	6.5	25
JXDX16R25F	R	2.5	< 0.1	●	7	29

● : Line up

JXPG**R/L-F (sharp edge)





Right hand (R) shown.

P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated	CUTDIA	INSL	PSIRR/L
				SH725			
JXPG06R10F	R	1	0.05	●	6	21	0°
JXPG06L10F	L	1	0.05	●	6	21	0°
JXPG06R15F	R	1.5	0.05	●	6	21	0°
JXPG06L15F	L	1.5	0.05	●	6	21	0°
JXPG06R10F-15	R	1	0.05	●	6	21	15°
JXPG06L10F-15	L	1	0.05	●	6	21	15°
JXPG06R15F-15	R	1.5	0.05	●	6	21	15°
JXPG06L15F-15	L	1.5	0.05	●	6	21	15°
JXPG12R15F	R	1.5	0.05	●	12	25	0°
JXPG12L15F	L	1.5	0.05	●	12	25	0°
JXPG12R20F	R	2	0.05	●	12	25	0°
JXPG12L20F	L	2	0.05	●	12	25	0°
JXPG12R15F-15	R	1.5	0.05	●	12	25	15°
JXPG12L15F-15	L	1.5	0.05	●	12	25	15°
JXPG12R20F-15	R	2	0.05	●	12	25	15°
JXPG12L20F-15	L	2	0.05	●	12	25	15°
JXPG16R15F	R	1.5	0.05	●	16	29	0°
JXPG16L15F	L	1.5	0.05	●	16	29	0°
JXPG16R20F	R	2	0.05	●	16	29	0°
JXPG16L20F	L	2	0.05	●	16	29	0°
JXPG16R15F-15	R	1.5	0.05	●	16	29	15°
JXPG16L15F-15	L	1.5	0.05	●	16	29	15°
JXPG16R20F-15	R	2	0.05	●	16	29	15°
JXPG16L20F-15	L	2	0.05	●	16	29	15°
JXPG20R15F	R	1.5	0.05	●	20	33	0°
JXPG20L15F	L	1.5	0.05	●	20	33	0°
JXPG20R20F	R	2	0.05	●	20	33	0°
JXPG20L20F	L	2	0.05	●	20	33	0°
JXPG20R15F-15	R	1.5	0.05	●	20	33	15°
JXPG20L15F-15	L	1.5	0.05	●	20	33	15°
JXPG20R20F-15	R	2	0.05	●	20	33	15°
JXPG20L20F-15	L	2	0.05	●	20	33	15°

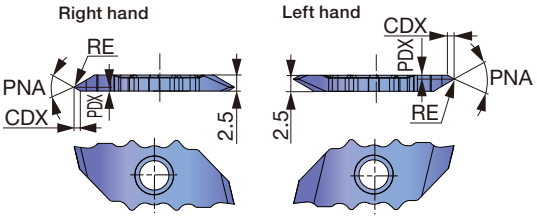
● : Line-up
CUTDIA: Max. parting-off dia.
Packing quantity = 5 pcs.

External
Internal
Grooving
Threading
Parting-off

Reference pages: Toolholders → G086 - G088, G090, Standard cutting conditions → G176

JXTG12FR/L-60 (For Threading / Sharp edge)





P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous	★	
S	Superalloys	★	
H	Hard materials	★	

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated												Pitches	PDX	CDX	PNA
			SH725															
JXTG12FR-60A-000	R	Flat (0.05 max)	●												0.2 - 0.4	0.25	0.4	60°
JXTG12FL-60A-000	L	Flat (0.05 max)	●												0.2 - 0.4	0.25	0.4	60°
JXTG12FR-60B-000	R	Flat (0.05 max)	●												0.2 - 0.4	2.25	0.4	60°
JXTG12FL-60B-000	L	Flat (0.05 max)	●												0.2 - 0.4	2.25	0.4	60°
JXTG12FR-60A-005	R	0.05	●												0.4 - 1	0.6	0.99	60°
JXTG12FL-60A-005	L	0.05	●												0.4 - 1	0.6	0.99	60°
JXTG12FR-60B-005	R	0.05	●												0.4 - 1	1.9	0.99	60°
JXTG12FL-60B-005	L	0.05	●												0.4 - 1	1.9	0.99	60°
JXTG12FR-60N-010	R	0.1	●												1 - 1.5	1.25	2.07	60°
JXTG12FL-60N-010	L	0.1	●												1 - 1.5	1.25	2.07	60°

● : Line-up
Packing quantity = 5 pcs.

Reference pages: Toolholders → G086 - G088, G090, Standard cutting conditions → G176

STANDARD CUTTING CONDITIONS

Parting, Grooving

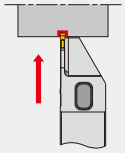
ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 200	0.01 - 0.05
P	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200	0.01 - 0.05
P	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 200	0.01 - 0.05
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 200	0.01 - 0.05
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.05
N	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.05
S	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.05

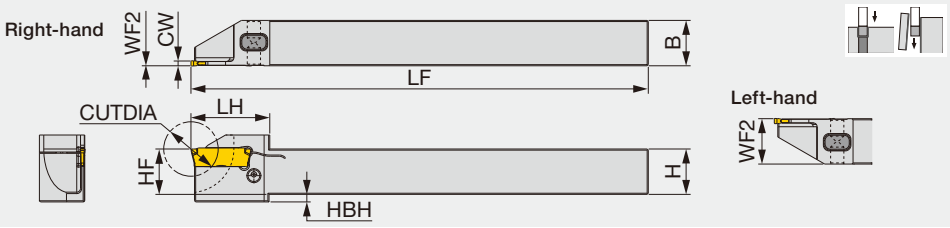
For aluminium and non-ferrous metal PCD insert

ISO	Workpiece materials	Grades	Operation	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)	Depth of cut *ap* (mm)
N	Aluminium alloys A5056, A6061, etc.	DX110	Grooving	100 - 300	0.03 - 0.15	-
N		DX110	Turning	100 - 300	0.03 - 0.15	< 6

JTTER/L

External grooving and parting toolholder, for Swiss lathes



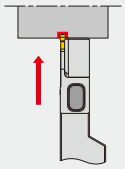


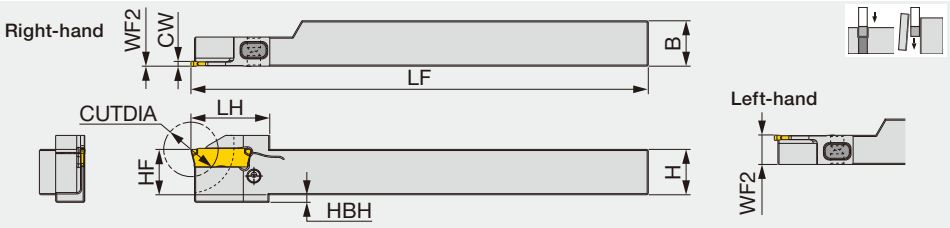
Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JTTER/L1010H1.2D12	1.2	0.9	12	10	10	100	17	10	0/10	-	1.5
JTTER/L1212F1.2D16	1.2	0.9	16	12	12	85	19	12	0/12	-	1.5
JTTER/L1212X1.2D16	1.2	0.9	16	12	12	120	19	12	0/12	-	1.5
JTTER/L1212X1.2D20	1.2	0.9	20	12	12	120	21	12	0/12	2	1.5
JTTER/L1616X1.2D20	1.2	0.9	20	16	16	120	21	16	0/16	-	2

(1) "WF" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
Torque*: Recommended clamping torque (N·m)

JTTER/L-S

External grooving and parting toolholder, for Swiss lathes (for sub spindle)





Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	Torque*
JTTER/L1010H1.2D12-S	1.2	0.9	12	10	10	100	17	10	0/7.7	-	1.5
JTTER1212F1.2D16-S (2)	1.2	0.9	16	12	12	85	19	12	0	-	1.5
JTTER/L1212X1.2D16-S	1.2	0.9	16	12	12	120	21	12	0/7.7	-	1.5
JTTER/L1212X1.2D20-S	1.2	0.9	20	12	12	120	21	12	0/7.7	2	1.5
JTTER/L1616X1.2D20-S	1.2	0.9	20	16	16	120	21	16	0/7.7	-	1.5

(1) "WF" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.
(2) No clamping screw from the insert side.
Torque*: Recommended clamping torque (N·m)

SPARE PARTS



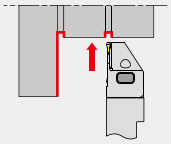


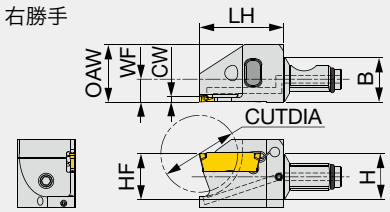
Designation	Clamping screw	Clamping pin	Wrench
JTTER/L1010, 1212..., JTTER/L**-S	SSM3.5x0.35	PIN-SL-TC	P-2F
JTTER/L1616...	SRM5-24145-RL	PIN-32121	P-2.5F

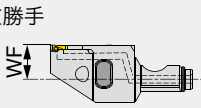
Reference pages: JTTER/L, JTTER/L-S: Inserts → G182 - G189, Standard cutting conditions → G190

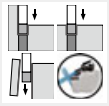
QC12-JTTER/L-CHP

高圧クーラント対応外径溝入れ・突切りヘッド







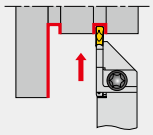


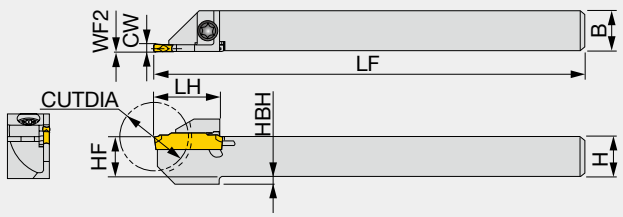
形 番	CW	シートサイズ	CUTDIA	H	B	LH	HF	WF (1)	OAW	トルク*
QC12-JTTER/L1.2D20-CHP	1.2	0.9	20	12	12	22	12	6/9	15	1.5
QC12-JTTER/L1.4D20-CHP	1.4	1	20	12	12	22	12	6/9	15	1.5
QC12-JTTER/L2D20-CHP	2	2	20	12	12	22	12	6/9	15	1.5

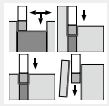
(1) 上記中の “WF” 値は同表の溝幅 “CW” インサートを取付けた際の寸法です。右勝手／左勝手の順で “WF” 値を示します。
トルク * : 推奨締付けトルク (N·m)

JCTER/L

自動盤用外径溝入れ、突切りバイト







本図は右勝手(R)を示す。

形 番	CW	シートサイズ	CUTDIA	H	B	LF	LH	HF	WF2(1)	HBH	トルク*
JCTER/L1010X1.4T10	1.4	1	20	10	10	120	18	10	0.2/10.2	-	3
JCTER/L1212F1.4T12	1.4	1	24	12	12	85	19.5	12	0.2/12.2	-	3
JCTER/L1212X1.4T12	1.4	1	24	12	12	120	19.5	12	0.2/12.2	-	3
JCTER/L1414-1.4T12	1.4	1	24	14	14	125	19.5	14	0.2/14.2	-	3
JCTER/L1616X1.4T16	1.4	1	32	16	16	120	24	16	0.2/16.2	-	3
JCTER/L1010X2T10	2	2	20	10	10	120	19	10	0.1/10.1	2	3
JCTER/L1212F2T12	2	2	24	12	12	85	19	12	0.1/12.1	2	3
JCTER/L1212X2T12	2	2	24	12	12	120	19	12	0.1/12.1	2	3
JCTER/L1414-2T12	2	2	24	14	14	125	19	14	0.1/14.1	-	3
JCTER/L1616X2T16	2	2	32	16	16	120	24	16	0.1/16.1	-	3
JCTER/L1212F3T12	3	3	24	12	12	85	19	12	0.3/12.3	2	3
JCTER/L1212X3T12	3	3	24	12	12	120	19	12	0.3/12.3	2	3
JCTER/L1616X3T16	3	3	32	16	16	120	24	16	0.3/16.3	-	3
JCTER/L2020H3T16	3	3	32	20	20	100	24	20	0.3/20.3	-	3

(1) 上記中の "WF2" 値は同表の溝幅 "CW" インサートを取り付けた際の寸法です。
CUTDIA: 最大突切り径
トルク* : 推奨締付けトルク(N·m)

部 品





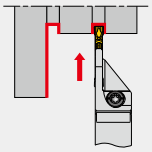


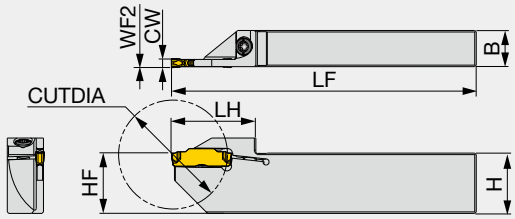

形 番	締付けねじ	締付けねじ 1	クランプピン	スパナ	スパナ 1	O リング
QC12-JTTER/L...	-	SSM3.5x0.35	PIN-SL-TC	-	P-2F	ORSS-0454.5X1.0NBR70
JCTER/L...	CSHB-4-A	-	-	T-15F	-	-

参照ページ : QC12-JTTER/L-CHP, JCTER/L: インサート → G182 - G189
シャンク, 関連部品 → G095 - G096, 標準切削条件 → G190

JCTER/L2012

自動盤用外径溝入れ、突切りバイト





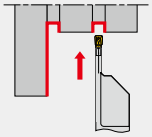
本図は右勝手(R)を示す。

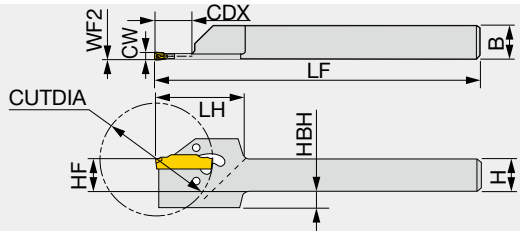
形 番	CW	シートサイズ	CUTDIA	H	B	LF	LH	HF	WF2(1)	トルク*
JCTER/L2012H2T18	2	2	36	20	12	100	25	20	0.1/12.1	3
JCTER/L2012H3T21	3	3	42	20	12	100	28	20	0.1/12.1	3

(1) 上記中の "WF2" 値は同表の溝幅 "CW" インサートを取り付けた際の寸法です。
CUTDIA: 最大突切り径
トルク* : 推奨締付けトルク(N·m)

CGER/L

自動盤用外径深溝入れ、突切りバイト





本図は右勝手(R)を示す。

形 番	CW	シートサイズ	CUTDIA(1)	CDX	H	B	LF	LH	HF	WF2 (2)	HBH
CGER/L2020-1.4T14	1.4	1	29/29	9.7	20	20	125	31	20	0.2/20.2	-
CGER/L1212-2T17	2	2	35/35	11.8	12	12	150	31	12	0.1/12.1	6
CGER/L1616-2T17	2	2	35/35	11.8	16	16	150	31	16	0.1/16.1	2
CGER/L2020-2T17	2	2	35/35	9.8	20	20	125	31	20	0.1/20.1	-
CGER/L1212-3T19	3	3	38/40	12	12	12	150	31	12	0.3/12.3	6
CGER/L1616-3T19	3	3	38/45	14.9	16	16	150	31	16	0.3/16.3	2
CGER/L2020-3T19	3	3	38/45	13.2	20	20	125	31	20	0.3/20.3	-
CGER/L2020-4T19	4	4	38/55	20.3	20	20	125	33	20	0.4/20.4	-

(1) DG*/SG* 最大突切り径CUTDIAは、使用インサートにより異なります。 (2) "WF2" の値は、同表の満幅 "CW" のインサートを取り付けた際の寸法です。
CRWスパナは付属品でないため、別途購入をお願します。インサートはCRWスパナで上あごを広げでクランプします。

部 品





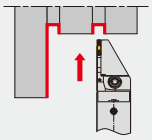
形 番	締付けねじ	スパナ	スパナ (オプション)
JCTER/L2012...	CSHB-4-A	T-15F	-
CGER/L2020-1.4T14	-	-	CRW23
CGER/L****-2T17 - 4T19	-	-	CRW33

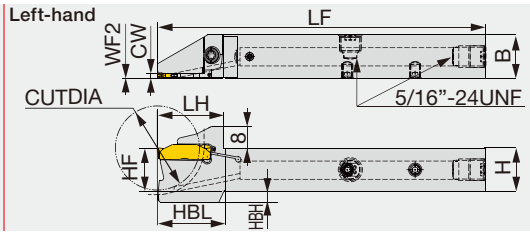
参照ページ : JCTER/L2012, CGER/L: インサート → G182 - G189, 標準切削条件 → G190

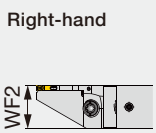
JCTER/L-CHP

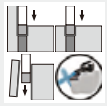
Direct connection

External grooving and parting-off toolholder, high pressure coolant compatible







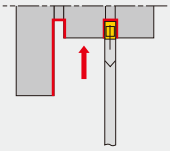


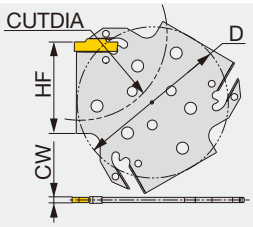
Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HBL	HF	WF2 (1)	HBH	Torque*
JCTER/L1212X2T12-CHP	2	2	25	12	12	120	24.7	24.7	12	0/12	5	3.0
JCTER/L1616X2T12-CHP	2	2	25	16	16	120	24.7	24.5	16	0/16	1	3.0
JCTER/L1616X2T16-CHP	2	2	32	16	16	120	24.7	24.7	16	0/16	4	3.0
JCTER/L2020X2T16-CHP	2	2	32	20	20	120	24.7	-	20	0/20	0	3.0

(1) "WF" value is calculated with groove width "CW" shown in the table. • CUTDIA: Max. parting off dia.
Torque*: Recommended torque (N·m) for clamping

CHGP

Parting-off and external grooving blade







Designation	CW	Seat size	CUTDIA	HF	D
CHGP52-2T	2	2	52	27	48.3
CHGP52-3T	3	3	52	27	48.3
CHGP82-3T	3	3	82	42	69.3
CHGP82-4T	4	4	82	42	69.3

.When depth is deeper than insert length - 1.5mm, 1 corner type is recommended

SPARE PARTS









Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench	Wrench (Option)
JCTER/L...	CSHB-4-A	T-15F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2	-
CHGP...	-	-	-	-	-	-	CRW33

Reference pages: JCTER/L-CHP, CHGP: Inserts → G182 - G189, Toolblock → G192
Standard cutting conditions → G190

CGP

External deep grooving and parting blade

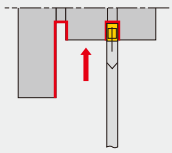


Fig.1

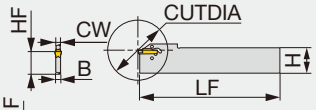


Fig.2

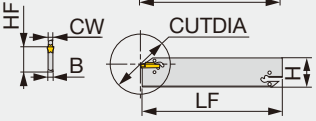
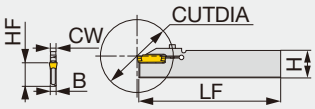
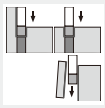


Fig.3





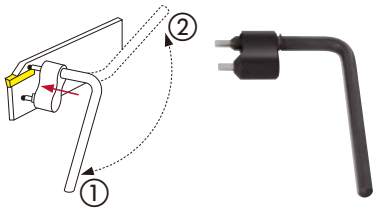
Designation	CW	Seat size	CUTDIA	H	B	LF	HF	Fig.	Torque*
CGP26-1.4S	1.4	1	26	26	1	150	21.4	1	-
CGP32-1.4D	1.4	1	26	32	1	150	24.8	2	-
CGP26-2S	2	2	40	26	1.8	150	21.4	1	-
CGP32-2D	2	2	50	32	1.8	150	24.8	2	-
CGP26-3S	3	3	50	26	2.4	150	21.4	1	-
CGP32-3D	3	3	100	32	2.4	150	24.8	2	-
CGP26-4S	4	4	80	26	3.2	150	21.4	1	-
CGP32-4D	4	4	100	32	3.2	150	24.9	2	-
CGP45-4D	4	4	120	45	3.2	150	38.1	2	-
CGP32-5D	5	5	120	32	4	150	24.9	2	-
CGP32-6D	6	6	120	32	5.2	150	24.9	2	-
CGP32-8S-CL	8	8	80	32	6.2	150	24.9	3	3

When depth is deeper than (insert length - 1.5mm), 1 corner type is recommended.
Wrench (CRW...) is not included. Please order it separately.
*Torque: Recommended clamping torque (N·m)

Caution

Newly developed clamp

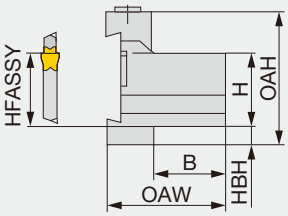
.Insert is clamped by the elastic deformation of upper jaw
.Low clamping stress increases the stability and tool life

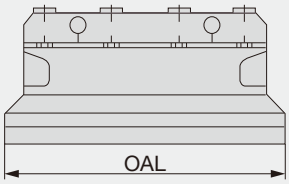


unclamp :①→②
clamp :②→①

CTBU

Tool blocks for CGP blade





Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU20-26	20	21	86	20	9	43	38	CGP26...
CTBU25-26	25	23	110	25	5	45	43	CGP26...
CTBU20-32	20	19	100	20	13	50	38	CGP32...
CTBU25-32	25	23	110	25	8	50	42	CGP32...
CTBU32-32	32	29	110	32	5	54	48	CGP32...

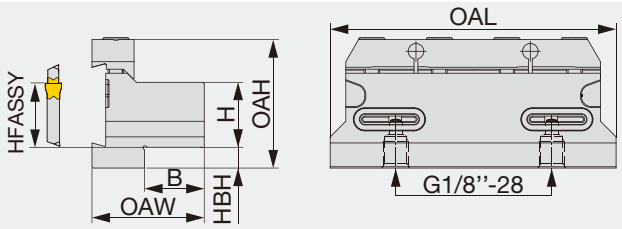
SPARE PARTS

Designation	Clamp	Clamping screw	Wrench	Wrench (Optional)
CGP**-1.4*	-	-	-	CRW23
CGP**-2/3/4/5/6	-	-	-	CRW33
CGP32-8S-CL	-	CM4X0.7X20-M0-A	P-3	-
CTBU20-26	CT-86	CM6X30-S	P-5	-
CTBU25-26	CT-105	CM6X30-S	P-5	-
CTBU20-32	CT-100	CM6X30-S	P-5	-
CTBU25-32, CTBU32-32	CT-110	CM6X30-S	P-5	-

Reference pages: CGP: Inserts → G182 - G189, Standard cutting conditions → G190

CTBU-CHP

Tool block for CGP-CHP blade with high pressure internal coolant capacity



Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU25-32-CHP	25	23	110	25	8	50	43.2	CGP32-*D-CHP

Applicable for 14 MPa coolant

SPARE PARTS

Designation	Clamping screw	Clamp	Wrench	O-ring
CTBU25-32-CHP	12.9-SRM6X16DIN912	110-CT	5-P	OR14X2.5NN

External
Internal
Grooving
Threading
Parting-off

TUNGCUT

CHIPBREAKER GUIDE

External grooving and parting

DGS type (2 corners)
SGS type (1 corner)

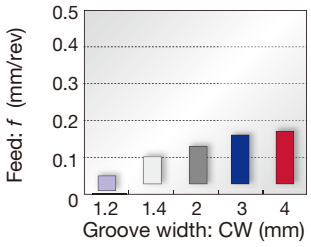


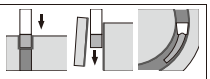
G184, G187

For Swiss lathes

Unique-designed edge
and chipbreaker
Handed insert available
CW = 1.2 - 4 mm

■ Standard feed





DGM type (2 corners)
SGM type (1 corner)

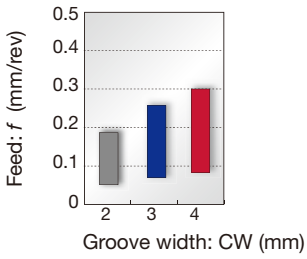


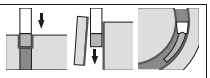
G185, G186

High fracture resistance

Smooth chip evacuation
Well-designed edge with
high strength
Handed insert available
CW = 2 - 4 mm

■ Standard feed





DGL type (2 corners)

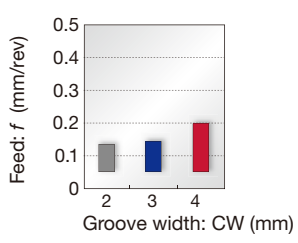


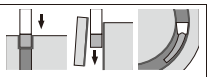
G189

1st choice for mild steel

Chipbreaker with excellent
chip control at low feed
Suitable for mild steel that
often has difficulties in chip
control
CW = 2 - 4 mm

■ Standard feed





Please see page G*** for the product details.

Reference pages: CTBU-CHP: Blade → F231

External grooving

DGE type (2 corners)

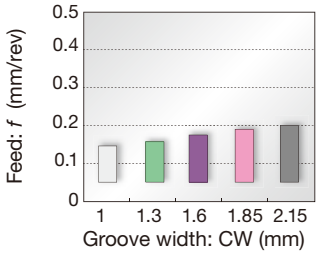


G188

For shallow grooves with high accuracy

Excellent chip control

CW = 1 - 2.15 mm





DGG type (2 corners)



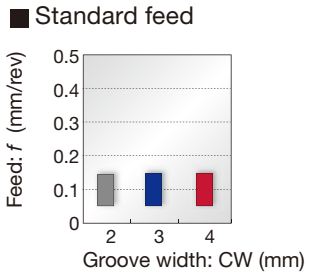
G188

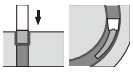
For non-ferrous materials and titanium alloys

Chipbreaker with low cutting force

Sharp cutting edge that prevents vibration and delivers fine surface finish

CW = 2 - 4 mm





External grooving of hardened steels

SGN-CBN type (1 corner)



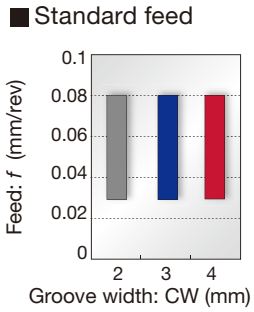
G189

For hardened steel cutting

Optimum cutting edge shape for grooving of hardened steels

Close tolerance width for finishing (W = ±0.025 mm)

CW = 2 - 4 mm

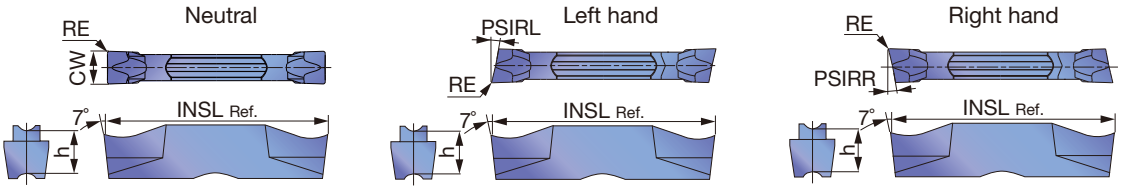




Please see page G*** for the product details.

DGS

External grooving and parting



		T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530	KS05F
P	Steel	★	★	☆	★	☆	★	★	
M	Stainless		★	☆	★	★	★		
K	Cast iron		★		★	☆	★	☆	☆
N	Non-ferrous								☆
S	Superalloys		★	☆	★				★
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05	RE	Coated						Cermet	Uncoated	INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	GH130	AH6235	NS9530	KS05F				
DGS1.2-003	0.9	N	1.2	0.03			●						16	4.7	0°	0°
DGS1.4-005	1	N	1.4	0.05			●						16	4.3	0°	0°
DGS1.4-010	1	N	1.4	0.1			●						16	4.3	0°	0°
DGS1.4-016	1	N	1.4	0.16		●	●		●				16	4.3	0°	0°
DGS2-005	2	N	2	0.05			●						20	5	0°	0°
DGS2-010	2	N	2	0.1			●						20	5	0°	0°
DGS2-020	2	N	2	0.2	●	●	●	●	●	●	●	●	20	5	0°	0°
DGS2-020-6R	2	R	2	0.2		●	●		●				20	5	0°	6°
DGS2-020-6L	2	L	2	0.2		●	●		●				20	5	6°	0°
DGS2-002-6R	2	R	2	0.02			●		●				19.5	5	0°	6°
DGS2-002-6L	2	L	2	0.02			●		●				19.5	5	6°	0°
DGS2-020-15R	2	R	2	0.2		●	●		●				20	5	0°	15°
DGS2-020-15L	2	L	2	0.2		●	●		●				20	5	15°	0°
DGS2-002-15R	2	R	2	0.02			●		●				19.5	5	0°	15°
DGS2-002-15L	2	L	2	0.02			●		●				19.5	5	15°	0°
DGS2.39-020	2	N	2.39	0.2		●		●		●			20	5	0°	0°
DGS3-020	3	N	3	0.2	●	●	●	●	●	●	●	●	20	5	0°	0°
DGS3-020-6R	3	R	3	0.2		●	●		●				20	5	0°	6°
DGS3-020-6L	3	L	3	0.2		●	●		●				20	5	6°	0°
DGS3-002-6R	3	R	3	0.02			●		●				19.45	5	0°	6°
DGS3-002-6L	3	L	3	0.02			●		●				19.45	5	6°	0°
DGS3-020-15R	3	R	3	0.2		●	●		●				20	5	0°	15°
DGS3-020-15L	3	L	3	0.2		●	●		●				20	5	15°	0°
DGS3-002-15R	3	R	3	0.02			●		●				19.45	5	0°	15°
DGS3-002-15L	3	L	3	0.02			●		●				19.45	5	15°	0°
DGS3.18-020	3	N	3.18	0.2		●		●		●			20	5	0°	0°
DGS4-030	4	N	4	0.3	●	●	●	●	●	●	●	●	20	5	0°	0°
DGS4-030-4R	4	R	4	0.3		●	●		●				20	5	0°	4°
DGS4-030-4L	4	L	4	0.3		●	●		●				20	5	4°	0°
DGS4.76-040	5	N	4.76	0.4		●		●		●			25	5.5	0°	0°
DGS5-030	5	N	5	0.3	●	●	●	●	●	●	●	●	25	5.5	0°	0°
DGS6-030	6	N	6	0.3	●	●	●	●	●	●		●	25	5.5	0°	0°
DGS6.35-040	6	N	6.35	0.4		●		●		●			25	5.5	0°	0°
DGS8-040	8	N	8	0.4		●		●		●		●	30	6.7	0°	0°

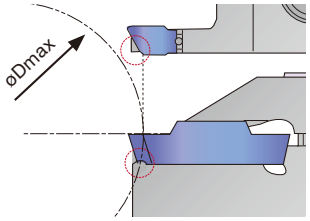
● : Line up

Caution

The tool will interfere with the workpiece when grooving larger diameters than øDmax.

Designation	øDmax (mm)
DGM2-002-15R/L	28
DGM3-002-15R/L	29
DGM4-030-15R/L	30
SGM3-020-15R/L	103

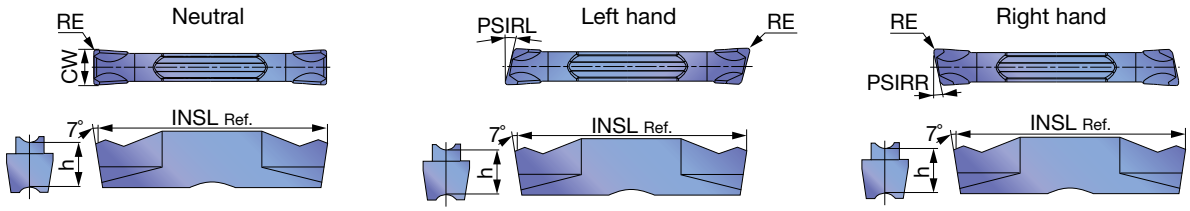
Designation	øDmax (mm)
DGS2-002-15R/L	28
DGS3-002-15R/L	29
SGS3-020-15R/L	103
SGS3-002-15R/L	34



Reference pages: Toolhoders → G177 - G181, Standard cutting conditions → G190

DGM

External grooving and parting



P	Steel	★	★	☆	★		☆	★		★							
M	Stainless		★	☆	★		★	★									
K	Cast iron		★		★	☆	☆	★		☆				☆			
N	Non-ferrous													☆			
S	Superalloys		★	☆	★	★								★			
H	Hard materials																

★ : First choice
☆ : Second choice

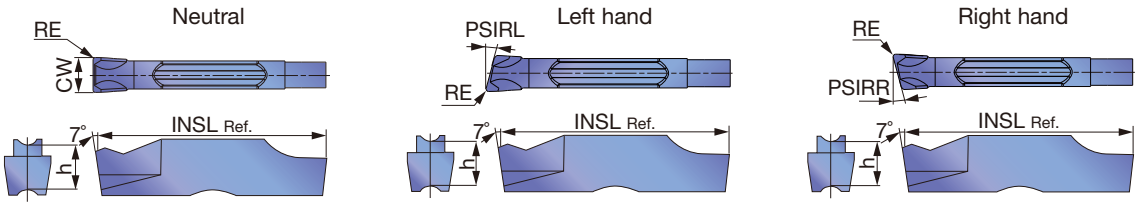
Designation	Seat size	HAND	CW±0.05	RE	Coated							Cermet		Uncoated					
					T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F			INSL	h	PSIRL	PSIRR
DGM2-020	2	N	2	0.2	●	●	●	●		●	●	●		●			20	5	0°	0°
DGM2-020-6R	2	R	2	0.2		●	●			●							20	5	0°	6°
DGM2-020-6L	2	L	2	0.2		●	●			●							20	5	6°	0°
DGM2-020-8R	2	R	2	0.2		●	●			●							20	5	0°	8°
DGM2-020-8L	2	L	2	0.2		●	●			●							20	5	8°	0°
DGM2-020-15R	2	R	2	0.2		●	●			●							20	5	0°	15°
DGM2-020-15L	2	L	2	0.2		●	●			●							20	5	15°	0°
DGM2-002-15R	2	R	2	0.02			●			●							19.35	5	0°	15°
DGM2-002-15L	2	L	2	0.02			●			●							19.35	5	15°	0°
DGM2.39-020	2	N	2.39	0.2		●		●			●						20	5	0°	0°
DGM3-020	3	N	3	0.2	●	●	●	●	●	●	●	●		●			20	5	0°	0°
DGM3-020-6R	3	R	3	0.2		●	●			●							20	5	0°	6°
DGM3-020-6L	3	L	3	0.2		●	●			●							20	5	6°	0°
DGM3-002-6R	3	R	3	0.02			●			●							19.45	5	0°	6°
DGM3-002-6L	3	L	3	0.02			●			●							19.45	5	6°	0°
DGM3-020-15R	3	R	3	0.2		●	●			●							20	5	0°	15°
DGM3-020-15L	3	L	3	0.2		●	●			●							20	5	15°	0°
DGM3.18-020	3	N	3.18	0.2		●		●			●						20	5	0°	0°
DGM4-030	4	N	4	0.3	●	●	●	●	●	●	●	●		●			20	5	0°	0°
DGM4-030-4R	4	R	4	0.3		●	●			●							20	5	0°	4°
DGM4-030-4L	4	L	4	0.3		●	●			●							20	5	4°	0°
DGM4-030-15R	4	R	4	0.3		●	●			●							20	5	0°	15°
DGM4-030-15L	4	L	4	0.3		●	●			●							20	5	15°	0°
DGM4.76-040	5	N	4.76	0.4		●		●			●						25	5.5	0°	0°
DGM5-030	5	N	5	0.3	●	●	●	●	●	●	●	●		●			25	5.5	0°	0°
DGM5-030-4R	5	R	5	0.3		●	●			●							25	5.5	0°	4°
DGM6-030	6	N	6	0.3	●	●	●	●	●	●	●			●			25	5.5	0°	0°
DGM6.35-040	6	N	6.35	0.4		●		●			●						25	5.5	0°	0°
DGM8-040	8	N	8	0.4	●	●	●	●		●	●			●			30	6.7	0°	0°

● : Line up

Reference pages: Toolhoders → G177 - G181, Standard cutting conditions → G190

SGM

External deep grooving and parting



P	Steel	★	☆	★	☆	★					
M	Stainless	★	☆	★	★	★					
K	Cast iron	★		★	☆	★		☆			
N	Non-ferrous							☆			
S	Superalloys	★	☆	★				★			
H	Hard materials										

★ : First choice
☆ : Second choice

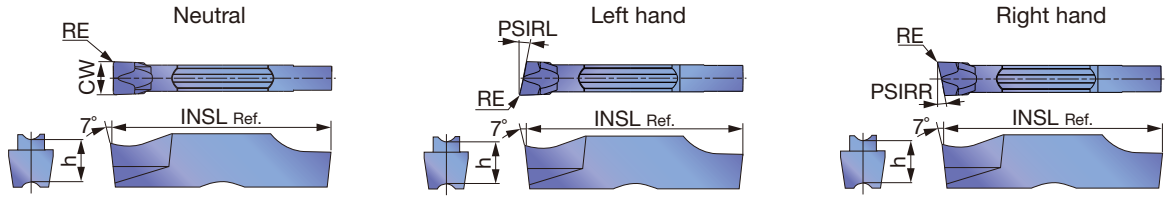
Designation	Seat size	HAND	CW±0.05	RE	Coated					Uncoated					INSL	h	PSIRL	PSIRR
					AH7025	AH725	AH8005	GH130	AH6235	KS05F								
SGM2-020	2	N	2	0.2	●	●	●	●	●	●					20	5	0°	0°
SGM2-020-6R	2	R	2	0.2	●	●		●							20	5	0°	6°
SGM2-020-6L	2	L	2	0.2	●	●		●							20	5	6°	0°
SGM3-020	3	N	3	0.2	●	●	●	●	●	●					20	5	0°	0°
SGM3-020-6R	3	R	3	0.2	●	●		●							20	5	0°	6°
SGM3-020-6L	3	L	3	0.2	●	●		●							20	5	6°	0°
SGM3-020-15R	3	R	3	0.2	●	●		●							20	5	0°	15°
SGM3-020-15L	3	L	3	0.2	●	●		●							20	5	15°	0°
SGM4-030	4	N	4	0.3	●	●	●	●	●	●					20	5	0°	0°
SGM4-030-4R	4	R	4	0.3	●	●		●							20	5	0°	4°
SGM4-030-4L	4	L	4	0.3	●	●		●							20	5	4°	0°
SGM5-030	5	N	5	0.3	●	●	●	●	●	●					25	5.5	0°	0°
SGM6-030	6	N	6	0.3	●	●	●	●	●	●					25	5.5	0°	0°
SGM8-040	8	N	8	0.4	●		●		●	●					30	6.7	0°	0°

● : Line up

Reference pages: Toolhoders → G177 - G181, Standard cutting conditions → G190

SGS

External deep grooving and parting



		Coated					Uncoated									
		AH7025	AH725	AH8005	GH130	AH6235	KS05F									
P	Steel	★	☆	★	☆	★										
M	Stainless	★	☆	★	★	★										
K	Cast iron	★		★	☆	★	☆									
N	Non-ferrous						☆									
S	Superalloys	★	☆	★			★									
H	Hard materials															

★ : First choice
☆ : Second choice

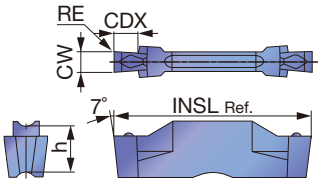
Designation	Seat size	HAND	CW±0.05	RE	AH7025	AH725	AH8005	GH130	AH6235	KS05F	INSL	h	PSIRL	PSIRR
SGS2-020	2	N	2	0.2	●	●	●	●	●	●	20	5	0°	0°
SGS2-020-6R	2	R	2	0.2	●	●		●			20	5	0°	6°
SGS2-020-6L	2	L	2	0.2	●	●		●			20	5	6°	0°
SGS2-020-15R	2	R	2	0.2	●	●		●			20	5	0°	15°
SGS2-020-15L	2	L	2	0.2	●	●		●			20	5	15°	0°
SGS3-020	3	N	3	0.2	●	●	●	●	●	●	20	5	0°	0°
SGS3-020-6R	3	R	3	0.2	●	●		●			20	5	0°	6°
SGS3-020-6L	3	L	3	0.2	●	●		●			20	5	6°	0°
SGS3-002-6R	3	R	3	0.02		●		●			19.8	5	0°	6°
SGS3-002-6L	3	L	3	0.02		●		●			19.8	5	6°	0°
SGS3-020-15R	3	R	3	0.2	●	●		●			20	5	0°	15°
SGS3-020-15L	3	L	3	0.2	●	●		●			20	5	15°	0°
SGS3-002-15R	3	R	3	0.02		●		●			19.8	5	0°	15°
SGS3-002-15L	3	L	3	0.02		●		●			19.8	5	15°	0°
SGS4-030	4	N	4	0.3	●	●	●	●	●	●	20	5	0°	0°
SGS5-030	5	N	5	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGS6-030	6	N	6	0.3	●	●	●	●	●	●	25	5.5	0°	0°
SGS8-040	8	N	8	0.4	●		●		●		30	6.7	0°	0°

● : Line up

Reference pages: Toolhoders → G177 - G181, Standard cutting conditions → G190

DGE

External grooving (for high precision)



		AH7025	AH725	GH130	NS9530
P	Steel	★	☆	☆	★
M	Stainless	★	☆	★	
K	Cast iron	★		☆	☆
N	Non-ferrous				
S	Superalloys	★	☆		
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	CDX	INSL	h
DGE100-000	2	1	0		●	●	●	2.5	20	5
DGE130-000	2	1.3	0		●	●	●	2.5	20	5
DGE160-010	2	1.6	0.1	●	●	●	●	2.5	20	5
DGE185-010	2	1.85	0.1	●	●	●	●	3.5	20	5
DGE215-015	2	2.15	0.15	●	●	●	●	3.5	20	5

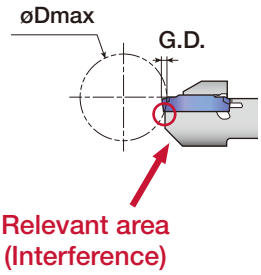
●: Line up

Caution

øDmax is limited as shown in the picture to the right according to the groove depth, G.D. Please refer to the following table.

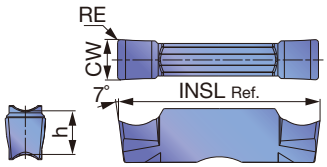
G.D = Groove depth

Designation	Max. groove depth (mm)	øDmax (mm) G.D. = 1	G.D. = 1.5	G.D. = 2	G.D. = 2.5	G.D. = 3
DGE100-000	2	∞	18.6	11.5	-	-
DGE130-000						
DGE160-010						
DGE185-010	3				8.8	7
DGE215-015						



DGG

External grooving (for high precision)



		AH7025	NS9530	KS05F
P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	☆
N	Non-ferrous			★
S	Superalloys	★		☆
H	Hard materials			

★ : First choice
☆ : Second choice

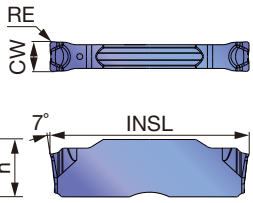
Designation	Seat size	CW±0.02	RE	Coated AH7025	Cermet NS9530	Uncoated KS05F	INSL	h
DGG200-020	2	2	0.2	●	●	●	20	5
DGG300-020	3	3	0.2	●	●	●	20	5
DGG400-040	4	4	0.4	●	●	●	20	5
DGG500-040	5	5	0.4	●	●	●	25	5.5
DGG600-040	6	6	0.4	●	●	●	25	5.5

●: Line up

Reference pages: Toolhoders → G177 - G181, Standard cutting conditions → G190

DGL

External grooving and parting



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

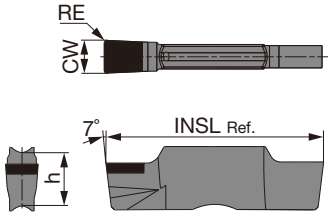
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	Coated AH8005	Coated AH6235	INSL	h
DGL2-020	2	2	0.2	●	●	●	20	5
DGL3-025	3	3	0.25	●	●	●	20	5
DGL4-030	4	4	0.3	●	●	●	20	5
DGL5-030	5	5	0.3	●	●	●	25	5.5
DGL6-080	6	6	0.8	●	●	●	25	5.5

● : Line up

SGN

External grooving



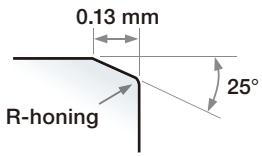
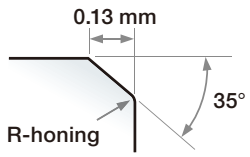
P	Steel			
M	Stainless			
K	Cast iron			
N	Non-ferrous			
S	Superalloys			
H	Hard materials	★		

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.025	RE	CBN BX360	INSL	h	Edge prep. No symbol	Edge prep. S	Edge prep. H
SGN200-020	2	2	0.2	●	20	5	○		
SGN200-020-S	2	2	0.2	●	20	5		○	
SGN200-020-H	2	2	0.2	●	20	5			○
SGN300-020	3	3	0.2	●	20	5	○		
SGN300-020-S	3	3	0.2	●	20	5		○	
SGN300-020-H	3	3	0.2	●	20	5			○
SGN400-020	4	4	0.2	●	20	5	○		
SGN400-020-S	4	4	0.2	●	20	5		○	
SGN400-020-H	4	4	0.2	●	20	5			○
SGN500-020-S	5	5	0.2	●	25	5.5		○	
SGN500-020-H	5	5	0.2	●	25	5.5			○

●: Line up

Edge preparations

No symbol	-S	-H
		

Reference pages: Toolhoders → G177 - G181, Standard cutting conditions → G190

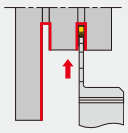
STANDARD CUTTING CONDITIONS

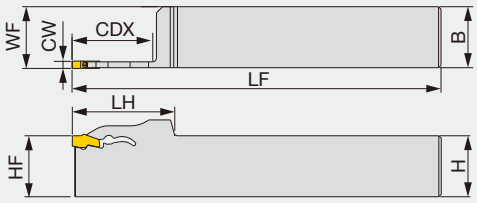
ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed *Vc* (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Wear resistance	T9225, AH8005	80 - 300
		< 300 HB	Impact resistance	AH6235, GH130	50 - 120
		< 300 HB	Surface quality	NS9530	80 - 220
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Wear resistance	AH8005	50 - 120
		< 200 HB	Impact resistance	AH6235, GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	T515	150 - 700
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	T515	150 - 300
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
		-	First choice	KS05F	100 - 600
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	20 - 60
		< HRC 40	Impact resistance	AH7025, AH725, AH6235	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	20 - 100
		< HRC 40	Impact resistance	AH7025, AH725	20 - 80
H	Hardened steel SCM435, SUJ2, etc. 34CrMo4, B1, etc.	> HRC 50	First choice	BX360	80 - 150

Please see page G182, G183 for feed: *f* (mm/rev).

QSER/L

External toolholders for grooving and parting





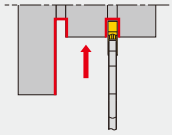


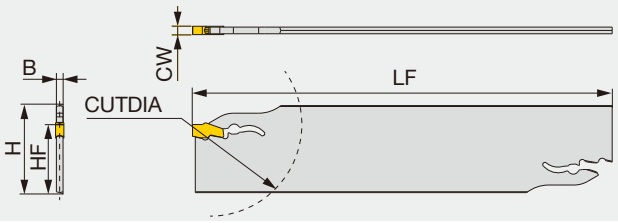
Right hand (R) shown.

Designation	CW	CDX	Seat size	H	B	LF	LH	HF	WF
QSER/L2020-2T26	2	26	2	20	20	125	36	20	20.1
QSER/L2020-2T33	2	33	2	20	20	125	42	20	20.1
QSER/L2020-3T26	3	26	3	20	20	125	36	20	20.3
QSER/L2020-3T33	3	33	3	20	20	125	42	20	20.3
QSER/L2020-4T33	4	33	4	20	20	125	42	20	20.4

QSP

Blades for external deep grooving and parting



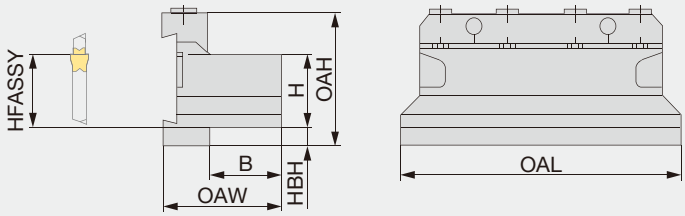




Designation	CW	CUTDIA	Seat size	H	B	LF	HF
QSP26-2D	2	50	2	26	1.8	150	21.4
QSP32-2D	2	66	2	32	1.8	150	24.8
QSP26-3D	3	75	3	26	2.4	150	21.4
QSP32-3D	3	120	3	32	2.4	150	24.8
QSP26-4D	4	80	4	26	3.2	150	21.4
QSP32-4D	4	120	4	32	3.2	150	24.9
QSP32-5D	5	120	5	32	4	150	24.9

CTBU

Tool block for QSP blades



Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU20-26	20	21	86	20	9	43	38	QSP26...
CTBU20-32	20	19	100	20	13	50	38	QSP32...

SPARE PARTS



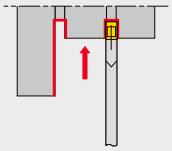


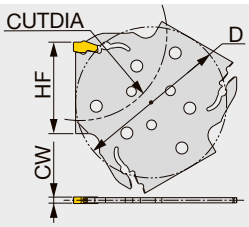
Designation	Clamp	Clamping screw	Wrench
QSER/L..., QSP...	-	-	QL-39
CTBU20-26	CT-86	CM6X30-S	P-5
CTBU25-26	CT-105	CM6X30-S	P-5
CTBU20-32	CT-100	CM6X30-S	P-5
CTBU25-32	CT-110	CM6X30-S	P-5
CTBU32-32	CT-110	CM6X30-S	P-5

Reference pages: QSER/L, QSP: Inserts → G193, Standard cutting conditions → G194

QSG

Parting-off and external grooving blade



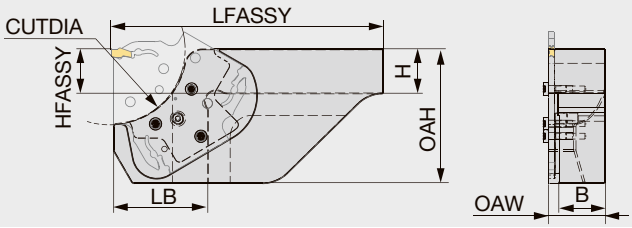




Designation	CW	Seat size	CUTDIA	HF	D
QSG52-2T	2	2	52	27	48.3
QSG82-2T	2	2	82	42	69.3
QSG52-3T	3	3	52	27	48.3
QSG82-3T	3	3	82	42	69.3
QSG52-4T	4	4	52	27	69.3
QSG82-4T	4	4	82	42	69.3

CHTBR/L

Tool block for QSG blade



Right hand (R) shown.

Designation	CUTDIA	H	B	LFASSY	HFASSY	OAH	OAW	LB
CHTBR/L2020-52	52	20	20.5	100	20	50	26.5	37
CHTBR/L2020-82	82	20	20.5	140	20	75	26.5	53

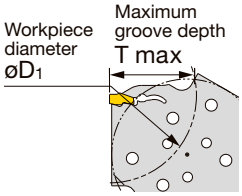
The blade clamping screw heads protrude out for as much as 3.1 mm over the insert cutting edge point.
Maintain the clearance from the chucking device to avoid interference.

SPARE PARTS






Designation	Clamping screw	Grip	Torx bit	Wrench
QSG...	-	-	-	QL-39
CHTBR/L...	SR ISO 14580 M4X10	SW6-SD	BLDT20/S7	-



Maximum groove depth (T max) as function of workpiece diameter (øD1)

Designation	øD1																	
CHTBR/L****-D52	53	54	55	56	58	60	62	65	68	72	78	84	92	102	115	133	159	198
CHTBR/L****-D82	104	108	112	116	121	127	134	142	151	162	176	192	212	237	270	313	375	468
T max	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

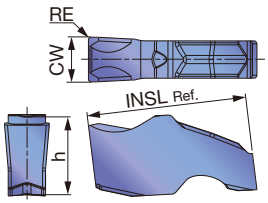
Designation	øD1												
CHTBR/L****-D82	83	84	84	85	86	87	89	90	92	94	96	98	101
T max	34	33	32	31	30	29	28	27	26	25	24	23	22

Reference pages: QSG: Inserts → G193, Standard cutting conditions → G194

QGM

External deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

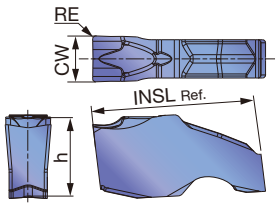
Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGM2-020	2	2	0.2	●	11	5.3
QGM3-020	3	3	0.2	●	11	5.3
QGM4-030	4	4	0.3	●	13	7.3
QGM5-030	5	5	0.3	●	13	7.3

●: Line up

QGS

External deep grooving and parting





P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

Designation	Seat size	CW±0.05	RE	Coated AH7025	INSL	h
QGS2-020	2	2	0.2	●	11	5.3
QGS3-020	3	3	0.2	●	11	5.3
QGS4-030	4	4	0.3	●	13	7.3
QGS5-030	5	5	0.3	●	13	7.3

●: Line up

Reference pages: Toolhoders → G191, G192, Standard cutting conditions → G194

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Grade	Cutting speed *Vc* (m/min)
P	Steels C45, 34CrMo4, etc.	< 300 HB	AH7025	50 - 180
M	Stainless steel X10CrNiS18-9, etc.	< 200 HB	AH7025	50 - 120
K	Gray cast iron GG25, 250, etc.	-	AH7025	50 - 180
	Ductile cast irons GGG45, 450-10S, etc.	-	AH7025	50 - 120
S	Superalloys Inconel718, etc.	< HRC 40	AH7025	20 - 60
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	AH7025	20 - 80

MEMO

Alphanumeric Index

Turning Grooving

Designation	Product name	Page
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06IRA60	60° angle threading insert	E010
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08IRA60	60° angle threading insert	E010
10ER/L□□□B	Positive insert for back turning	B162, G091
10ER/L300	Positive insert for back turning	B162, G091
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11IR□□ISO-M	ISO metric threading insert	E019
11IR□□PT	BSPT threading insert	E024
11IR□□UN	Unified threading insert	E021
11IR□□W	Whitworth threading insert	E023
11IR10MJ	MJ threading insert	E028
11IRA55	55° angle threading insert	E015
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16ER□□W-B	Whitworth threading insert	E023
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16ER□RD-B	Round threading insert	E027
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16ER8RD-CB	API Round threading insert	E030
16ER8UN-B	Unified threading insert	E022
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16ER8UN-M	Unified threading insert	E022
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16ERA60	60° angle threading insert	E010
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16ERAG55	55° angle threading insert	E015
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16IR8UN-B	Unified threading insert	E022
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16IRAG60	60° angle threading insert	E010
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16IRG55	55° angle threading insert	E015
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