

Miniature Machining



Miniature Machining - Content structure

- Products are listed by application.
- In the same application, products are listed by insert shape.
- 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 insert shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (⑤) in the dimension table (④). Applicable inserts are shown in (⑦) and (⑨).

Method ② Select the series name on G003 and check the details on each page.

Method ③ Select an item from Quick Guide on G004 - G025.

CC
Rhombic, 80°
with hole
Positive 7°

MODUMTURN
QC12-JSCL2CR-Y

Screw-on Y-axis turning modular head with 95° approach angle, for positive 80° rhombic inserts

Without offset

Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSCL2CR9-Y-CHP	12	12	19.5	0	6	19.8	18.6	0.3	0.2	CC"10RT3... (CC"32.5...)	1.2 (0.88)

RE** Standard corner radius

QC12-JSCL2CR

Screw-on modular head with 95° approach angle, for positive 80° rhombic inserts

Without offset

Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR9	12	12	19.5	12	6	19	13.2	CC"10RT3... (CC"32.5...)	1.2 (0.88)

Torque: Recommended clamping torque: N m (lbf ft)

RE** Standard corner radius

SPARE PARTS

Clamping screw	Wrench	ORIS
QC12-JSCL2CR9-Y-CHP	CSTB-450	1-6F
QC12-JSCL2CR9	CSTB-450	1-6F
QC12-JSCL2CR9-Y-CHP	CSTB-450	ORIS-0454-SX1-0NBR70

Reference pages : QC12-JSCL2CR-Y, QC12-JSCL2CR-Y-CHP, QC12-JSCL2CR:
Inserts → B112 -, CBN → B191, PCD → B213, Shank, Accessory → G115, G116

G030 tungaloy.com/us

QC12-JSCL2CR-CHP

Screw-on modular head with 95° approach angle, for positive 80° rhombic inserts, with high pressure

Without offset

Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR9-CHP	12	12	19.5	12	6	21	0.2	CC"10RT3... (CC"32.5...)	1.2 (0.88)

Torque: Recommended clamping torque: N m (lbf ft)

RE** Standard corner radius

SPARE PARTS

Clamping screw	Wrench	ORIS
QC12-JSCL2CR9-CHP	CSTB-450	1-6F
QC12-JSCL2CR9-CHP	CSTB-450	ORIS-0454-SX1-0NBR70

INSERT SELECTION

Application area	Precision finishing	Finish cutting	Medium to finish cutting	Application area	Precision finishing	Finish cutting	Medium to finish cutting
Grinding	SH725	SH725	SH725	Grinding	SH725	SH725	SH725
Brother Shape	SH725	SH725	SH725	Brother Shape	SH725	SH725	SH725
Cutting conditions	Q114	Q114	Q114	Cutting conditions	Q114	Q114	Q114
Application area	Medium to finish cutting	Medium to finish cutting	Medium to finish cutting	Application area	Medium to finish cutting	Medium to finish cutting	Medium to finish cutting
Grinding	SH725	SH725	SH725	Grinding	SH725	SH725	SH725
Brother Shape	SH725	SH725	SH725	Brother Shape	SH725	SH725	SH725
Cutting conditions	Q114	Q114	Q114	Cutting conditions	Q114	Q114	Q114
Application area	Medium to finish cutting	Medium to finish cutting	Medium to finish cutting	Application area	Medium to finish cutting	Medium to finish cutting	Medium to finish cutting
Grinding	SH725	SH725	SH725	Grinding	SH725	SH725	SH725
Brother Shape	SH725	SH725	SH725	Brother Shape	SH725	SH725	SH725
Cutting conditions	Q114	Q114	Q114	Cutting conditions	Q114	Q114	Q114
Application area	Medium to finish cutting	Medium to finish cutting	Medium to finish cutting	Application area	Medium to finish cutting	Medium to finish cutting	Medium to finish cutting
Grinding	SH725	SH725	SH725	Grinding	SH725	SH725	SH725
Brother Shape	SH725	SH725	SH725	Brother Shape	SH725	SH725	SH725
Cutting conditions	Q114	Q114	Q114	Cutting conditions	Q114	Q114	Q114

Reference pages : QC12-JSCL2CR-CHP: Inserts → B112 -, CBN → B191, PCD → B213
Shank, Accessory → G115, G116

Tungaloy G031

- ① : Application

② : Insert shape

③ : Tool series name

④ : Dimension table

⑤ : Toolholder designation

e.g. right-hand, 0.5 inch square shank

⑥ : Dimension drawing (conforming to ISO13399)

⑦ : Applicable insert

⑧ : Spare parts

⑨ : Insert selection

⑩ : Reference page

→ JSDJ2XR082 X-CHP

When ordering

- Please specify the designation and quantity.

e.g. JSWL2XR082X-CHP ... 1 (one toolholder per package)

* Inserts are not included. Please order those separately.

Main products



MODUM^{INI}TURN

Modular head turning toolholder system



G026



MINIV^{LOCK}GROOVE

High precision grooving and threading tool series for CNC automatic lathes



G014, G020, G083 -, G168 -



MINI^{FORCE}TURN

Economical double-sided inserts with excellent sharpness



G029



J-SERIES

Toolholders for small-part machining



G004 -, G032 -
G106 -, G182 -



TETRA^MCUT

Unique insert pocket geometry for grooving with high quality and precision



CW = 0.013" - 0.125"

G014 -
G016 -, G020 -
G086 -, G137 -, G170 -



TETRA^{FORCE}CUT

4-cornered insert with good clamping rigidity for highly precise grooving and parting



CW = 0.02" - 0.125"

G014, G099 -



DUO^{FORCE}CUT

New flexible turning tool series for CNC automatic lathes and cam-driven lathes

CW = 0.02" - 0.039"

G074, G140 -



DUO^{JUST}CUT

Innovative clamping system for high rigidity in parting



CW = 0.024" - 0.079"

G018 -, G022 -
G142 -, G176 -



TUNG^{CUT}

Multi-functional tool series for various grooving operations



CW = 0.047" - 0.157"

G018 -, G148 -



TINY^{MINI}TURN

Solid boring bar for turning small diameters with high precision



G024 -, G123 -



TUNG^{HEAVY}GROOVE

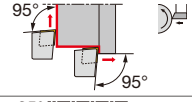
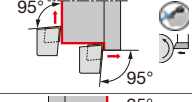
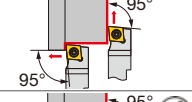
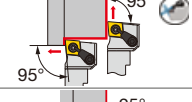
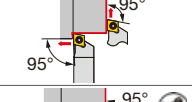
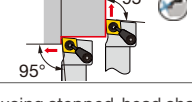
Highly rigid clamping for wide grooving and profiling in one pass

CW = 0.394" - 1.000"

G016, G112 -

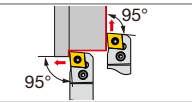
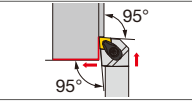
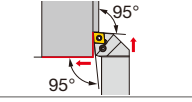
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CC** inserts

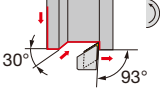
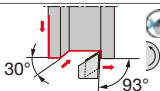
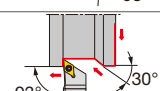
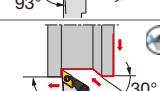
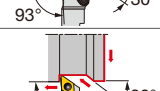
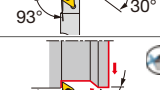
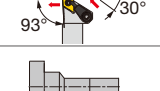
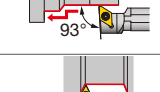
Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)					Holder			Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.750 x 0.750	MODULAR TURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
95°		QC-JSCL2CR-Y	CC**3...		○	○			○	○		✓		without*	G030
		QC-JSCL2CR-Y-CHP	CC**3...		○	○			○	○	○	✓		without*	G030
		QC-JSCL2CR	CC**3...		○	○			○			✓		without*	G030
		QC-JSCL2CR-CHP	CC**3...		○	○			○		○	✓		without*	G031
		JSCL2CR/L	CC**2...	○	○		○					✓		without	G032
		JSCL2CR-CHP	CC**3...		○		○				○	✓		without	G033

* When using stepped-head shank, the "Offset" will be "with".

CN** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)		Holder	Clamping style				Offset	Page
				0.625 x 0.625	0.750 x 0.750		Screw-on	Back-clamp	Lever-lock	Double-clamp		
95°		PCLNR/L	C/GN**33		○		✓				with	G036
		ACLNR/L	C/GN**33/43		○			✓			with	C019
		PCLNR/L-CHP	C/GN**33		○	○			✓		with	C023

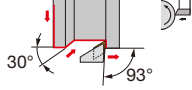
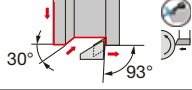
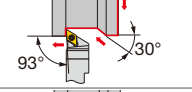
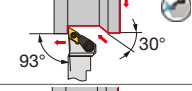
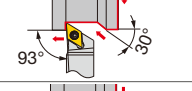
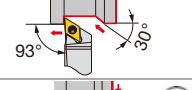
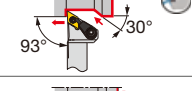
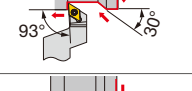
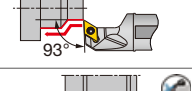
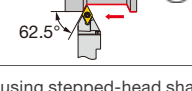
DC** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)				Cylindrical shank (shank dia.)		Holder			Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	ø0.625	ø0.750	MODULAR (Modular head)	Y-axis feed	TUNGJET (through-coolant)	Screw-on	Back-clamp		
93°		QC-JSDJ2CR-Y	DC**2		○	○				○	○		✓		without*	G037
		QC-JSDJ2CR-Y-CHP	DC**2		○	○				○	○	○	✓		without*	G038
		QC-JSDJ2CR	DC**2/3		○	○				○			✓		without*	G038
		QC-JSDJ2CR-CHP	DC**2/3		○	○				○		○	✓		without*	G038
		JSDJ2CR/L	DC**2/3	○	○		○						✓		without	G039
		JSDJ2CR/L-CHP	DC**2/3		○		○					○	✓		without	G040 G041
		JS-SDUCL	DC**2/3						○				✓		-	G043
62.5°		JSDNCN	DC**2	○	○		○						✓		with	G044

* When using stepped-head shank, the "Offset" will be "with".

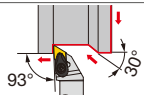
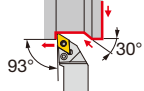
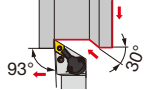
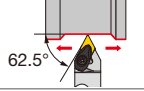
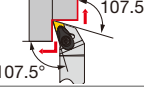
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DX*U inserts

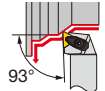
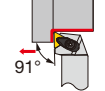
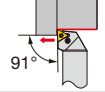
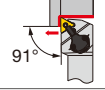
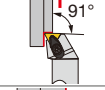
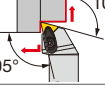
Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)						Cylindrical shank (shank dia.)		Holder			Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.625 x 0.750	0.750 x 0.750	ø0.625	ø0.750	MODULAR TURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
93°		QC-JSDJ2XR-Y	DX*U	○	○							○	○		✓		without*	G046
		QC-JSDJ2XR-Y-CHP	DX*U	○	○							○	○	○	✓		without*	G046
		QC-JSDJ2XR	DX*U	○	○							○			✓		without*	G046
		QC-JSDJ2XR-CHP	DX*U	○	○							○		○	✓		without*	G047
		JSDJ2XR/L	DX*U	○	○		○								✓		without	G047
		JPDJ2XR/L	DX*U	○	○		○									✓	without	G048
		JSDJ2XR/L-CHP	DX*U	○			○							○	✓		without	G048
		JSDJXR-F	DX*U			○		○							✓		with	G049
		JSDJXR/L	DX*U						○						✓		with	C057
		JS-SDUXL	DX*U							○	○				✓		-	G050
62.5°		QC-JSDNXR-CHP	DX*U	○	○							○		○	✓		without*	G051

* When using stepped-head shank, the "Offset" will be "with".

DN** inserts

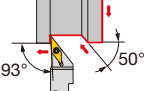
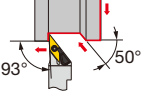
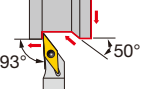
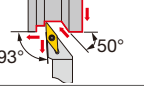
Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)		Holder TUNGJET (Through-coolant)	Clamping style		Offset	Page
				0.625 x 0.625	0.750 x 0.750		Lever-lock	Double-clamp		
93°		ADJNR/L	DN**33/43/44		○			✓	with	C036
		PDJNR/L	DN**33/43/44	○	○		✓		with	G052
		PDJNR/L-CHP	DN**33/43/44		○	○	✓		with	C039
62.5°		ADPNN	DN**43		○			✓	with	C049
107.5°		ADQNR/L	DN**33/43/44		○			✓	with	C045

TN** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)		Holder TUNGJET (Through-coolant)	Clamping style		Offset	Page
				0.625 x 0.625	0.750 x 0.750		Lever-lock	Double-clamp		
93°		ATJNR/L	TN**33		○			✓	with	C088
91°		ATGNR/L	TN**33		○			✓	with	C091
		PTGNR/L	TN**23		○		✓		with	C092
		PTGNR/L-CHP	TN**23/33		○	○	✓		with	C093
		ATFNR/L	TN**33		○			✓	with	C094
105°		ATQNR/L	TN**33		○			✓	with	C096

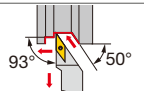
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VB** inserts

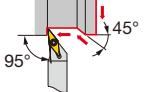
Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)						Holder	Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.625 x 0.750	0.750 x 0.750		Screw-on	Back-clamp		
93°		QC-JSVJ2BR	VB**22		○	○					✓		without*	G058
		QC-JSVJ2BR-CHP	VB**22		○	○				 	✓		without*	G058
		JSVJ2BR/L	VB**22	○	○		○				✓		without	G058
		JSVJ2BR/L-CHP	VB**22		○		○				○	✓	without	G059
		JSVJBR/L	VB**22						○		✓		with	G060

* When using stepped-head shank, the "Offset" will be "with".

VC** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)		Clamping style		Offset	Page
				0.625 x 0.625	0.750 x 0.750	Screw-on	Back-clamp		
93°		SVJCR	VB**33	○	○	✓		with	C113

VP** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)			Clamping style		Offset	Page
				0.500 x 0.500	0.625 x 0.625	0.750 x 0.750	Screw-on	Back-clamp		
93°		JSVL2PR/L	VP**22	○	○		✓		without	G062

YWMT inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)		Clamping style		Offset	Page
				0.625 x 0.625	0.750 x 0.750	Screw-on	Back-clamp		
93°		SYJBR/L	YWMT16		○	✓		with	C130
100°		SYHBR/L	YWMT16		○	✓		with	C132
77.5°		SYIBN	YWMT16		○	✓		with	C131
122.5°		SYQBR/L	YWMT16		○	✓		with	C131

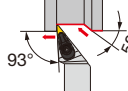
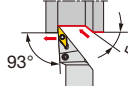
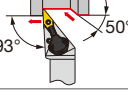
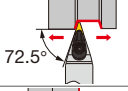
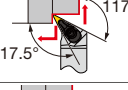
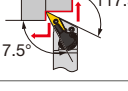
VXGU inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)						Cylindrical shank (shank dia.)	Holder	Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.625 x 0.750	0.750 x 0.750			Screw-on	Back-clamp		
93°		QC-JSVJ2XR	VXGU	○	○						○	✓		without*	G064
		QC-JSVJ2XR-CHP	VXGU	○	○						○	○	✓	without*	G064
		JSVJ2XR/L	VXGU	○	○		○					✓		without	G065
		JPVJ2XR/L	VXGU	○	○		○						✓	without	G065
		JSVJ2XR/L-CHP	VXGU		○		○				○	✓		without	G066
		JSVJXR-F	VXGU			○		○				✓		with	G067
		JSVJXR/L	VXGU						○			✓		with	C119
72.5°		JS-SVUXL	VXGU							○	○	○	✓	-	C120
		QC-JSVVXR-CHP	VXGU	○	○						○	○	✓	without*	G067

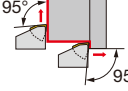
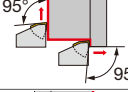
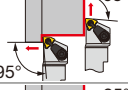
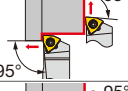
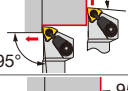
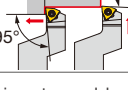
* When using stepped-head shank, the "Offset" will be "with".

Miniature External Turning - Quick Guide

V/YN** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)		Holder 	Clamping style		Offset	Page
				0.625 x 0.625	0.750 x 0.750		Lever-lock	Double-clamp		
93°		AVJNR/L	VN**2.33, V/YN**33		○			✓	with	C103
		PVJNR/L	VN**2.33	○			✓		with	C104
		PVJNR/L-CHP	VN**2.33, V/YN**33		○	○	✓		with	C105
72.5°		AVVNN	VN**2.33, V/YN**33		○			✓	with	C107
117.5°		AVQNR/L	VN**2.33, V/YN**33		○			✓	with	C110
		PVQNR/L-CHP	V/YN**33		○	○	✓		with	C112

WXGU inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)						Holder			Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.625 x 0.750	0.750 x 0.750		Y-axis feed		Screw-on	Back-clamp		
95°		QC-JSWL2XR-Y	WXGU		○	○				○	○		✓		without*	G069
		QC-JSWL2XR-Y-CHP	WXGU		○	○				○	○	○	✓		without*	G069
		QC-JSWL2XR	WXGU		○	○				○			✓		without*	G070
		QC-JSWL2XR-CHP	WXGU		○	○				○		○	✓		without*	G070
		JSWL2XR/L	WXGU	○	○		○						✓		without	G071
		JPWL2XR/L	WXGU	○	○		○							✓	without	G071
		JSWL2XR/L-CHP	WXGU		○		○					○	✓		without	G072
		JSWLXR-F	WXGU			○		○					✓		with	G073

* When using stepped-head shank, the "Offset" will be "with".



WN** inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)			Holder	Clamping style		Offset	Page
				0.500 x 0.500	0.500 x 0.625	0.750 x 0.750		Lever-lock	Double-clamp		
95°		AWLNR/L	WN**43/33			○				✓	with C121
		PWLNR/L	WN**33			○		✓		with C123	
		PWLNR/L-CHP	WN**43/33			○	○	✓		with C124	



J10E inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)			Holder	Clamping style		Offset	Page
				0.500 x 0.500	0.500 x 0.625	0.750 x 0.750		Screw-on	Back-clamp		
Back turning		QC-JSEGR	J10ER...	○	○		○	✓		without* G078	
		QC-JSEGR-CHP	J10ER...	○	○		○	✓		without* G078	

* When using stepped-head shank, the "Offset" will be "with".



JTB inserts

Cutting edge angle	Application	Designation	Insert	Size of square shanks (in)			Clamping style		Offset	Page
				0.375 x 0.375	0.500 x 0.500	0.625 x 0.625	Screw-on	Back-clamp		
Back turning		JTB/L	JTB/L30	○	○	○	✓		without G081	

Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

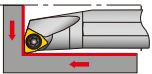
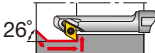
StreamJet-Bar								Min. bore diameter DMIN (in)											Page
Appli- cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	Y-PRO												
								0	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.250		
Boring & Internal facing		SEXPR/L	EP...	Steel Carbide		✓		ϕ 0.250"											D048
		SCLCR/L	CC...	Steel Carbide		✓		ϕ 0.375" ϕ 1.250"											D018
		SCLPR/L	CP...	Steel Carbide		✓		ϕ 0.500" ϕ 0.875"											D022
Boring & internal profiling		SDUCR/L	DC...	Steel Carbide		✓		ϕ 0.625" ϕ 1.000"											D032
		SVUCR/L	VC...	Steel		✓		ϕ 0.625" ϕ 1.000"											D072
		SVUBR/L	VB...	Steel		✓		ϕ 0.875" ϕ 1.000"											D068
		SDQCR/L	DC...	Steel		✓		ϕ 1.000" ϕ 1.250"											D035
		SVQCR/L	VC...	Steel		✓		ϕ 0.625" ϕ 0.875"											D074
		SVQBR/L	VB...	Steel		✓		ϕ 0.688" ϕ 1.000"											D069
		SYUBR/L	YW...	Steel Carbide		✓		ϕ 1.000" ϕ 1.250"											D088
		STUPR/L	TP...	Steel Carbide		✓		ϕ 0.875" ϕ 1.000"											D060
Boring		STUPR/L	TP...	Steel Carbide		✓		ϕ 0.438" ϕ 1.250"											D060
Blind hole boring		STFPR/L	TP...	Carbide		✓		ϕ 0.438" ϕ 0.875"											D057
		STFPR/L	TP...	Carbide		✓		ϕ 0.500" ϕ 1.000"											D057
Blind hole boring		STFCR/L	TC...	Carbide		✓		ϕ 0.500" ϕ 1.000"											D056
		STFCR/L	TC...	Carbide		✓		ϕ 0.500" ϕ 1.000"											D056

StreamJet-Bar

StreamJet-Bar										ISO Insert	Y-PRO	Min. bore diameter DMIN (in)										Page
Appli- cation	Style	Designation	Insert	Material	Through coolant																	
						0	0.125	0.250	0.375			0.500	0.625	0.750	0.875	1.000						
Internal undercut & profiling		SYQBR/L	YW...	Steel Carbide	☐											ø0.750"	ø0.875"	D089				
Back boring		SDZCR/L	DC...	Steel	☐	✓											ø0.875"	D037				
		SVZCR/L	VC...	Steel	☐	✓									ø0.750"	ø1.000"	D076					
		SVZBR/L	VB...	Steel	☐	✓										ø1.000"	D071					
Internal sphere cutting		SVJCR/L	VC...	Steel	☐	✓											ø1.000"	D075				
		SVJBR/L	VB...	Steel	☐	✓											ø1.000"	D070				

Double-sided insert with positive cutting edges

MiniForce-Turn

MiniForce-Turn							MINIFURN	Min. bore diameter DMIN (in)										Page
Appli- cation	Style	Designation	Insert	Material	Through coolant													
						0		0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000			
Boring & Internal facing		SWLXR/L	WX*U...	Steel Carbide	☐	✓				ø0.500"			ø1.000"			D081		
Boring & Internal profiling		SDXXR/L	DX*U...	Steel Carbide	☐	✓				ø0.625"			ø1.000"			D040		
Back boring		SDZXRL	DX*U...	Steel	☐	✓				ø0.625"			ø0.875"			D041		

Miniature Grooving - Quick Guide

External Grooving



MiniVLockGroove

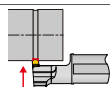
Application	Designation	Insert	Square shank (height x width)				Holder			Groove width (in)			Max. groove depth (in)	Page
			0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	MODUMTURN (Modular head)	TUNG TJET (Through-coolant)	Direct connection	0	0.0313	0.0938		
	QC12-SVER/L-CHP Modular head	VGP...		○	○		○	○	○	0.013"		0.039"	0.079" - 0.157"	G083
	SVER/L	VGP...	○	○						0.020"		0.039"	0.098" - 0.157"	G083
	SVER/L-CHP	VGP...		○				○	○	0.020"		0.039"	0.098" - 0.157"	G084



TetraMini-Cut



TetraMini-Cut

Application	Designation	Insert	Square shank (height x width)						Cylindrical shank (shank dia.)				Holder			
			0.375 x 0.375	0.375 x 0.500	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.750 x 0.750	ø0.500	ø0.625	ø0.750	ø1.000	 (Modular head)	Y-axis feed	 (Through-coolant)	Direct connection
 	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/L...							○	○	○					



TetraForce-Cut

Application	Designation	Insert	Square shank (height x width)				Holder			Groove width (in)						
			0.375 x 0.375	0.500 x 0.500	0.625 x 0.625	0.750 x 0.750	MODUMTURN (Modular head)	TUNG TJET (Through-coolant)	Direct connection	0	0.0313	0.0625	0.0938	0.1250	0.1563	0.1875
	STCR/L-27	TC*27...	○	○	○	○				0.020"				0.125"		
	STCR/L-27-CHP	TC*27...		○		○		○	○	0.020"				0.125"		
	STCR/L-38	TCL38...				○					0.059"			0.157"		

Groove width (in)							Max. groove depth (in)	Page
0	0.0313	0.0625	0.0938	0.1250	0.1563	0.1875		
0.013"					0.125"		0.0315" - 0.138"	G086
0.013"					0.125"		0.0315" - 0.138"	G086
0.013"					0.125"		0.0315" - 0.138"	G087
0.013"					0.125"		0.0315" - 0.138"	G087
0.013"					0.125"		0.0315" - 0.138"	G088
0.013"					0.125"		0.0315" - 0.138"	G088 G089
0.013"					0.125"		0.0315" - 0.138"	G089

Max. groove depth (in)	Page
0.039" - 0.252"	G099
0.039" - 0.252"	G099 G100
0.354" - 0.394"	G105

Grade

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Miniature Grooving - Quick Guide

External Grooving



GTGN

Application	Designation	Insert	Square shank (height x width)				Groove width (in)						
			0.375 x 0.375	0.500 x 0.500	0.625 x 0.625	0.750 x 0.750	0	0.0313	0.0625	0.0938	0.1250	0.1563	0.1875
	CER/L	GTGN-16E...				○	0.039"			0.089"			



TungHeavyGroove

Application	Designation	Insert	Square shank (height x width)			Groove width (in)						Max. groove depth (in)	Page
			0.500 x 0.500	0.625 x 0.625	0.750 x 0.750	0	0.394	0.787	1.181	1.575	1.969		
	FPGN	PSGB...	○	○	○	0.394"			0.984"			-	G111
	SPGN	PSGB...	○	○	○	0.394"			0.984"			-	G112

Internal Grooving



AddInternalCut

Application	Designation	Insert	Cylindrical shank		Groove width (in)	Max. groove depth (in)	Through coolant
			ø0.500	ø0.625			
	A/E-STCIR/L	TCIG10/12...	○	○	0.020" - 0.118"	0.039" - 0.118"	○

Face Grooving



TetraMini-Cut

Application	Designation	Insert	Square shank (height x width)			Cylindrical shank		Groove width (in)	Max. groove depth (in)
			0.375 x 0.375	0.500 x 0.500	0.625 x 0.625	ø0.625	ø0.750		
	JS-STCFL18	TCF18L...				○	○	0.020" - 0.118"	0.039" - 0.118"
	STCFVR-18	TCF18L...	○	○	○			0.020" - 0.118"	0.039" - 0.118"

Max. groove depth (in)	Page
0.049" - 0.071"	F105

Min. bore diameter DMIN (in)									Page
0	0.125	0.250	0.375	0.625	0.750	0.875	1.000		
				ø0.438"			ø0.813"		G117

Min. face groove outside diameter (in)									Page
0	0.125	0.250	0.375	0.625	0.750	0.875	1.000		
		ø0.236"							G137
		ø0.236"							G137

Grade

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Parting



DuoJustCut

Application	Designation	Insert	Square shank (height x width)				Groove width (in)	Holder	
			0.375 x 0.375	0.500 x 0.500	0.625 x 0.625	0.750 x 0.750		TUNGTURN (Through-coolant)	
	JSXXR/L	JXP...	○	○	○	○	0.024" - 0.079"		
	JSXXR/L-CHP	JXP...		○	○		0.024" - 0.079"	○	
	JSXXR/L-S	JXP...	○	○			0.024" - 0.079"		
	JSXXR/L-S-CHP	JXP...		○	○		0.024" - 0.079"	○	



TungCut

Application	Designation	Insert	Square shank (height x width)					Groove width (in)	Holder		
			0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.750 x 0.750		MODULTURN (Modular head)	TUNGTURN (Through-coolant)	Direct connection
	QC12-JTTER/L-CHP Modular head	DG.../ SG...		○	○			0.047" - 0.079"	○	○	○
	J*TER/L	DG.../ SG...		○		○		0.079" - 0.118"			
	JCTER/L-CHP	DG.../ SG...		○		○	○	0.079"		○	○
	CHGP	DG.../ SG...					○	0.079" - 0.157"			
	CGP	DG.../ SG...					○	0.055" - 0.315"			



AddForceCut

Application	Designation	Insert	Square shank					Groove width (in)	Holder		
			0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.750 x 0.750		MODULTURN (Modular head)	TUNGTURN (Through-coolant)	Direct connection
	QSG	QG...					○	0.079" - 0.157"			
	QSP	QG...					○	0.079" - 0.157"			

Max. parting diameter (in)										
0	0.250	0.500	0.750	1.000	1.250	1.500	1.750	2.000	Page	
ø0.236"			ø0.787"							G142
ø0.236"			ø0.787"							G143
ø0.236"			ø0.787"							G142
ø0.236"			ø0.787"							G143

Max. parting diameter (in)										Page
0	0.625	1.250	1.875	2.500	3.125	3.750	4.375	5.000		
ø0.787"										G148
ø0.945" ø1.260"										G149 G150
ø0.980" ø1.260"										G151
ø2.047" ø3.228"										G152
ø1.024" ø4.724"										G152

Max. parting diameter (in)										Page
0	0.625	1.250	1.875	2.500	3.125	3.750	4.375	5.000		
			ø2.047"			ø3.228"				G164
			ø2.047"					ø4.724"		G163

Grade

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External Threading



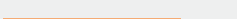
MiniVLockGroove

Application	Designation	Insert	Square shank (height x width)			Corner R (in)	Holder		
			0.375 x 0.375	0.500 x 0.500	0.500 x 0.625		MODULTURN (Modular head)	TUNGJET (Through-coolant)	Direct connection
	QC12-SVER/L-CHP Modular head	VGT10F...		○	○	0.020" - 0.039"	○		○
	SVER/L	VGT10F...	○	○		0.020" - 0.039"			
	SVER/L-CHP	VGT10F...		○		0.020" - 0.039"			○



TetraMini-Cut

Application	Designation	Insert	Square shank (height x width)						Cylindrical shank (shank dia.)				Corner R (in)
			0.375 x 0.375	0.375 x 0.500	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.750 x 0.750	ø0.500	ø0.625	ø0.750	ø1.000	
	QC12-STCR/L-Y Modular head	TCT18R/L...			○	○							0.002" - 0.008"
	QC12-STCR/L-Y-CHP Modular head	TCT18R/L...			○	○							0.002" - 0.008"
	QC12-STCR/L Modular head	TCT18R/L...			○	○							0.002" - 0.008"
	QC12-STCR/L-CHP Modular head	TCT18R/L...			○	○							0.002" - 0.008"
	STCR/L-18	TCT18R/L...	○		○		○	○					0.002" - 0.008"
	STCR/L-18-CHP	TCT18R/L...			○	○							0.002" - 0.008"
	JS-STCL18	TCT18R/L...								○	○	○	0.002" - 0.008"

Threads per inch											Page
0	16	32	48	64	80	96	112	128	144		
12										G168	
12										G168	
12										G168	

	Holder				Threads per inch										Page
	MODULAR (Modular head)	Y-axis feed	TUNGJET (Through-coolant)	Direct connection	0	16	32	48	64	80	96	112	128	144	
	○	○			8				64						G170
	○	○	○	○	8				64						G170
	○				8				64						G171
	○		○	○	8				64						G171
					8				64						G172
			○	○	8				64						G172 G173
					8				64						G173

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

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Miniature Threading - Quick Guide

External Threading



DuoJust-Cut

Application	Designation	Insert	Square shank (height x width)				Corner R (in)	Holder	
			0.375 x 0.375	0.500 x 0.500	0.625 x 0.625	0.750 x 0.750		TUNGJET (Through-coolant)	Direct connection
	JSXXR/L	JXTG12...	○	○	○	○	0.002" - 0.004"		
	JSXXR/L-CHP	JXTG12...		○	○		0.002" - 0.004"	○	○
	JSXXR/L-S	JXTG12...	○	○			0.002" - 0.004"		
	JSXXR/L-S-CHP	JXTG12...		○	○		0.002" - 0.004"	○	○



TungThread

Application	Designation	Insert	Square shank (height x width)					Corner R (in)	Holder		
			0.375 x 0.375	0.500 x 0.500	0.500 x 0.625	0.625 x 0.625	0.750 x 0.750		MODULAN (Modular head)	TUNGJET (Through-coolant)	Direct connection
	JSE2R16-CHP	16ER...		○		○		0.002" - 0.009"		○	○
	CER/L	16ER/L...					○	0.002" - 0.009"		○	○

Internal Threading



TungThread

Application	Designation	Insert	Min. bore diameter DMIN (in)	Corner R (in)
	SIR	6/8IR...	ø0.640" - ø1.800"	0.002" - 0.007"
	SNR	6IR...	ø0.750"	0.002" - 0.004"

Threads per inch												Page
0	16	32	48	64	80	96	112	128	144			
16										127	G176	
16										127	G177	
16										127	G176	
16										127	G177	

Threads per inch												Page
0	16	32	48	64	80	96	112	128	144			
8										50.8	G180	
8										50.8	E036	

Threads per inch												Page
0	16	32	48	64	80	96	112	128	144			
12.7										50.8	E054	
14.5										50.8	E055	

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

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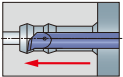
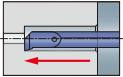
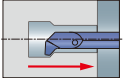
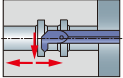
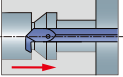
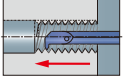
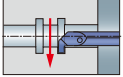
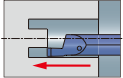
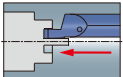
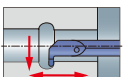
L

M

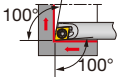
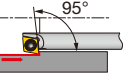
Miniature Internal Turning - Quick Guide

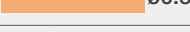
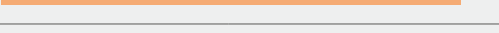
TinyMini-Turn

Solid carbide tools for small diameters turning

	Application	Description	Material	Through coolant	Cylindrical shank		Groove width
					ø4	ø7	
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	Through coolant	Min. bore diameter DMIN (mm)						Page
			ø7		0	2	4	6	8	10	
Boring & internal facing		SEXPR	○	○				ø5	ø6		G133
Back boring		SEZPR	○	○				ø5.5			G133

Min. bore diameter DMIN (mm)										Page
0	2	4	6	8	10	12	14	15		
ø1  ø7									G125	
ø0.6  ø7									G123, G124	
ø2.8  ø5									G126	
ø2.8  ø5										
ø5  ø5									G126	
ø5  ø5									G127	
ø5  ø6.8									G127	
ø5  ø6.8										
ø3  ø7									G128	
ø3  ø5										
ø4  ø7									G128	
ø4  ø6									G129	
ø2  ø6.8									G129	
ø2  ø6.8									G130	
ø6  ø15									G131	
ø6  ø15										
ø6  ø6									G132	
ø6  ø6										
ø5  ø6.8									G132	
ø5  ø6.8										

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

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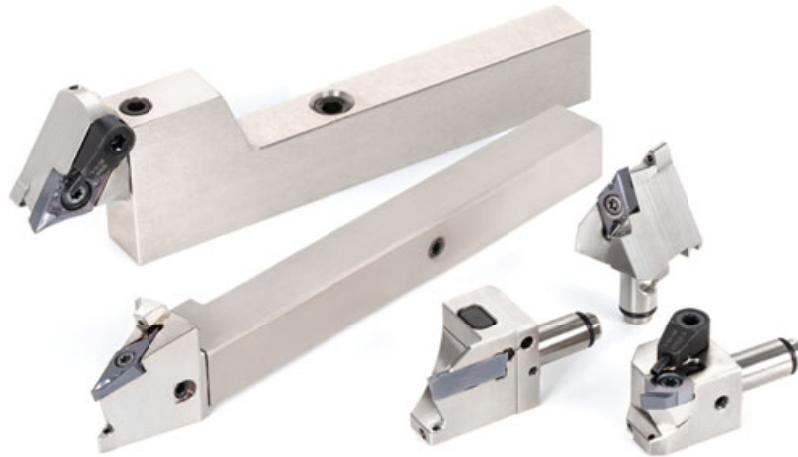
I

J

K

L

M



Modular style Swiss turning tool system facilitates tool changes with high repeatability

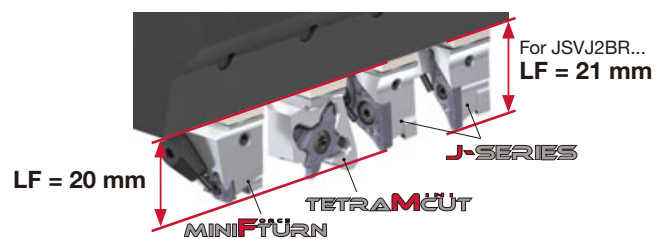
Unique coupling design

Simply loosen the clamping screw for easy tool exchanges. Unique coupling design allows extremely high repeatability.



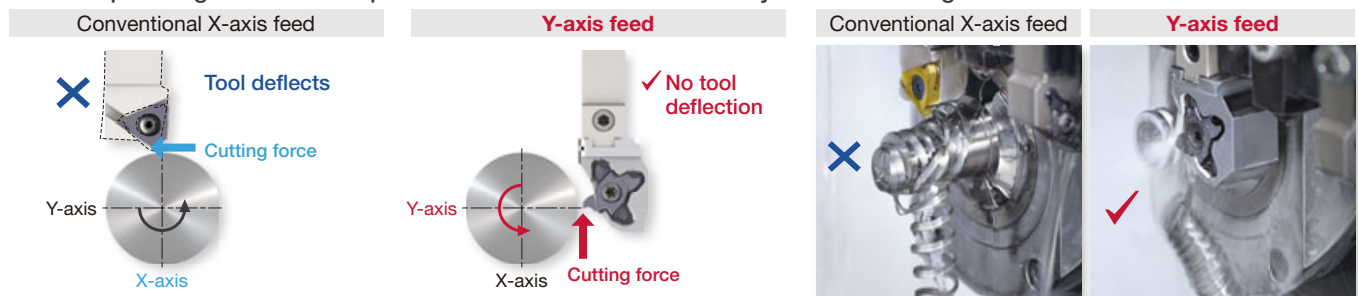
Benefits of Y-axis feed

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



Reference pages : **G030** -, **G083** -, **G148**, **G168** -
Shank, Accessory : **G115**, **G116**



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



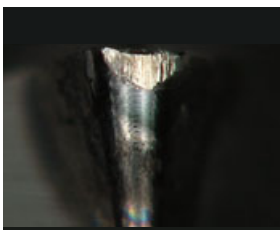
High pressure coolant (7 MPa)



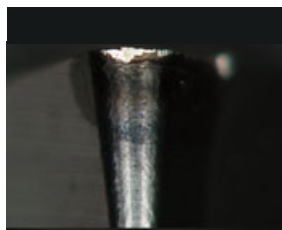
- Coolant jets from two outlets ensure high cutting efficiency and extended tool life

Directly to the cutting edge

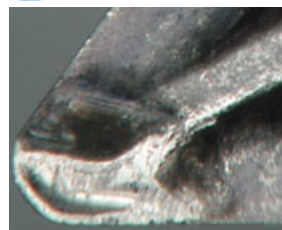
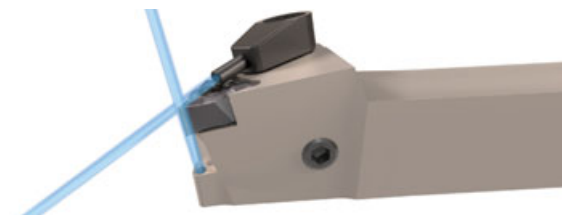
- Reliable chip control
- Reduces crater and notch wears



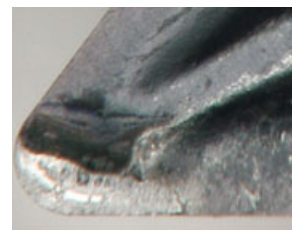
Excessive wear with external coolant supply (at normal pressure)



High pressure coolant (7 MPa)



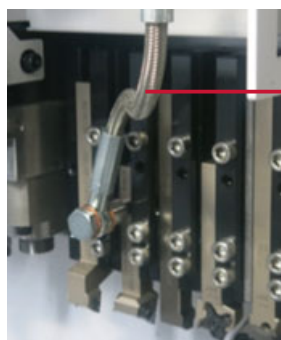
Excessive crater wear with external coolant supply (at normal pressure)



High pressure coolant (7 MPa)

Tube-free design streamlines tool setup.
Through-coolant supply enables high productivity

Conventional



Hose

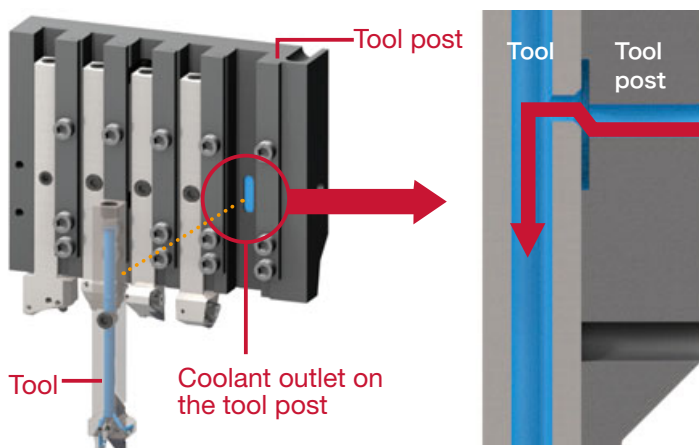


DirectTung-Jet system

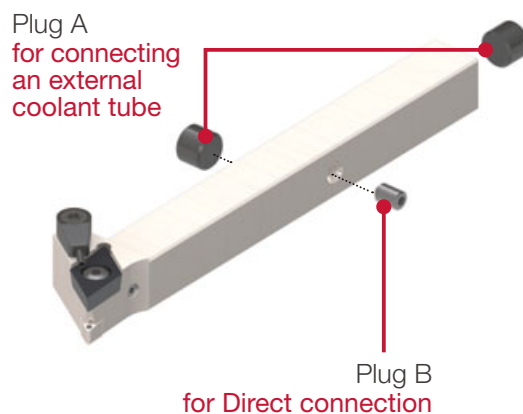


No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

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

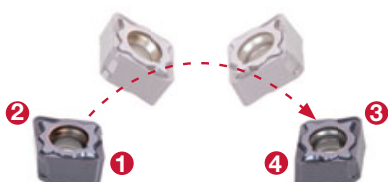


Economical double-sided positive insert

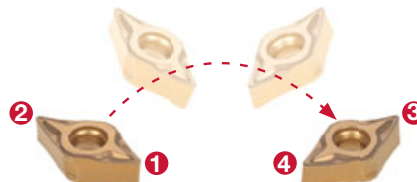
Innovative geometry and seat interface ensures stability and high performance.

■ Insert

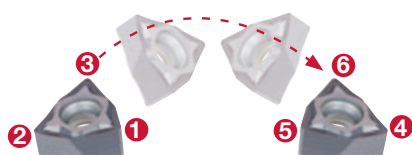
CXMU0603... 4 edges, rhombic 80°



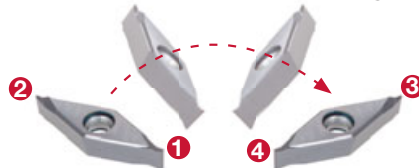
DXM/GU0703... 4 edges, rhombic 55°



WXGU0403... 6 positive cutting edges



VXGU09T2... 4 positive cutting edges



■ High rake angle

WXGU0403...

External turning

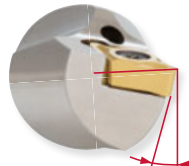
External turning



DXGU0703...

Internal turning

Internal turning



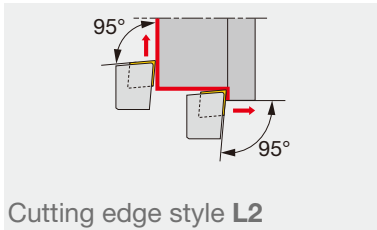
CC



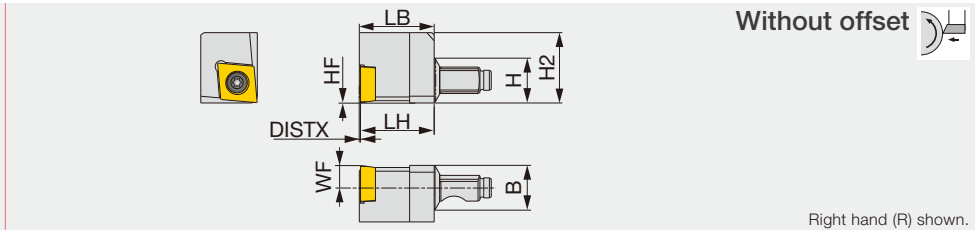
**Rhombic, 80°
with hole
Positive 7°**

MODUM^{INI}TURN QC12-JSCL2CR-Y

Screw-on Y-axis turning modular head with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style L2

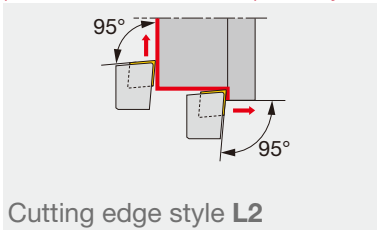


Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque
QC12-JSCL2CR09-Y	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	19.8 (0.780")	18.6 (0.732")	0.3 (0.012")	0.2 (0.008")	CC**09T3... (CC**32.5...)	1.2 (0.89)

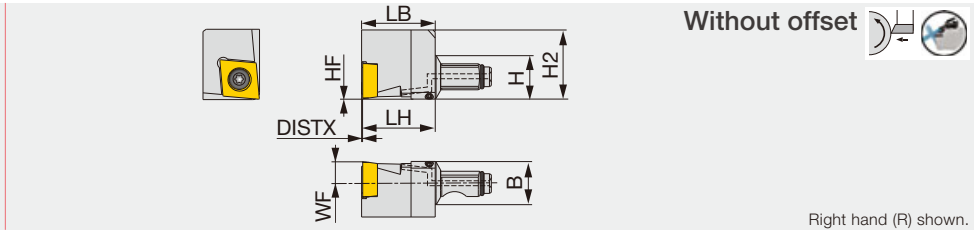
Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius

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

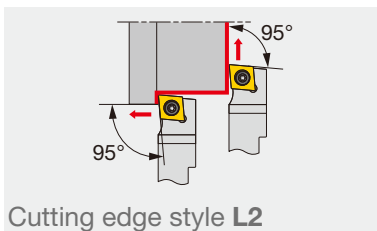


Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSCL2CR09-Y-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	19.8 (0.780")	18.6 (0.732")	0.3 (0.012")	0.2 (0.008")	CC**09T3... (CC**32.5...)	1.2 (0.89)

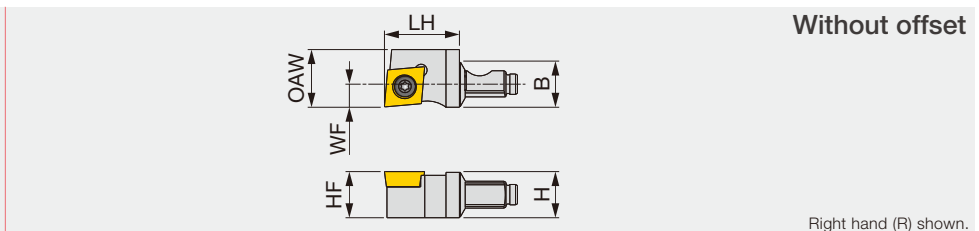
Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius

QC12-JSCL2CR

Screw-on modular head with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style L2



Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR09	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	CC**09T3... (CC**32.5...)	1.2 (0.89)

Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius

SPARE PARTS



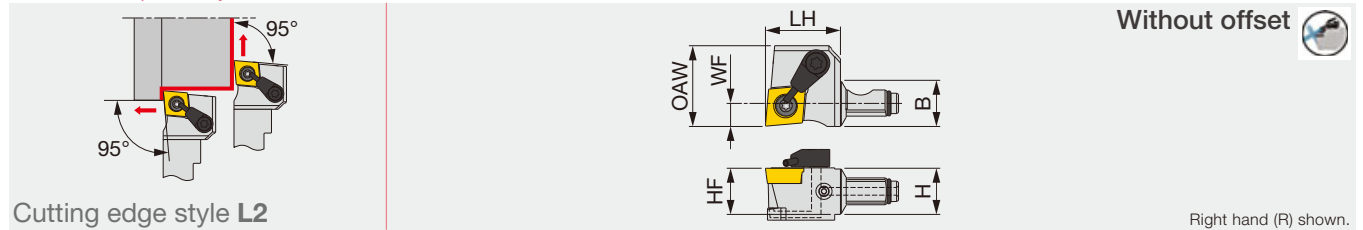
Designation	Clamping screw	Wrench	O-ring
QC12-JSCL2CR09-Y, QC12-JSCL2CR09	CSTB-4SD	T-8F	-
QC12-JSCL2CR09-Y-CHP	CSTB-4SD	T-8F	ORSS-0454.5X1.0NBR70

Reference pages : QC12-JSCL2CR-Y, QC12-JSCL2CR-Y-CHP, QC12-JSCL2CR:

Inserts → **B112** -, CBN → **B191**, PCD → **B213**, Shank, Accessory → **G115**, **G116**

QC12-JSCL2CR-CHP

Screw-on modular head with 95° approach angle, for positive 80° rhombic inserts, with high pressure coolant capability



Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR09-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	21 (0.827")	0.2 (0.008")	CC**09T3... (CC**32.5...)	1.2 (0.89)

Torque: Recommended clamping torque: N·m (lbs·ft)

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
	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	J10		
	Cutting conditions	G114		
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	G114		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	J10		
	Cutting conditions	G114		
N	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	DX110	TH10	KS05F
	Breaker Shape	NS	W20	AL
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	CBN	CBN	
	Breaker Shape	BXA10	BXA20	
	Cutting conditions	B026		

Reference pages : QC12-JSCL2CR-CHP: Inserts → **B112** -, CBN → **B191**, PCD → **B213**
Shank, Accessory → **G115**, **G116**

CC



**Rhombic, 80°
with hole
Positive 7°**

J-SERIES

JSCL2CR/L

Screw-on toolholder with 95° approach angle, for positive 80° rhombic inserts



External



Grooving



Internal



Parting-off



Threading

C

D

F

G

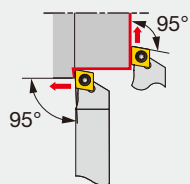
S

T

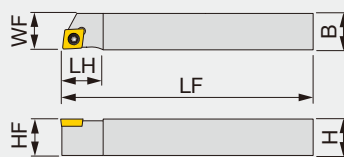
V

W

OTHERS



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSCL2CR/L062	0.375	0.375	5.000	0.438	0.375	0.375	0.008	CC**21.5...	0.89
JSCL2CR/L082	0.500	0.500	5.000	0.438	0.500	0.500	0.008	CC**21.5...	0.89
JSCL2CR/L103	0.625	0.625	5.000	0.625	0.625	0.625	0.008	CC**32.5...	0.89

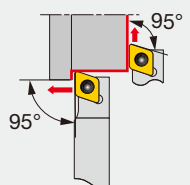
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCL2CR/L1010X06	10	10	120	12	10	10	0.2	CC**0602...	1.2
JSCL2CR/L1212F06	12	12	85	12	12	12	0.2	CC**0602...	1.2
JSCL2CR/L1212X06	12	12	120	12	12	12	0.2	CC**0602...	1.2
JSCL2CR/L1212F09	12	12	85	16	12	12	0.2	CC**09T3...	1.2
JSCL2CR/L1212X09	12	12	120	16	12	12	0.2	CC**09T3...	1.2
JSCL2CR/L1616X09	16	16	120	16	16	16	0.2	CC**09T3...	1.2

Torque: Recommended clamping torque: lbs-ft (*N-m)

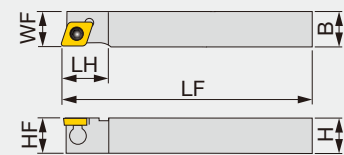
**RE: Standard corner radius

JTCL2CR/L

Back-clamp toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Metric	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

SPARE PARTS



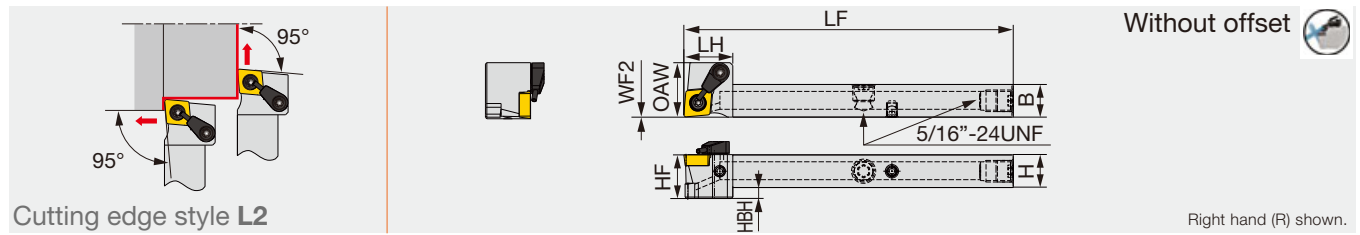
Designation	Clamping screw	Clamp	Clamping screw	Wrench	Wrench 1	Wrench 2 (Optional)
JSCL2CR/L062/082, JSCL2CR/L**06	CSTB-2.5	-	-	-	T-8F	(T-8L)
JSCL2CR/L103, JSCL2CR/L**09	CSTB-4SD	-	-	-	T-8F	(T-8L)
JTCL2CR/L**06	-	JCP-2	JDS-3525	P-2F	-	-
JTCL2CR/L**09	-	JCP-3	JDS-5040	P-2.5F	-	-

Reference pages : JSCL2CR/L, JTCL2CR/L : Inserts → **B112** -, CBN → **B191**, PCD → **B213**

JSCL2CR-CHP

Direct connection

Screw-on toolholder without offset, 95° approach angle for positive 80° rhombic inserts, high pressure coolant compatible



Inch	H	B	LF	LH	HF	HBH	WF2	OAW	RE	Insert	Torque
JSCL2CR083X-CHP	0.500	0.500	4.750	0.709	0.500	0.031	0	0.787	0.008	CC** 32.5...	0.89
JSCL2CR103X-CHP	0.625	0.625	4.750	0.709	0.625	-	0	0.787	0.008	CC** 32.5...	0.89
Metric	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	20	0.2	CC**09T3...	1.2

Torque: Recommended clamping torque: lbs-ft (*N-m) RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench 1	DirectJet plug	Wrench 2
JSCL2CR**-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
P	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
K	Application areas	Medium to finish cutting		
	Grade	SH725		
S	Breaker Shape	J10		
	Cutting conditions	G114		
K	Application areas	medium to finish cutting		
	Grade	T515		
S	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
S	Breaker Shape	JS	JS	
	Cutting conditions	G114		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
M	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
M	Breaker Shape	J10		
	Cutting conditions	G114		
N	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	DX110	TH10	KS05F
N	Breaker Shape	NS	W20	AL
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	BXA10	BXA20	
H	Breaker Shape	CBN	CBN	
	Cutting conditions	B026		

Reference pages : JSCL2CR-CHP: Inserts → **B112** -, CBN → **B191**, PCD → **B213**

CC

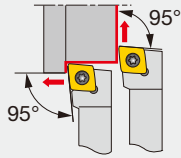


**Rhombic, 80°
with hole
Positive 7°**

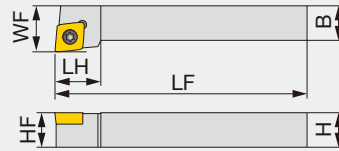
J-SERIES

JSCLCR/L

Screw-on toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style L



Right hand (R) shown.

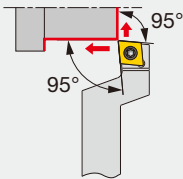
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCLCR/L0808H06	8	8	100	12	8	10	0.4	CC**0602...	1.2
JSCLCR/L1010H06	10	10	100	12	10	12	0.4	CC**0602...	1.2
JSCLCR/L1212H09	12	12	100	16	12	16	0.8	CC**09T3...	1.2
JSCLCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)
RE**: Standard corner radius

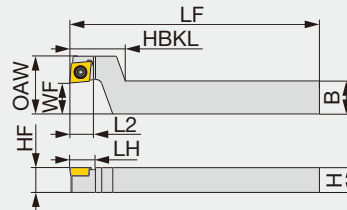
C

JSCLCR-F

Screw-on stepped-head toolholder with 95° approach angle, for positive 80° rhombic inserts



Cutting edge style L



Right hand (R) shown.

Metric	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

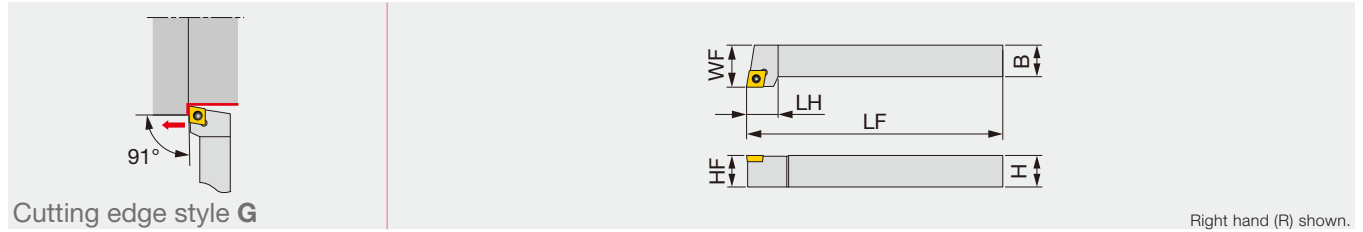


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSCLCR/L**H06	CSTB-2.5	T-8F	-
JSCLCR/L**H09	CSTB-4SD	T-8F	-
JSCLCR**F15	CSTB-4SD	T-8F	(T-8L)

Reference pages : JSCLCR/L, JSCLCR-F: Inserts → **B112** -, CBN → **B191**, PCD → **B213**

JSCGCR/L

Screw-on toolholder with 91° approach angle, for positive 80° rhombic inserts



Metric	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
P	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
P	Breaker Shape	J10		
	Cutting conditions	G114		
K	Application areas	medium to finish cutting		
	Grade	T515		
K	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
S	Breaker Shape	JS	JS	
	Cutting conditions	G114		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
M	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
M	Breaker Shape	J10		
	Cutting conditions	G114		
N	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	DX110	TH10	KS05F
N	Breaker Shape	NS	W20	AL
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	CBN	CBN	
H	Breaker Shape	BXA10	BXA20	
	Cutting conditions	B026		

Reference pages : JSCGCR/L: Inserts → B112 -, CBN → B191, PCD → B213

CN



Rhombic, 80°
with hole

GN

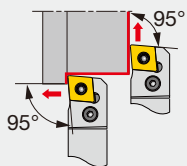


Rhombic, 70°
with hole

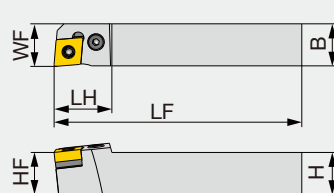
J-SERIES

PCL2NR

Lever-lock toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L2**



Without offset

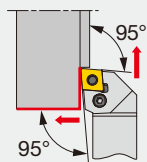
Right hand (R) shown.

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCL2NR2020H12	20	20	100	26	20	20	0.8	CN**/GNGA1204...	3

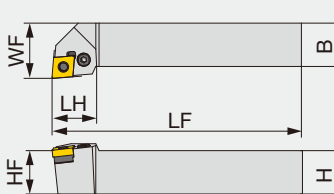
Torque*: Recommended clamping torque (N-m) RE**: Standard corner radius

PCLNR/L

Lever-lock toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style **L**



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PCLNR/L1233	0.750	0.750	4.500	0.813	0.750	1.000	0.031	CN**/GNMG 33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR2020H12	20	20	100	26	20	25	0.8	CN**/GNGA1204...	3

Torque: Recommended clamping torque: lbs-ft (*N-m) RE**: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCLNR/L1233	LSC317	LCS3	LCL33	LSP3	P-2.5
PCL**2020H12	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			

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		

M	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Breaker Shape	SF	SM	SH
	Cutting conditions	B006		

N	Application areas	Finish cutting	Medium cutting
	Grade	DX110	TH10
	Breaker Shape	DIA	P
	Cutting conditions	B010	

H	Application areas	Precision finishing
	Grade	BXA10
	Breaker Shape	HP
	Cutting conditions	B014

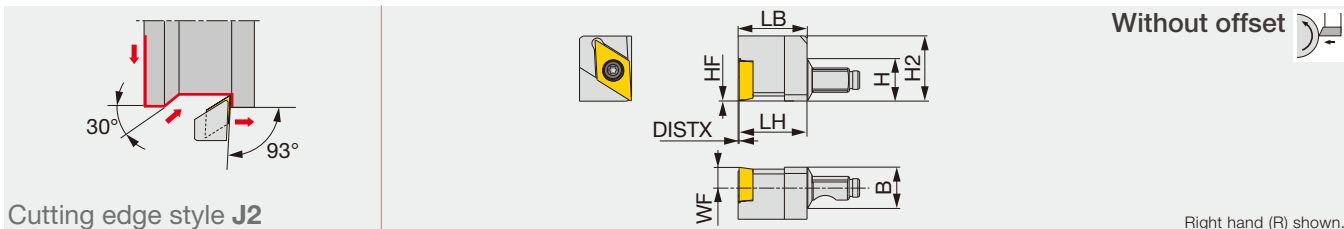
Reference pages : PCL2NR, PCLNR/L: Inserts → **B054** -, CBN → **B168** -, PCD → **B211**

DC

**Rhombic, 55°
with hole
Positive 7°**

MODUM^{INI}TURN QC12-JSDJ2CR-Y

Screw-on Y-axis turning modular head with 93° approach angle, for positive 55° rhombic inserts



Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2CR11-Y	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	19.8 (0.78")	18.7 (0.736")	0.3 (0.012")	0.2 (0.008")	DC**11T3... (DC**32.5...)	1.2 (0.89)

Torque: Recommended clamping torque: N·m (lbs·ft)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
QC12-JSDJ2CR11-Y	CSTB-4SD	T-8F

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	01	JP	JS	JS
	Breaker Shape			
	Cutting conditions	G114		

P	Application areas	Medium to finish cutting
	Grade	SH725
	01	
	Breaker Shape	
	Cutting conditions	G114

K	Application areas	Medium to finish cutting
	Grade	T515
	CM	
	Breaker Shape	
	Cutting conditions	B020

S	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	JS	JS	
	Breaker Shape		
	Cutting conditions	G114	

M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	01	JP	JS	JS
	Breaker Shape			
	Cutting conditions	G114		

M	Application areas	Medium to finish cutting
	Grade	SH725
	01	
	Breaker Shape	
	Cutting conditions	G114

N	Application areas	Precision finishing	Medium cutting
	Grade	DX110	KS05F
	NS	AL	
	Breaker Shape		
	Cutting conditions	B022	

H	Application areas	Precision finishing	Finish cutting
	Grade	BXA10	BXA20
	CBN	CBN	
	Breaker Shape		
	Cutting conditions	B026	

Reference pages : QC12-JSDJ2CR-Y : Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**
Shank, Accessory → **G115, G116**

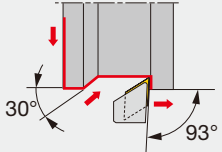
DC

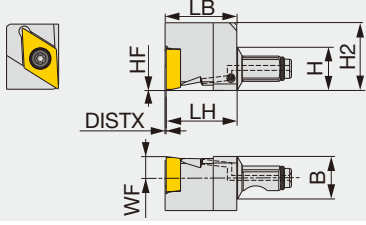
**Rhombic, 55°
with hole
Positive 7°**

MODUMTURN

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



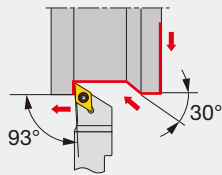


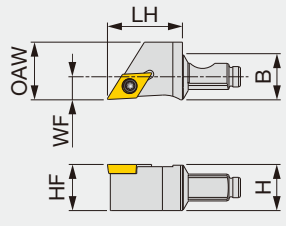
Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2CR11-Y-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	19.8 (0.78")	18.7 (0.736")	0.3 (0.012")	0.2 (0.008")	DC**11T3... (DC**32.5...)	1.2 (0.89)

Torque*: Recommended clamping torque: N-m (lbs-ft)
RE**: Standard corner radius

QC12-JSDJ2CR

Screw-on modular head with 93° approach angle, for positive 55° rhombic inserts



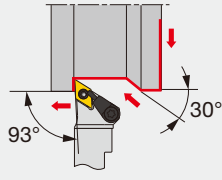


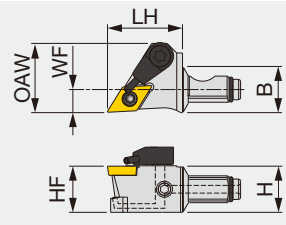
Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2CR07	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	DC**0702... (DC**21.5...)	1.2 (0.89)
QC12-JSDJ2CR11	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	DC**11T3... (DC**32.5...)	1.2 (0.89)

Torque*: Recommended clamping torque: N-m (lbs-ft)
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



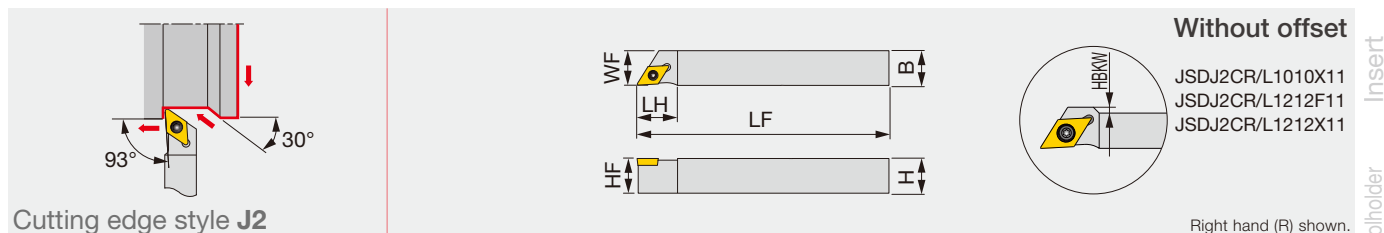


Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2CR07-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	18 (0.709")	0.2 (0.008")	DC**0702... (DC**21.5...)	1.2 (0.89)
QC12-JSDJ2CR11-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	21 (0.827")	0.2 (0.008")	DC**11T3... (DC**32.5...)	1.2 (0.89)

Torque*: Recommended clamping torque: N-m (lbs-ft)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSDJ2CR11-Y-CHP	CSTB-4SD	-	T-8F	ORSS-0454.5X1.0NBR70
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



Cutting edge style J2

Inch	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque
JSDJ2CR/L062	0.375	0.375	5.000	0.563	0.375	0.380	-	0.008	DC**21.5...	0.89
JSDJ2CR/L082	0.500	0.500	5.000	0.563	0.500	0.500	-	0.008	DC**21.5...	0.89
JSDJ2CR/L103	0.625	0.625	5.000	0.813	0.625	0.630	-	0.008	DC**32.5...	0.89

Metric	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: lbs-ft (*N-m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDJ2CR/L062/082, JSDJ2CR/L**07	CSTB-2.5	T-8F	(T-8L)
JSDJ2CR/L103, JSDJ2CR/L**11	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P	Application areas Grade	Precision finishing SH725	Finish cutting SH725	Medium to finish cutting SH725
	01	JP	JS	JS
	Breaker Shape			
	Cutting conditions	G114		

P	Application areas Grade	Medium to finish cutting SH725
	01	
	Breaker Shape	
	Cutting conditions	G114

K	Application areas Grade	Medium to finish cutting T515
	CM	
	Breaker Shape	
	Cutting conditions	B020

S	Application areas Grade	Finish cutting SH725	Medium to finish cutting SH725
	JS	JS	
	Breaker Shape		
	Cutting conditions	G114	

M	Application areas Grade	Precision finishing SH725	Finish cutting SH725	Medium to finish cutting SH725
	01	JP	JS	JS
	Breaker Shape			
	Cutting conditions	G114		

M	Application areas Grade	Medium to finish cutting SH725
	01	
	Breaker Shape	
	Cutting conditions	G114

N	Application areas Grade	Precision finishing DX110	Medium cutting KS05F
	NS	AL	
	Breaker Shape		
	Cutting conditions	B022	

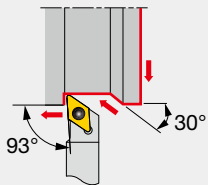
H	Application areas Grade	Precision finishing BXA10	Finish cutting BXA20
	CBN	CBN	
	Breaker Shape		
	Cutting conditions	B026	

DC

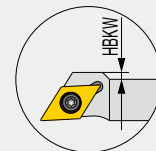
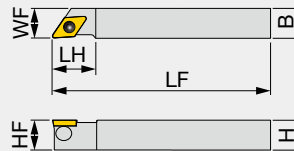
Rhombic, 55°
with hole
Positive 7°

J-SERIES 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.

Metric	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

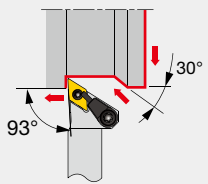
Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

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

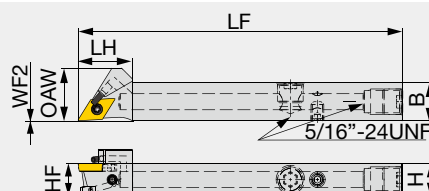


Fig.1

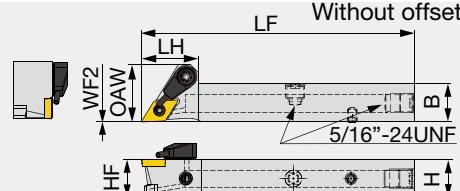


Fig.2

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque	Fig.
JSDJ2CR083X-CHP	0.500	0.500	4.750	0.748	0.500	0	0.807	0.008	DC**32.5...	0.89	-
JSDJ2CR103X-CHP	0.625	0.625	4.750	0.748	0.625	0	0.807	0.008	DC**32.5...	0.89	-
Metric	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: lbs·ft (*N·m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench 1
JTDJ2CR/L**07	JCP-2	JDS-3525	P-2F
JTDJ2CR/L**11	JCP-3	JDS-5040	P-2.5F

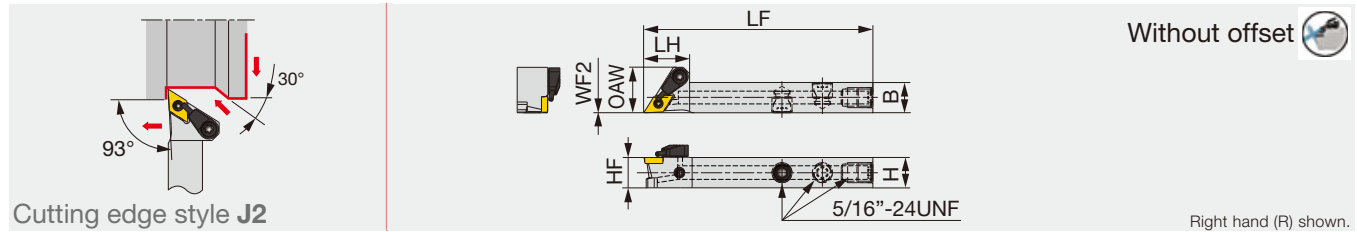
SPARE PARTS

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	SSH4-4-TB	T-8F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSDJ2CR**X-CHP, JSDJ2CR**11-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2

Reference pages : JTDJ2CR/L, JSDJ2CR-CHP: Inserts → **B121** -, CBN → **B193** -, PCD → **B214**

Screw-on toolholders without offset – 93° approach angle. For positive 55° rhombic insert. High-pressure coolant capability.



Cutting edge style J2

Inch	H	B	LF	LH	HF	WF	OAW	RE	Insert	Torque
JSDJ2CR/L082-CHP	0.500	0.500	3.344	0.710	0.500	0.500	0.710	0.2	DC**21.5...	0.89
Metric	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: lbs-ft (*N-m)

RE**: Standard corner radius

SPARE PARTS

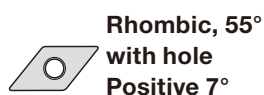
Designation	Clamping screw	Coolant unit	Wrench 1	Wrench 2 (Optional)
JSDJ2CR/L082-CHP, JSDJ2CR/L1212F07-CHP	CSTB-2.5	S-CU-CHP	T-8F	-
JSDJ2CR/L1212F11-CHP	CSTB-4SD	S-CU-CHP	T-8F	-

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G114		
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	G114		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
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 : JSDJ2CR/L-CHP: Inserts → B121 -, CBN → B193 -, PCD → B214

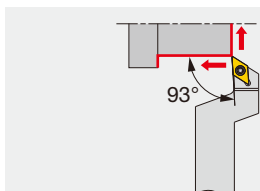
DC



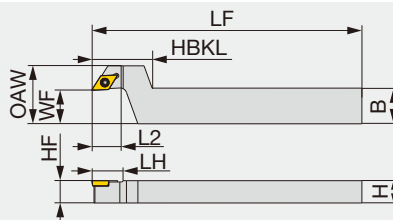
J-SERIES

JSDJCR-F

Screw-on stepped-head toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style J



Right hand (R) shown.

Metric	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

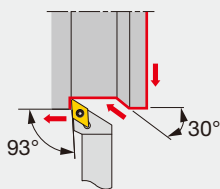
C

D

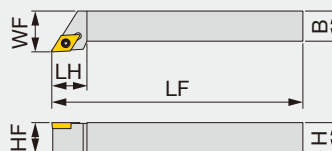
F

JSDJCR/L

Screw-on toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style J



Right hand (R) shown.

Metric	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

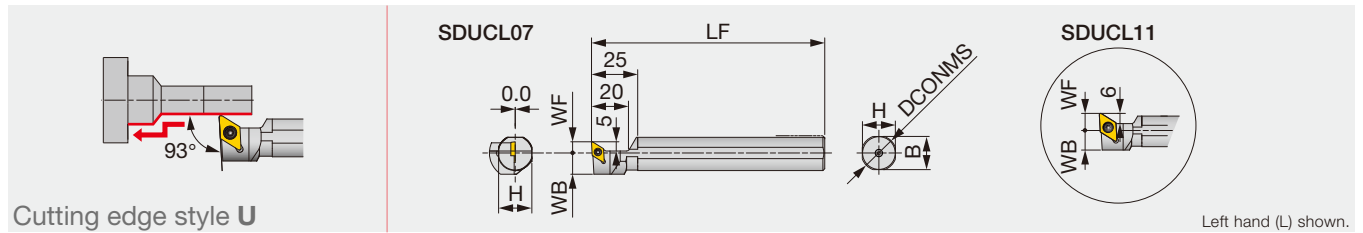


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDJC**H07, JSDJCR**07-F15	CSTB-2.5	T-8F	(T-8L)
JSDJC**H11, JSDJCR**11-F15	CSTB-4SD	T-8F	(T-8L)

Reference pages : JSDJCR-F, JSDJCR/L: Inserts → **B121** -, CBN → **B193** -, PCD → **B214**

JS-SDUCL

Screw-on round-shank toolholder with 93° approach angle, for positive 55° rhombic inserts



Metric	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
P	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
P	Breaker Shape	01		
	Cutting conditions	G114		
K	Application areas	Medium to finish cutting		
	Grade	T515		
K	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
S	Breaker Shape	JS	JS	
	Cutting conditions	G114		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
M	Breaker Shape	01	JP	JS
	Cutting conditions	G114		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
M	Breaker Shape	01		
	Cutting conditions	G114		
N	Application areas	Precision finishing	Medium cutting	
	Grade	DX110	KS05F	
N	Breaker Shape	NS	AL	
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	BXA10	BXA20	
H	Breaker Shape	CBN	CBN	
	Cutting conditions	B026		

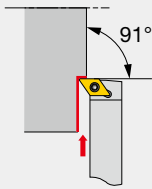
Reference pages : JS-SDUCL: Inserts → B121 -, CBN → B193 -, PCD → B214

DC

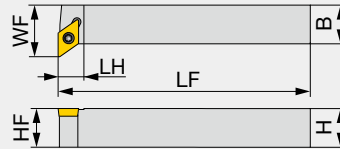
 **Rhombic, 55°
with hole
Positive 7°**

J-SERIES JSDFCR/L

Screw-on toolholder for facing with 91° approach angle, for positive 55° rhombic inserts



Cutting edge style F



Right hand (R) shown.

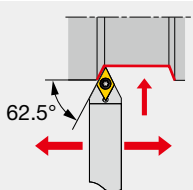
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDFCR/L1212H07	12	12	100	8	12	16	0.4	DC**0702...	1.2
JSDFCR/L1616H11	16	16	100	10.5	16	22	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N-m)

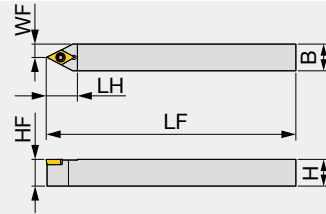
RE**: Standard corner radius

JSDNCN

Screw-on toolholder with 62.5° approach angle, for positive 55° rhombic inserts



Cutting edge style N



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSDNCN062	0.375	0.375	5.000	0.563	0.375	0.188	0.008	DC**21.5...	0.89
JSDNCN082	0.500	0.500	5.000	0.563	0.500	0.250	0.008	DC**21.5...	0.89
JSDNCN103	0.625	0.625	5.000	0.813	0.625	0.313	0.008	DC**32.5...	0.89

Metric	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: lbs-ft (*N-m)

RE**: Standard corner radius

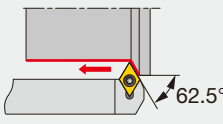
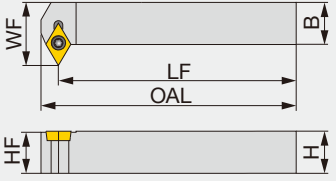
SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDFCR/L1212H07, JSDNCN**07 JSDNCN062, 082	CSTB-2.5	T-8F	(T-8L)
JSDNCN103, JSDNCN**11, JSDFCR/L1616H11	CSTB-4SD	T-8F	(T-8L)

Reference pages : JSDFCR/L, JSDNCN: Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**

JSDN3CR

Screw-on toolholder with 62.5° approach angle (N3-style), for positive 55° rhombic inserts

				Right hand (R) shown.					
Metric	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)
JSDN3CR1212H07	CSTB-2.5	T-8F	(T-8L)
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						G114			

P	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
					
Cutting conditions				G114	

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				G114	

M	Application areas	Precision finishing		Finish cutting	Medium to finish cutting				
	Grade	SH725	SH725	SH725	SH725				
	Breaker Shape	01	JP	JS	JS				
									
Cutting conditions						G114			

M	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
					
Cutting conditions				G114	

N	Application areas	Precision finishing	Finish cutting	Medium cutting					
	Grade	DX110	DX140	KS05F					
	Breaker Shape	NS	DIA	AL					
									
Cutting conditions						B022			

H	Application areas	Precision finishing	Finish cutting		
	Grade	BXA10	BXA20		
	Breaker Shape	HP	CBN		
					
Cutting conditions				B026	

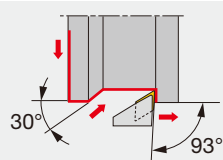
Reference pages : JSDN3CR: Inserts → **B121** -, CBN → **B193** -, PCD → **B214**

DX

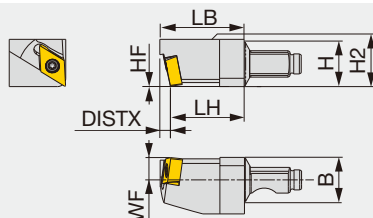


MINIFORCE QC12-JSDJ2XR-Y

Screw-on Y-axis turning modular head with 93° approach angle, for DX*U inserts



Cutting edge style J2



Without offset



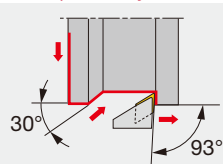
Right hand (R) shown.

Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2XR07-Y	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	22.3 (0.878")	12.5 (0.492")	2.8 (0.110")	0.2 (0.008")	DX*U0703**L... (DX*U22**L...)	0.9 (0.66)

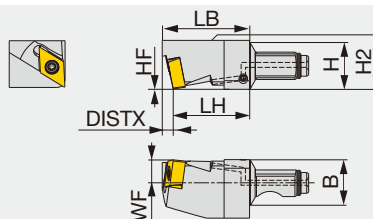
Torque: Recommended clamping torque: N·m (lbs·ft) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

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



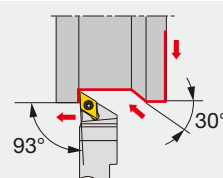
Right hand (R) shown.

Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2XR07-Y-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	22.3 (0.878")	12.5 (0.492")	2.8 (0.110")	0.2 (0.008")	DX*U0703**L... (DX*U22**L...)	0.9 (0.66)

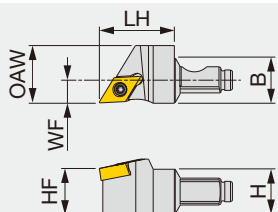
Torque: Recommended clamping torque: N·m (lbs·ft) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSDJ2XR

Screw-on modular head with 93° approach angle, for DX*U inserts



Cutting edge style J2



Without offset

Right hand (R) shown.

Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2XR07	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	DX*U0703**L... (DX*U22**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N·m (lbs·ft) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

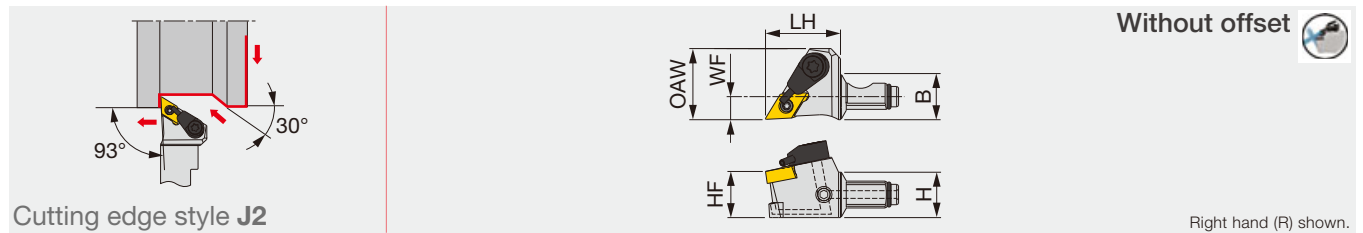


Designation	Clamping screw	Wrench	O-ring
QC12-JSDJ2XR07-Y	SR34-514	T-7F	-
QC12-JSDJ2XR07-Y-CHP, QC12-JSDJ2XR07	SR34-514	T-7F	ORSS-0454.5X1.0NBR70

Reference pages : QC12-JSDJ2XR-Y, QC12-JSDJ2XR-Y-CHP, QC12-JSDJ2XR: Inserts → **B126** -
Shank, accessory → **G115**, **G116**, Standard cutting conditions → **G114**

QC12-JSDJ2XR-CHP

Screw-on modular head with 93° approach angle, for DX*U inserts, with high pressure coolant capability

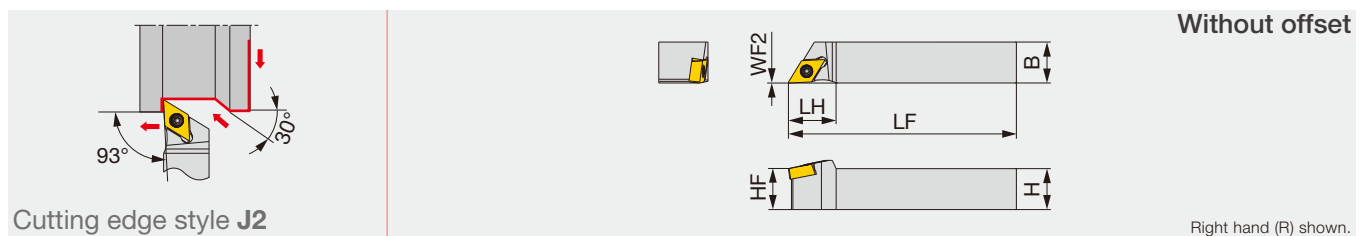


Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2XR07-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	18.4 (0.724")	0.2 (0.008")	DX*U0703**L... (DX*U22**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N-m (lbs-ft)
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



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSDJ2XR/L062	0.375	0.375	4.750	0.625	0.375	0	0.008	DX*U22**L/R...	0.66
JSDJ2XR/L082	0.500	0.500	4.750	0.625	0.500	0	0.008	DX*U22**L/R...	0.66
JSDJ2XR/L102	0.625	0.625	4.750	0.625	0.625	0	0.008	DX*U22**L/R...	0.66

Metric	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: lbs-ft (*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	M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS
	Cutting conditions	G114			Cutting conditions	G114	

for Small CNC lathes

P	Application areas	Finish cutting	Medium cutting	M	Application areas	Finish cutting	Medium cutting	N	Application areas	Medium to finish cutting	
	Grade	AH725	AH725		Grade	AH8015	AH8015		Grade	KS05F	KS05F
	Breaker Shape	SS	TS		Breaker Shape	SS	TS		Breaker Shape	SS	TS
	Cutting conditions		G114		Cutting conditions		G114		Cutting conditions		R022

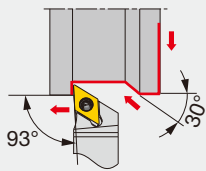
Reference pages : QC12-JSDJ2XR-CHP, JSDJ2XR/L: Inserts → **B126** -
Shank, accessory → **G115**, **G116**, Standard cutting conditions → **G114**

DX

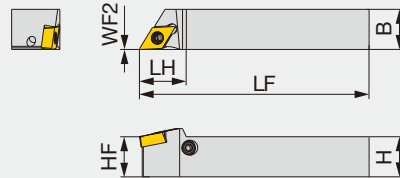


MINIFORCE JPDJ2XR/L

Lever-lock toolholder with 93° approach angle, for DX*U inserts



Cutting edge style J2



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JPDJ2XR/L062	0.375	0.375	4.750	0.625	0.375	0	0.008	DX*U22**/R...	0.66
JPDJ2XR/L082	0.500	0.500	4.750	0.625	0.500	0	0.008	DX*U22**/R...	0.66
JPDJ2XR/L102	0.625	0.625	4.750	0.625	0.625	0	0.008	DX*U22**/R...	0.66
Metric	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**/L...	0.9
JPDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**/L...	0.9
JPDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**/L...	0.9
JPDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**/L...	0.9

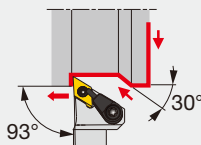
Torque: Recommended clamping torque: lbs-ft (*N-m) RE**: Standard corner radius

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

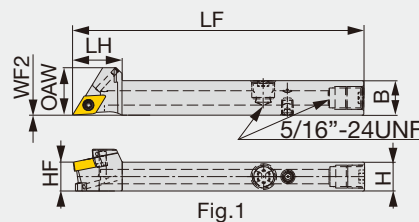


Fig.1

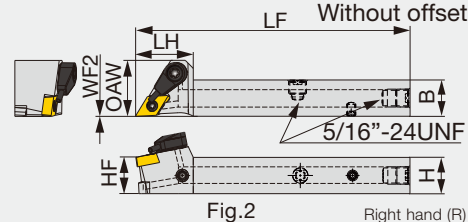
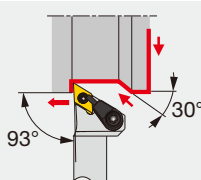


Fig.2

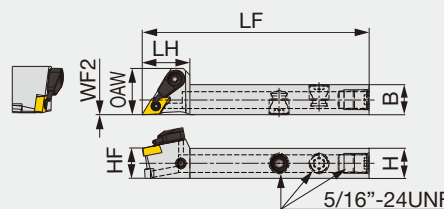
Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque	Fig.
JSDJ2XR082X-CHP	0.500	0.500	4.750	0.748	0.500	0	0.728	0.008	DX*U22**/L...	0.66	2
JSDJ2XR102X-CHP	0.625	0.625	4.750	0.748	0.625	0	0.728	0.008	DX*U22**/L...	0.66	2
Metric	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.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSDJ2XR/L082-CHP	0.500	0.500	3.344	0.750	0.500	0	0.730	0.008	DXGU0703**/L...	0.66
Metric	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...	0.9

Torque: Recommended clamping torque: lbs-ft (*N-m) RE**: Standard corner radius

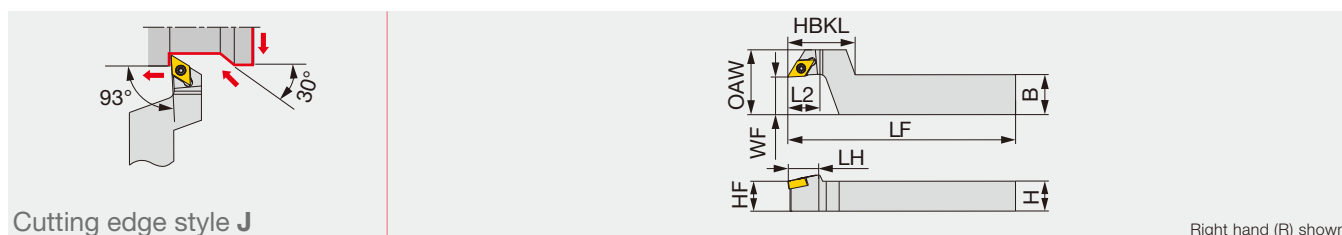
Right-hand toolholders (R) are used with left-hand inserts (L). Left-hand toolholders (L) are used with right-hand inserts (R).

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...	SLLV-2	SL-PI-2	SR10400611	HW2.0/5RED	-	-	-	-	-	-	-
JSDJ2XR1012H07-CHP	-	-	-	-	SR34-514	-	T-7F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSDJ2XR**07-CHP	-	-	-	-	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSDJ2XR/L1212F07-CHP	-	-	-	-	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-
JSDJXR**-F15	-	-	-	-	SR34-514	-	T-7F	-	-	-	-

JSDJXR-F

Screw-on stepped-head toolholder with 93° approach angle, for DX*U inserts



Cutting edge style J

Inch	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque
JSDJXR082-F10	0.500	0.625	4.750	0.500	1.130	0.625	0.500	0.625	1.000	0.008	DX*U22**L/R...	0.66
JSDJXR102-F10	0.625	0.750	4.750	0.500	1.130	0.625	0.625	0.625	1.000	0.008	DX*U22**L/R...	0.66
Metric	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: lbs-ft (*N-m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
JSDJXR**-F...	SR34-514	T-7F

INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting	M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS
	Cutting conditions	G114			Cutting conditions	G114	

for Small CNC lathes

P	Application areas	Finish cutting	Medium cutting	M	Application areas	Finish cutting	Medium cutting	N	Application areas	Medium to finish cutting
	Grade	AH725	AH725		Grade	AH8015	AH8015		Grade	KS05F
	Breaker Shape	SS	TS		Breaker Shape	SS	TS		Breaker Shape	TS
	Cutting conditions	G114			Cutting conditions	G114			Cutting conditions	B022

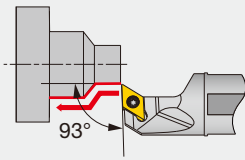
Reference pages : JPDJ2XR/L, JSDJ2XR-CHP, JSDJXR-F : Inserts → **B126** -
Standard cutting conditions → **G114**

DX

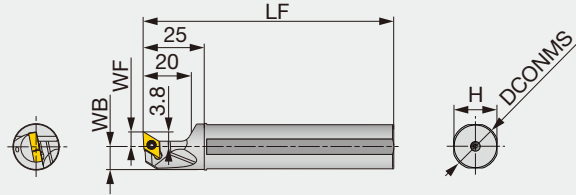


MINIFORCE JS-SDUXL

Screw-on round-shank toolholder with 93° approach angle, for DX*U inserts



Cutting edge style U



Left hand (L) shown.

Metric	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	M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS
	Cutting conditions	G114			Cutting conditions	G114	

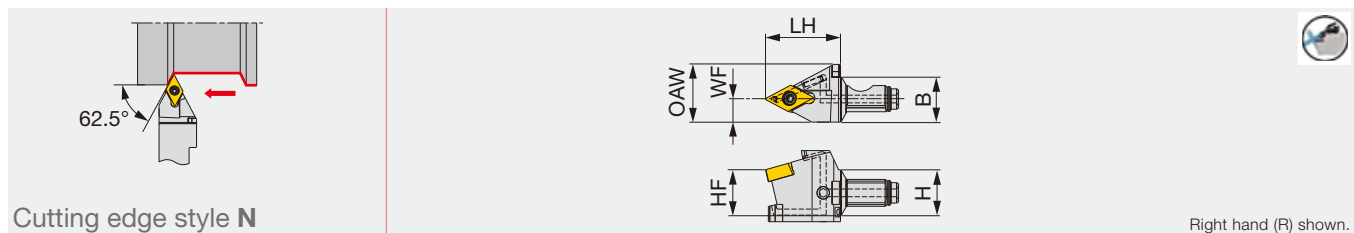
for Small CNC lathes

P	Application areas	Finish cutting	Medium cutting	M	Application areas	Finish cutting	Medium cutting	N	Application areas	Medium to finish cutting	
	Grade	AH725	AH725		Grade	AH8015	AH8015		Grade	KS05F	KS05F
	Breaker Shape	SS 	TS 		Breaker Shape	SS 	TS 		Breaker Shape	SS 	TS 
	Cutting conditions	G114			Cutting conditions	G114			Cutting conditions	B022	

Reference pages : JS-SDUXL: Inserts → **B126 -**, Standard cutting conditions → **G114**

QC12-JSDN XR-CHP

Screw-on modular head with 62.5° approach angle, for DX*U inserts, with high pressure coolant capability



Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDN XR07-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	DX*U0703**L... (DX*U22**L...)	0.9 (0.66)

Torque*: Recommended clamping torque: N-m (lbs-ft)

RE**: Standard corner radius

Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

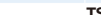
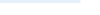
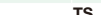
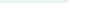
Designation	Clamping screw	Wrench	O-ring
QC12-JSDN XR07-CHP	SR34-508	T-7F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting	M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS
	Cutting conditions	G114			Cutting conditions	G114	

for Small CNC lathes

P	Application areas	Finish cutting	Medium cutting	M	Application areas	Finish cutting	Medium cutting	N	Application areas	Medium to finish cutting	
	Grade	AH725	AH725		Grade	AH8015	AH8015		Grade	KS05F	KS05F
	Breaker Shape	SS	TS		Breaker Shape	SS	TS		Breaker Shape	SS	TS
											
Cutting conditions		G114		Cutting conditions		G114		Cutting conditions		R022	

Reference pages : QC12-JSDN XR-CHP: Inserts → **B126 -**, Shank, Accessory → **G115, G116**
Standard cutting conditions → **G114**

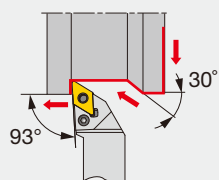
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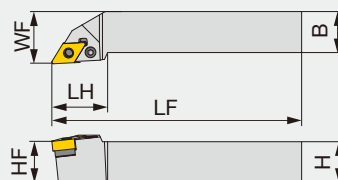


PDJNR/L

Lever-lock toolholder with 93° approach angle, for negative 55°/45° rhombic inserts



Cutting edge style J



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PDJNR/L1033	0.625	0.625	4.000	1.125	0.625	0.875	0.031	DN**/FNMG 33...	1.48
PDJNR/L1233	0.750	0.750	4.500	1.125	0.750	1.000	0.031	DN**/FNMG 33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR/L1616H1104	16	16	100	27	16	20	0.8	DN**/FNMG1104...	2
PDJNR/L2020K1104	20	20	125	27	20	25	0.8	DN**/FNMG1104...	2
PDJNR2020H15	20	20	100	32	20	25	0.8	DN**/FNGA1504...	3

Torque: Recommended clamping torque: lbs-ft (*N-m)

RE**: Standard corner radius

SPARE PARTS



Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PDJNR/L**33, PDJNR/L**1104	ELSD32	LCS3	LCL33L	LSP3	P-2.5
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			

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	CBN	HRF	HRM
	Breaker Shape	BX950	AH8005	AH8005
	Cutting conditions	B012		

M	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Breaker Shape	SF	SM	SH
	Cutting conditions	B006		

N	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	DX110	DX140	TH10
	Breaker Shape	DIA	DIA	P
	Cutting conditions	B010		

H	Application areas	Precision finishing	Finish cutting
	Grade	HP	HS
	Breaker Shape	BXA10	BXA10
	Cutting conditions	B014	

Reference pages : PDJNR/L: Inserts → B066 -, CBN → B172 -, PCD → B211

SC



**Square
with hole
Positive 7°**

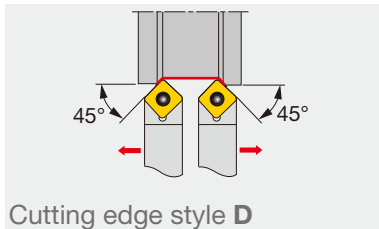
SP



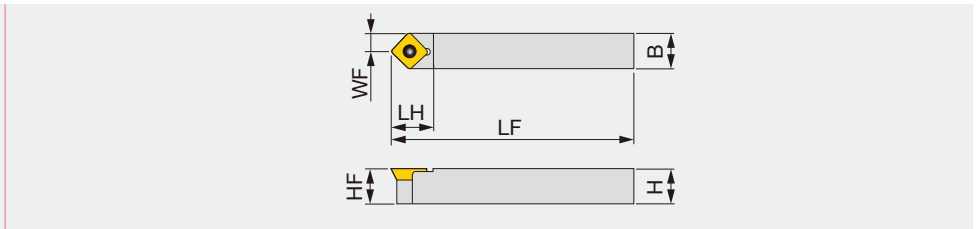
**Square
with hole
Positive 11°**

SSDC/PN

Screw-on toolholder with 45° approach angle, for positive square inserts



Cutting edge style **D**



Metric	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** -

TC

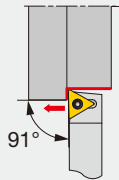


Triangular
with hole
Positive 7°

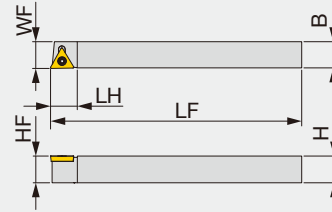
J-SERIES

JSTACR/L

Screw-on toolholder with 91° approach angle, for positive 60° triangular inserts



Cutting edge style A



Without offset

Right hand (R) shown.

Metric	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
	01	JP	JS	JS
	Breaker Shape			
	Cutting conditions	G114		

P	Application areas	Medium to finish cutting
	Grade	SH725
	J10	
	Breaker Shape	
	Cutting conditions	G114

K	Application areas	Medium to finish cutting
	Grade	T515
	CM	
	Breaker Shape	
	Cutting conditions	B020

H	Application areas	Finish cutting
	Grade	BXA10
	CBN	
	Breaker Shape	
	Cutting conditions	B026

M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	01	JP	JS	JS
	Breaker Shape			
	Cutting conditions	G114		

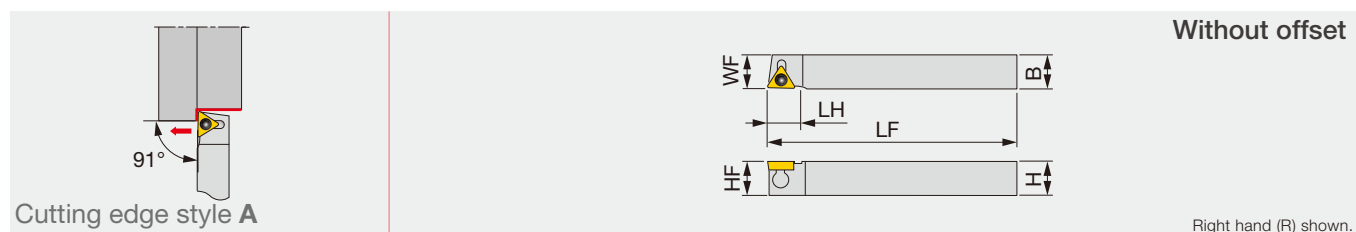
M	Application areas	Medium to finish cutting
	Grade	SH725
	J10	
	Breaker Shape	
	Cutting conditions	G114

N	Application areas	Precision finishing	Medium cutting
	Grade	DX120	KS05F
	DIA	with rake AL	
	Breaker Shape		
	Cutting conditions	B022	

Reference pages : JSTACR/L: Inserts → **B138** -, CBN → **B198**, PCD → **B215** -

JTTACR/L

Back-clamp toolholder with 91° approach angle, for positive 60° triangular inserts



Metric	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

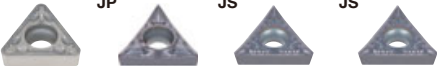
INSERT SELECTION

P	Application areas	Precision finishing		Finish cutting	Medium to finish cutting				
	Grade	SH725	SH725	SH725	SH725				
	Breaker Shape	01	JP	JS	JS				
									
Cutting conditions						G114			

P	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
					
Cutting conditions			G114		

K	Application areas	Medium to finish cutting			
	Grade	T515			
	Breaker Shape	CM			
					
Cutting conditions			B020		

H	Application areas	Finish cutting			
	Grade	BXA10			
	Breaker Shape	CBN			
					
Cutting conditions			B026		

M	Application areas	Precision finishing		Finish cutting	Medium to finish cutting				
	Grade	SH725	SH725	SH725	SH725				
	Breaker Shape	01	JP	JS	JS				
									
Cutting conditions						G114			

M	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
					
Cutting conditions			G114		

N	Application areas	Precision finishing	Medium cutting		
	Grade	DX120	KS05F		
	Breaker Shape	DIA	AL		
					
Cutting conditions				B022	

Reference pages : JTTACR/L: Inserts → **B138** -, CBN → **B198**, PCD → **B215** -

TN

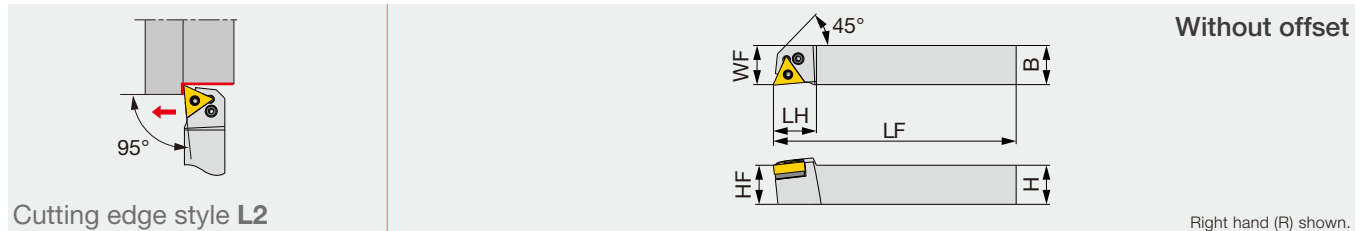


**Triangular
with hole**



PTL2NR/L

Lever-lock toolholder with 95° approach angle, for negative 60° triangular inserts



Metric	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

C

D

F

G

S

T

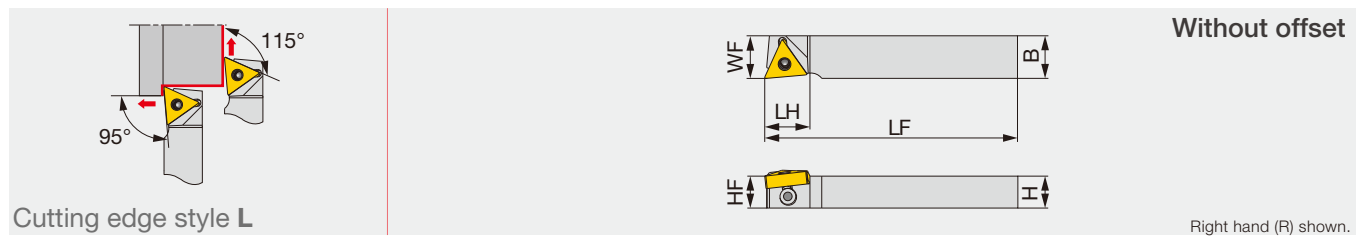
V

W

OTHERS

JTTLNR/L

Back-clamp toolholder with 95° approach angle, for negative 60° triangular inserts



Metric	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

SPARE PARTS

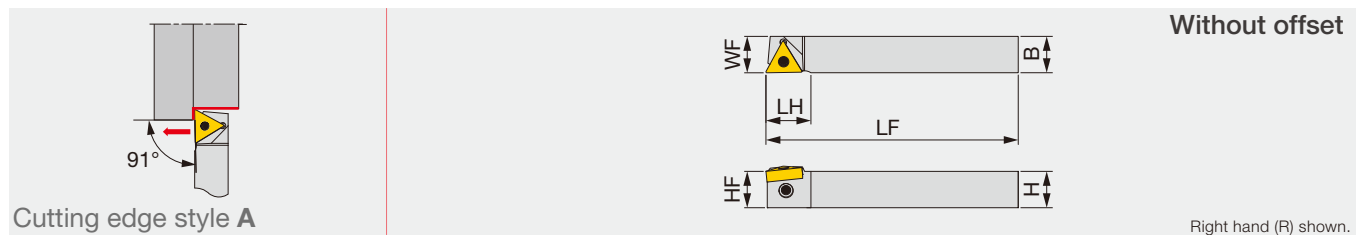


Designation	Clamp	Shim	Clamping screw	Clamping screw 1	Wrench	Wrench 1	Spring pin	Lever
PTL2NR/L...	-	LST317 D30	-	LCS3	-	P-2.5	LSP3	LCL3
JTTLNR/L...	JCP-3N	-	JDS-5040	-	P-2.5F	-	-	-

Reference pages : PTL2NR/L, JTTLNR/L: Inserts → **B087** -, CBN → **B182** -, PCD → **B212**

JTTANR/L

Back-clamp toolholder with 91° approach angle, for negative 60° triangular inserts



Metric	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				
	Cutting conditions	G114		B004	
P	Application areas	Medium to heavy cutting			
	Grade	T9215			
	Breaker Shape				
	Cutting conditions	B004			
N	Application areas	Precision finishing	Finish cutting	Medium cutting	
	Grade	DX110	DX140	TH10	KS05F
	Breaker Shape				
	Cutting conditions	B010			
H	Application areas	Precision finishing	Finish cutting		
	Grade	BXA10	BXA10		
	Breaker Shape				
	Cutting conditions	B014			
M	Application areas	Precision finishing	Finish cutting	Medium cutting	
	Grade	SH725	SH725	AH6225	
	Breaker Shape				
	Cutting conditions	G114		B006	
K	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting	
	Grade	T515	T515	T515	
	Breaker Shape				
	Cutting conditions	B008			
S	Application areas	Precision finishing	Finish cutting	Medium cutting	
	Grade	BX950	AH8005	AH8005	
	Breaker Shape				
	Cutting conditions	B012			

Reference pages : JTTANR/L: Inserts → **B087** -, CBN → **B182** -, PCD → **B212**

VB

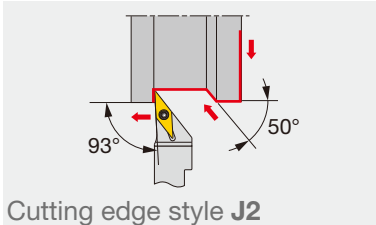


**Rhombic, 35°
with hole
Positive 5°**

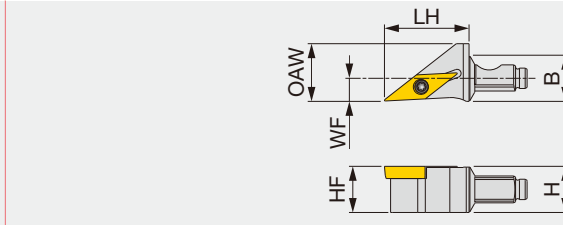
MODUM^{INI}TURN

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.

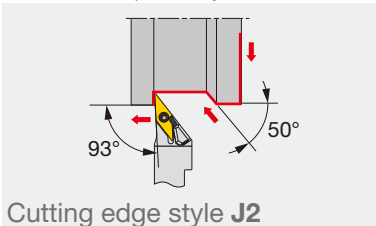
Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2BR11	12 (0.750")	12 (0.750")	22 (0.866")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	VB**1103... (VB**22...)	1.2 (0.89)

Torque: Recommended clamping torque: N·m (lbs·ft)

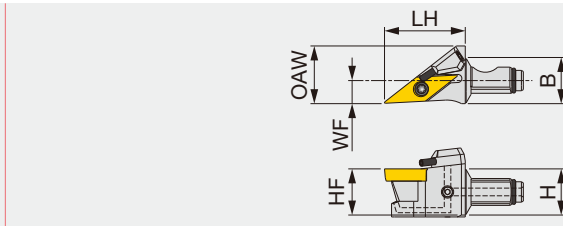
RE**: Standard corner radius

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.

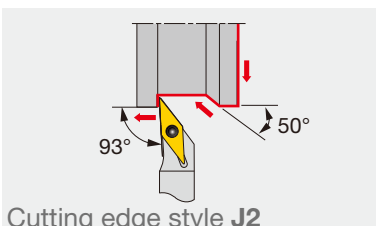
Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2BR11-CHP	12 (0.750")	12 (0.750")	21 (0.827")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	VB**1103... (VB** 22...)	1.2 (0.89)

Torque: Recommended clamping torque: N·m (lbs·ft)

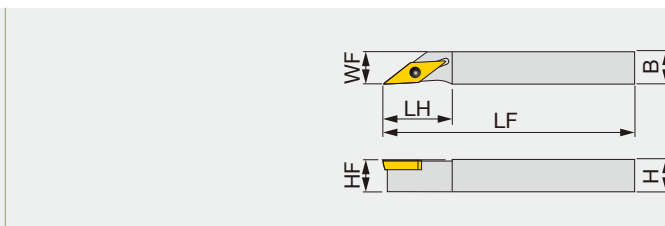
RE**: Standard corner radius

JSVJ2BR/L

Screw-on toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style J2



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSVJ2BR/L062	0.375	0.375	5.000	0.813	0.375	0.375	0.008	VB** 22...	0.89
JSVJ2BR/L082	0.500	0.500	5.000	0.813	0.500	0.500	0.008	VB** 22...	0.89
JSVJ2BR/L102	0.625	0.625	5.000	0.813	0.625	0.625	0.008	VB** 22...	0.89
Metric	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: lbs·ft (*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



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.

Metric	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

Cutting edge style **J2**

Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJ2BR/L082-CHP	0.500	0.500	3.344	0.930	0.500	0	0.610	0.008	VB** 22...	0.89

Metric	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: lbs-ft (*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	SSH4-6-TB	P-2
JSVJ2BR/L082-CHP, 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	G114			

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	G114			

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	G114	

H

Application areas	Precision finishing	Finish cutting
Grade	BXA10	BXA10
Breaker Shape	HP	CBN
Cutting conditions	B026	

Reference pages : QC12-JSVJ2BR, QC12-JSVJ2BR-CHP, JSVJ2BR/L, JSVJ2BR/L-CHP:
Inserts → **B150** -, CBN → **B207** -, Shank, Accessory → **G115**, **G116**

VB

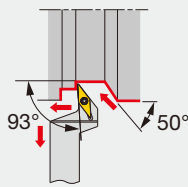


Rhombic, 35°
with hole
Positive 5°

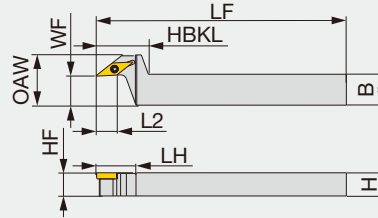
J-SERIES

JSVJBR-F

Screw-on stepped-head toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style J



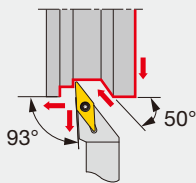
Right hand (R) shown.

Metric	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

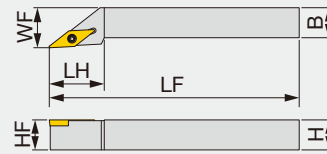
Torque*: Recommended clamping torque (N·m) RE**: Standard corner radius

JSVJBR/L

Screw-on toolholder with 93° approach angle, for positive 35° rhombic inserts



Cutting edge style J



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
SVJBR/L122	0.750	0.750	4.500	1.063	0.750	1.000	0.0160	VB**22...	0.89
SVJBR/L123	0.750	0.750	4.500	1.181	0.750	1.000	0.0320	VB**33...	0.89
SVJBR/L163	1.000	1.000	6.000	1.575	1.000	1.250	0.0320	VB**33...	0.89

Metric	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: lbs·ft (*N·m) RE**: Standard corner radius

SPARE PARTS

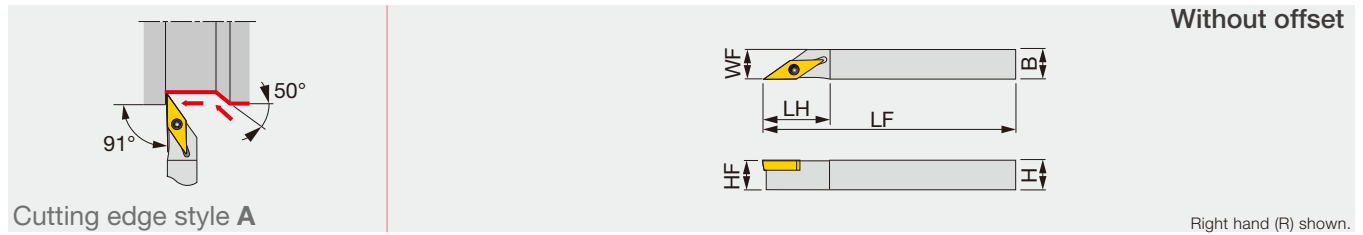


Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVJBR**-F15, JSVJBR/L...	CSTB-2.5	T-8F	(T-8L)

Reference pages : JSVJBR-F, JSVJBR/L: Inserts → **B150** -, CBN → **B207** -

JSVABL

Screw-on toolholder with 91° approach angle, for positive 35° rhombic inserts



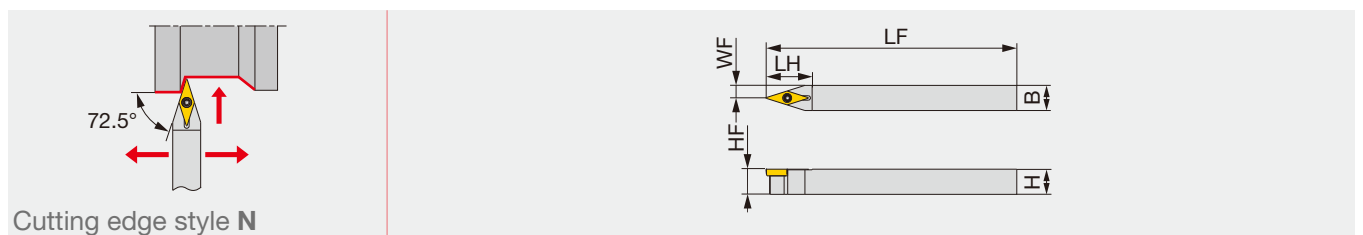
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVABL1010K11	10	10	125	21	10	10	0.2	VB**1103...	1.2
JSVABL1212K11	12	12	125	21	12	12	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

JSVNB

Screw-on toolholder with 72.5° approach angle, for positive 35° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVNB1010X11	10	10	120	22	10	5	0.2	VB**1103...	1.2
JSVNB1212F11	12	12	85	22	12	6	0.2	VB**1103...	1.2
JSVNB1212X11	12	12	120	22	12	6	0.2	VB**1103...	1.2
JSVNB1616X11	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)
JSVNB...	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	G114			
K	Application areas	Medium to finish cutting			
	Grade	T515			
	Breaker Shape	CM			
	Cutting conditions	B020			
H	Application areas	Precision finishing	Finish cutting		
	Grade	BXA10	BXA10		
	Breaker Shape	HP	CBN		
	Cutting conditions	B026			
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	G114			
S	Application areas	Finish cutting	Medium to finish cutting		
	Grade	SH725	SH725		
	Breaker Shape	JS	JS		
	Cutting conditions	G114			

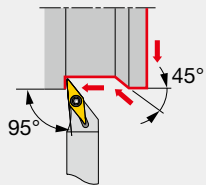
Reference pages : JSVABL, JSVNB: Inserts → **B150** -, CBN → **B207** -

VP

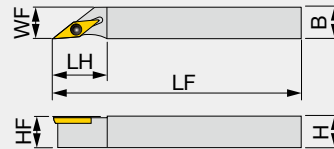
**Rhombic, 35°
with hole
Positive 11°**

J-SERIES JSVL2PR/L

Screw-on toolholder with 95° approach angle, for positive 35° rhombic inserts



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSVL2PR/L082	0.500	0.500	5.000	0.813	0.500	0.500	0.008	VP**22...	0.89
JSVL2PR/L102	0.625	0.625	5.000	0.813	0.625	0.625	0.008	VP**22...	0.89
Metric	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: lbs-ft (*N·m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVL2PR/L082/102	CSTB-2.5	T-8F	(T-8L)
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	G114	

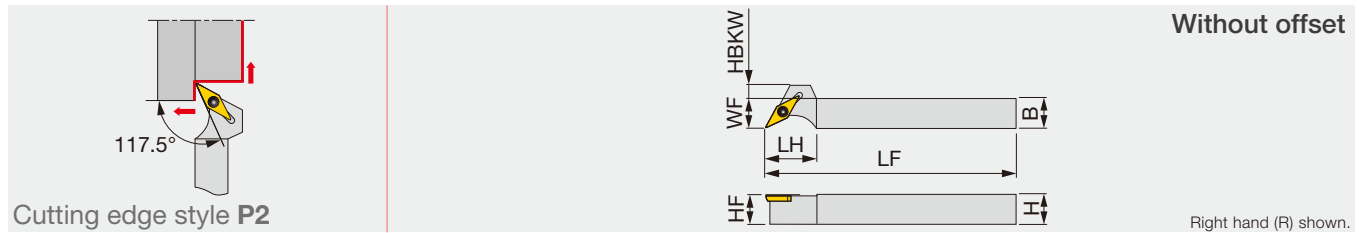
M	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JSP
	Cutting conditions	G114	

S	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JSP
	Cutting conditions	G114	

Reference pages : JSVL2PR/L: Inserts → **B154**

JSVP2PR/L

Screw-on toolholder with 117.5° approach angle, for positive 35° rhombic inserts



Metric	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)

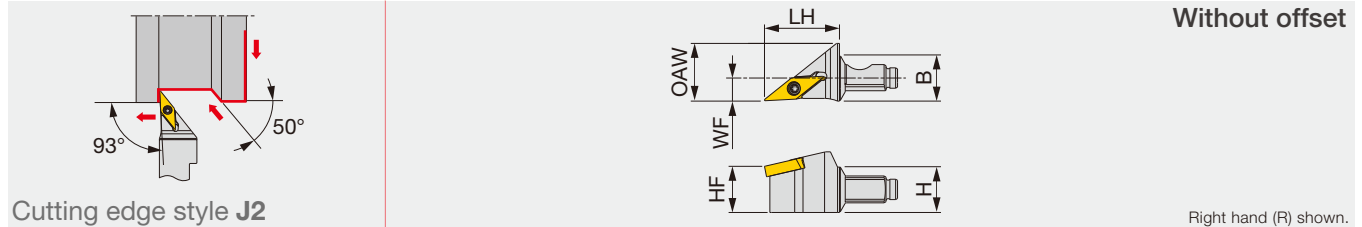
INSERT SELECTION

P	Application areas	Finish cutting	Finish cutting	M	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JRP	JSP		Breaker Shape	JRP	JSP
	Cutting conditions	G114			Cutting conditions	G114	
S	Application areas	Finish cutting	Finish cutting				
	Grade	SH725	SH725				
	Breaker Shape	JRP	JSP				
	Cutting conditions	G114					

Reference pages : JSVP2PR/L: Inserts → **B154**

MINIFORCE QC12-JSVJ2XR

Screw-on modular head with 93° approach angle, for VXGU inserts

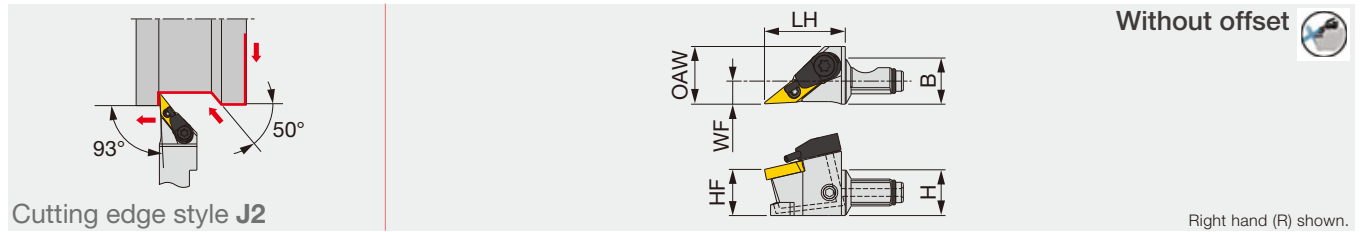


Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2XR09	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	VXGU09T2**L... (VXGU73.5**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSVJ2XR-CHP

Screw-on modular head with 93° approach angle, for VXGU inserts, with high pressure coolant capability



Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2XR09-CHP	12 (0.750")	12 (0.750")	21 (0.827")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	VXGU09T2**L... (VXGU73.5**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

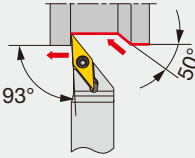
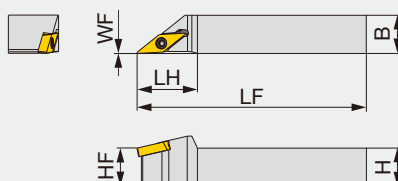
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring	Lever	Pin	Clamping screw	Wrench
QC12-JSVJ2XR09	SR34-508	-	T-7F	-	SLLV-1	SL-PI-2	SR10400611	HW2.0/5RED
QC12-JSVJ2XR09-CHP	SR34-508	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-

Reference pages : QC12-JSVJ2XR, QC12-JSVJ2XR-CHP: Inserts → **B155**, Shank, Accessory → **G115**, **G116**
Standard cutting conditions → **G114**

JSVJ2XR/L

Screw-on toolholder with 93° approach angle, for VXGU inserts

										Without offset
Cutting edge style J2		Right hand (R) shown.								
Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque	
JSVJ2XR/L067	0.375	0.375	4.750	0.669	0.375	0	0.008	VXGU73*L/R...	0.66	
JSVJ2XR/L087	0.500	0.500	4.750	0.748	0.500	0	0.008	VXGU73*L/R...	0.66	
JSVJ2XR/L107	0.625	0.625	4.750	0.748	0.625	0	0.008	VXGU73*L/R...	0.66	
Metric	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	

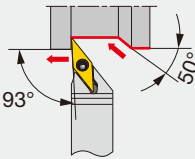
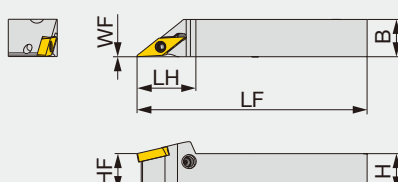
Torque: Recommended clamping torque: lbs-ft (*N-m) RE**: Standard corner radius

Use right-hand toolholders (R) with left-hand inserts (L).

Use left-hand toolholders (L) with right-hand inserts (R).

JPVJ2XR/L

Lever-lock toolholder with 93° approach angle, for VXGU inserts

										Without offset
Cutting edge style J2		Right hand (R) shown.								
Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque	
JPVJ2XR/L067	0.375	0.375	4.750	0.669	0.375	0	0.008	VXGU73*L/R...	0.66	
JPVJ2XR/L087	0.500	0.500	4.750	0.748	0.500	0	0.008	VXGU73*L/R...	0.66	
JPVJ2XR/L107	0.625	0.625	4.750	0.748	0.625	0	0.008	VXGU73*L/R...	0.66	
Metric	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: lbs-ft (*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).

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Pin	Clamping screw	Wrench
JSVJ2XR/L...	SR34-508	T-7F	-	-	-	-
JPVJ2XR/L...	-	-	SLLV-1	SL-PI-2	SR10400611	HW2.0/5RED

INSERT SELECTION

P	Application areas	Finish cutting	Medium to finish cutting	M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JRP	JS		Breaker Shape	JRP	JS
	Cutting conditions	G114			Cutting conditions	G114	

Reference pages : JSVJ2XR/L, JPVJ2XR/L: Inserts → **B155**, Standard cutting conditions → **G114**

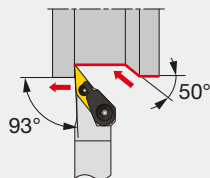
VX

 **Rhombic, 35°
with hole**

MINIFORCE JSVJ2XR/L-CHP

Direct connection

Screw-on toolholder without offset, 93° approach angle, for VXGU inserts, high pressure coolant compatible



Cutting edge style J2

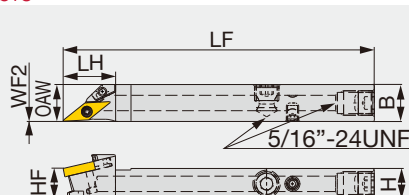


Fig.1

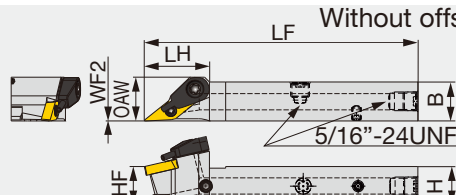
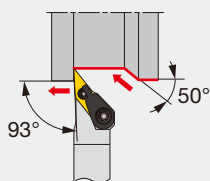


Fig.2

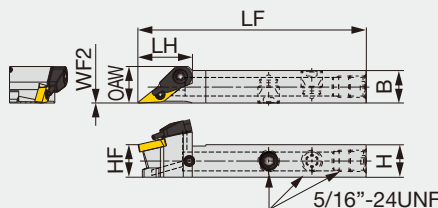
Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque	Fig.
JSVJ2XR087X-CHP	0.500	0.500	4.750	0.768	0.500	0	0.528	0.008	VXGU73*L...	0.66	-
JSVJ2XR107X-CHP	0.625	0.625	4.750	0.768	0.625	0	0.625	0.008	VXGU73*L...	0.66	-
Metric	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.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJ2XR/L087-CHP	0.500	0.500	4.750	0.748	0.500	0	0.020	0.008	VXGU73*L...	0.66
Metric	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: lbs-ft (*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).

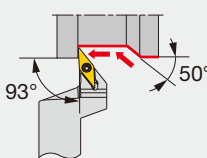
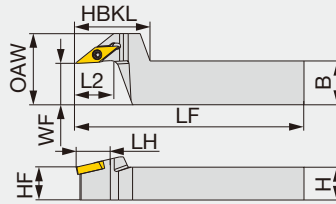
SPARE PARTS

Designation	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**X-CHP, JSVJ2XR**X09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSVJ2XR/L087-CHP JSVJ2XR/L1212F09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-

Reference pages : JSVJ2XR/L-CHP: Inserts → **B155**, Standard cutting conditions → **G114**

JSVJXR-F

Screw-on stepped-head toolholder with 93° approach angle, for VXGU inserts

Cutting edge style J

Right hand (R) shown.

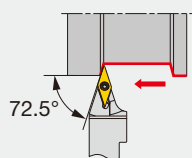
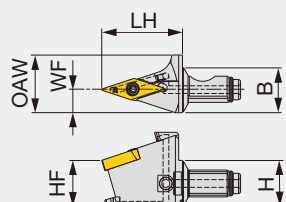
Inch	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJXR087-F10	0.500	0.625	4.750	0.500	1.130	0.750	0.500	0.625	1.000	0.008	VXGU73**L...	0.66
JSVJXR107-F10	0.625	0.750	4.750	0.500	1.130	0.750	0.625	0.625	1.000	0.008	VXGU73**L...	0.66

Metric	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: lbs-ft (*N-m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

QC12-JSVVXR-CHP

Screw-on modular head with 72.5° approach angle, for VXGU inserts, with high pressure coolant capability

Cutting edge style V

Right hand (R) shown.

Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVVXR09-CHP	12 (0.750")	12 (0.750")	21 (0.827)	12 (0.472)	6 (0.236)	15 (0.591)	0.2 (0.008)	VXGU09T2**L... (VXGU73**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N-m (lbs-ft)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
JSVJXR**-F...	SR34-508	T-7F	-
QC12-JSVVXR09-CHP	SR34-508	T-7F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JS
	Cutting conditions	G114	

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JS
	Cutting conditions	G114	

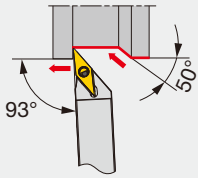
Reference pages : JSVJXR-F, QC12-JSVVXR-CHP: Inserts → **B155**,
Shank, Accessory → **G115**, **G116**, Standard cutting conditions → **G114**

VN

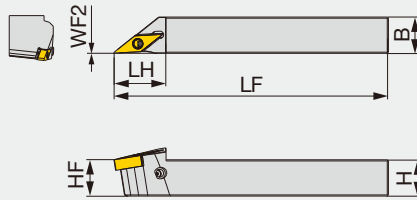
 **Rhombic, 35°
with hole**

ISO ETURN
JPVJ2NR/L

Back-clamp toolholder with 93° approach angle, for negative 35° rhombic inserts



Cutting edge style J



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JPVJ2NR082.33	0.500	0.500	4.75	0.900	0.500	0	0.0078	VN**2.33...	0.66
JPVJ2NR102.33	0.625	0.625	4.75	0.900	0.625	0	0.0078	VN**2.33...	0.66
Metric	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: lbs-ft (*N-m)

RE**: The holder measurements are true with this insert radius

SPARE PARTS

Designation	Lever	Pin	Clamping screw	Wrench
JPVJ2NR/L***.33 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 : JPVJ2NR/L: Inserts → **B098** -

WX



Trigon, 80°
with hole

MINIFORCE 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.

Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque
QC12-JSWL2XR04-Y	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	22.3 (0.878")	12 (0.472")	2.8 (0.11")	0.2 (0.008")	WXGU0403**L... (WXGU22**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N-m (lbs-ft)
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.

Metric	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque
QC12-JSWL2XR04-Y-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	0 (0")	6 (0.236")	22.3 (0.878")	12 (0.472")	2.8 (0.11")	0.2 (0.008")	WXGU0403**L... (WXGU22**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N-m (lbs-ft)
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 Grade Breaker Shape Cutting conditions	Finish cutting SH725 JSS 	Medium to finish cutting SH725 JS 	M	Application areas Grade Breaker Shape Cutting conditions	Finish cutting SH725 JSS 	Medium to finish cutting SH725 JS 	H	Application areas Grade Breaker Shape Cutting conditions	Precision finishing BXA10 HP
		G114				G114				B026

For Small CNC lathes

P	Application areas Grade Breaker Shape Cutting conditions	Finish cutting AH725 SS 	Medium cutting AH725 TS 	M	Application areas Grade Breaker Shape Cutting conditions	Finish cutting AH8015 SS 	Medium cutting AH8015 TS 	N	Application areas Grade Breaker Shape Cutting conditions	Medium to finish cutting KS05F SS 	KS05F TS
		G114				G114				B022	

Reference pages : QC12-JSWL2XR-Y, QC12-JSWL2XR-Y-CHP: Inserts → **B157 -**, CBN → **B210**
Shank, Accessory → **G115**, **G116**, Standard cutting conditions → **G114**

Tungaloy G069

Grade
Insert
Ext. Toolholder
Int. Toolholder
Threading
Grooving
Miniature tool
Milling cutter
Endmill
Drilling tool
Tooling System
User's Guide
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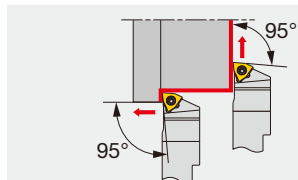


Trigon, 80°
with hole

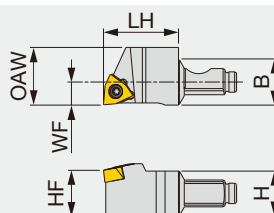
MINIFORCE TURN

QC12-JSWL2XR

Screw-on modular head with 95° approach angle, for WXGU inserts



Cutting edge style L2



Without offset

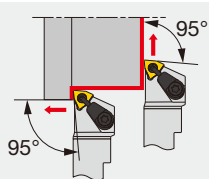
Right hand (R) shown.

Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque
QC12-JSWL2XR04	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	15 (0.591")	0.2 (0.008")	WXGU0403**L... (WXGU22**L...)	0.9 (0.66)

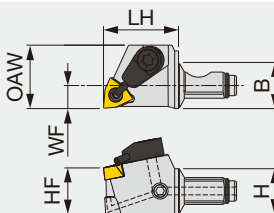
Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

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.

Metric	H	B	LH	HF	WF	OAW	RE**	Insert	Torque
QC12-JSWL2XR04-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	6 (0.236")	16.5 (0.650")	0.2 (0.008")	WXGU0403**L... (WXGU22**L...)	0.9 (0.66)

Torque: Recommended clamping torque: N·m (lbs·ft)
RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

OTHERS

SPARE PARTS

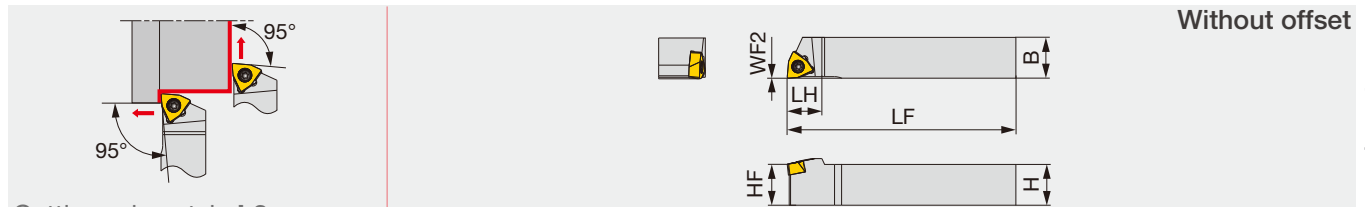


Designation	Clamping screw 1	Coolant unit	Wrench 1	O-ring
QC12-JSWL2XR04	SR34-514	-	T-7F	-
QC12-JSWL2XR04-CHP	SR34-514	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70

Reference pages : QC12-JSWL2XR, QC12-JSWL2XR-CHP: Inserts → **B157** -, CBN → **B210**
Shank, Accessory → **G115**, **G116**, Standard cutting conditions → **G114**

JSWL2XR/L

Screw-on toolholder with 95° approach angle, for WXGU inserts



Cutting edge style L2

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSWL2XR/L062	0.375	0.375	4.750	0.500	0.375	0	0.008	WXGU22**L/R...	0.66
JSWL2XR/L082	0.500	0.500	4.750	0.500	0.500	0	0.008	WXGU22**L/R...	0.66
JSWL2XR/L102	0.625	0.625	4.750	0.500	0.625	0	0.008	WXGU22**L/R...	0.66

Metric	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

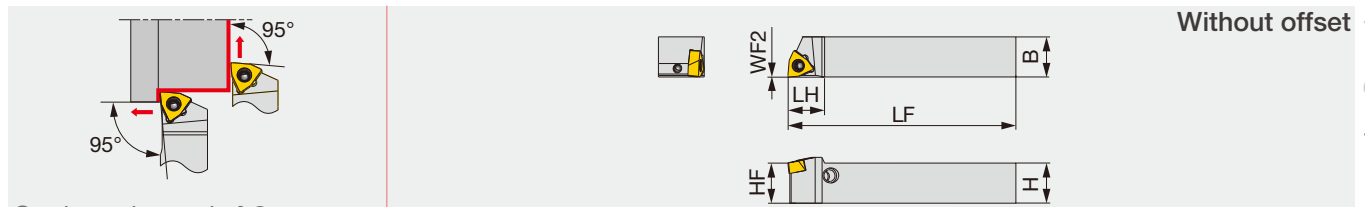
Torque: Recommended clamping torque: lbs-ft (*N-m)

RE**: Standard corner radius

Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

JPWL2XR/L

Lever-lock toolholder with 95° approach angle, for WXGU inserts



Cutting edge style L2

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JPWL2XR/L062	0.375	0.375	4.750	0.500	0.375	0	0.008	WXGU22**L/R...	0.66
JPWL2XR/L082	0.500	0.500	4.750	0.500	0.500	0	0.008	WXGU22**L/R...	0.66
JPWL2XR/L102	0.625	0.625	4.750	0.500	0.625	0	0.008	WXGU22**L/R...	0.66

Metric	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: lbs-ft (*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	M	Application areas	Finish cutting	Medium to finish cutting	H	Application areas	Precision finishing
	Grade	SH725	SH725		Grade	SH725	SH725		Grade	HP
	Breaker Shape	JSS	JS		Grade	JSS	JS		Grade	HP
	Breaker Shape				Grade				Grade	
	Cutting conditions	G114			Grade	G114			Grade	B026

For Small CNC lathes

P	Application areas	Finish cutting	Medium cutting	M	Application areas	Finish cutting	Medium cutting	N	Application areas	Medium to finish cutting
	Grade	AH725	AH725		Grade	AH8015	AH8015		Grade	KS05F
	Breaker Shape	SS	TS		Grade	SS	TS		Grade	KS05F
	Breaker Shape				Grade				Grade	
	Cutting conditions	G114			Grade	G114			Grade	B022

Reference pages : JSWL2XR/L, JPWL2XR/L: Inserts → **B157** -, CBN → **B210**
Standard cutting conditions → **G114**

WX

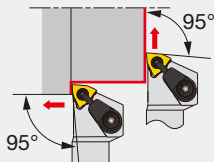


Trigon, 80°
with hole

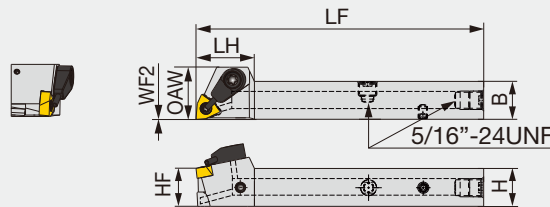
MINIFORCE JSWL2XR/L-CHP

Direct connection

Screw-on toolholder without offset, 95° approach angle, for WXGU inserts, high pressure coolant compatible



Without offset

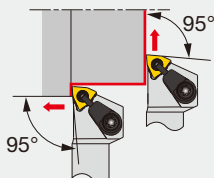


Right hand (R) shown.

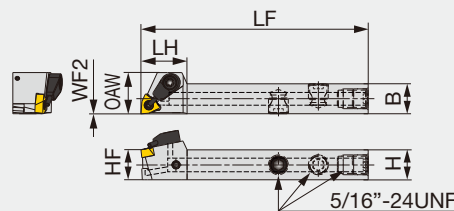
Cutting edge style L2

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSWL2XR082X-CHP	0.500	0.500	4.750	0.728	0.500	0	0.650	0.008	WXGU22**L...	0.66
JSWL2XR102X-CHP	0.625	0.625	4.750	0.728	0.625	0	0.650	0.008	WXGU22**L...	0.66
Metric	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



Without offset



Right hand (R) shown.

Cutting edge style L2

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSWL2XR/L082-CHP	0.500	0.500	3.344	0.750	0.500	0	0.650	0.008	WXGU22**L/R...	0.66
Metric	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: lbs-ft (*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).

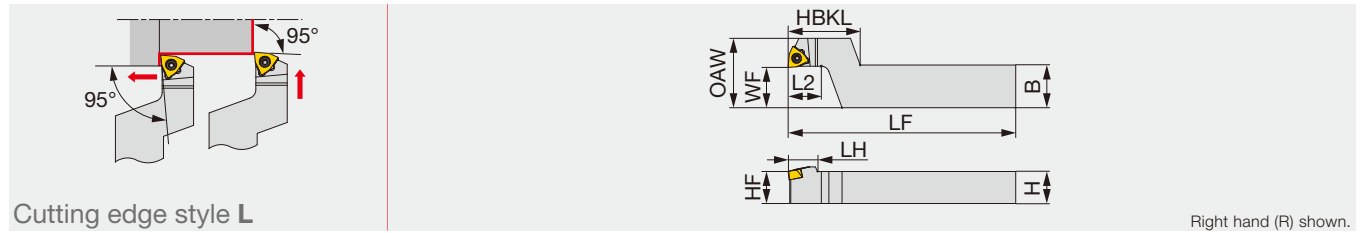
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSWL2XR**-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSWL2XR/L**-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-

Reference pages : JSWL2XR/L-CHP: Inserts → **B157 -**, CBN → **B210**
Standard cutting conditions → **G114**

JSWLXR-F

Screw-on stepped-head toolholder with 95° approach angle, for WXGU inserts



Cutting edge style L

Right hand (R) shown.

Inch	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque
JSWLXR082-F10	0.500	0.625	4.750	0.500	1.100	0.500	0.500	0.625	1.000	0.008	WXGU22**L...	0.66
JSWLXR102-F10	0.625	0.750	4.750	0.500	1.100	0.500	0.625	0.625	1.000	0.008	WXGU22**L...	0.66
Metric	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: lbs-ft (*N-m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS		
Designation	Clamping screw	Wrench
JSWLXR**-F10, JSWLXR**-F15	SR34-514	T-7F

INSERT SELECTION

For Swiss lathes

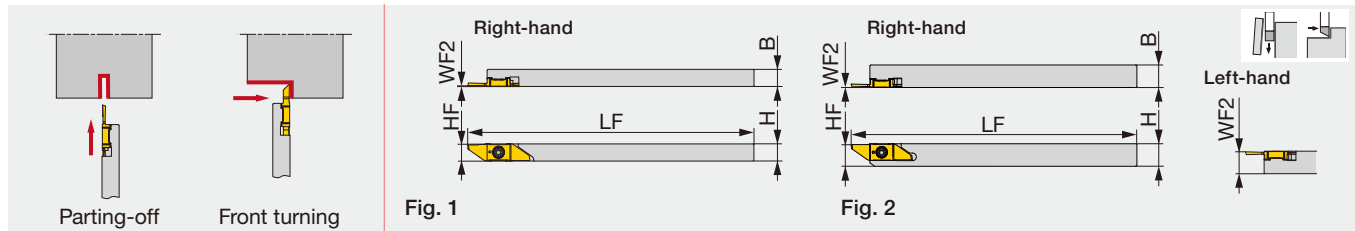
P	Application areas Grade	Finish cutting SH725	Medium to finish cutting SH725	M	Application areas Grade	Finish cutting SH725	Medium to finish cutting SH725	H	Application areas Grade	Precision finishing BXA10
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS		Breaker Shape	HP
	Cutting conditions	G114			Cutting conditions	G114			Cutting conditions	B026

For Small CNC lathes

P	Application areas Grade	Finish cutting AH725	Medium cutting AH725	M	Application areas Grade	Finish cutting AH8015	Medium cutting AH8015	N	Application areas Grade	Medium to finish cutting KS05F
	Breaker Shape	SS	TS		Breaker Shape	SS	TS		Breaker Shape	SS
	Cutting conditions	G114			Cutting conditions	G114			Cutting conditions	B022

Reference pages : JSWLXR-F: Inserts → **B157** -, CBN → **B210**, Standard cutting conditions → **G114**

Parting-off and front turning toolholders



Metric	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

SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR...05	CSTB-2.5L054DL	T-7F
JSXXL...05	CSTB-2.5L054DR	T-7F

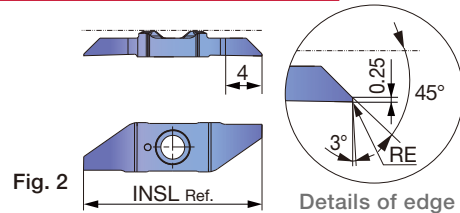
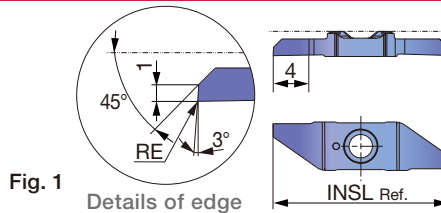
Torque*: Recommended clamping torque (N·m)

(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...).

INSERT

JVFN45R/L (For front turning)



	P	M	K	N	S	H
Steel	★					
Stainless	★					
Cast iron						
Non-ferrous	★					
Superalloys	★					
Hard materials						

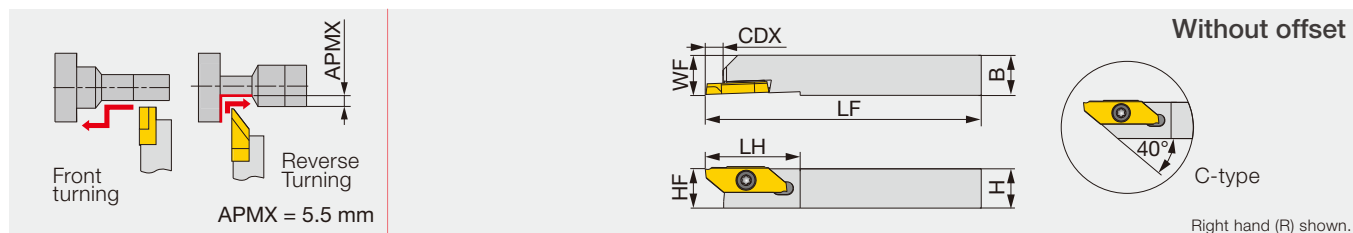
★ : First choice

Designation	HAND	RE	Coated				INSL (in)	Fig.
			SH725					
JVFN45R0310F	R	0	●				0.827	1
JVFN45L0302FL	L	0	●				0.827	2

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grade	Cutting speed Vc (sfm)	Feed f (ipr)
P	Low carbon steels 1015, etc.	SH725	164 - 591	0.00039 - 0.0012
	Carbon steels, Alloy steels 1055, etc.	SH725	164 - 591	0.00039 - 0.0012
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 591	0.00039 - 0.0012
M	Stainless steels 304, etc.	SH725	164 - 394	0.00039 - 0.0012
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 656	0.00039 - 0.0012
	Copper alloys C2600, C280C, etc.	SH725	328 - 656	0.00039 - 0.0012
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.00039 - 0.0012
	Superalloys Inconel718, etc.	SH725	98 - 262	0.00039 - 0.0012



Metric	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...

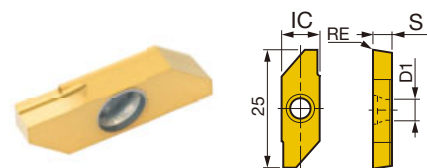
Can be used with JXG insert for parting and grooving.
Can be wrenched also from the back with a double-head screw.

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional) (T-8L)
JSXGR/L...	CSTB-4SD	T-8F	

INSERT

JXF (For front turning)



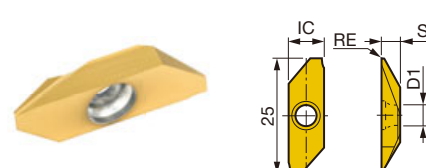
P	Steel	★					
M	Stainless	★					
K	Cast iron						
N	Non-ferrous	★					
S	Superalloys	★					
H	Hard materials						

★ : First choice

Designation	HAND	RE	Coated		Uncoated		IC	S	D1
			J740	TH10	J740	TH10			
JXFR8000F	R	0.001	●		●		0.315	0.156	0.173
JXFR8010F	R	0.004	●		●		0.315	0.156	0.173

● : Line up

JXR (For reverse turning)

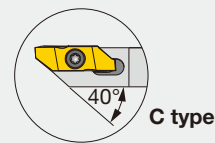
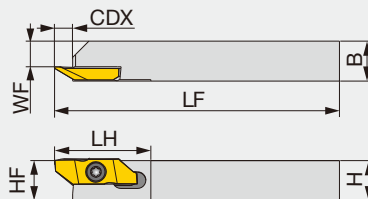
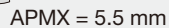


P	Steel	★					
M	Stainless	★					
K	Cast iron						
N	Non-ferrous	★					
S	Superalloys	★					
H	Hard materials						

★ : First choice

Designation	HAND	RE	Coated		Uncoated		IC	S	D1
			J740	TH10	J740	TH10			
JXRR8000F	R	0.001	●		●		0.315	0.156	0.173
JXRR8010F	R	0.004	●		●		0.315	0.156	0.173

● : Line up



Right hand (R) shown.

Can be used with JXT insert for threading.
Can be wrenched also from the back with a double-head screw.

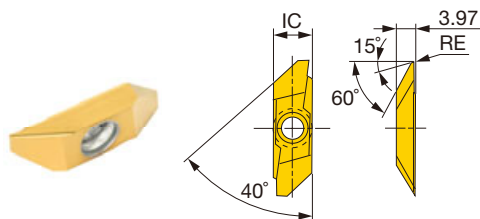
SPARE PARTS



Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSXBR/L...	CSTB-4SD	T-8F	(T-8L)

INSERT

JXB (Sharp edge)



Right hand (R) shown.

P	Steel	★				
M	Stainless	★				
K	Cast iron	★		☆		
N	Non-ferrous			★		
S	Superalloys	☆		★		
H	Hard materials			★		

★ : First choice
☆ : Second choice

Designation	HAND	RE (mm)	Coated		Uncoated								IC (mm)	Max. depth of cut (mm)
			J740		TH10									
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

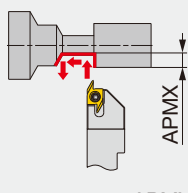
● : Line up

P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	☆		
H	Hard materials			

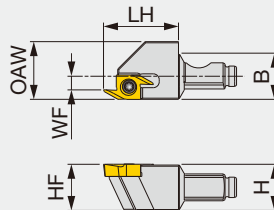
Designation	HAND	RE (mm)	Coated		IC (mm)	Max. depth of cut (mm)
			J740			
JXBR/L8005	R	0.05	●		8	5.5
JXBR/L8005	L	0.05	●		8	5.5
JXBR/L8010	R	0.1	●		8	5.5
JXBR/L8010	L	0.1	●		8	5.5
JXBR/L8015	R	0.15	●		8	5.5
JXBR/L8015	L	0.15	●		8	5.5

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Feed: <i>f</i> (ipr)	
				Grooving	Turning
P	General steel 1045, etc.	J740	33 - 328	0.0004 - 0.0012	0.0008 - 0.004
	Free-cutting steel	J740	33 - 328	0.0004 - 0.0012	0.0008 - 0.004
M	Stainless steel 303, etc.	J740	33 - 328	0.0004 - 0.0008	0.0008 - 0.003
N	Aluminium alloys, Brass Si < 12%, 5056, 6061, etc.	TH10	164 - 656	0.0004 - 0.0020	0.0008 - 0.004
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	33 - 98	0.0004 - 0.0008	0.0008 - 0.002

Screw-on modular head for back turning



APMX = 0.118"



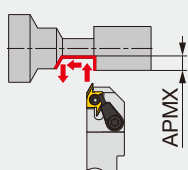
Right hand (R) shown.

Metric	H	B	LH	HF	WF	OAW	Insert	Torque*
QC12-JSEGR10	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	3.5 (0.138")	15 (0.591")	J10ER...	1.2 (0.89)

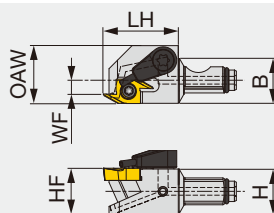
Torque* : Recommended clamping torque: N-m (lbs-ft)

QC12-JSEGR-CHP

Screw-on modular head for back turning, with high pressure coolant capability



APMX = 0.118"



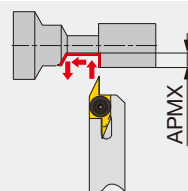
Right hand (R) shown.

Metric	H	B	LH	HF	WF	OAW	Insert	Torque*
QC12-JSEGR10-CHP	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	3.5 (0.138")	15 (0.591")	J10ER...	1.2 (0.89)

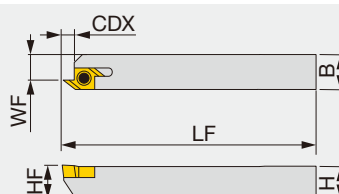
Torque* : Recommended clamping torque: N-m (lbs-ft)

JSEGR/L

Screw-on toolholder for back turning



APMX = 3 mm



Metric	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

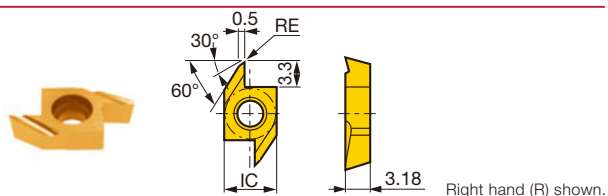
Torque*: Recommended clamping torque (N-m)

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 → **G079**
Shank, Accessory → **G115, G116**, Standard cutting conditions → **G080**

J10E (Sharp edge)



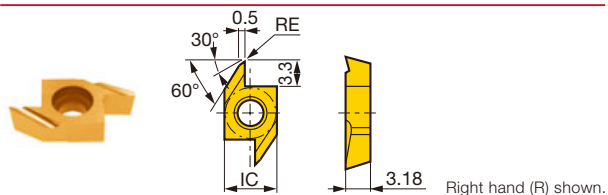
P	Steel	★	☆		★					
M	Stainless	★	☆							
K	Cast iron	★			☆		☆			
N	Non-ferrous						★			
S	Superalloys	☆					★			
H	Hard materials						★			

★ : First choice
☆ : Second choice

Designation	HAND	RE (mm)	Coated		Cermet	Uncoated		IC (mm)	Max. depth of cut (mm)
			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)

[illegible][illegible]

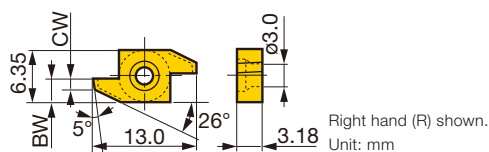
● : Line up

STANDARD CUTTING CONDITIONS (J10E type insert)

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Feed f (ipr)
P	Steel 1045, etc.	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
		NS9530	164 - 492	0.0004 - 0.004
		J9530	164 - 492	0.0004 - 0.004
	Free-cutting steel	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
M	Stainless steel 303, etc.	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
		NS9530	164 - 492	0.0004 - 0.004
		J9530	164 - 492	0.0004 - 0.004
N	Aluminum alloys, Brass Si < 12%, 5056, 6061, etc.	TH10	33 - 656	0.0004 - 0.004
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	33 - 98	0.0004 - 0.004

INSERT

10E (Insert blank)

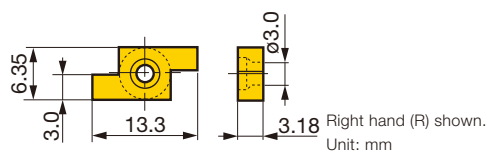


Designation	HAND	Uncoated		
		TH10		
10ER100B	R	●		
10EL100B	L	●		
10ER150B	R	●		
10EL150B	L	●		

● : 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)

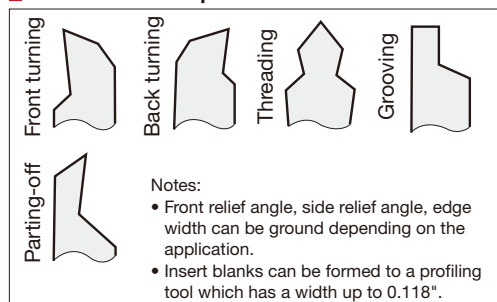


Designation	HAND	Uncoated		
		TH10		
10ER300	R	●		
10EL300	L	●		

● : Line up

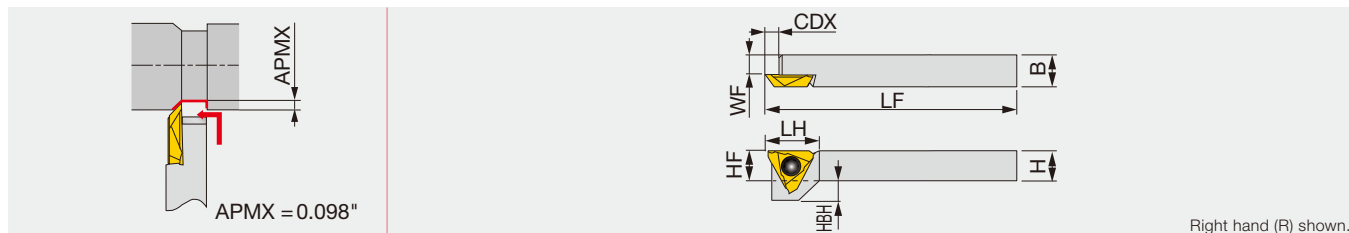
Note: Right hand holder (JSEGR...) use right hand insert (10ER...) and left hand holder (JSEGL...) use left hand insert (10EL...)

Formed examples of insert blanks



Standard cutting conditions

Operations		Workpiece material	Carbon steel	Stainless steel	Brass
Lateral feed (external turning)	Cutting speed (sfm)		~ 330	~ 160	~ 650
	Feed (ipr)	Roughing	~ 0.002	~ 0.001	~ 0.004
		Medium	~ 0.001	~ 0.001	~ 0.002
		Finishing	~ 0.0007	~ 0.0006	~ 0.0016
Parting-off Grooving Forming	Cutting speed (sfm)		~ 260	~ 100	~ 500
	Feed (ipr)	Roughing	~ 0.0007	~ 0.0006	~ 0.002
		Medium	~ 0.0006	~ 0.0004	~ 0.001
		Finishing	~ 0.0004	~ 0.0003	~ 0.0006



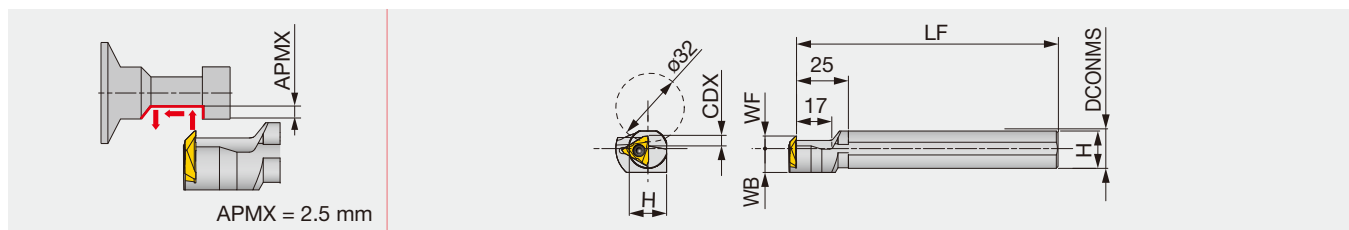
Inch	H	B	LF	LH	CDX	HF	WF	HBH	Insert	Torque
JSTBR/L063	0.375	0.375	5.000	0.625	0.197	0.375	0.219	0.250	JTBR/L3...	0.89
JSTBR/L083	0.500	0.500	5.000	0.625	0.197	0.500	0.313	0.125	JTBR/L3...	0.89
JSTBR/L103	0.625	0.625	5.000	0.625	0.197	0.625	0.469	-	JTBR/L3...	0.89

Metric	H	B	LF	LH	CDX	HF	WF	HBH	Insert	Torque*
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

Torque: Recommended clamping torque: lbs-ft (*N-m)

JS-TBL3

Screw-on toolholder for back turning



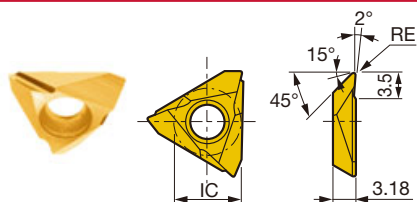
Metric	H	H	LF	CDX	WF	WB	Insert	Torque*
JS19K-TBL3	19.05	18	125	4.5	6	11.5	JTBR3...	3
JS20K-TBL3	20	19	125	4.5	6	11.5	JTBR3...	3
JS22K-TBL3	22	21	125	4.5	6	11.5	JTBR3...	3
JS25K-TBL3	25.4	24	125	4.5	10	12.7	JTBR3...	3

Torque*: Recommended clamping torque (N-m)

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTBR/L...	CSTB-4SD	T-8F	(T-8L)
JS**-TBL3	CSTB-4S	T-15F	-

JTB (Sharp edge)



Right hand (R) shown.

P	Steel	★ ☆	★						
M	Stainless	★ ☆							
K	Cast iron	★		☆		☆			
N	Non-ferrous					★			
S	Superalloys	☆ ☆				★			
H	Hard materials					★			

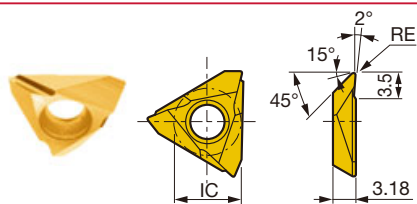
★ : First choice

☆ : Second choice

Designation	HAND	RE (in)	Coated		Cermet	Uncoated				IC (mm)	Max. depth of cut (mm)
			SH725	J740	NS9530	TH10					
JTBR3000F	R	0.001	●	●		●				9.438	2.5
JTBL3000F	L	0.001	●	●		●				9.438	2.5
JTBR3005F	R	0.002	●	●		●				9.438	2.5
JTBL3005F	L	0.002	●	●		●				9.438	2.5
JTBR3010F	R	0.004	●	●	●	●				9.438	2.5
JTBL3010F	L	0.004	●	●	●	●				9.438	2.5
JTBR3015F	R	0.006	●	●						9.438	2.5
JTBL3015F	L	0.006	●							9.438	2.5

● : Line up

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

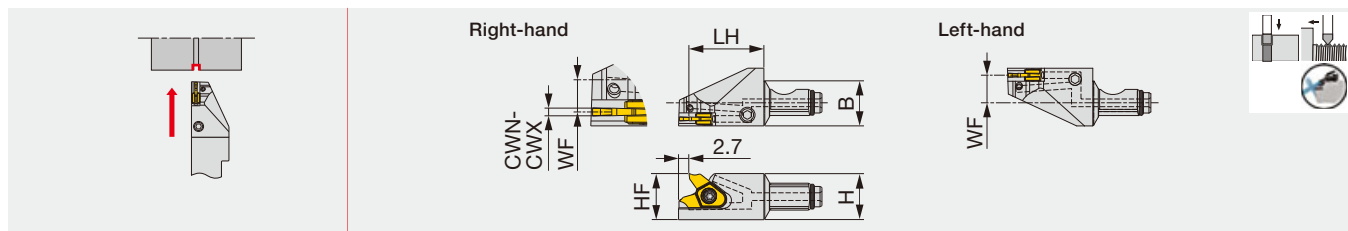
☆ : Second choice

[illegible]

● : Line up

STANDARD CUTTING CONDITIONS (JTB type insert)

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Feed f (ipr)
P	Steel 1045, etc.	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
		NS9530	164 - 492	0.0004 - 0.004
		J9530	164 - 492	0.0004 - 0.004
	Free-cutting steel	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
M	Stainless steel 303, etc.	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
		NS9530	164 - 492	0.0004 - 0.004
		J9530	164 - 492	0.0004 - 0.004
N	Aluminum alloys, Brass Si < 12%, 5056, 6061, etc.	TH10	33 - 656	0.0004 - 0.004
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	33 - 98	0.0004 - 0.004

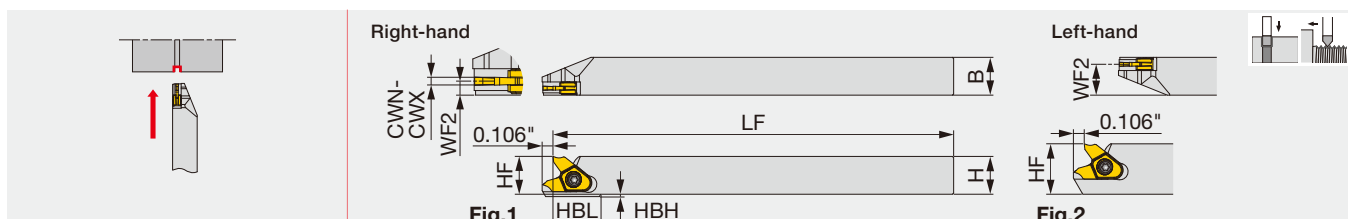
									
Metric	CWN	CWX	H	B	LH	HF	WF ⁽¹⁾	Insert	Torque
QC12-SVER/L10-CHP	0.5 (0.020")	1 (0.039")	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	4.19/7.19 (0.165"/0.283")	VG*10...	1.3 (0.96)

Torque: Recommended clamping torque: N·m (lbs·ft)

(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

												
Inch	CWN	CWX	H	B	LF	HF	WF2 ⁽¹⁾	HBL	HBH	Insert	Torque	Fig.
SVER/L06-10	0.020	0.039	0.375	0.375	4.750	0.375	0.070/0.304	0.472	0.024	VG*10...	0.96	1
SVER/L08-10	0.020	0.039	0.500	0.500	4.750	0.500	0.070/0.430	-	-	VG*10...	0.96	2
Metric	CWN	CWX	H	B	LF	HF	WF2 ⁽¹⁾	HBL	HBH	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

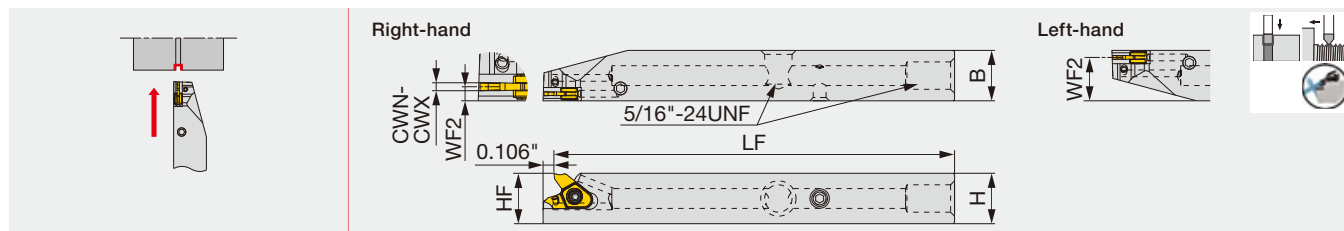
Torque: Recommended clamping torque: lbs·ft (*N·m)

(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	O-ring
QC12-SVER10-CHP	CSTB-2.5L054DL	T-7F	ORSS-0454.5X1.0NBR70
QC12-SVEL10-CHP	CSTB-2.5L054DR	T-7F	ORSS-0454.5X1.0NBR70
SVER0808...	CSTB-2.2L053DL	T-7F	-
SVEL0808...	CSTB-2.2L053DR	T-7F	-
SVER06/08-10, SVEL1010/1212...	CSTB-2.5L054DL	T-7F	-
SVEL06/08-10, SVEL1010/1212...	CSTB-2.5L054DR	T-7F	-

External grooving and threading toolholder, with high pressure coolant capability



Inch	CWN	CWX	H	B	LF	HF	WF2 ⁽¹⁾	Insert	Torque
SVER/L08-10-CHP	0.020	0.039	0.500	0.500	4.750	0.500	0.070/0.430	VG*10...	0.96
Metric	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: lbs-ft (*N·m)

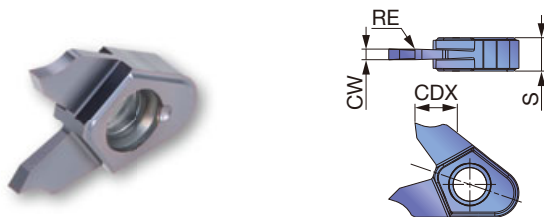
(1) "WF" indicates the distance from the reference position to the center of the cutting edge width. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

SPARE PARTS

Designation	Clamping screw	Coolant plug	DirectJet plug	Wrench	Wrench 1	Wrench 2
SVER...	CSTB-2.5L054DL	SR5/16UNFTL360	SSHM4-6-TB	T-7F	P-4	P-2
SVEL...	CSTB-2.5L054DR	SR5/16UNFTL360	SSHM4-6-TB	T-7F	P-4	P-2

INSERTS

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 (mm)	CW±0.001 (in)	RE (in)	Coated	CDX* (in)	CUTDIA (in)	S (in)
VGP08-033F-000	0.33	0.013	0	SH725	0.079	0.157	0.087
VGP08-050F-000	0.5	0.020	0	SH725	0.079	0.157	0.087
VGP08-075F-000	0.75	0.030	0	SH725	0.098	0.197	0.087
VGP08-100F-000	1	0.039	0	SH725	0.098	0.197	0.087
VGP10-050F-000	0.5	0.020	0	SH725	0.098	0.197	0.124
VGP10-050F-005	0.5	0.020	0.002	SH725	0.098	0.197	0.124
VGP10-075F-000	0.75	0.030	0	SH725	0.118	0.236	0.124
VGP10-075F-005	0.75	0.030	0.002	SH725	0.118	0.236	0.124
VGP10-100F-000	1	0.039	0	SH725	0.157	0.315	0.124
VGP10-100F-005	1	0.039	0.002	SH725	0.157	0.315	0.124

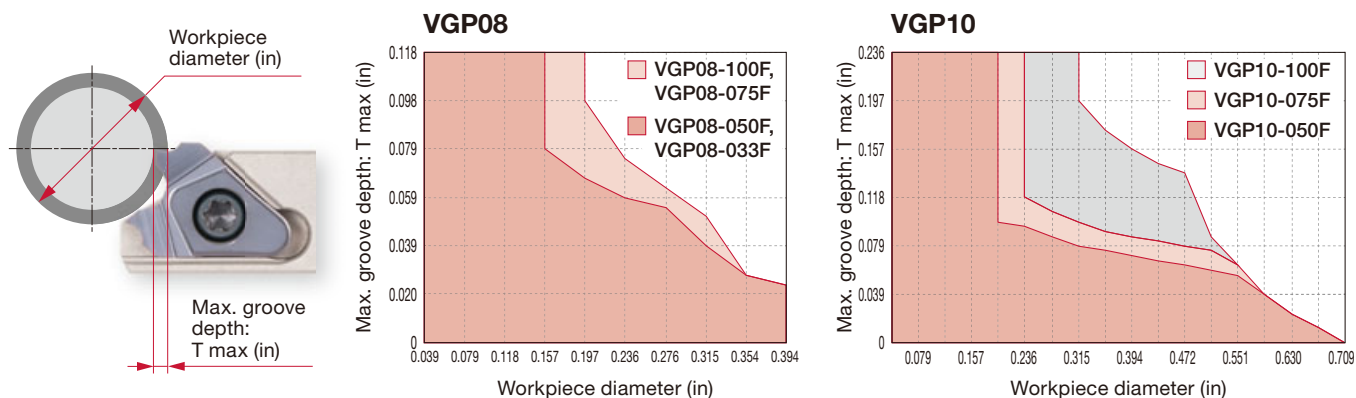
*Max grooving depth varies depending on workpiece diameters.
See below for details.

● : Line up

Reference pages : Toolholders → **G083 - G084**

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 (sfm)	Feed f (ipr)
P	Low carbon steels 1015, 1020, etc.	SH725	164 - 492	0.0002 - 0.004
	Carbon steels, Alloy steels 1055, 4140, etc.	SH725	164 - 492	0.0002 - 0.004
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 492	0.0002 - 0.004
M	Stainless steels 304, etc.	SH725	164 - 328	0.0002 - 0.004
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 722	0.0002 - 0.004
	Copper alloy C2600, C280C, etc.	SH725	328 - 656	0.0002 - 0.004
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.0002 - 0.004
	Superalloys Inconel718, etc.	SH725	98 - 262	0.0002 - 0.004

Y-axis turning modular head for external grooving and threading

Metric	CWN	CWX	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	0.33 (0.013")	3.18 (0.125")	12 (0.472")	12 (0.472")	19.5 (0.768")	0 (0")	6/9 (0.236" / 0.354")	26 (1.024")	18.6 (0.732")	6.5 (0.256")	TC*18...	1.2 (0.89)

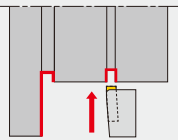
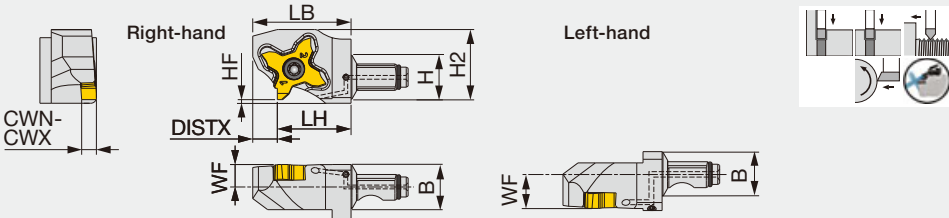
Torque* : Recommended clamping torque: N·m (lbs·ft)

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

												
Metric	CWN	CWX	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	0.33 (0.013")	3.18 (0.125")	12 (0.472")	12 (0.472")	19.5 (0.768")	0 (0")	6 (0.236")	26 (1.024")	18.6 (0.732")	6.5 (0.256")	TC*18...	1.2 (0.89)

Torque* : Recommended clamping torque: N·m (lbs·ft)

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

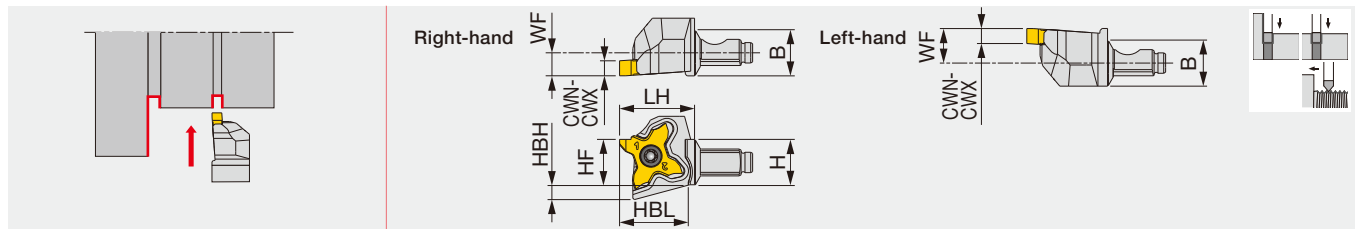
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y, 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

QC12-STCR/L

Modular head for external grooving and threading



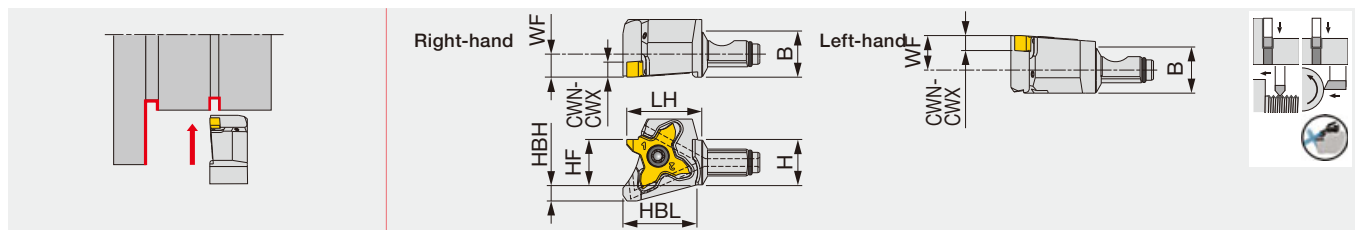
Metric	CWN	CWX	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18	0.33 (0.013")	3.18 (0.125")	12 (0.472")	12 (0.472")	19.5 (0.768")	12 (0.472")	3.9 (0.154")	17.9 (0.705")	6 (0.236")	TC*18R...	1.2 (0.89)
QC12-STCL18	0.33 (0.013")	3.18 (0.125")	12 (0.472")	12 (0.472")	21 (0.827")	12 (0.472")	3.9 (0.154")	18.3 (0.720")	9 (0.354")	TC*18L...	1.2 (0.89)

Torque* : Recommended clamping torque: N-m (lbs-ft)

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



Metric	CWN	CWX	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18-CHP	0.33 (0.013")	3.18 (0.125")	12 (0.472")	12 (0.472")	19.5 (0.768")	12 (0.472")	4.2 (0.165")	19.3 (0.760")	6 (0.236")	TC*18R...	1.2 (0.89)
QC12-STCL18-CHP	0.33 (0.013")	3.18 (0.125")	12 (0.472")	12 (0.472")	21 (0.827")	12 (0.472")	4.2 (0.165")	19.3 (0.760")	9 (0.354")	TC*18L...	1.2 (0.89)

Torque* : Recommended clamping torque: N-m (lbs-ft)

Through-coolant head

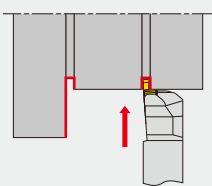
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

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 : QC12-STCR/L, QC12-STCR/L-CHP: Inserts → **G091** -
Shank, Accessory → **G115**, **G116**, Standard cutting conditions → **G097**

External grooving and threading toolholder



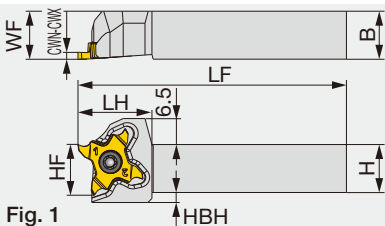


Fig. 1

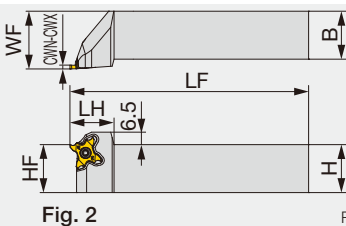


Fig. 2

Right-hand (R) shown.

Inch	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque	Fig.
STCR/L06-18	0.013	0.125	0.375	0.375	4.750	0.730	0.375	0.375	0.177	TC*18...	0.89	1
STCR/L08-18	0.013	0.125	0.500	0.500	4.750	0.730	0.500	0.500	0.098	TC*18...	0.89	1
STCR/L10-18	0.013	0.125	0.625	0.625	4.750	0.730	0.625	0.625	-	TC*18...	0.89	1
STCR/L12-18	0.013	0.125	0.750	0.750	4.750	0.900	0.750	1.000	-	TC*18...	0.89	2
STCR/L16-18	0.013	0.125	1.000	1.000	5.500	0.900	1.000	1.250	-	TC*18...	0.89	2

Metric	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

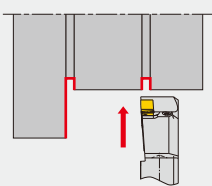
Torque: Recommended clamping torque: lbs-ft (*N-m)

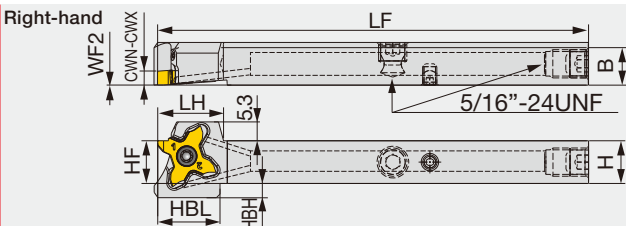
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

STCR/L-H/X18-CHP

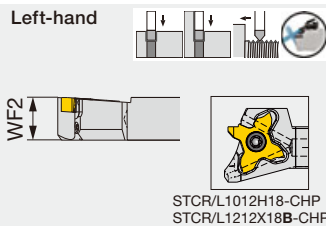
Direct connection

External grooving and threading toolholder, with high pressure coolant capability





Right-hand



Left-hand

STCR/L1012H18-CHP
STCR/L1212X18B-CHP

Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF2	HBH	Insert	Torque
STCR/L08X18-CHP	0.013	0.125	0.500	0.500	4.750	0.728	0.689	0.500	0.500	0.130	TC**18...	0.89
STCR/L10X18-CHP	0.013	0.125	0.625	0.625	4.75	0.728	-	0.625	-	0	TC**18...	0.89

Metric	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

Torque: Recommended clamping torque: lbs-ft (*N-m)

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

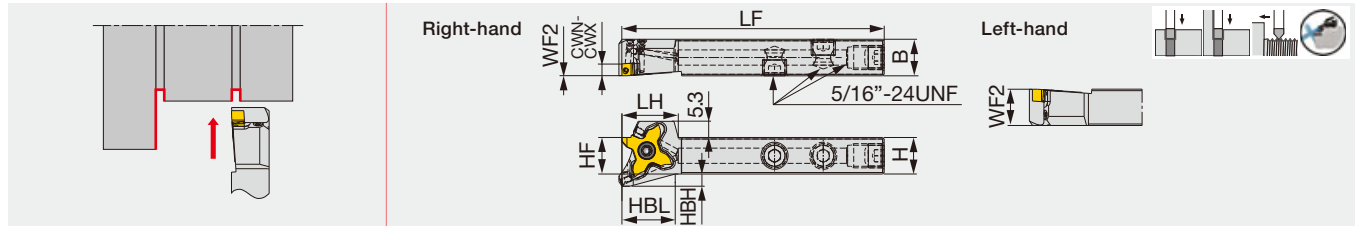
Threading pitch range: 0.8 - 3.0 mm

Reference pages : STCR/L-18, STCR/L-H/X18-CHP: Inserts → **G091** -, Standard cutting conditions → **G097**

STCR/L-18-CHP

Tube connection

External grooving and threading toolholder, with high pressure coolant capability

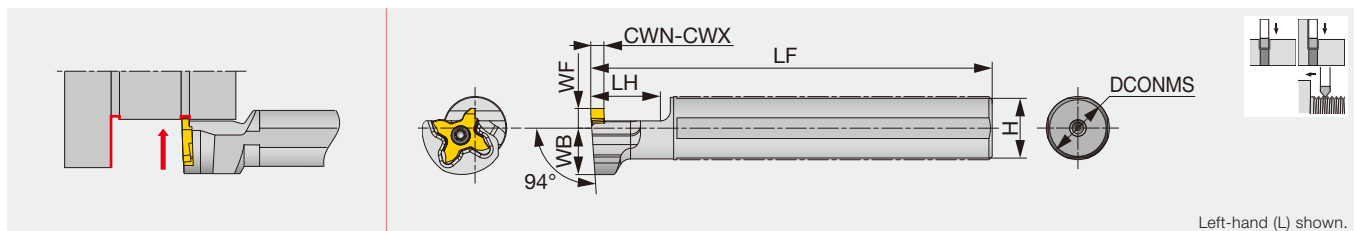


Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF2 ⁽¹⁾	HBH	Insert	Torque*
STCR/L08F18-CHP	0.013	0.125	0.500	0.500	3.344	0.728	0.689	0.500	0/0.5	0.130	TC**18	0.89
Metric	CWN	CWX	H	B	LF	LH	HBL	HF	WF2 ⁽¹⁾	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.33	3.18	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

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**).
WF2(1) : 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: lbs-ft (*N·m)

JS-STCL18

External grooving and threading toolholder with round shank, for Swiss lathes



Metric	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	-	-

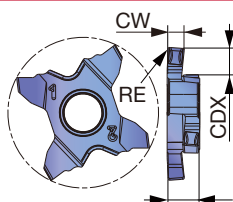
Threading pitch range: 0.8 - 3.0 mm

Selection guide for TetraMini-Cut inserts

Groove width		Corner rad.		TCL18R/L (G091 page)	TCS18R/L (G091 page -)	TCG18R/L (G093 page -)	TCP18R/L (G095 page)	TCP18R/L-F (G096 page)
CW (in)	CW (mm)	RE (in)	RE (mm)	AH7025	AH7025	AH7025	AH725	SH725
0.013	0.33	0.002	0.05				●	●
0.017	0.43	0.002	0.05				●	●
0.020	0.50	0.002	0.05				●	●
0.030	0.75	0.002	0.05				●	●
0.037	0.95	0.002	0.05				●	●
0.039	1.00	0.002	0.05					●
		0.004	0.1		●	●	●	●
0.047	1.20	0.020	0.5			●		
		0.002	0.05					●
0.049	1.25	0.004	0.1		●	●	●	●
		0.008	0.2		●	●		
0.051	1.30	0.008	0.2		●	●		
0.055	1.40	0.004	0.1		●	●	●	●
		0.008	0.2		●	●		
0.057	1.45	0.002	0.05					●
		0.004	0.1		●	●	●	●
		0.008	0.2			●		
0.059	1.50	0.002	0.05					●
		0.004	0.1	●	●	●	●	●
		0.008	0.2	●	●	●		
0.062	1.58	0.031	0.79			●		
0.063	1.60	0.008	0.2		●	●		
0.067	1.70	0.008	0.2		●	●		
0.069	1.75	0.002	0.05					●
		0.004	0.1		●	●	●	●
		0.008	0.2	●	●	●		
0.073	1.85	0.008	0.2		●	●		
0.077	1.95	0.008	0.2		●	●		
0.079	2.00	0.002	0.05					●
		0.004	0.1	●	●	●	●	●
		0.008	0.2	●	●	●		
		0.039	1.0			●		
0.089	2.25	0.008	0.2		●	●		
0.091	2.30	0.008	0.2		●	●		
0.094	2.39	0.047	1.2			●		
0.098	2.50	0.004	0.1		●	●	●	●
		0.008	0.2		●	●		
		0.012	0.3	●	●	●		
0.104	2.65	0.012	0.3		●	●		
0.110	2.80	0.012	0.3		●	●		
0.118	3.00	0.004	0.1	●	●	●	●	●
		0.008	0.2	●	●	●		
		0.012	0.3	●	●	●		
		0.059	1.5			●		
0.125	3.18	0.063	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

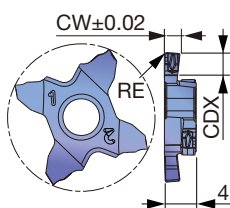
Designation	HAND	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated			CDX (in)
					AH7025			
TCL18R150-010	R	1.5	0.059	0.004	●			0.138
TCL18L150-010	L	1.5	0.059	0.004	●			0.138
TCL18R150-020	R	1.5	0.059	0.008	●			0.138
TCL18L150-020	L	1.5	0.059	0.008	●			0.138
TCL18R175-020	R	1.75	0.069	0.008	●			0.138
TCL18L175-020	L	1.75	0.069	0.008	●			0.138
TCL18R200-010	R	2	0.079	0.004	●			0.138
TCL18L200-010	L	2	0.079	0.004	●			0.138
TCL18R200-020	R	2	0.079	0.008	●			0.138
TCL18L200-020	L	2	0.079	0.008	●			0.138
TCL18R250-030	R	2.5	0.098	0.012	●			0.138
TCL18L250-030	L	2.5	0.098	0.012	●			0.138
TCL18R300-010	R	3	0.118	0.004	●			0.138
TCL18L300-010	L	3	0.118	0.004	●			0.138
TCL18R300-020	R	3	0.118	0.008	●			0.138
TCL18L300-020	L	3	0.118	0.008	●			0.138
TCL18R300-030	R	3	0.118	0.012	●			0.138
TCL18L300-030	L	3	0.118	0.012	●			0.138

Please see page **G098** 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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated							CDX (in)
					AH7025							
TCS18R100-010	R	1	0.039	0.004	●							0.079
TCS18L100-010	L	1	0.039	0.004	●							0.079
TCS18R120-010	R	1.2	0.047	0.004	●							0.079
TCS18L120-010	L	1.2	0.047	0.004	●							0.079
TCS18R125-010	R	1.25	0.049	0.004	●							0.079
TCS18L125-010	L	1.25	0.049	0.004	●							0.079

Please see page **G098** 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 (mm)	CW±0.001 (in)	RE (in)	Coated										CDX (in)
					AH7025										
TCS18R125-020	R	1.25	0.049	0.008	●										0.079
TCS18L125-020	L	1.25	0.049	0.008	●										0.079
TCS18R130-020	R	1.3	0.051	0.008	●										0.138
TCS18L130-020	L	1.3	0.051	0.008	●										0.138
TCS18R140-010	R	1.4	0.055	0.004	●										0.138
TCS18L140-010	L	1.4	0.055	0.004	●										0.138
TCS18R140-020	R	1.4	0.055	0.008	●										0.138
TCS18L140-020	L	1.4	0.055	0.008	●										0.138
TCS18R145-010	R	1.45	0.057	0.004	●										0.138
TCS18L145-010	L	1.45	0.057	0.004	●										0.138
TCS18R150-010	R	1.5	0.059	0.004	●										0.138
TCS18L150-010	L	1.5	0.059	0.004	●										0.138
TCS18R150-020	R	1.5	0.059	0.008	●										0.138
TCS18L150-020	L	1.5	0.059	0.008	●										0.138
TCS18R160-020	R	1.6	0.063	0.008	●										0.138
TCS18L160-020	L	1.6	0.063	0.008	●										0.138
TCS18R170-020	R	1.7	0.067	0.008	●										0.138
TCS18L170-020	L	1.7	0.067	0.008	●										0.138
TCS18R175-010	R	1.75	0.069	0.004	●										0.138
TCS18L175-010	L	1.75	0.069	0.004	●										0.138
TCS18R175-020	R	1.75	0.069	0.008	●										0.138
TCS18L175-020	L	1.75	0.069	0.008	●										0.138
TCS18R185-020	R	1.85	0.073	0.008	●										0.138
TCS18L185-020	L	1.85	0.073	0.008	●										0.138
TCS18R195-020	R	1.95	0.077	0.008	●										0.138
TCS18L195-020	L	1.95	0.077	0.008	●										0.138
TCS18R200-010	R	2	0.079	0.004	●										0.138
TCS18L200-010	L	2	0.079	0.004	●										0.138
TCS18R200-020	R	2	0.079	0.008	●										0.138
TCS18L200-020	L	2	0.079	0.008	●										0.138
TCS18R225-020	R	2.25	0.089	0.008	●										0.138
TCS18L225-020	L	2.25	0.089	0.008	●										0.138
TCS18R230-020	R	2.3	0.091	0.008	●										0.138
TCS18L230-020	L	2.3	0.091	0.008	●										0.138
TCS18R250-010	R	2.5	0.098	0.004	●										0.138
TCS18L250-010	L	2.5	0.098	0.004	●										0.138
TCS18R250-020	R	2.5	0.098	0.008	●										0.138
TCS18L250-020	L	2.5	0.098	0.008	●										0.138
TCS18R250-030	R	2.5	0.098	0.012	●										0.138
TCS18L250-030	L	2.5	0.098	0.012	●										0.138
TCS18R265-030	R	2.65	0.104	0.012	●										0.138
TCS18L265-030	L	2.65	0.104	0.012	●										0.138
TCS18R280-030	R	2.8	0.110	0.012	●										0.138
TCS18L280-030	L	2.8	0.110	0.012	●										0.138
TCS18R300-010	R	3	0.118	0.004	●										0.138
TCS18L300-010	L	3	0.118	0.004	●										0.138
TCS18R300-020	R	3	0.118	0.008	●										0.138
TCS18L300-020	L	3	0.118	0.008	●										0.138
TCS18R300-030	R	3	0.118	0.012	●										0.138
TCS18L300-030	L	3	0.118	0.012	●										0.138

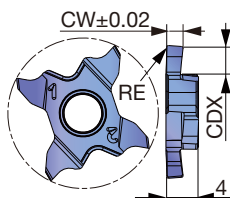
Please see page G098 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G086 - G089, Standard cutting conditions → G097

Index	User's Guide	Tooling System	Drilling tool	Endmill	Milling cutter	Miniature tool	Grooving	Threading	Int. Toolholder	Ext. Toolholder	Insert	Grade
M	L	K	J	I	H	G	F	E	D	C	B	A



P	Steel	★			
M	Stainless	★			
K	Cast iron	★			
N	Non-ferrous				
S	Superalloys	★			
H	Hard materials				

★ : First choice
☆ : Second choice

Please see page **G098** for precautions of processing.

5 pieces per package
● : Line up

Reference pages : Toolholders → **G086 - G089**, Standard cutting conditions → **G097**

★ : First choice
☆ : Second choice

External

Grooving

Internal

Parting-off

Threading

5 pieces per package

★ : First choice
☆ : Second choice

Right-hand (R) shown.

★ : First choice
☆ : Second choice

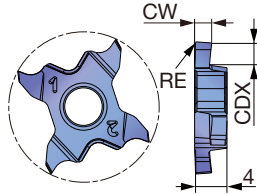
★ : First choice
☆ : Second choice

5 pieces per package

● : Line up

★ : First choice
☆ : Second choice

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 (mm)	CW±0.001 (in)	RE (in)	Coated		CDX (in)
					AH725		
TCP18R033-005	R	0.33	0.013	0.002	●		0.031
TCP18L033-005	L	0.33	0.013	0.002	●		0.031
TCP18R043-005	R	0.43	0.017	0.002	●		0.047
TCP18L043-005	L	0.43	0.017	0.002	●		0.047
TCP18R050-005	R	0.50	0.020	0.002	●		0.047
TCP18L050-005	L	0.50	0.020	0.002	●		0.047
TCP18R075-005	R	0.75	0.030	0.002	●		0.079
TCP18L075-005	L	0.75	0.030	0.002	●		0.079
TCP18R095-005	R	0.95	0.037	0.002	●		0.079
TCP18L095-005	L	0.95	0.037	0.002	●		0.079
TCP18R100-010	R	1	0.039	0.004	●		0.079
TCP18L100-010	L	1	0.039	0.004	●		0.079
TCP18R120-010	R	1.2	0.047	0.004	●		0.079
TCP18L120-010	L	1.2	0.047	0.004	●		0.079
TCP18R125-010	R	1.25	0.049	0.004	●		0.079
TCP18L125-010	L	1.25	0.049	0.004	●		0.079
TCP18R140-010-35	R	1.4	0.055	0.004	●		0.138
TCP18L140-010-35	L	1.4	0.055	0.004	●		0.138
TCP18R145-010	R	1.45	0.057	0.004	●		0.079
TCP18L145-010	L	1.45	0.057	0.004	●		0.079
TCP18R145-010-35	R	1.45	0.057	0.004	●		0.138
TCP18L145-010-35	L	1.45	0.057	0.004	●		0.138
TCP18R150-010	R	1.5	0.059	0.004	●		0.079
TCP18L150-010	L	1.5	0.059	0.004	●		0.079
TCP18R150-010-35	R	1.5	0.059	0.004	●		0.138
TCP18L150-010-35	L	1.5	0.059	0.004	●		0.138
TCP18R175-010	R	1.75	0.069	0.004	●		0.079
TCP18L175-010	L	1.75	0.069	0.004	●		0.079
TCP18R175-010-35	R	1.75	0.069	0.004	●		0.138
TCP18L175-010-35	L	1.75	0.069	0.004	●		0.138
TCP18R200-010	R	2	0.079	0.004	●		0.098
TCP18L200-010	L	2	0.079	0.004	●		0.098
TCP18R200-010-35	R	2	0.079	0.004	●		0.138
TCP18L200-010-35	L	2	0.079	0.004	●		0.138
TCP18R250-010	R	2.5	0.098	0.004	●		0.098
TCP18L250-010	L	2.5	0.098	0.004	●		0.098
TCP18R250-010-35	R	2.5	0.098	0.004	●		0.138
TCP18L250-010-35	L	2.5	0.098	0.004	●		0.138
TCP18R300-010	R	3	0.118	0.004	●		0.098
TCP18L300-010	L	3	0.118	0.004	●		0.098
TCP18R300-010-35	R	3	0.118	0.004	●		0.138
TCP18L300-010-35	L	3	0.118	0.004	●		0.138

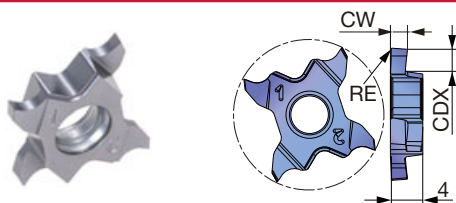
Please see page G098 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G086 - G089, Standard cutting conditions → G097

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 (mm)	CW±0.001 (in)	RE (in)	Coated		CDX (in)
					SH725		
TCP18R033F-005	R	0.33	0.013	0.002	●		0.031
TCP18L033F-005	L	0.33	0.013	0.002	●		0.031
TCP18R043F-005	R	0.43	0.017	0.002	●		0.047
TCP18L043F-005	L	0.43	0.017	0.002	●		0.047
TCP18R050F-005	R	0.5	0.020	0.002	●		0.047
TCP18L050F-005	L	0.5	0.020	0.002	●		0.047
TCP18R075F-005	R	0.75	0.030	0.002	●		0.079
TCP18L075F-005	L	0.75	0.030	0.002	●		0.079
TCP18R095F-005	R	0.95	0.037	0.002	●		0.079
TCP18L095F-005	L	0.95	0.037	0.002	●		0.079
TCP18R100F-005	R	1	0.039	0.002	●		0.079
TCP18R100F-010	R	1	0.039	0.004	●		0.079
TCP18L100F-010	L	1	0.039	0.004	●		0.079
TCP18R120F-005	R	1.2	0.047	0.002	●		0.079
TCP18R120F-010	R	1.2	0.047	0.004	●		0.079
TCP18L120F-010	L	1.2	0.047	0.004	●		0.079
TCP18R125F-005	R	1.25	0.049	0.002	●		0.079
TCP18R125F-010	R	1.25	0.049	0.004	●		0.079
TCP18L125F-010	L	1.25	0.049	0.004	●		0.079
TCP18R140F-010-35	R	1.4	0.055	0.004	●		0.138
TCP18R145F-005-35	R	1.45	0.057	0.002	●		0.138
TCP18R145F-010	R	1.45	0.057	0.004	●		0.079
TCP18L145F-010	L	1.45	0.057	0.004	●		0.079
TCP18R145F-010-35	R	1.45	0.057	0.004	●		0.138
TCP18L145F-010-35	L	1.45	0.057	0.004	●		0.138
TCP18R150F-005-35	R	1.5	0.059	0.002	●		0.138
TCP18R150F-010	R	1.5	0.059	0.004	●		0.079
TCP18L150F-010	L	1.5	0.059	0.004	●		0.079
TCP18R150F-010-35	R	1.5	0.059	0.004	●		0.138
TCP18L150F-010-35	L	1.5	0.059	0.004	●		0.138
TCP18R175F-005-35	R	1.75	0.069	0.002	●		0.138
TCP18R175F-010	R	1.75	0.069	0.004	●		0.079
TCP18L175F-010	L	1.75	0.069	0.004	●		0.079
TCP18R175F-010-35	R	1.75	0.069	0.004	●		0.138
TCP18L175F-010-35	L	1.75	0.069	0.004	●		0.138
TCP18R200F-005-35	R	2	0.079	0.002	●		0.138
TCP18R200F-010	R	2	0.079	0.004	●		0.098
TCP18L200F-010	L	2	0.079	0.004	●		0.098
TCP18R200F-010-35	R	2	0.079	0.004	●		0.138
TCP18L200F-010-35	L	2	0.079	0.004	●		0.138
TCP18R250F-010	R	2.5	0.098	0.004	●		0.098
TCP18L250F-010	L	2.5	0.098	0.004	●		0.098
TCP18R250F-010-35	R	2.5	0.098	0.004	●		0.138
TCP18L250F-010-35	L	2.5	0.098	0.004	●		0.138
TCP18R300F-010	R	3	0.118	0.004	●		0.098
TCP18L300F-010	L	3	0.118	0.004	●		0.098
TCP18R300F-010-35	R	3	0.118	0.004	●		0.138
TCP18L300F-010-35	L	3	0.118	0.004	●		0.138

Please see page G098 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G086 - G089, Standard cutting conditions → G097

STANDARD CUTTING CONDITIONS

TCS18R (3D chipbreaker) , TCG18R/L (honed edge)

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed: f (ipr)	
				TCG	TCS
P	Low carbon steel 1015, 1020, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
	Carbon steels, Alloy steel 1055, 4140, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
	Prehardened steel NAK80, PX5, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
M	Stainless steel 304SS, 316SS, etc.	AH7025	164 - 394	0.001 - 0.005	0.001 - 0.006
K	Gray cast iron Class 25, Class 30, etc.	AH7025	164 - 591	0.001 - 0.005	0.001 - 0.006
	Ductile cast iron 60-40-18, 80-55-06, etc.	AH7025	164 - 591	0.001 - 0.005	0.001 - 0.006
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	98 - 262	0.001 - 0.005	0.001 - 0.006
	Superalloys Inconel718, etc.	AH7025	66 - 197	0.001 - 0.005	0.001 - 0.006

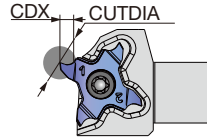
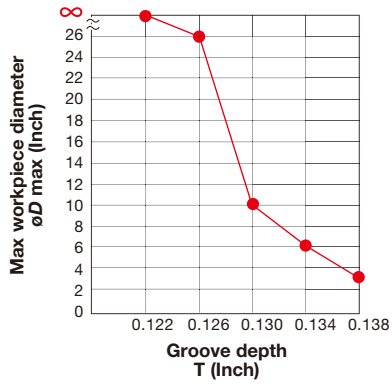
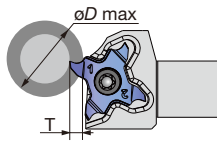
TCL18R (3D chipbreaker), TCG18R/L (Full R, honed edge)

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed: f (ipr)	
				TCL18	TCG18
P	Low carbon steel 1015, 1020, etc.	AH7025	262 - 591	0.001 - 0.005	0.002 - 0.006
	Carbon steels, Alloy steel 1055, 4140, etc.	AH7025	262 - 591	0.001 - 0.005	0.002 - 0.006
	Prehardened steel NAK80, PX5, etc.	AH7025	262 - 591	0.001 - 0.005	0.002 - 0.006
M	Stainless steel 304SS, 316SS, etc.	AH7025	164 - 394	0.001 - 0.005	0.002 - 0.006
K	Gray cast iron Class 25, Class 30, etc.	AH7025	164 - 591	0.001 - 0.005	0.002 - 0.006
	Ductile cast iron 60-40-18, 80-55-06, etc.	AH7025	164 - 591	0.001 - 0.005	0.002 - 0.006
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	98 - 262	0.001 - 0.005	0.002 - 0.006
	Superalloys Inconel718, etc.	AH7025	66 - 197	0.001 - 0.005	0.002 - 0.006

TCP18R/L (lightly honed edge) / TCP18R/L-F (sharp edge)

ISO	Workpiece materials	Priority	Grades	Cutting speed Vc (sfm)	Feed f (ipr)
P	Low carbon steel 1015, 1020, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
	Carbon steels, Alloy steel 1055, 4140, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
M	Stainless steel 304SS, 316SS, etc.	First choice	SH725	164 - 394	0.001 - 0.004
		Toughness	AH725	164 - 394	0.001 - 0.004
K	Gray cast iron Class 25, Class 30, etc.	First choice	AH725	164 - 591	0.001 - 0.004
		Sharpness	SH725	164 - 591	0.001 - 0.004
	Ductile cast iron 60-40-18, 80-55-06, etc.	First choice	AH725	164 - 591	0.001 - 0.004
		Sharpness	SH725	164 - 591	0.001 - 0.004
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	98 - 262	0.001 - 0.004
		Toughness	AH725	98 - 262	0.001 - 0.004
	Superalloys Inconel718, etc.	First choice	SH725	66 - 197	0.001 - 0.004
		Toughness	AH725	66 - 197	0.001 - 0.004

PRECAUTIONS OF PROCESSING

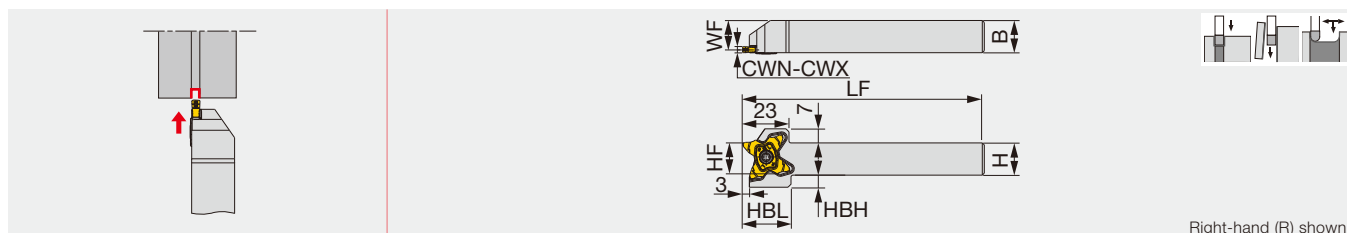


Max workpiece diameter
CUTDIA (Inch)
0.276

*Groove depth and
max workpiece diameter (ϕD_{max})

Maximum workpiece diameter is limited relative
to depth of cut in order to avoid collision between
insert and workpiece.





Right-hand (R) shown.

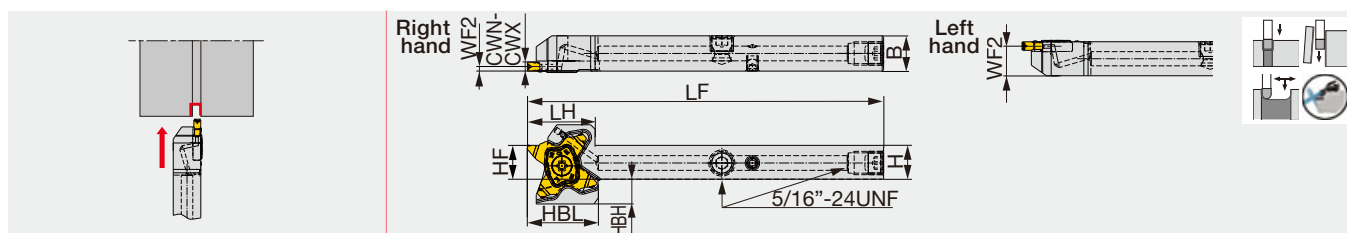
Inch	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque
STCR/L06-27	0.020	0.125	0.375	0.375	5.000	0.375	0.315	0.374	0.945	TC*27...	1.84
STCR/L08-27	0.020	0.125	0.500	0.500	5.000	0.500	0.440	0.287	0.945	TC*27...	1.84
STCR/L10-27	0.020	0.125	0.625	0.625	5.000	0.625	0.570	0.236	0.945	TC*27...	1.84
STCR/L12-27	0.020	0.125	0.750	0.750	5.000	0.75	0.690	0.118	0.945	TC*27...	1.84
STCR/L16-27	0.020	0.125	1.000	1.000	5.500	1.000	0.940	-	-	TC*27...	1.84
Metric	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: lbs-ft (*N·m)

STCR/L1212-27-CHP

Direct connection

Grooving and parting-off toolholder. High pressure coolant capability.



Inch	CWN	CWX	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	HBL	Insert	Torque
STCR/L08-27-CHP	0.020	0.125	0.500	0.500	4.750	0.906	0.500	0.059/0.413	0.287	0.945	TC*27...	1.84
Metric	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 = 0.118" is mounted.

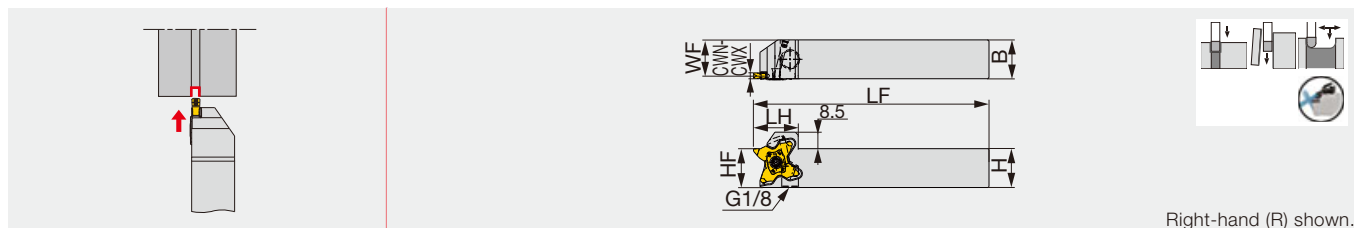
Torque: Recommended clamping torque: lbs-ft (*N·m)

Make sure to avoid tool interferences when used on Swiss machines

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

External grooving and parting-off toolholder with high pressure coolant supply



Right-hand (R) shown.

Inch	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque
STCR/L12-27-CHP	0.020	0.125	0.750	0.750	5.000	0.906	0.750	0.690	TC*27...	1.84
Metric	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

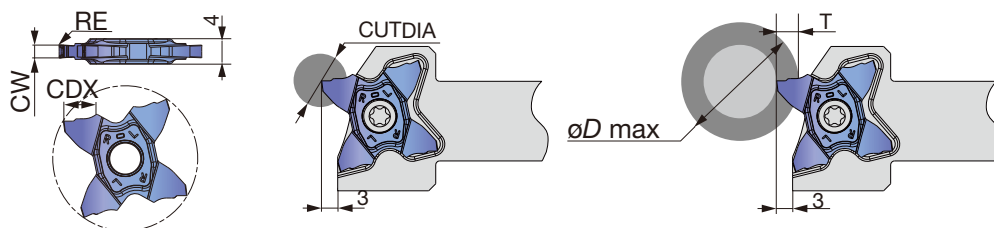
Torque: Recommended clamping torque: lbs-ft (*N·m)

SPARE PARTS

Designation	Screw	Wrench
STCR...-27-CHP	SR16-212-01397L	T-2010/5
STCL...-27-CHP	SR16-212-01397	T-2010/5

INSERT - FOR GROOVING AND PARTING OFF

TCL27



P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

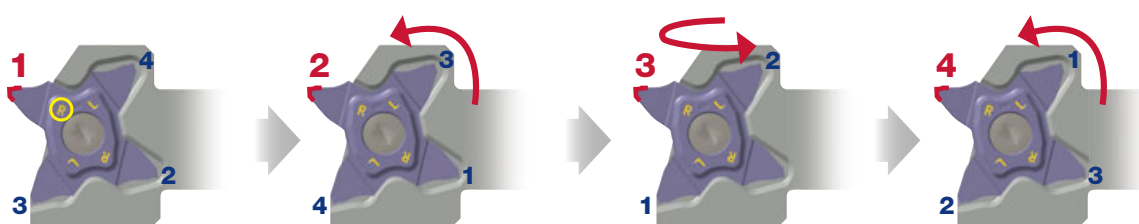
★ : First choice
☆ : Second choice

Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)									
							T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCL27-150-015	1.5	0.059	0.006	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCL27-200-020	2	0.079	0.008	●	0.252	0.504	∞	23.622	11.024	7.087	5.118	4.134	3.346	2.362	1.969	1.181
TCL27-250-020	2.5	0.098	0.008	●	0.252	0.504	∞	23.622	11.024	7.087	5.118	4.134	3.346	2.362	1.969	1.181
TCL27-300-020	3	0.118	0.008	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165

5 pieces per package

● : Line up

HOW TO INDEX INSERTS



1. Right-hand edge (R) is used for the right-hand toolholders.

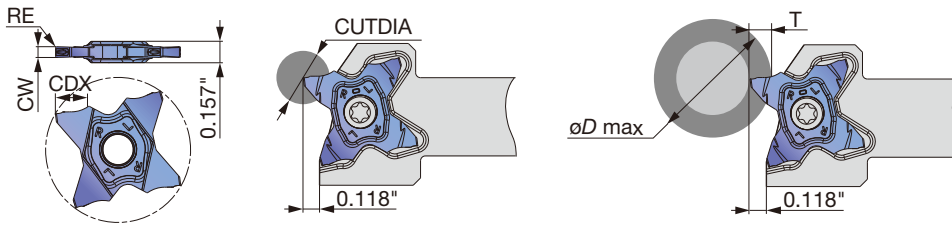
2. Rotate the insert

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

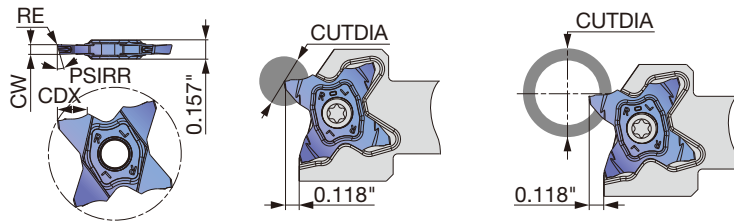
Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)											
							T≤0.039	T≤0.079	T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCS27-050-000	0.5	0.020	0	●	0.039	0.079	∞	-	-	-	-	-	-	-	-	-	-	-
TCS27-050-004	0.5	0.020	0.0016	●	0.098	0.197	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-075-010	0.75	0.030	0.004	●	0.098	0.197	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-080-000	0.8	0.031	0	●	0.063	0.126	∞	-	-	-	-	-	-	-	-	-	-	-
TCS27-100-006	1	0.039	0.0024	●	0.138	0.276	∞	∞	∞	23.622	-	-	-	-	-	-	-	-
TCS27-100-010	1	0.039	0.004	●	0.138	0.276	∞	∞	∞	23.622	-	-	-	-	-	-	-	-
TCS27-104-000	1.04	0.041	0	●	0.079	0.157	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-120-000	1.2	0.047	0	●	0.079	0.157	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-125-010	1.25	0.049	0.004	●	0.138	0.276	∞	∞	∞	23.622	-	-	-	-	-	-	-	-
TCS27-125-020	1.25	0.049	0.008	●	0.138	0.276	∞	∞	∞	23.622	-	-	-	-	-	-	-	-
TCS27-140-000	1.4	0.055	0	●	0.079	0.157	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-147-000	1.47	0.058	0	●	0.098	0.197	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-150-010	1.5	0.059	0.004	●	0.224	0.449	∞	∞	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-150-020	1.5	0.059	0.008	●	0.224	0.449	∞	∞	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-157-015	1.57	0.062	0.006	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-170-010	1.7	0.067	0.004	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-175-010	1.75	0.069	0.004	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-175-020	1.75	0.069	0.008	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-178-018	1.78	0.070	0.007	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-185-020	1.85	0.073	0.008	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-196-015	1.96	0.077	0.006	●	0.118	0.236	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-200-010	2	0.079	0.004	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.118	4.134	3.346	2.362	1.969	1.181
TCS27-200-020	2	0.079	0.008	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.118	4.134	3.346	2.362	1.969	1.181
TCS27-222-015	2.22	0.087	0.006	●	0.138	0.276	∞	∞	∞	23.622	-	-	-	-	-	-	-	-
TCS27-230-020	2.3	0.091	0.008	●	0.138	0.276	∞	∞	∞	23.622	-	-	-	-	-	-	-	-
TCS27-239-015	2.39	0.094	0.006	●	0.224	0.449	∞	∞	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-247-020	2.47	0.097	0.008	●	0.224	0.449	∞	∞	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-250-010	2.5	0.098	0.004	●	0.224	0.449	∞	∞	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-250-030	2.5	0.098	0.012	●	0.224	0.449	∞	∞	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-270-010	2.7	0.106	0.004	●	0.244	0.488	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	-
TCS27-287-020	2.87	0.113	0.008	●	0.244	0.488	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	-
TCS27-300-000	3	0.118	0	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCS27-300-020	3	0.118	0.008	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCS27-300-030	3	0.118	0.012	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCS27-300-040	3	0.118	0.016	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCS27-315-015	3.15	0.124	0.006	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.677
TCS27-318-020	3.18	0.125	0.008	●	0.252	0.504	∞	∞	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.677

5 pieces per package
● : Line up

Reference pages : Toolholders → **G099 - G100**, Standard cutting conditions → **G104**

INSERT- FOR PARTING OFF

TCS27-R/L



Right hand (R) shown.

P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice
☆ : Second choice

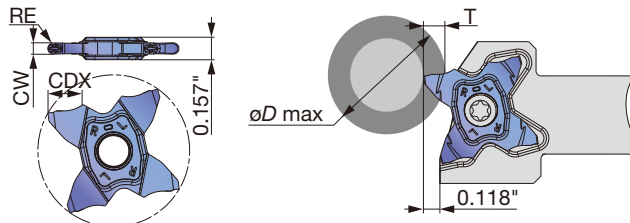
Designation	HAND	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated		CDX (in)	PSIRL	PSIRR	Max. parting off dia. CUTDIA (in)	
					AH725					Solid bar	Tube
TCS27-100-15R	R	1	0.039	0.0024	●		0.138	0°	15°	0.276	23.622
TCS27-100-15L	L	1	0.039	0.0024	●		0.138	15°	0°	0.276	23.622
TCS27-150-6R	R	1.5	0.059	0.0024	●		0.224	0°	6°	0.449	1.378
TCS27-150-6L	L	1.5	0.059	0.0024	●		0.224	6°	0°	0.449	1.378
TCS27-150-15R	R	1.5	0.059	0.0024	●		0.224	0°	15°	0.449	1.378
TCS27-150-15L	L	1.5	0.059	0.0024	●		0.224	15°	0°	0.449	1.378
TCS27-200-6R	R	2	0.079	0.004	●		0.252	0°	6°	0.504	1.181
TCS27-200-6L	L	2	0.079	0.004	●		0.252	6°	0°	0.504	1.181
TCS27-200-15R	R	2	0.079	0.004	●		0.252	0°	15°	0.504	1.181
TCS27-200-15L	L	2	0.079	0.004	●		0.252	15°	0°	0.504	1.181

5 pieces per package

● : Line up

INSERT- FOR GROOVING AND PROFILING

TCS27 (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 (mm)	CW±0.001 (in)	RE (in)	Coated		CDX (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)									
				AH725			T≤0.039 T≤0.079 T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCS27-157-079	1.57	0.062	0.031	●		0.118	∞	-	-	-	-	-	-	-	-	-
TCS27-200-100	2	0.079	0.039	●		0.118	∞	-	-	-	-	-	-	-	-	-
TCS27-239-120	2.39	0.094	0.047	●		0.224	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-300-150	3	0.118	0.059	●		0.252	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165

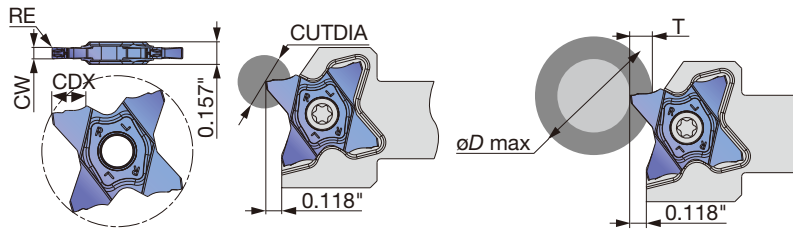
5 pieces per package

● : Line up

Reference pages : Toolholders → **G099 - G100**, Standard cutting conditions → **G104**

INSERT- FOR GROOVING AND PARTING OFF

TCM27



P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous		
S	Superalloys	★	
H	Hard materials		

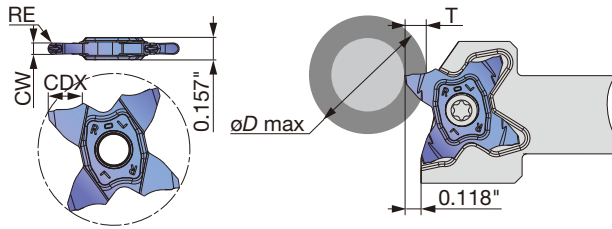
★ : First choice
☆ : Second choice

Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)									
							T≤0.039 T≤0.079 T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCM27-150-010	1.5	0.059	0.004	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-150-020	1.5	0.059	0.008	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-157-015	1.57	0.062	0.006	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-170-010	1.7	0.067	0.004	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-175-010	1.75	0.069	0.004	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-175-020	1.75	0.069	0.008	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-178-018	1.78	0.070	0.007	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-185-020	1.85	0.073	0.008	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-196-015	1.96	0.077	0.006	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-200-010	2	0.079	0.004	●	0.252	0.504	∞	23.622	11.024	7.087	5.118	4.134	3.346	2.362	1.969	1.181
TCM27-200-020	2	0.079	0.008	●	0.252	0.504	∞	23.622	11.024	7.087	5.118	4.134	3.346	2.362	1.969	1.181
TCM27-222-015	2.22	0.087	0.006	●	0.138	0.276	∞	23.622	-	-	-	-	-	-	-	-
TCM27-230-020	2.3	0.091	0.008	●	0.138	0.276	∞	23.622	-	-	-	-	-	-	-	-
TCM27-239-015	2.39	0.094	0.006	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-247-020	2.47	0.097	0.008	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-250-010	2.5	0.098	0.004	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-250-030	2.5	0.098	0.012	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-270-010	2.7	0.106	0.004	●	0.244	0.488	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	-
TCM27-287-020	2.87	0.113	0.008	●	0.244	0.488	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	-
TCM27-300-000	3	0.118	0	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCM27-300-020	3	0.118	0.008	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCM27-300-030	3	0.118	0.012	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCM27-300-040	3	0.118	0.016	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165
TCM27-315-015	3.15	0.124	0.006	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.677
TCM27-318-020	3.18	0.125	0.008	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.677

5 pieces per package
● : Line up

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 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)									
							T≤0.039 T≤0.079 T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCM27-157-079	1.57	0.059	0.031	●	0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-200-100	2	0.059	0.039	●	0.118	0.236	∞	23.622	-	-	-	-	-	-	-	-
TCM27-239-120	2.39	0.062	0.047	●	0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-300-150	3	0.125	0.059	●	0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165

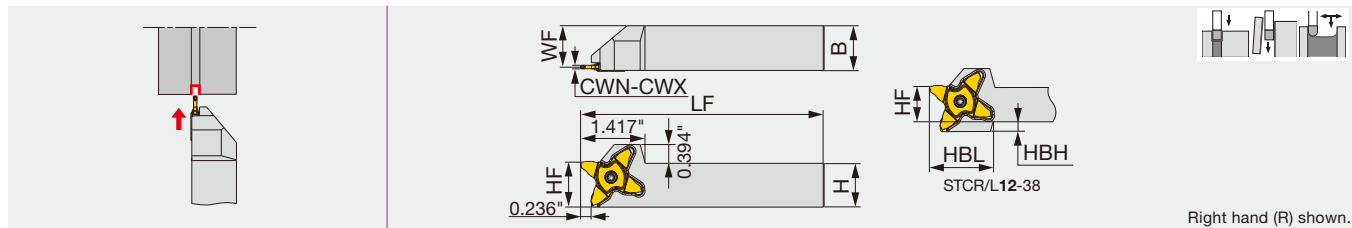
5 pieces per package

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grades	Cutting speed Vc (sfm)	Feed: <i>f</i> (ipr)						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	
	Steel 1045, etc.	AH725	328 - 656	0.001 - 0.005	0.002 - 0.006	0.002 - 0.010	0.002 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Alloy steel 4137, etc.	AH725	164 - 591	0.001 - 0.005	0.002 - 0.006	0.002 - 0.010	0.002 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Stainless steel 304, etc.	AH725	328 - 492	0.001 - 0.005	0.002 - 0.006	0.002 - 0.008	0.002 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Gray cast iron No.250, etc.	AH725	164 - 591	0.001 - 0.005	0.002 - 0.006	0.002 - 0.010	0.002 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Ductile cast iron 60-40-18, etc.	AH725	164 - 394	0.001 - 0.005	0.002 - 0.006	0.002 - 0.008	0.002 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Titanium alloys Ti-6Al-4V, etc.	AH725	98 - 197	0.001 - 0.005	0.002 - 0.006	0.002 - 0.006	0.002 - 0.005	0.002 - 0.004	0.002 - 0.004	0.020
	Superalloys Inconel718, etc.	AH725	66 - 164	0.001 - 0.005	0.002 - 0.006	0.002 - 0.006	0.002 - 0.005	0.002 - 0.004	0.002 - 0.004	0.020

Reference pages : Toolholders → **G099 - G100**



Inch	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque
STCR/L12-38	0.059	0.157	0.750	0.750	5.000	0.750	0.670	0.234	1.378	TCL38...	1.84
STCR/L16-38	0.059	0.157	1.000	1.000	5.500	1.000	0.920	-	-	TCL38...	1.84
STCR/L20-38	0.059	0.157	1.250	1.250	5.500	1.250	1.170	-	-	TCL38...	1.84

Metric	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

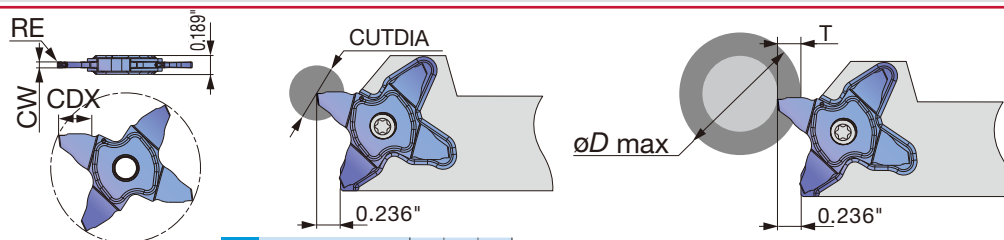
Torque: Recommended clamping torque: lbs-ft (*N·m)

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



P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice

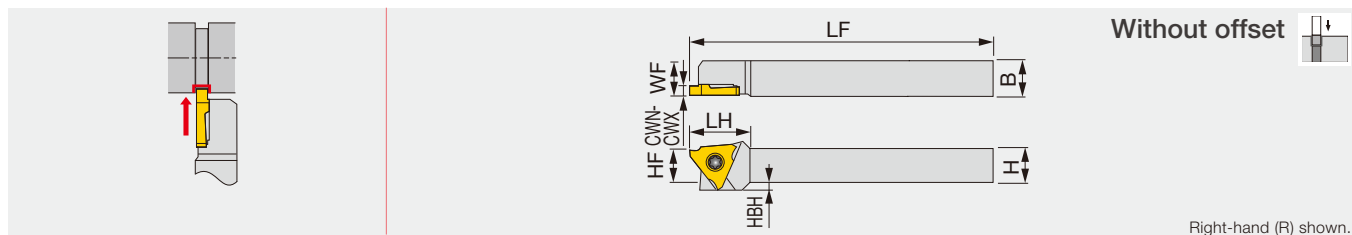
Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH7025	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max)					
							T ≤ 0.197"	T ≤ 0.236"	T ≤ 0.276"	T ≤ 0.315"	T ≤ 0.354"	T ≤ 0.394"
TCL38-150-020	1.5	0.059	0.008	●	0.354	0.709	∞	37.402	12.402	7.480	1.772	-
TCL38-200-020	2	0.079	0.008	●	0.354	0.709	∞	37.402	12.402	7.480	1.772	-
TCL38-300-020	3	0.118	0.008	●	0.394	0.787	∞	37.402	12.402	7.480	5.118	1.969
TCL38-400-030	4	0.157	0.012	●	0.394	0.787	∞	37.402	12.402	7.480	5.118	1.969

5 pieces per package

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed: f (ipr)
				Grooving, Parting TCL38
P	Carbon steel (1045, etc.)	AH7025	262 - 591	0.001 - 0.007
	Alloy steel (4140, etc.)	AH7025	164 - 591	0.001 - 0.007
M	Alloy steel (304SS, etc.)	AH7025	164 - 492	0.001 - 0.006
K	Grey cast iron (Class 25, etc.)	AH7025	164 - 591	0.001 - 0.006
	Ductile cast iron (60-40-18, etc.)	AH7025	164 - 394	0.001 - 0.006
S	Titanium alloys (Ti-6Al-4V, etc.)	AH7025	98 - 197	0.001 - 0.006
	Superalloys (Inconel718, etc.)	AH7025	66 - 164	0.001 - 0.006



Right-hand (R) shown.

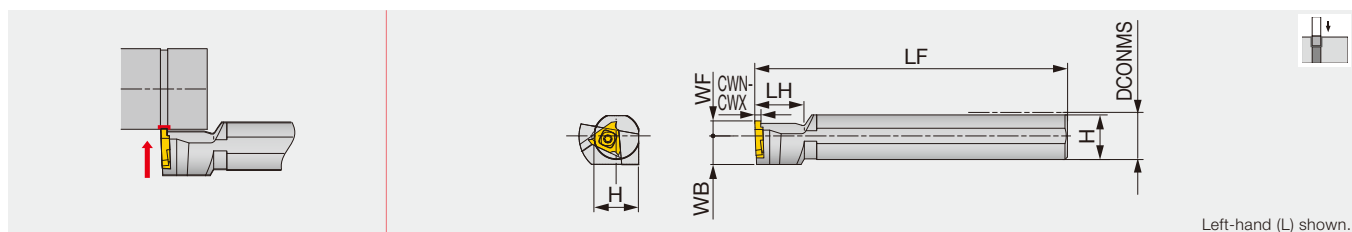
Inch	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque
JSTGR/L063	0.013	0.118	0.375	0.375	5	0.75	0.375	0.375	0.100	JTGR/L3...	0.89
JSTGR/L083	0.013	0.118	0.500	0.500	5	0.75	0.500	0.500	-	JTGR/L3...	0.89
JSTGR/L103	0.013	0.118	0.625	0.625	5	0.75	0.625	0.625	-	JTGR/L3...	0.89

Metric	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: lbs-ft (*N·m)

JS-TGL3

Screw-on external grooving toolholder, for Swiss lathes



Left-hand (L) shown.

Metric	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).

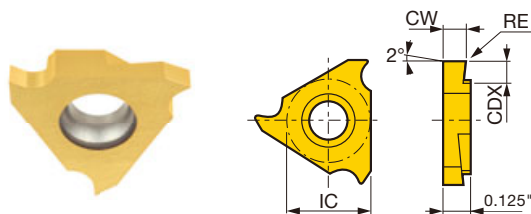
SPARE PARTS

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 → **G107 - G108**
Standard cutting conditions → **G108**

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 ^{+0.05} (mm)	CW ₀ ^{+0.002} (in)	RE (in)	Coated		Cermet NS9530	Uncoated		CDX (in)	IC (mm)	Max. groove depth
					SH725	J740		TH10				
JTGR3033F	R	0.33	0.013	0.001	●	●		●		0.028	9.53	0.028
JTGL3033F	L	0.33	0.013	0.001		●		●		0.028	9.53	0.028
JTGR3033F-005	R	0.33	0.013	0.002	●					0.028	9.53	0.028
JTGR3043F	R	0.43	0.017	0.001		●				0.043	9.53	0.028
JTGR3050F	R	0.5	0.020	0.001	●	●	●	●		0.043	9.53	0.043
JTGL3050F	L	0.5	0.020	0.001	●	●		●		0.043	9.53	0.043
JTGR3050F-005	R	0.5	0.020	0.002	●					0.043	9.53	0.043
JTGL3050F-005	L	0.5	0.020	0.002	●					0.043	9.53	0.043
JTGR3065F	R	0.65	0.026	0.001	●	●				0.075	9.53	0.043
JTGR3065F-010	R	0.65	0.026	0.004	●					0.075	9.53	0.043
JTGR3075F	R	0.75	0.030	0.001	●	●	●	●		0.075	9.53	0.075
JTGL3075F	L	0.75	0.030	0.001	●	●	●	●		0.075	9.53	0.075
JTGR3075F-010	R	0.75	0.030	0.004	●					0.075	9.53	0.075
JTGL3075F-010	L	0.75	0.030	0.004	●					0.075	9.53	0.075
JTGR3080F	R	0.8	0.031	0.001	●	●				0.075	9.53	0.075
JTGR3080F-010	R	0.8	0.031	0.004	●					0.075	9.53	0.075
JTGR3085F	R	0.85	0.033	0.001	●	●				0.075	9.53	0.075
JTGR3095F	R	0.95	0.037	0.001	●	●	●	●		0.075	9.53	0.075
JTGL3095F	L	0.95	0.037	0.001	●	●		●		0.075	9.53	0.075
JTGR3095F-010	R	0.95	0.037	0.004	●					0.075	9.53	0.075
JTGL3095F-010	L	0.95	0.037	0.004	●					0.075	9.53	0.075
JTGR3100F	R	1	0.039	0.002	●	●	●	●		0.083	9.53	0.075
JTGL3100F	L	1	0.039	0.002	●	●		●		0.083	9.53	0.075
JTGR3100F-010	R	1	0.039	0.004	●					0.083	9.53	0.075
JTGL3100F-010	L	1	0.039	0.004	●					0.083	9.53	0.075
JTGR3110F	R	1.1	0.043	0.002	●	●				0.083	9.53	0.075
JTGR3120F	R	1.2	0.047	0.002	●	●				0.083	9.53	0.075
JTGR3120F-010	R	1.2	0.047	0.004	●					0.083	9.53	0.075
JTGR3125F	R	1.25	0.049	0.002	●	●	●	●		0.083	9.53	0.083
JTGL3125F	L	1.25	0.049	0.002	●	●		●		0.083	9.53	0.083
JTGR3125F-010	R	1.25	0.049	0.004	●					0.083	9.53	0.083
JTGL3125F-010	L	1.25	0.049	0.004	●					0.083	9.53	0.083
JTGR3130F	R	1.3	0.051	0.002	●	●				0.083	9.53	0.083
JTGR3140F	R	1.4	0.055	0.002	●	●				0.083	9.53	0.083
JTGR3140F-010	R	1.4	0.055	0.004	●					0.083	9.53	0.083
JTGR3145F	R	1.45	0.057	0.002	●	●	●	●		0.083	9.53	0.083
JTGL3145F	L	1.45	0.057	0.002		●		●		0.083	9.53	0.083
JTGR3145F-010	R	1.45	0.057	0.004	●					0.083	9.53	0.083
JTGR3150F	R	1.5	0.059	0.002	●	●	●	●		0.083	9.53	0.083
JTGL3150F	L	1.5	0.059	0.002	●	●		●		0.083	9.53	0.083
JTGR3150F-010	R	1.5	0.059	0.004	●					0.083	9.53	0.083
JTGL3150F-010	L	1.5	0.059	0.004	●					0.083	9.53	0.083
JTGR3175F	R	1.75	0.069	0.002	●	●	●	●		0.083	9.53	0.083
JTGL3175F	L	1.75	0.069	0.002		●	●	●		0.083	9.53	0.083
JTGR3175F-010	R	1.75	0.069	0.004	●					0.083	9.53	0.083

●: Line up

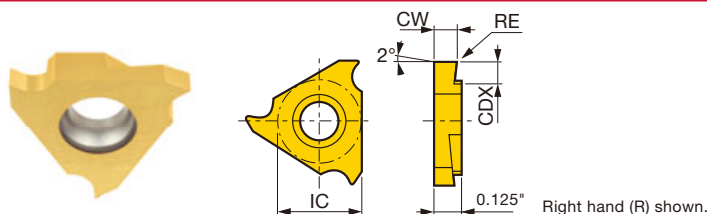
P	Steel	★	★		★		☆		
M	Stainless	★	★						
K	Cast iron				☆		★		
N	Non-ferrous						★		
S	Superalloys						★		
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	HAND	CW ₀ ^{+0.05} (mm)	CW ₀ ^{+0.002} (in)	RE (in)	Coated		Cermet NS9530	Uncoated		CDX (in)	IC (mm)	Max. groove depth
					SH725	J740		TH10				
JTGR3180F	R	1.8	0.071	0.002	●	●				0.083	9.53	0.083
JTGR3200F	R	2	0.079	0.002	●	●	●			0.102	9.53	0.102
JTGL3200F	L	2	0.079	0.002	●	●		●		0.102	9.53	0.102
JTGR3200F-010	R	2	0.079	0.004	●					0.102	9.53	0.102
JTGL3200F-010	L	2	0.079	0.004	●					0.102	9.53	0.102
JTGR3225F	R	2.25	0.089	0.002	●	●				0.102	9.53	0.102
JTGR3250F	R	2.5	0.098	0.002	●	●	●	●		0.102	9.53	0.102
JTGL3250F	L	2.5	0.098	0.002	●	●		●		0.102	9.53	0.102
JTGR3250F-010	R	2.5	0.098	0.004	●					0.102	9.53	0.102
JTGL3250F-010	L	2.5	0.098	0.004	●					0.102	9.53	0.102
JTGR3275F	R	2.75	0.108	0.002		●				0.102	9.53	0.102
JTGR3300F	R	3	0.118	0.002	●	●				0.102	9.53	0.102
JTGR3300F-010	R	3	0.118	0.004	●					0.102	9.53	0.102

●: Line up

JTG (honed edge)



P	Steel	★							
M	Stainless								
K	Cast iron	☆							
N	Non-ferrous								
S	Superalloys	☆							
H	Hard materials								

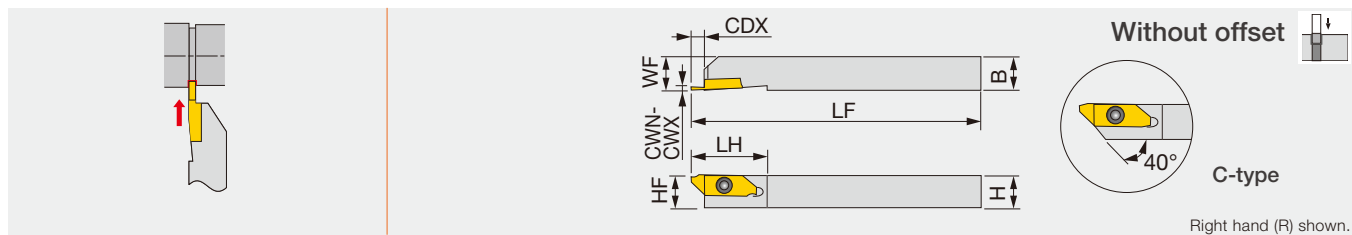
★ : First choice
☆ : Second choice

Designation	HAND	CW ₀ ^{+0.05} (mm)	CW ₀ ^{+0.002} (in)	RE (in)	Coated		J9530			CDX (in)	IC (mm)	Max. groove depth
JTGR3100	R	1	0.039	0.002	●					0.087	9.525	0.083
JTGL3100	L	1	0.039	0.002	●					0.087	9.525	0.083
JTGR3125	R	1.25	0.049	0.002	●					0.087	9.525	0.083
JTGL3125	L	1.25	0.049	0.002	●					0.087	9.525	0.083
JTGR3150	R	1.5	0.059	0.002	●					0.087	9.525	0.083
JTGL3150	L	1.5	0.059	0.002	●					0.087	9.525	0.083
JTGR3200	R	2	0.079	0.002	●					0.106	9.525	0.102
JTGL3200	L	2	0.079	0.002	●					0.106	9.525	0.102

●: Line up

STANDARD CUTTING CONDITIONS (J-Series grooving tool)

ISO	Workpiece material	Grade	Cutting Speed Vc (sfm)	Feed f (ipr)
P	General steels 1045, etc.	SH725	164 - 656	0.0004 - 0.0039
		J740	33 - 328	0.0004 - 0.0039
		NS9530	164 - 492	0.0004 - 0.0039
	Free-cutting steel	J9530	164 - 492	0.0012 - 0.0051
		SH725	164 - 656	0.0004 - 0.0039
M	Stainless steels 303SS, 304SS, etc.	J740	33 - 328	0.0004 - 0.0039
		SH725	164 - 656	0.0004 - 0.0039
		J740	33 - 328	0.0004 - 0.0039
		NS9530	164 - 492	0.0004 - 0.0039
		J9530	164 - 492	0.0012 - 0.0051
N	Aluminum alloys, copper alloys Si < 12%, etc.	TH10	33 - 656	0.0004 - 0.0039
S	Difficult-to-cut materials, titanium alloys Ti-6Al-4V, etc.	TH10	33 - 98	0.0004 - 0.0039



Metric	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.

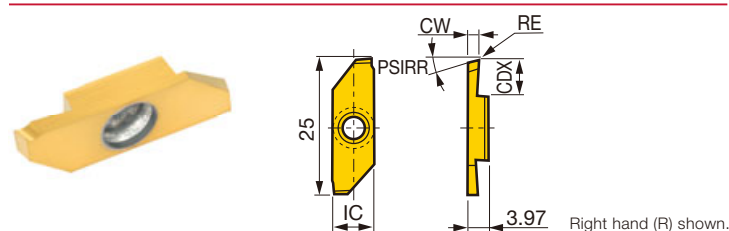
This toolholders can be used for JXG insert (grooving), JFX insert (front-turning), JXK insert (reverse-turning)

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)



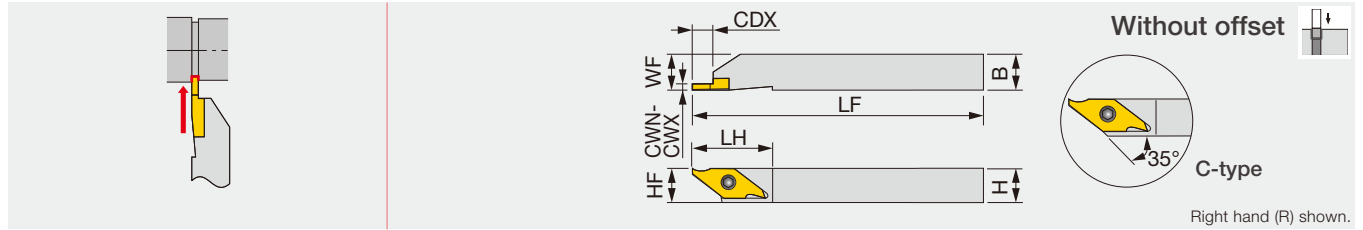
P	Steel	★	☆							
M	Stainless	★								
K	Cast iron			★						
N	Non-ferrous			★						
S	Superalloys	☆		★						
H	Hard materials									

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.001 (in)	CW±0.025 (mm)	RE (mm)	Coated		Uncoated		CDX (mm)	IC (mm)	PSIRR (mm)
					J740		TH10				
JXGR8070FA	R	0.028	0.7	0	●				4.5	8	15
JXGL8070FA	L	0.028	0.7	0	●		●		4.5	8	15
JXGR8070FA-005	R	0.028	0.7	0.05	●		●		4.5	8	15
JXGR8100FA	R	0.039	1	0	●				6	8	15
JXGL8100FA	L	0.039	1	0	●		●		6	8	15
JXGR8100FA-005	R	0.039	1	0.05	●		●		6	8	15
JXGR8100FA45	R	0.039	1	0	●				4.5	8	15
JXGR8100FA45-005	R	0.039	1	0.05	●		●		4.5	8	15
JXGR8150FA	R	0.059	1.5	0	●				6	8	15
JXGL8150FA	L	0.059	1.5	0	●		●		6	8	15
JXGR8150FA-005	R	0.059	1.5	0.05	●		●		6	8	15
JXGR8150FA50	R	0.059	1.5	0	●				5	8	15
JXGR8150FA50-005	R	0.059	1.5	0.05	●		●		5	8	15
JXGR8180FA	R	0.071	1.8	0	●				6	8	15
JXGR8180FA-005	R	0.071	1.8	0.05	●		●		6	8	15
JXGR8200FA	R	0.079	2	0	●				6	8	15
JXGL8200FA	L	0.079	2	0	●		●		6	8	15
JXGR8200FA-005	R	0.079	2	0.05	●		●		6	8	0
JXGR8200FN	R	0.079	2	0	●				6	8	0
JXGL8200FN	L	0.079	2	0	●		●		6	8	0
JXGR8200FN-005	R	0.079	2	0.05	●		●		6	8	0

●: Line up

Reference pages: JSXGR/L: Standard cutting conditions → G111



Inch	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque
JSVGR/L062.5	0.013	0.079	0.028 - 0.217	0.375	0.375	5	0.875	0.375	0.375	JVGR/L...	1.70
JSVGR/L082.5	0.013	0.079	0.028 - 0.217	0.500	0.500	5	0.875	0.500	0.500	JVGR/L...	1.70
JSVGR/L102.5	0.013	0.079	0.028 - 0.217	0.625	0.625	5	0.875	0.625	0.625	JVGR/L...	1.70
Metric	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

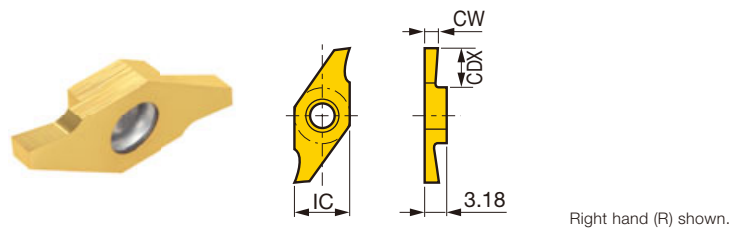
Torque: Recommended clamping torque: lbs-ft (*N·m)

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVGR/L	CSTB-3S	T-9F	(T-9L)

INSERT

JVG (with hand, sharp edge)



P	Steel	★	★		★		☆				
M	Stainless	★	★								
K	Cast iron				☆		★				
N	Non-ferrous						★				
S	Superalloys	☆					★				
H	Hard materials										

★ : First choice
☆ : Second choice

Designation	HAND	CW _{+0.05} (mm)	CW _{+0.002} (in)	RE (in)	Coated		Cermet		Uncoated		CDX (in)	IC (mm)
					SH725	J740	NS9530		TH10			
JVGR033F	R	0.33	0.013	0	●	●					0.7	7.94
JVGL033F	L	0.33	0.013	0	●				●		0.7	7.94
JVGR050F	R	0.5	0.020	0	●	●					1.1	7.94
JVGL050F	L	0.5	0.020	0	●				●		1.1	7.94
JVGR075F	R	0.75	0.030	0	●	●					1.9	7.94
JVGL075F	L	0.75	0.030	0	●				●		1.9	7.94
JVGR095F	R	0.95	0.037	0	●	●					1.9	7.94
JVGL095F	L	0.95	0.037	0	●				●		1.9	7.94
JVGR100F	R	1	0.039	0	●	●	●				5.5	7.94
JVGL100F	L	1	0.039	0	●		●		●		5.5	7.94
JVGR125F	R	1.25	0.049	0	●	●			●		5	7.94
JVGL125F	L	1.25	0.049	0	●				●		5	7.94
JVGR150F	R	1.5	0.059	0	●	●	●				5.5	7.94
JVGL150F	L	1.5	0.059	0	●		●		●		5.5	7.94
JVGR200F	R	2	0.079	0	●	●	●		●		5.5	7.94
JVGL200F	L	2	0.079	0	●				●		5.5	7.94

●: Line up

Reference pages: JSVGR/L: Standard cutting conditions → **G111**

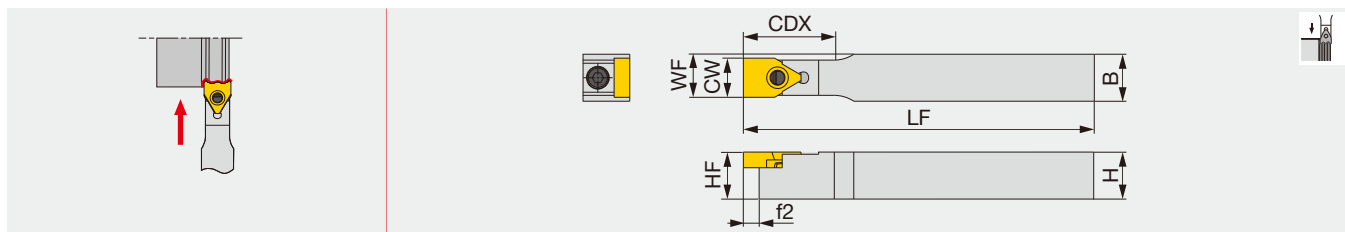
STANDARD CUTTING CONDITIONS (JXG and JVG inserts)

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Feed f (ipr)
P	Steel 1045, etc.	SH725	164 - 656	0.0004 - 0.0039
		J740	33 - 328	0.0004 - 0.0039
		NS9530	164 - 492	0.0004 - 0.0039
	Free-cutting steel	SH725	164 - 656	0.0004 - 0.0039
		J740	33 - 328	0.0004 - 0.0039
M	Stainless steel 303SS, etc.	SH725	164 - 656	0.0004 - 0.0039
		J740	33 - 328	0.0004 - 0.0039
		NS9530	164 - 492	0.0004 - 0.0039
N	Aluminum alloys, Brass Si < 12%, etc.	TH10	33 - 656	0.0004 - 0.0039
		TH10	33 - 656	0.0004 - 0.0039
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	33 - 98	0.0004 - 0.0039

TUNG H GROOVE

FPGN

Lever-lock toolholder for external wide grooving and profiling



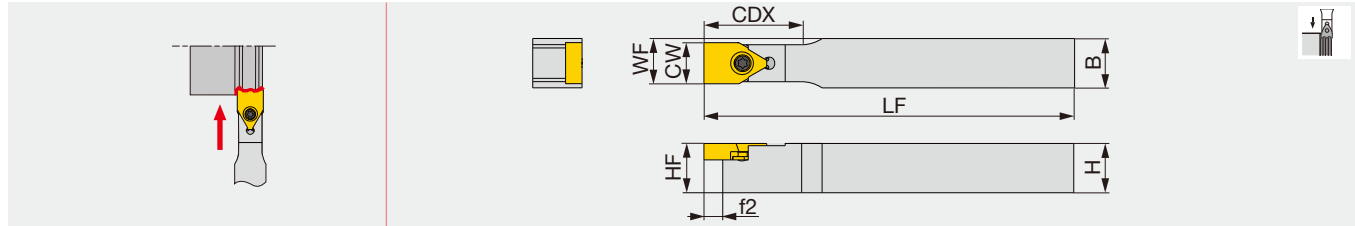
Inch	CW	CDX	H	B	LF	HF	WF	f2	Insert	Torque
FPGN08-10T20	0.394	0.984	0.500	0.500	4.946	0.500	0.450	0.216	PSGB10...	1.62
FPGN10-10T20	0.394	0.984	0.625	0.625	4.946	0.625	0.510	0.216	PSGB10...	1.62
FPGN12-10T20	0.394	0.984	0.750	0.750	5.196	0.750	0.570	0.216	PSGB10...	1.62
FPGN10-15T25	0.590	1.181	0.625	0.625	4.946	0.625	0.610	0.216	PSGB15...	1.62
FPGN12-15T25	0.590	1.181	0.750	0.750	5.196	0.750	0.670	0.216	PSGB15...	1.62
FPGN12-20T32	0.787	1.456	0.750	0.750	5.196	0.750	0.770	0.216	PSGB20...	6.27
Metric	CW	CDX	H	B	LF	HF	WF	f2	Insert	Torque*
FPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10...	2.2
FPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10...	2.2
FPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10...	2.2
FPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15...	2.2
FPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15...	2.2
FPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20...	8.5

PSGB insert blank is available for tailored inserts.

Torque: Recommended clamping torque: lbs-ft (*N·m)

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



Inch	CW	CDX	H	B	LF	HF	WF	f2	Insert	Torque
SPGN08-10T20	0.394	0.984	0.500	0.500	4.946	0.500	0.450	0.216	PSGB10	0.96
SPGN10-10T20	0.394	0.984	0.625	0.625	4.946	0.625	0.510	0.216	PSGB10	0.96
SPGN12-10T20	0.394	0.984	0.750	0.750	5.196	0.750	0.570	0.216	PSGB10	0.96
SPGN10-15T25	0.590	1.181	0.625	0.625	4.946	0.625	0.610	0.216	PSGB15	2.58
SPGN12-15T25	0.590	1.181	0.750	0.750	5.196	0.750	0.670	0.216	PSGB15	2.58
SPGN12-20T32	0.787	1.456	0.750	0.750	5.196	0.750	0.770	0.216	PSGB20	3.69
Metric	CW	CDX	H	B	LF	HF	WF	f2	Insert	Torque*
SPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10	2.3
SPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10	2.3
SPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10	2.3
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

PSGB insert blank is available for tailored inserts. Can be used with profile grooving inserts, only
Torque: Recommended clamping torque: lbs-ft (*N·m)

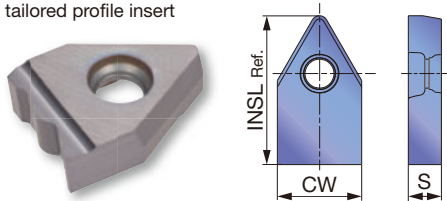
SPARE PARTS

Designation	Clamping screw	Wrench
SPGN****-10T20	CSTB-3L081	T-8F
SPGN****-15T25	CSTB-4	T-15F
SPGN****-20T..., 25T...	CSTB-5	T-20F

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

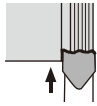
Designation	CW±0.025 (mm)	CW±0.001 (in)	Uncoated				INSL (in)	S (in)
			TH10	UX30				
PSGB10	10.2	0.402	●	●			0.709	0.157
PSGB15	15.2	0.598	●	●			0.787	0.197
PSGB20	20.2	0.795	●	●			1.063	0.256
PSGB25	25.2	0.992	●	●			1.063	0.256

These are blanks (semi-finished products) for wide profile grooving inserts that can be tailored.

Package quantity = 5pcs.
● : Line up

Reference pages : Toolholders → **G111 - G112**

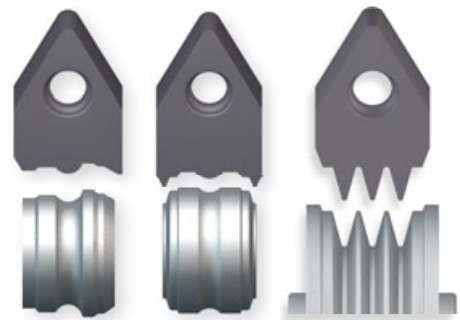
STANDARD CUTTING CONDITIONS



Wide profile grooving

ISO	Workpiece material	Hardness (HB)	Grade	Cutting speed Vc (sfm)
P	Steel 1045, 1055, etc.	< 200	UX30	165 - 490
	Alloy steel 4140, 8620, etc.	< 300	UX30	165 - 390
M	Stainless steel 304SS, 316SS, 17-4 PH, etc.	< 200	UX30	165 - 390
K	Gray cast iron Class 25, Class 30, etc.	-	TH10	165 - 490
	Ductile cast iron 60-40-18, 60-55-06, etc.	-	TH10	165 - 390
N	Aluminum alloys Si < 12%, etc.	-	TH10	330 - 1640

- 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.



Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

Technical Guide

MINIFORCE STANDARD CUTTING CONDITIONS FOR EXTERNAL TURNING



Applications	ISO	Workpiece material	Priority	Chip breaker	Grade	Cutting speed Vc (sfm)	Depth of cut ap (in)	Feed f (ipr)
For swiss type automatic lathes	P	Low carbon steels Carbon steels 1045, etc. Low alloy steels Alloy steels 4140, etc.	First choice	JS	SH725	164 - 591	0.004 - 0.118	0.001 - 0.004
			With high sharpness	JSS	SH725	164 - 591	0.004 - 0.059	0.001 - 0.004
	M	Stainless steels (Austenitic) 304, etc. Stainless steels (Martensitic and ferritic) 430, etc. Stainless steels (Precipitation hardened) 174, etc.	First choice	JS	SH725	164 - 591	0.004 - 0.049	0.001 - 0.004
			With high sharpness	JSS	SH725	164 - 591	0.004 - 0.059	0.001 - 0.004
For small size CNC lathes	P	Low carbon steels Carbon steels 1045, etc. Low alloy steels Alloy steels 4140, etc.	First choice	SS	AH725	164 - 591	0.006 - 0.059	0.002 - 0.008
				TS	AH725	164 - 591	0.012 - 0.079	0.003 - 0.012
			For improved surface finish	SS	NS9530	164 - 656	0.006 - 0.059	0.002 - 0.008
				TS	NS9530	164 - 656	0.012 - 0.079	0.003 - 0.012
			For wear resistance	SS	GT9530	164 - 820	0.006 - 0.059	0.002 - 0.008
				TS	GT9530	164 - 820	0.012 - 0.079	0.003 - 0.012
	M	Stainless steels (Austenitic) 304, etc. Stainless steels (Martensitic and ferritic) 430, etc. Stainless steels (Precipitation hardened) 174, etc.	First choice	SS	AH8015	164 - 492	0.006 - 0.059	0.002 - 0.008
			For impact resistance	TS	AH8015	164 - 492	0.012 - 0.079	0.003 - 0.012

J-SERIES STANDARD CUTTING CONDITIONS

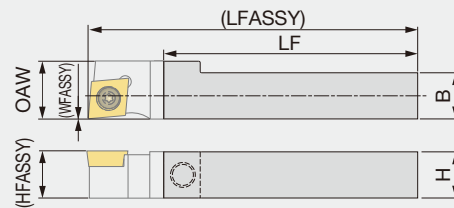
ISO	Workpiece material	Priority	Grade	Cutting speed Vc (sfm)	Feed f (ipr)
P	Low carbon steels Carbon steels 1045, etc. Low alloy steels Alloy steels 4140, etc.	First choice	SH725	164 - 656	0.0004 - 0.008
		For impact resistance	AH725	164 - 656	0.0004 - 0.008
M	Stainless steels (Austenitic) 304, etc. Stainless steels (Martensitic and ferritic) 430, etc. Stainless steels (Precipitation hardened) 174, etc.	First choice	SH725	164 - 656	0.0004 - 0.008
		For impact resistance	AH725	164 - 656	0.0004 - 0.008
S	Titanium alloys Ti-6Al-4V, etc. Superalloys Inconel718, etc.	First choice	SH725	66 - 262	0.0004 - 0.008
		For impact resistance	AH725	66 - 262	0.0004 - 0.008

ACCESSORY

MODUMTURN^{INI}

QC-08 and QC-1212

Shank for modular heads



Inch	H	B	WFASSY	LF	OAW	HFASSY	LFASSY ⁽¹⁾	Torque
QC-08F	0.500	0.500	0	2.560	0.590	0.500	3.346	2.21
QC-08X	0.500	0.500	0	3.940	0.590	0.500	4.724	2.21
Metric	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: lbs-ft (*N·m)

(1) The size is true when the modular head with LH = 19.5 mm is mounted.

QC-08-CHP and QC-1212-CHP

Shank for modular heads, with high pressure coolant capability

Tube connection

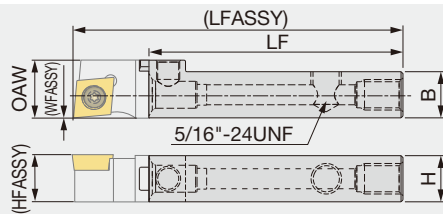


Fig.1

Direct connection

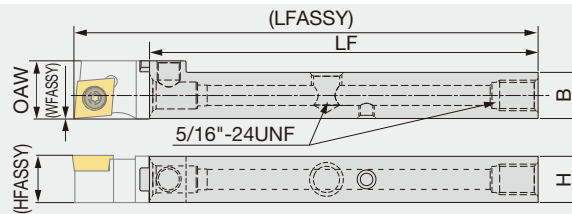


Fig.2

Inch	H	B	LF	WFASSY	OAW	HFASSY	LFASSY ⁽¹⁾	Torque	Fig.
QC-08F-CHP	0.500	0.500	2.560	0	0.590	0.500	3.346	2.21	1
QC-08X-CHP ^(*)	0.500	0.500	3.940	0	0.590	0.500	4.724	2.21	2
Metric	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: lbs-ft (*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-08-F10-CHP and QC-1216-F15-CHP

Stepped-head shank for modular heads, with high pressure coolant capability

Tube connection

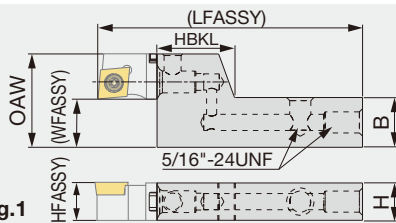


Fig.1

Direct connection

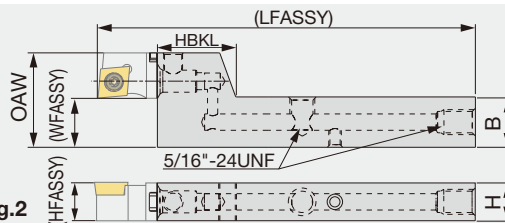


Fig.2

Inch	H	B	LF	OAW	WFASSY	HFASSY	LFASSY ⁽¹⁾	HBKL	Torque	Fig.
QC-08F-F10-CHP	0.500	0.625	2.559	1.220	0.625	0.500	3.346	0.980	2.21	1
QC-08X-F10-CHP ⁽¹⁾	0.500	0.625	3.937	1.220	0.625	0.500	4.724	0.980	2.21	2
Metric	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: lbs-ft (*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.

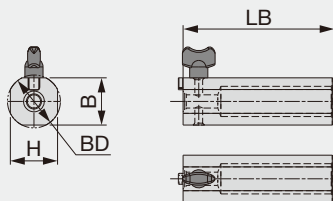
SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
QC-**F/X	SRM6X0.5-26977	P-3	-	-	-	-
QC-**F-...	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	-	-
QC-**X-...	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2

MODUM^{INI}TURN

QC-12D28EXC

Modular head holder for insert change



Metric	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

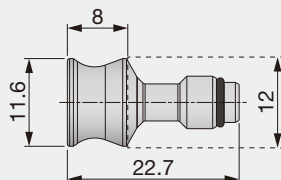
Designation	Fixing screw
QC-12D28EXC	KNOBM5X10



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



Unit: mm

Designation

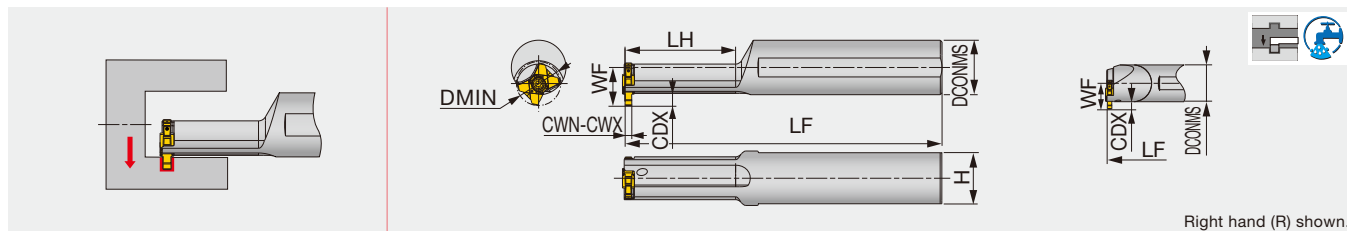
QC12-STOPPER

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.



Inch	Material	CWN	CWX	DMIN	DCONMS	LH	LF	WF	H	Insert	Torque*
A08-STCIR/L10-D07U	Steel	0.059	0.118	0.438	0.500	0.984	4.000	0.339	0.475	TCIG10...	0.74
A08-STCIR/L10-D08U	Steel	0.059	0.118	0.500	0.500	1.220	4.000	0.339	0.475	TCIG10...	0.74
E08-STCIR/L10-D10U	Carbide	0.059	0.118	0.625	0.500	-	5.000	0.339	0.475	TCIG10...	0.74
A10-STCIR/L12-D09U	Steel	0.059	0.118	0.563	0.625	1.299	4.500	0.441	0.600	TCIG12...	0.96
A10-STCIR/L12-D11U	Steel	0.059	0.118	0.688	0.625	1.614	4.500	0.441	0.600	TCIG12...	0.96
E10-STCIR/L12-D13U	Carbide	0.059	0.118	0.813	0.625	-	6.000	0.441	0.600	TCIG12...	0.96
Metric	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: lbs-ft (*N·m)

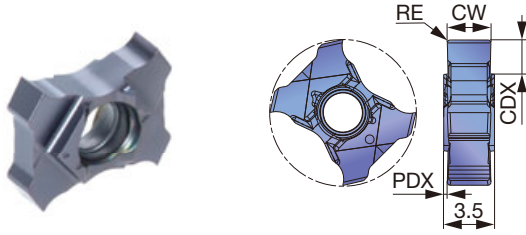
SPARE PARTS



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

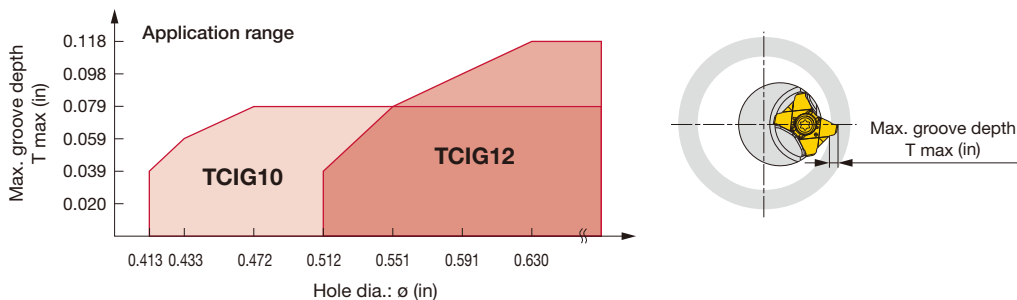
Designation	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	Coated					CDX (in)	PDX (in)
				AH725						
TCIG10-050-005	0.5	0.020	0.05	●					0.039	0.059
TCIG10-122-008	1.22	0.048	0.08	●					0.079	0.045
TCIG10-142-008	1.42	0.056	0.08	●					0.079	0.041
TCIG10-150-010	1.5	0.059	0.1	●					0.079	0.039
TCIG10-172-008	1.72	0.068	0.08	●					0.079	0.035
TCIG10-200-010	2	0.079	0.1	●					0.079	0.030
TCIG10-250-020	2.5	0.098	0.2	●					0.079	0.020
TCIG10-300-020	3	0.118	0.2	●					0.079	0.010
TCIG12-100-010	1	0.039	0.1	●					0.098	0.049
TCIG12-150-010	1.5	0.059	0.1	●					0.118	0.039
TCIG12-197-008	1.97	0.078	0.08	●					0.118	0.030
TCIG12-200-020	2	0.079	0.2	●					0.118	0.030
TCIG12-224-008	2.24	0.088	0.08	●					0.118	0.025
TCIG12-250-020	2.5	0.098	0.2	●					0.118	0.020
TCIG12-277-015	2.77	0.109	0.15	●					0.118	0.015
TCIG12-300-020	3	0.118	0.2	●					0.118	0.010

● : Line up

Shallower groove depths (T max) for smaller bores

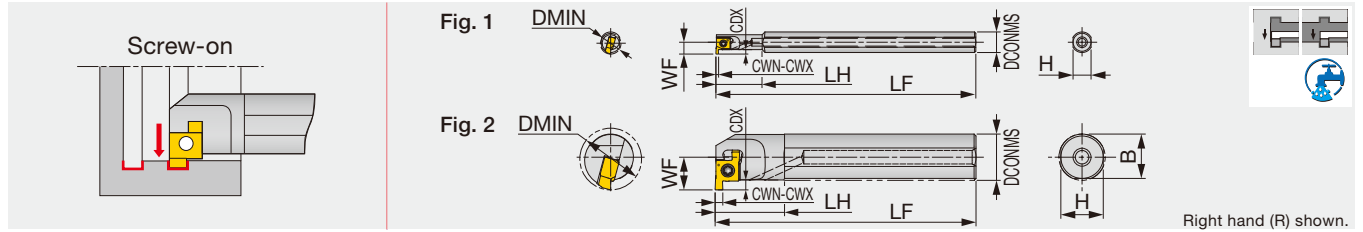
Maximum groove depths (T max) for TCIG10 inserts are smaller than the CDX value shown above when the grooving bore diameter is < 0.472" ; and for TCIG12, when the bore diameter is < 0.63".

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 (sfm)	Feed f (ipr)
P	Steel 1045, 4140, etc.	< 300 HB	First choice	98 - 262	0.0004 - 0.002
M	Stainless steel 303SS, etc.	< 200 HB	First choice	98 - 164	0.0004 - 0.002
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	33 - 164	0.0004 - 0.002

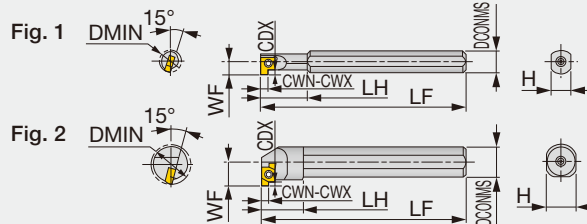
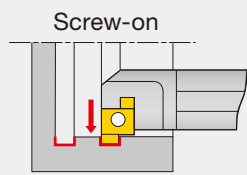


Metric	Material	CWN	CWX	DMIN	CDX	DCONMS	H	B	LF	LH	WF	Insert	Torque*	Fig.
A08H-SNGR06-D080	Steel	1	2	8	1.5	8	7	-	100	18	4.73	6GMR..., 6GR...	0.7	1
A08H-SNGR07-D100	Steel	1	2	10	1.5	8	7	-	100	23	5.8	7GMR..., 7GR...	1.0	1
A10K-SNGR07-D120	Steel	1	2	12	1.5	10	9	-	125	29	6.8	7GMR..., 7GR...	1.0	1
A10K-SNGR08-D140	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



Right hand (R) shown.

Metric	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).

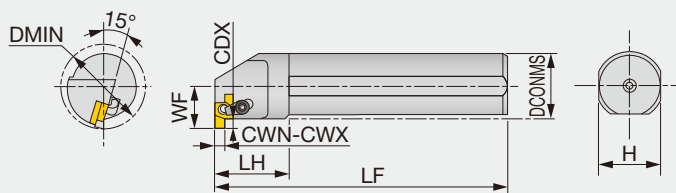
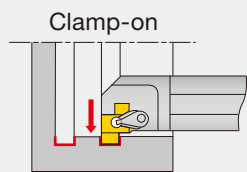
Torque*: Recommended clamping torque (N·m)

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.

Metric	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).

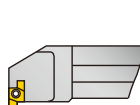
Torque*: Recommended clamping torque (N·m)

Optional parts for CNG holders

Use the following parts for screw clamp options.

SPARE PARTS

Designation	Clamp set	Screw	Shim	Wrench
CNGR...	CSP22	DTS5-3.5	SGSR151	T-20F
CNGL...	CSP22	DTS5-3.5	SGSL151	T-20F

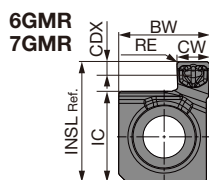


Designation	Clamping screw	Wrench
CNGR/L...	CSTB-3.5L	T-15F

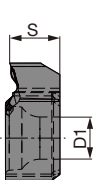
Reference pages: SNGR/L, CNGR/L: Inserts → **G121, G122**, Standard cutting conditions → **G123**

INSERTS

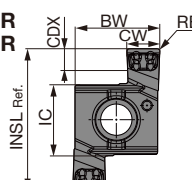
**GMR/L



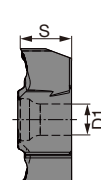
Single edge



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±0.001 (in)	CW±0.025 (mm)	RE (mm)	Coated					CDX (mm)	BW (in)	S (in)	IC (in)	INSL (in)	D1 (in)
					AH7025										
6GMR100-015	R	0.039	1	0.15	●					1.5	0.219	0.092	0.187	0.254	0.091
7GMR200-020	R	0.079	2	0.2	●					1.5	0.219	0.121	0.219	0.290	0.102
8GMR150-020	R	0.059	1.5	0.2	●					2	0.242	0.152	0.219	0.400	0.102
9GMR200-020	R	0.079	2	0.2	●					3	0.305	0.183	0.250	0.510	0.113
9GMR300-020	R	0.118	3	0.2	●					3	0.305	0.183	0.250	0.510	0.113

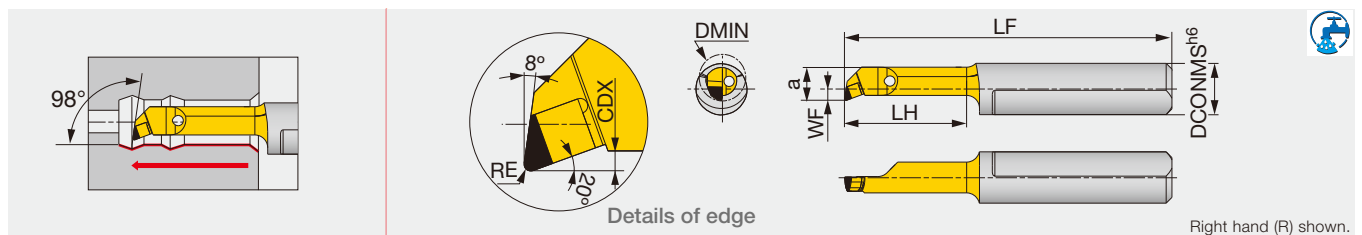
● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Feed rate: f (ipr)	
				**GMR...	**GR/L...
P	Carbon steel 1045, etc.	AH7025	262 - 591	0.0012 - 0.0047	-
		NS9530	262 - 656	-	0.002 - 0.0059
		UX30	131 - 492	-	0.002 - 0.0059
	Alloy steel 4137, etc.	AH7025	262 - 591	0.0012 - 0.0047	-
		NS9530	262 - 656	-	0.002 - 0.0059
		UX30	131 - 492	-	0.002 - 0.0059
M	Stainless steel 304SS, etc.	AH7025	164 - 394	0.0012 - 0.0047	-
		UX30	131 - 328	-	0.0012 - 0.0039
K	Gray cast irons Class 25, etc.	AH7025	164 - 722	0.0012 - 0.0047	-
		TH10	197 - 656	-	0.002 - 0.0059
	Ductile cast irons 60-40-18, etc.	AH7025	164 - 591	0.0012 - 0.0047	-
		TH10	131 - 525	-	0.002 - 0.0059
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	98 - 262	0.0012 - 0.0047	-
		TH10	66 - 164	-	0.002 - 0.0031
	Superalloys Inconel718, etc.	AH7025	66 - 197	0.0012 - 0.0047	-
		TH10	33 - 98	-	0.0012 - 0.0031

TINY^{INI}TURN JBTR

For boring, profiling, and chamfering

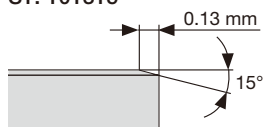


Metric	BX310	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
JBTR04060010-D028ST	●	2.8	4	0.9	2.6	22	6	0.3	0.1
JBTR04095010-D028ST	●	2.8	4	0.9	2.6	25.5	9.5	0.3	0.1
JBTR04070015-D040ST	●	4	4	1.5	3.5	23	7	0.5	0.15
JBTR04110015-D040ST	●	4	4	1.5	3.5	27	11	0.5	0.15
JBTR07090020-D050ST	●	5	7	0.6	4.15	25	9	0.4	0.2
JBTR07140020-D050ST	●	5	7	0.6	4.15	30	14	0.4	0.2

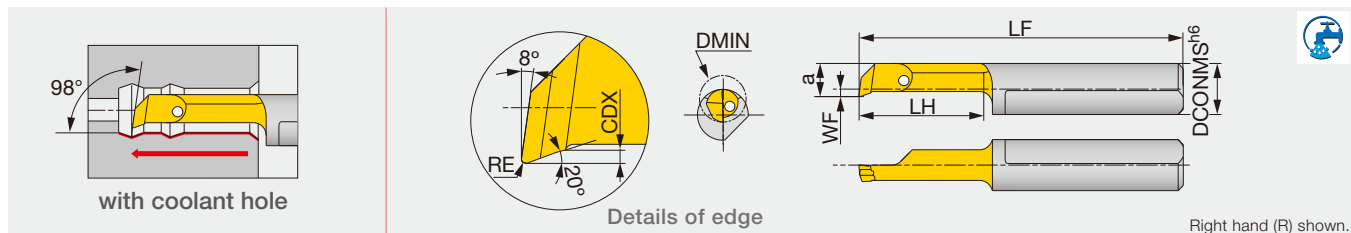
● : Line up

Edge preparation

ST: T01315



Reference pages : JBTR: Standard cutting conditions → **G136**

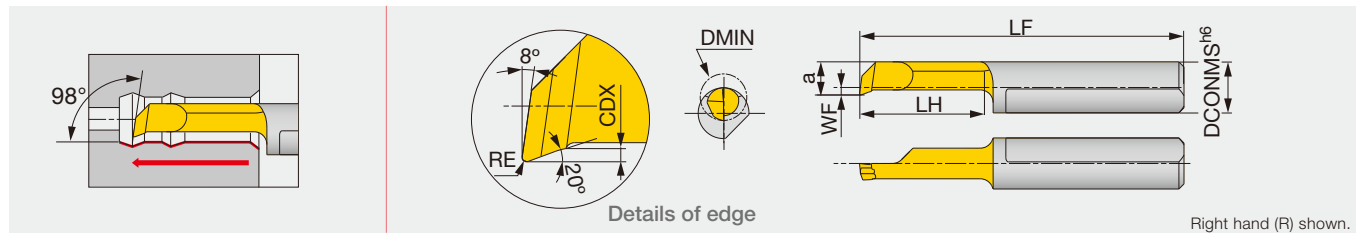


Metric	SH725	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
JBTR04020004-D006	●	▲	0.6	4	-1.5	0.5	18.5	2	0.08	0.04
JBTR04030004-D006	●	▲	0.6	4	-1.5	0.5	19.5	3	0.08	0.04
JBTR04045005-D010	●	▲	1	4	-1.1	0.9	21	4.5	0.1	0.05
JBTR04065005-D010	●	▲	1	4	-1.1	0.9	23	6.5	0.1	0.05
JBTR04040005-D020	●	▲	2	4	-0.3	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
JBTL07290015-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
▲ : To be discontinued in April 2025

TBTR/L

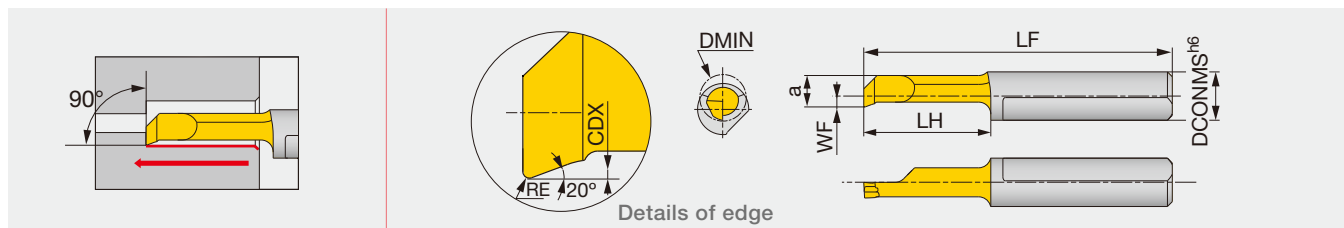
Solid boring bar for boring, profiling, and chamfering



Metric	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

Solid boring bar for boring and chamfering

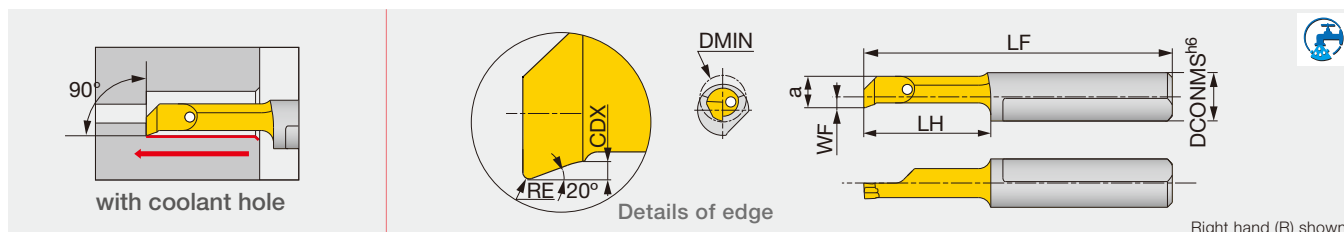


Metric	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
TBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
TBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
TBPR07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15

● : Line up

JBPR

Solid boring bar for boring and chamfering



Right hand (R) shown.

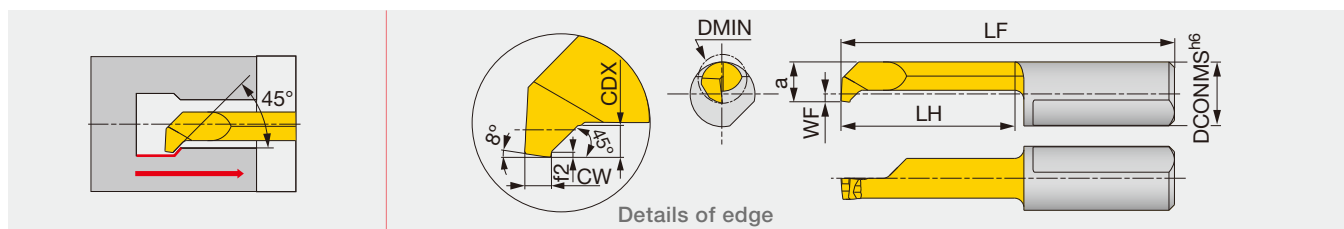
Metric	SH725	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
JBPR04090010-D028	●	▲	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBPR04150010-D028	●	▲	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBPR04090010-D040	●	▲	4	4	1.5	3.5	25.5	9	0.3	0.1
JBPR04150010-D040	●	▲	4	4	1.5	3.5	31.5	15	0.3	0.1
JBPR07140015-D050	●	▲	5	7	0.9	4.4	30	14	0.5	0.15
JBPR07190015-D050	●	▲	5	7	0.9	4.4	35	19	0.5	0.15

● : Line up

▲ : To be discontinued in April 2025

TBUR

Solid boring bar for back boring and chamfering



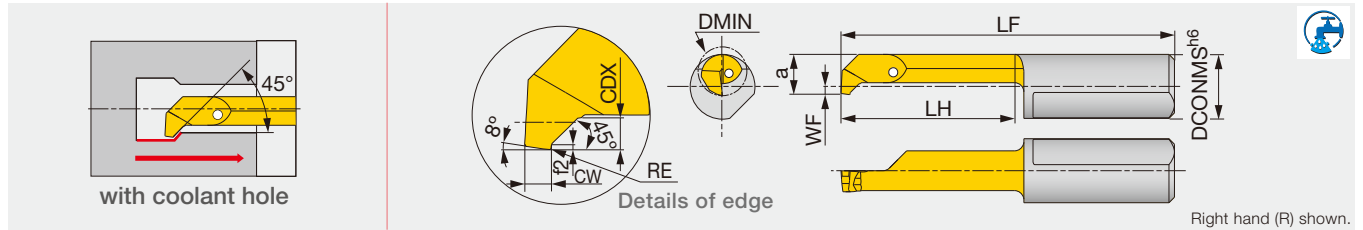
Metric	SH725	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW ^{+0.05} ₀
TBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1
TBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1

● : Line up

Reference pages : TBPR, JBPR, TBUR: Standard cutting conditions → **G136**

JBUR

Solid boring bar for back boring and chamfering

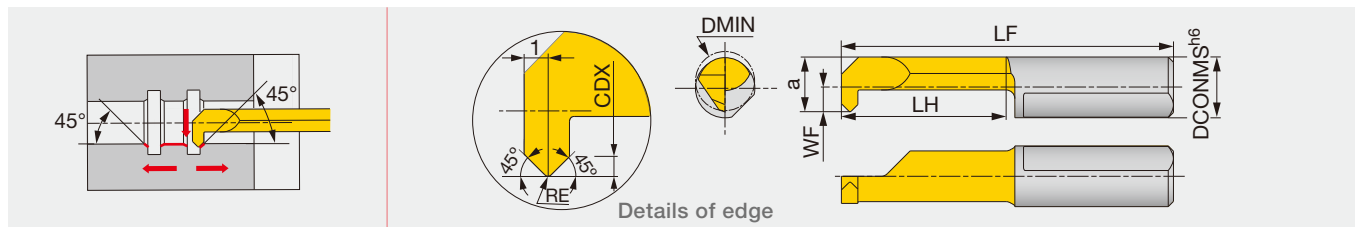


Metric	SH725	SH730	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW ^{+0.05} ₀	RE
JBUR07140010-D050	●	▲	5	7	0.9	4.4	30	14	0.2	1	1	0.1
JBUR07190010-D050	●	▲	5	7	0.9	4.4	35	19	0.2	1	1	0.1

● : Line up
▲ : To be discontinued in April 2025

TBCR

Solid boring bar for boring and 45° chamfering

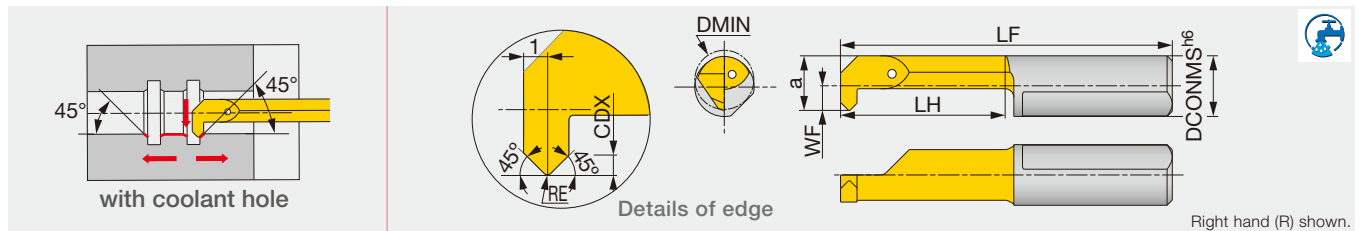


Metric	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
TBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

● : Line up

JBCR

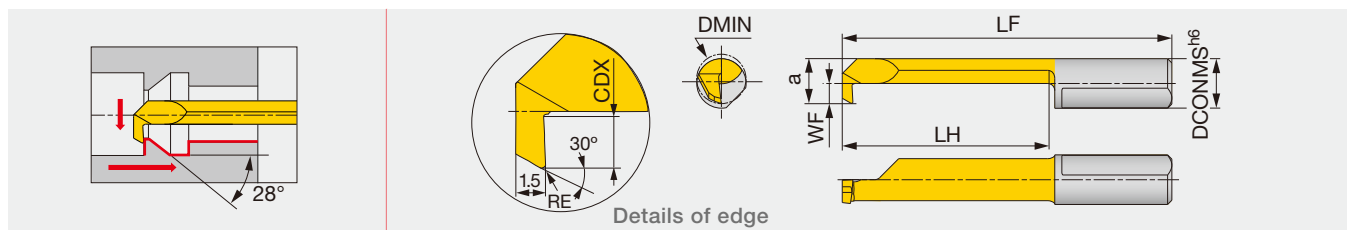
Solid boring bar for boring and 45° chamfering



Metric	SH725	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
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
▲ : To be discontinued in April 2025

Solid boring bar for back boring

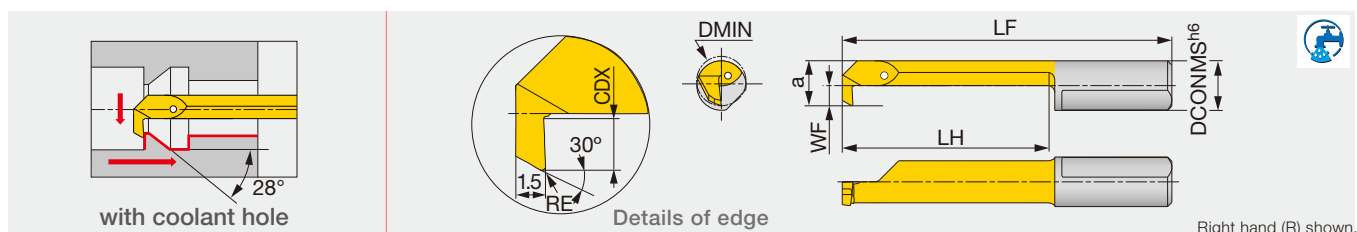


Metric	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBBR04140020-D030	●	3	4	0.6	2.6	30	14	0.5	0.2
TBBR04140015-D040	●	4	4	1.5	3.5	30	14	0.8	0.15
TBBR07190020-D050	●	5	7	0.9	4.4	35	19	1	0.2

● : Line up

JBBR

Solid boring bar for back boring



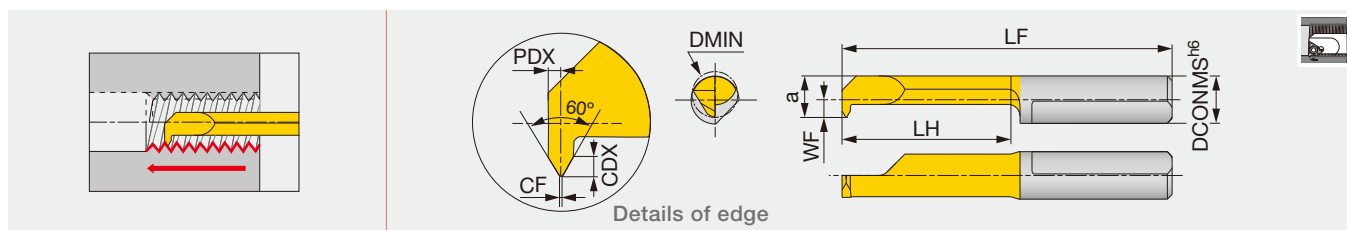
Metric	SH725	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
JBBR04140020-D030	●	▲	3	4	0.6	2.6	30	14	0.5	0.2
JBBR04190020-D030	●	▲	3	4	0.6	2.6	35	19	0.5	0.2
JBBR04140015-D040	●	▲	4	4	1.5	3.5	30	14	0.8	0.15
JBBR04240015-D040	●	▲	4	4	1.5	3.5	40	24	0.8	0.15
JBBR07190020-D050	●	▲	5	7	0.9	4.4	35	19	1	0.2
JBBR07290020-D050	●	▲	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

▲ : To be discontinued in April 2025

TBIR

Solid boring bar for threading (metric)



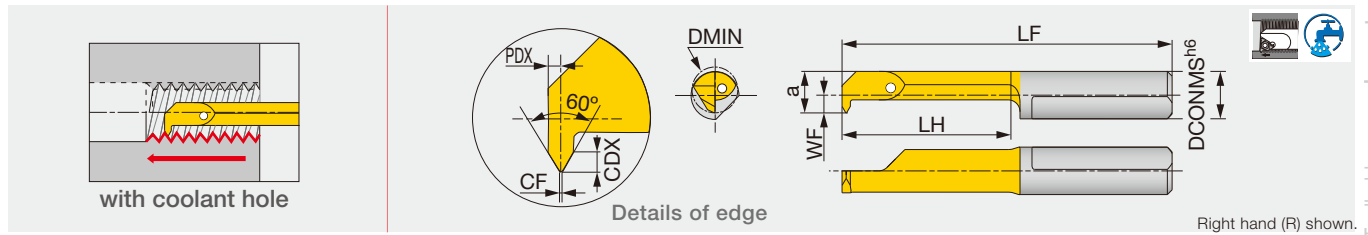
Metric	SH725	Pitch	DMIN	CF ⁰ _{0.02}	DCONMS	WF	a	LF	LH	CDX	PDX
TBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
TBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
TBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
TBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
TBIR07140100-D060	●	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 → **G136**

JBIR

Solid boring bar for threading (metric)

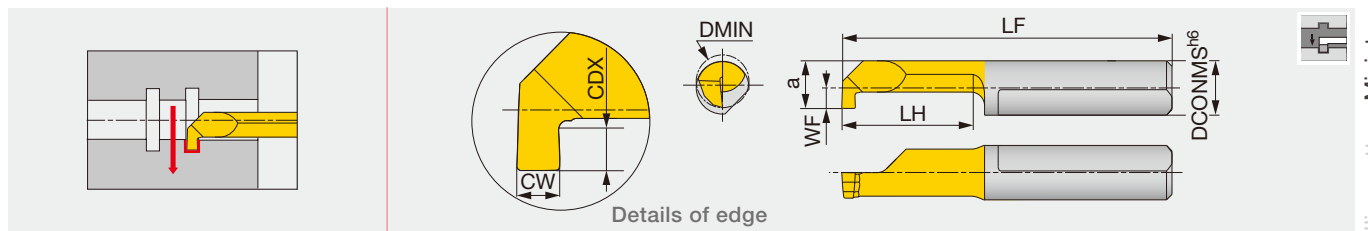


Metric	SH725	SH730	Pitch	DMIN	CF ⁰ _{0.02}	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	▲	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	▲	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	▲	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	▲	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
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
▲ : To be discontinued in April 2025

TBGR

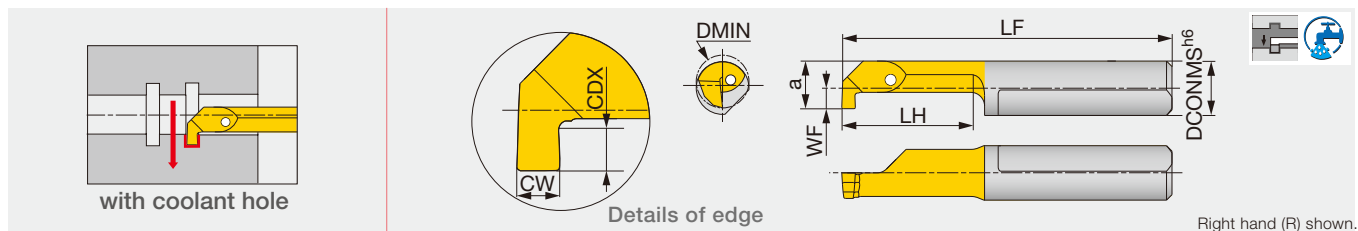
Solid boring bar for internal grooving



Metric	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



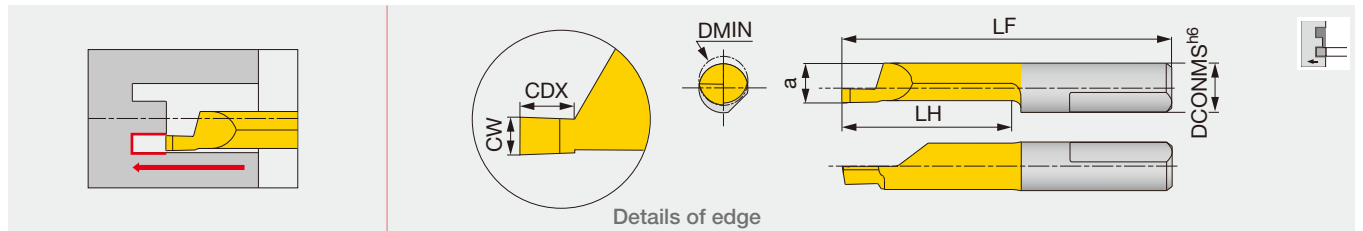
Metric	SH725	SH730	CW ^{+0.05} ₀	DMIN	DCONMS	WF	a	LF	LH	CDX
JBGR04050050-D020	●	▲	0.5	2	4	-0.2	1.8	21	5	0.4
JBGR04100050-D020	●	▲	0.5	2	4	-0.2	1.8	26	10	0.4
JBGR04050070-D030	●	▲	0.7	3	4	0.7	2.7	21	5	0.6
JBGR04100070-D030	●	▲	0.7	3	4	0.7	2.7	26	10	0.6
JBGR04090100-D040	●	▲	1	4	4	1.5	3.5	25.5	9	0.8
JBGR04150100-D040	●	▲	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
▲ : To be discontinued in April 2025

TBFR

Solid boring bar for face grooving



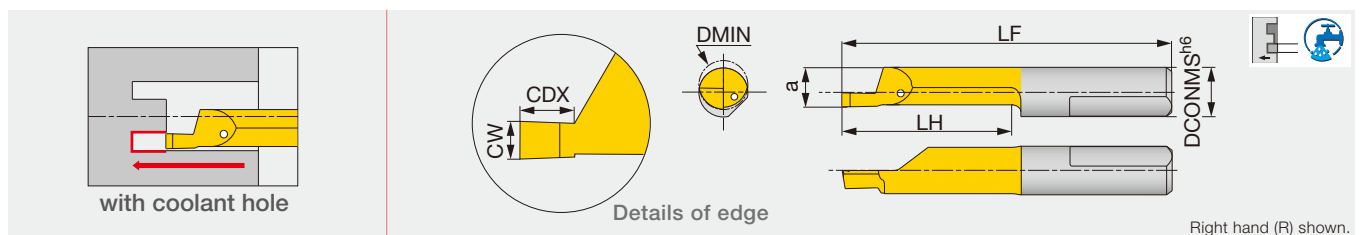
Metric	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
TBFR07110100-D060	●	1	6	7	5.2	26	10	1.5
TBFR07110200-D060	●	2	6	7	5.2	26	10	3
TBFR07110100-D080	●	1	8	7	5.9	27	11	1.5
TBFR07110250-D080	●	2.5	8	7	5.9	27	11	3.5
TBFR07300300-D080	●	3	8	7	5.9	46	30	3.5
TBFR07200250-D150	●	2.5	15	7	5.9	36	20	20
TBFR07200300-D150	●	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.

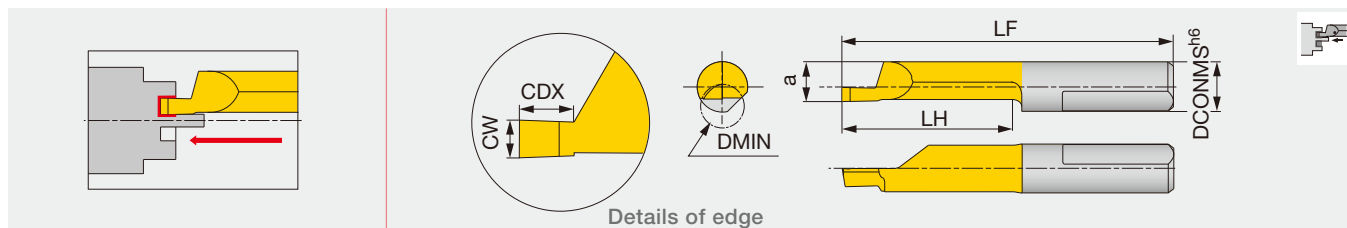
Metric	SH725	SH730	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
JBFR07110100-D060	●	▲	1	6	7	5.2	27	10	1.5
JBFR07110150-D060	●	▲	1.5	6	7	5.2	27	10	2
JBFR07110200-D060	●	▲	2	6	7	5.2	27	10	3
JBFR07110100-D080	●	▲	1	8	7	5.9	27	11	1.5
JBFR07110150-D080	●	▲	1.5	8	7	5.9	27	11	2.5
JBFR07110200-D080	●	▲	2	8	7	5.9	27	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

▲ : To be discontinued in April 2025

Solid boring bar for face grooving (for shaft)



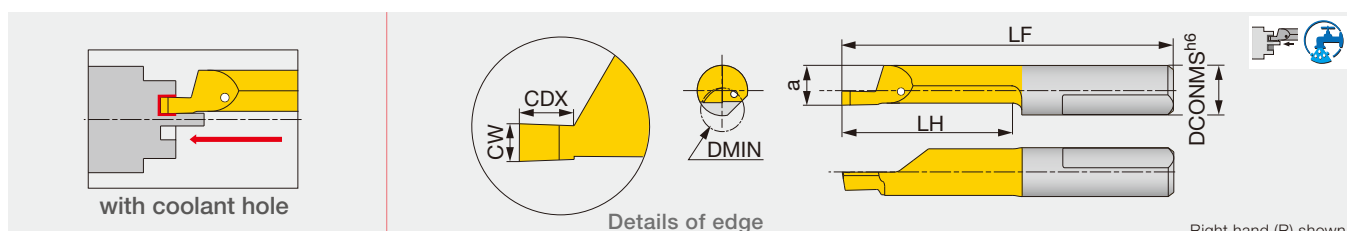
Metric	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
TBSR07200200-D060	●	2	6	7	5.2	36	20	4

Corner radius : less than 0.1 mm.

● : Line up

JBSR

Solid boring bar for face grooving (for shaft)



Metric	SH725	SH730	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
JBSR07200200-D060	●	▲	2	6	7	5.2	36	20	4

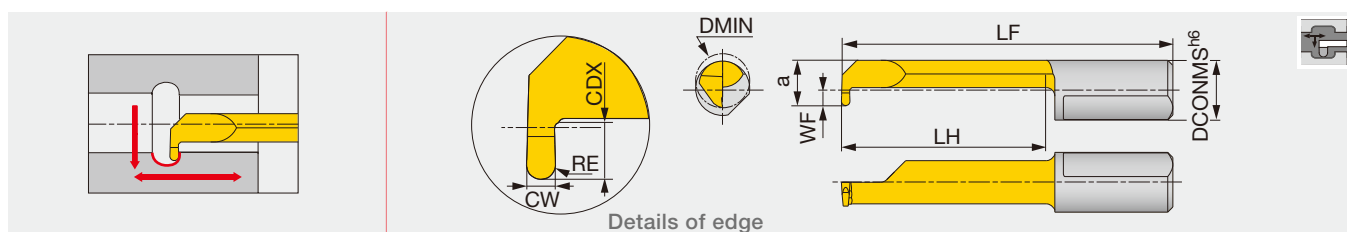
Corner radius: less than 0.1 mm

● : Line up

▲ : To be discontinued in April 2025

TBRR

Solid boring bar for boring and profiling

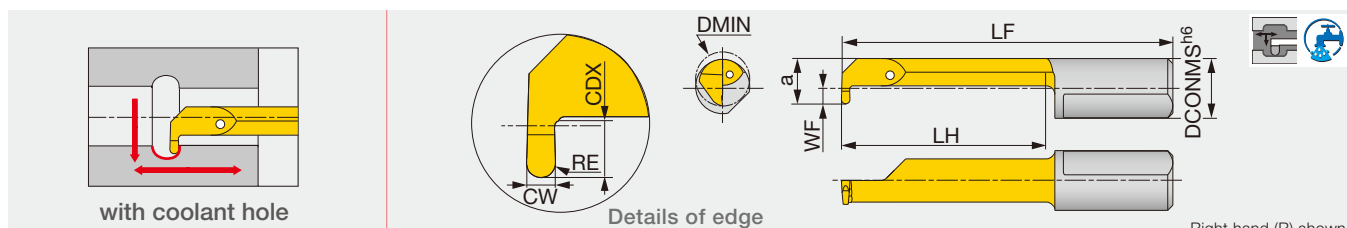


Metric	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	WF	a	LF	LH	CDX	RE
TBRR07190050-D050	●	1	5	7	0.9	4.4	35	19	1	0.5
TBRR07240050-D060	●	1	6	7	1.8	5.3	40	24	1.8	0.5
TBRR07290050-D068	●	1	6.8	7	2.8	6.3	45	29	2.5	0.5

● : Line up

JBRR

Solid boring bar for boring and profiling



Metric	SH725	SH730	$CW^{+0.05}_0$	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

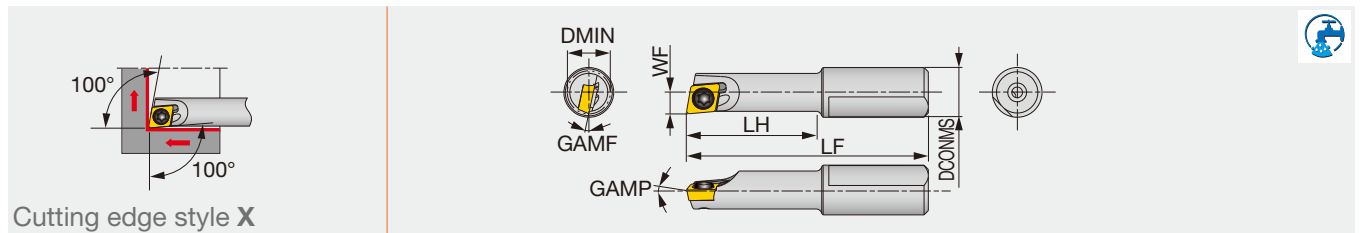
● : Line up

▲ : To be discontinued in April 2025

Reference pages : TBSR, JBSR, TBRR, JBRR: Standard cutting conditions → **G136**

A/E-SEXPR

Screw-on boring bar, for positive 75° rhombic inserts



Metric	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

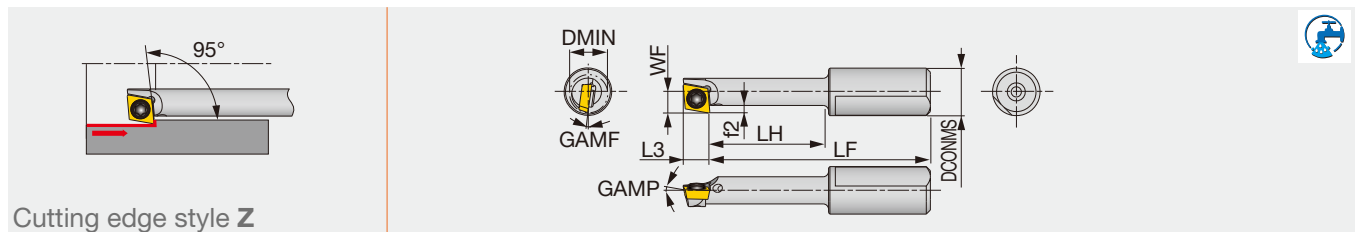
*Torque: Recommended clamping torque (N·m)

**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



Metric	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

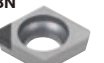
Note: Use right-hand toolholders (SEZPR**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A/E070**03-...	CSTA-1.6	T-6F
A/E070**04-...	CSTB-2	T-6F

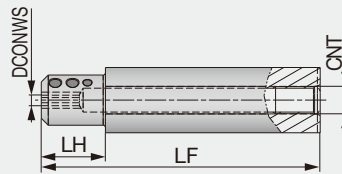
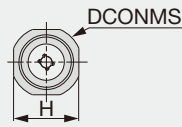
INSERT SELECTION

P	Application	Finishing	M	Application	Finishing	K	Application	Finishing	S	Application	Finishing
	Grade	SH725		Grade	SH725		Grade	SH725		Grade	SH725
	JS			JS			JS			JS	
	Breaker Shape			Breaker Shape			Breaker Shape			Breaker Shape	
Cutting conditions		B016	Cutting conditions		B018	Cutting conditions		B020	Cutting conditions		B024

N	Application	Precision finishing	H	Application	Precision finishing
	Grade	DX140		Grade	CBN
	JS	SH725		CBN	BX310
	Breaker Shape			Breaker Shape	
Cutting conditions		B022	Cutting conditions		B026

Reference pages: A/E-SEXPR, A/E-SEZPR: Insert → **B128** -, CBN → **B195**, PCD → **B214**

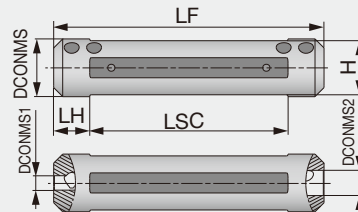
Sleeve for internal coolant supply with 4 coolant holes



Metric	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



Metric	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

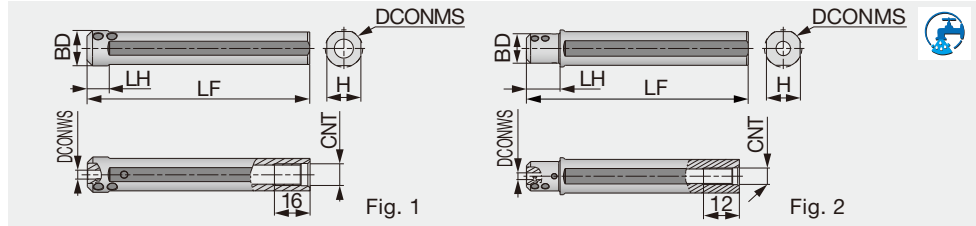
SPARE PARTS



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

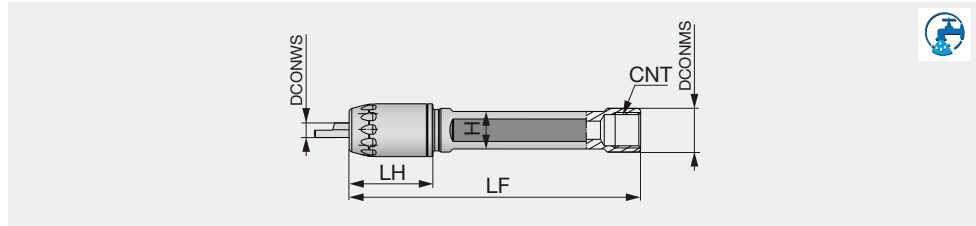
Sleeve for internal coolant supply



Metric	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



Metric	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

TINYTURN^{INI}

STANDARD CUTTING CONDITIONS

Boring, profiling, chamfering, back boring

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Cutting speed Vc (sfm)	Feed f (mm/rev)	Feed f (ipr)
 P	Low carbon steel 1015, 1025, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.08 *	0.0004 - 0.003 *
	Carbon steel, Alloy steel 1055, 4140, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.08 *	0.0004 - 0.003 *
	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.08 *	0.0004 - 0.003 *
 M	Stainless steel 304, 316, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.08 *	0.0004 - 0.003 *
 K	Gray cast iron No.250B, No.300B, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.08 *	0.0004 - 0.003 *
	Ductile cast iron 65-45-12, 80-55-06, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.08 *	0.0004 - 0.003 *
 N	Aluminum alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	295 - 656	0.01 - 0.08 *	0.0004 - 0.003 *
 S	Titanium alloys Ti-6Al-4V, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.08 *	0.0004 - 0.003 *
	Superalloys Inconel718, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.08 *	0.0004 - 0.003 *

* JBTR/L04020004-D006, JBTR/L04030004-D006 : Max. f = 0.0004 ipr (0.01 mm/rev)

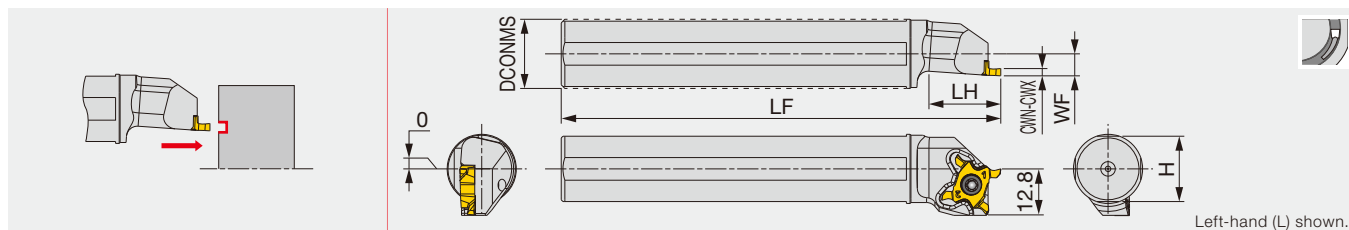
Threading (metric thread)

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Cutting speed Vc (sfm)	Number of passes Pitch (mm)				
					0.5 (0.020")	0.75 (0.030")	1 (0.039")	1.25 (0.049")	1.5 (0.059")
P	Low carbon steel 1015, 1025, etc.	SH730, SH725	40 - 140	131 - 459	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
	Carbon steel, Alloy steel 1055, 4140, etc.	SH730, SH725	40 - 140	131 - 459	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	131 - 459	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
M	Stainless steel 304, 316, etc.	SH730, SH725	40 - 140	131 - 459	8	10	12	15	18
K	Gray cast iron No.250B, No.300B, etc.	SH730, SH725	30 - 100	98 - 328	7	9	12	14	17
	Ductile cast iron 65-45-12, 80-55-06, etc.	SH730, SH725	30 - 100	98 - 328	7	9	12	14	17
N	Aluminum alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	295 - 656	6	8	10	12	15

Internal and face grooving

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Cutting speed Vc (sfm)	Internal grooving		Face grooving	
					Feed: f (mm/rev)	Feed: f (ipr)	Feed: f (mm/rev)	Feed: f (ipr)
P	Low carbon steel 1015, 1025, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
	Carbon steel, Alloy steel 1055, 4140, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
M	Stainless steel 304, 316, etc.	SH730, SH725	40 - 140	131 - 459	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
K	Gray cast iron No.250B, No.300B, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
	Ductile cast iron 65-45-12, 80-55-06, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
N	Aluminum alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	295 - 656	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
S	Titanium alloys Ti-6Al-4V, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002
	Superalloys Inconel718, etc.	SH730, SH725	30 - 100	98 - 328	0.01 - 0.03	0.0004 - 0.001	0.01 - 0.05	0.0004 - 0.002

Face grooving toolholder with round shank

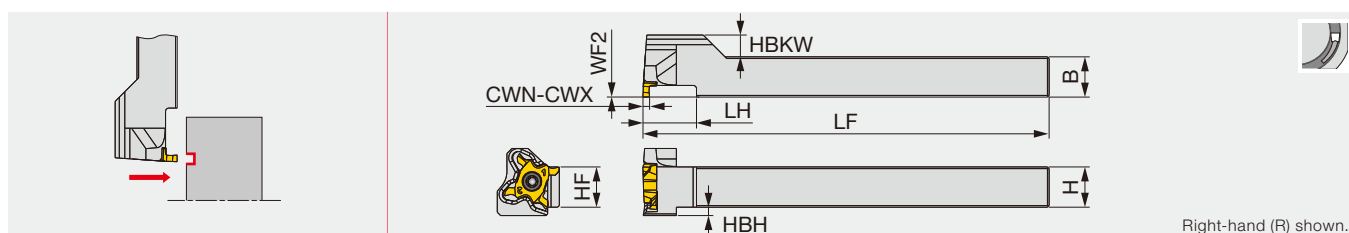


Metric	CWN	CWX	DCONMS	LF	LH	H	WF	Insert	Torque*
JS16F-STCFL18	0.5	2.5	16	85	20	15	6	TCF18L...	1.2
JS19G-STCFL18	0.5	2.5	19.05	90	20	18	6	TCF18L...	1.2
JS19X-STCFL18	0.5	2.5	19.05	120	20	18	6	TCF18L...	1.2
JS20G-STCFL18	0.5	2.5	20	90	20	19	6	TCF18L...	1.2
JS20X-STCFL18	0.5	2.5	20	120	20	19	6	TCF18L...	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



Inch	CWN	CWX	H	B	LF	LH	HF	WF	HBKW	HBH	Insert	Torque
STCFVR06-18	0.020	0.098	0.375	0.375	4.016	0.472	0.375	0	0.354	0.177	TCF18L...	0.89
STCFVR08-18	0.020	0.098	0.500	0.500	4.764	0.630	0.500	0	0.228	0.098	TCF18L...	0.89
STCFVR10-18	0.020	0.098	0.625	0.625	4.764	0.787	0.625	0	0.106	-	TCF18L...	0.89
Metric	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

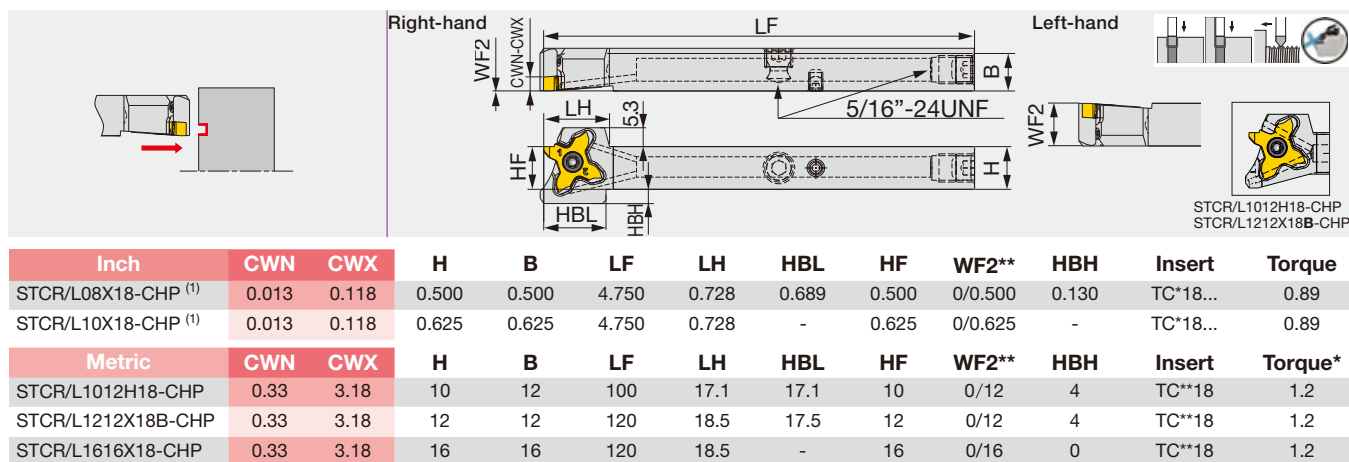
Note: The left hand insert (L) is used for the left hand toolholders (L).
Torque: Recommended clamping torque: lbs·ft (*N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-STCFL18, STCFVR**18	CSTC-4L100DR	T-1008/5

Threading pitch range: 0.8 ~ 3 mm

External grooving and threading toolholder, high pressure coolant compatible

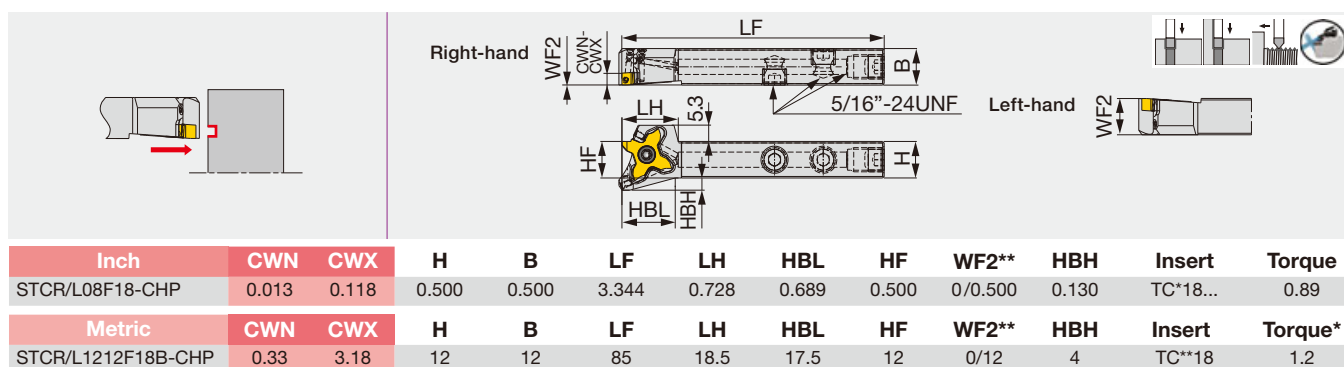


The right hand insert (TC*18R**) is used for the right hand toolholders (STCR**), and the left hand insert (TC*18L**) is used for the left hand toolholders (STCL**).
WF2** : The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.
Torque: Recommended clamping torque: lbs-ft (*N·m)

STCR/L-18-CHP

Tube connection

External grooving and threading toolholder. High pressure coolant capability.



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**).
WF2** : 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: lbs-ft (*N·m)

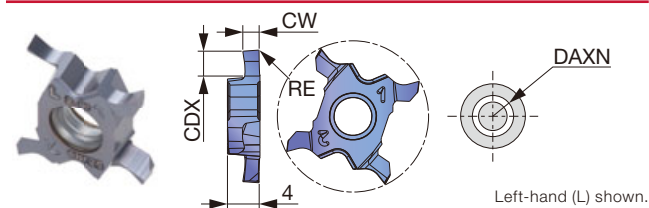
SPARE PARTS

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 0.8 ~ 3.0 mm

 INSERT

TCF18L (Face grooving)



P	Steel	★				
M	Stainless	★				
K	Cast iron	★				
N	Non-ferrous					
S	Superalloys	★				
H	Hard materials					

★: First choice

[illegible]

5 pieces per package

● : Line up

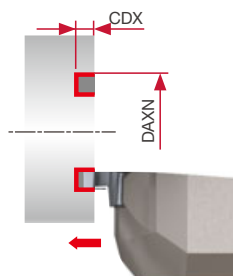
STANDARD CUTTING CONDITIONS

TCF18L (Face grooving)

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed f (ipr)
P	Low carbon steel 1015, 1020, etc.	SH725	98 - 328	0.0004 - 0.0016
	Carbon steels, Alloy steel 1055, 4140, etc.	SH725	98 - 328	0.0004 - 0.0016
	Prehardened steel NAK80, PX5, etc.	SH725	98 - 328	0.0004 - 0.0016
M	Stainless steel 304SS, 316SS, etc.	SH725	98 - 328	0.0004 - 0.0016
K	Gray cast iron Class25, Class30, etc.	SH725	98 - 328	0.0004 - 0.0016
	Ductile cast iron 60-40-18, 80-55-06, etc.	SH725	98 - 328	0.0004 - 0.0016
S	Titanium alloys Ti-6Al-4V, etc.	SH725	66 - 131	0.0004 - 0.0016
	Superalloys Inconel718, etc.	SH725	33 - 98	0.0004 - 0.0016

■ PRECAUTIONS OF PROCESSING

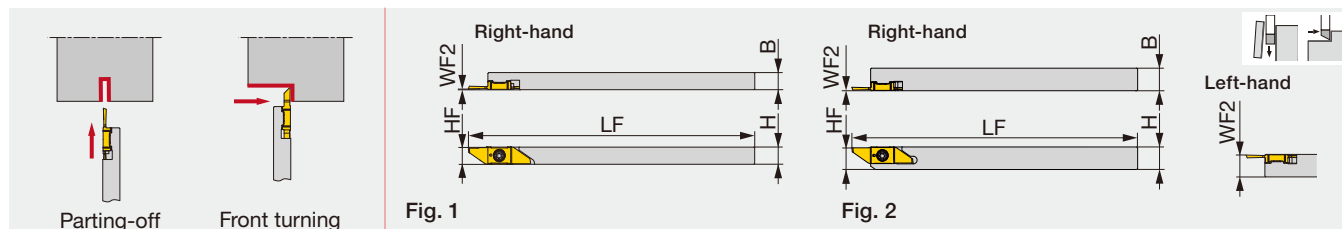
Minimum diameter for face grooving



Minimum face diameter DAXN (in)	Maximum groove depth CDX (in)
2.559	0.118

Reference pages: Toolhoders → **G137 - G138**

Parting-off and front turning toolholders



Metric	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.

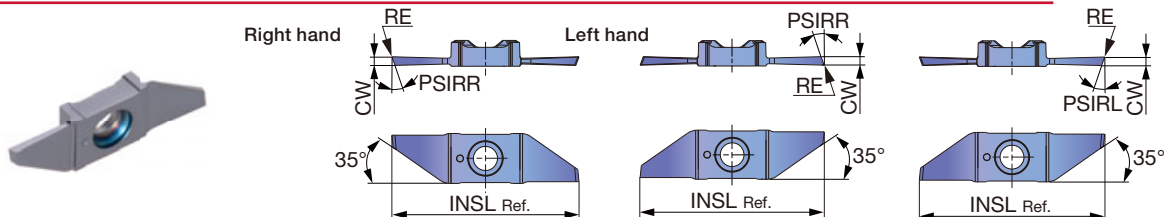
Use the right-hand insert (JV***R...) for a right-hand holder (JSXXR...); the left-hand insert (JV***L...) for a left-hand holder (JSXXL...).

SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR...05	CSTB-2.5L054DL	T-7F
JSXXL...05	CSTB-2.5L054DR	T-7F

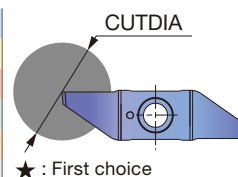
INSERTS

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 (mm)	CW±0.001 (in)	RE (in)	Coated				CUTDIA (in)	INSL (in)	PSIRR	PSIRL
					SH725							
JVPN04R05F000-20	R	0.5	0.020	0	●				0.157	1.685	20°	-
JVPN04L05F000-20	L	0.5	0.020	0	●				0.157	1.685	20°	-
JVPN04R05F005-20	R	0.5	0.020	0.002	●				0.157	1.677	20°	-
JVPN04L05F005-20	L	0.5	0.020	0.002	●				0.157	1.677	20°	-
JVPN07R06F000-20	R	0.6	0.024	0	●				0.276	1.685	20°	-
JVPN07L06F000-20	L	0.6	0.024	0	●				0.276	1.685	20°	-
JVPN07R06F005-20	R	0.6	0.024	0.002	●				0.276	1.685	20°	-
JVPN07L06F005-20	L	0.6	0.024	0.002	●				0.276	1.685	20°	-
JVPN12R08F000-20	R	0.8	0.031	0	●				0.472	1.701	20°	-
JVPN12L08F000-20	L	0.8	0.031	0	●				0.472	1.701	20°	-
JVPN12R08F005-20	R	0.8	0.031	0.002	●				0.472	1.693	20°	-
JVPN12L08F005-20	L	0.8	0.031	0.002	●				0.472	1.693	20°	-
JVPN12R10F000-20	R	1	0.039	0	●				0.472	1.709	20°	-
JVPN12L10F000-20	L	1	0.039	0	●				0.472	1.709	20°	-
JVPN12R10F005-20	R	1	0.039	0.002	●				0.472	1.709	20°	-
JVPN12L10F005-20	L	1	0.039	0.002	●				0.472	1.709	20°	-
JVPN12L10F000-20L	L	1	0.039	0	●				0.472	1.709	-	20°

● : Line up

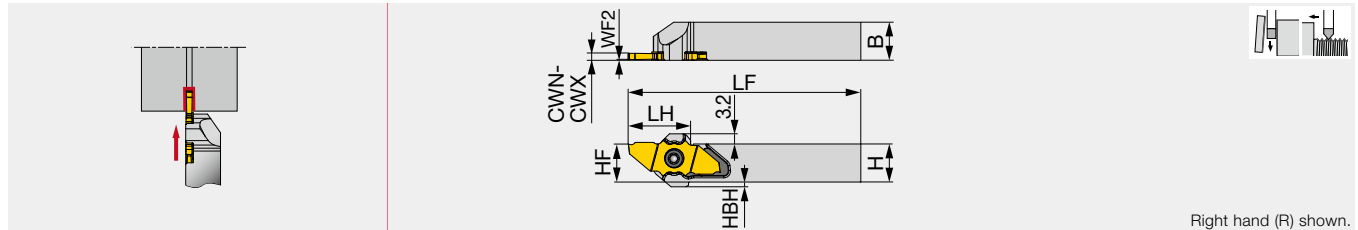
STANDARD CUTTING CONDITIONS

Parting-off

ISO	Workpiece materials	Grade	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Low carbon steels 1015, etc.	SH725	164 - 591	0.00039 - 0.0020
	Carbon steels, Alloy steels 1055, etc.	SH725	164 - 591	0.00039 - 0.0020
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 591	0.00039 - 0.0020
M	Stainless steels 304, etc.	SH725	164 - 394	0.00039 - 0.0020
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 656	0.00039 - 0.0020
	Copper alloys C2600, C280C, etc.	SH725	328 - 656	0.00039 - 0.0020
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.00039 - 0.0020
	Superalloys Inconel718, etc.	SH725	98 - 262	0.00039 - 0.0020

Grade
Insert
Ext. Toolholder
Int. Toolholder
Threading
Grooving
Miniature tool
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Inch	CWN	CWX	H	B	LF**	LH**	HF	WF2 ⁽¹⁾	HBL	HBH	Insert	Torque	Fig.
JSXXR/L063	0.024	0.098	0.375	0.375	4.646	0.774	0.375	0.008 / 0.386	0.748	0.12	JX...	0.89	1
JSXXR/L083	0.024	0.098	0.500	0.500	3.268	0.774	0.500	0.008 / 0.386	0.748	0.06	JX...	0.89	1
JSXXR/L103	0.024	0.098	0.625	0.625	4.646	0.774	0.625	0.008 / 0.386	-	0.06	JX...	0.89	1
JSXXR/L123	0.024	0.098	0.750	0.750	3.950	0.886	0.750	0.008 / 0.742	-	-	JX...	0.89	1
JSXXR/L163	0.024	0.098	1.000	1.000	5.350	1.339	1.000	1.250 / 1.250	-	-	JX...	0.89	2

Metric	CWN	CWX	H	B	LF**	LH**	HF	WF2 ⁽¹⁾	HBL**	HBH	Insert	Torque*	Fig.
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2/9.8	19	3	JX...	1.2	1
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2/11.8	19	1.5	JX...	1.2	1
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2/11.8	19	1.5	JX...	1.2	1
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2/15.8	-	-	JX...	1.2	1
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2/19.8	-	-	JX...	1.2	1

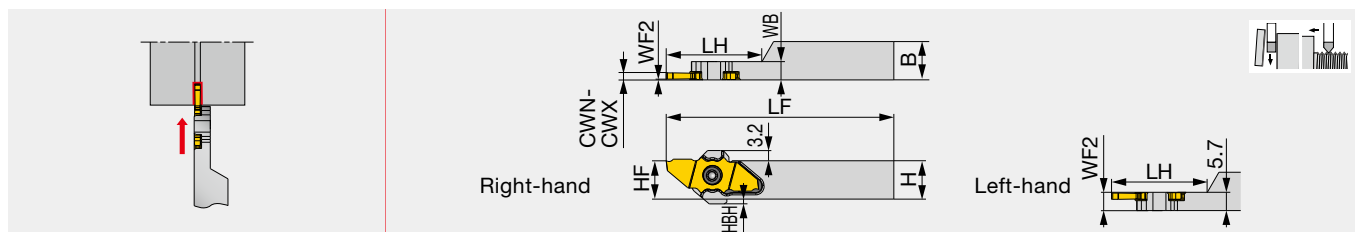
Torque: Recommended clamping torque: lbs-ft (*N·m)

**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 0.079" (2 mm) shorter than the above values with JX*G12... and JXPG20... inserts, and 0.157" (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)



Inch	CWN	CWX	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque*
JSXXR/L063-S	0.024	0.098	0.375	0.375	4.750	1.030	0.383	0.008/0.217	0.120	JX*G06...,12...,16...	0.890
JSXXR/L083-S	0.024	0.098	0.500	0.500	4.750	1.030	0.500	0.008/0.217	0.060	JX*G06...,12...,16...	0.890
Metric	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 clamping torque: lbs-ft (*N·m)

**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 0.157" (4 mm) shorter for JXPG06... insert. LF, LH, and HBL will all be 0.079" (2 mm) shorter with JXPG20... insert.

***JXPG20... insert will not fit.

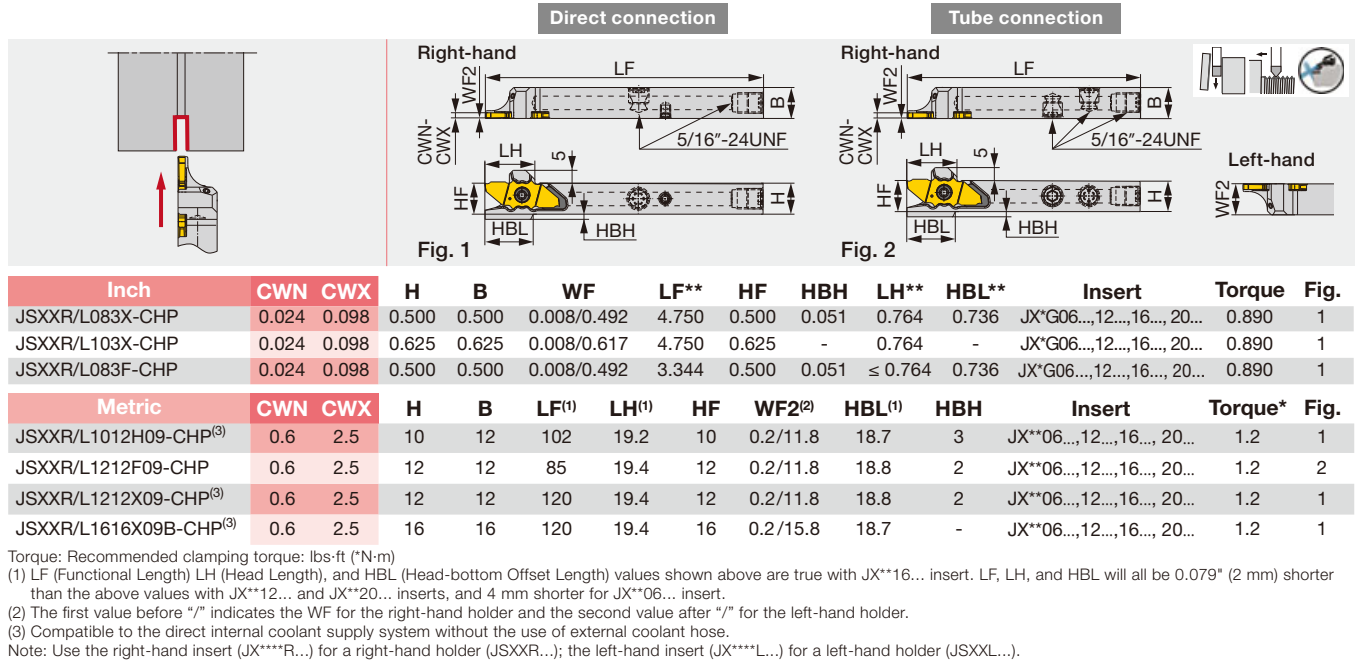
Note: Use the right-hand insert (JX***R...) for a right-hand holder (JSXXR...); the left-hand insert (JX***L...) for a left-hand holder (JSXXL...).

SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR..., JSXXR****-S	CSTC-4L055DL	T-1008/5
JSXXL..., JSXXL****-S	CSTC-4L055DR	T-1008/5

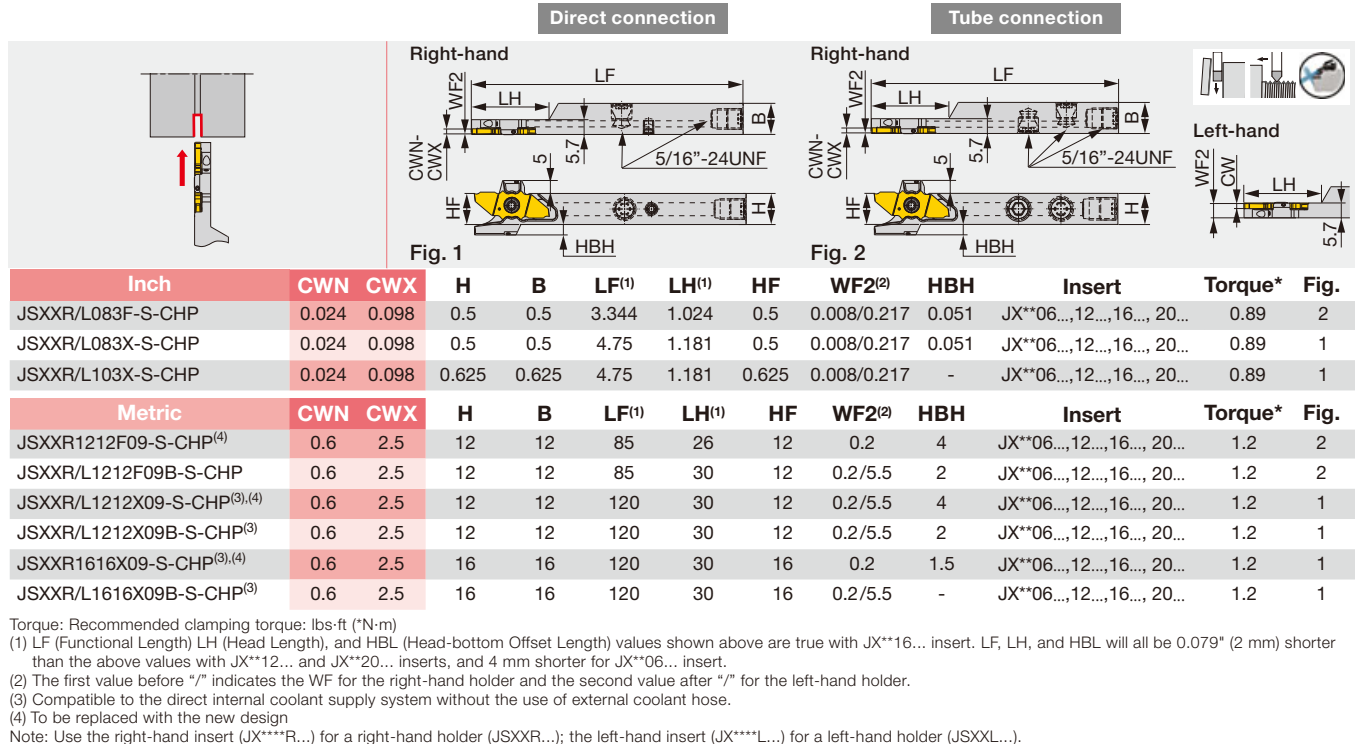
JSXXR/L-F/H/X-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes



JSXXR/L-F/X-S-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes (for sub spindle)



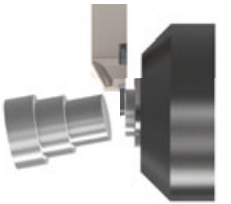
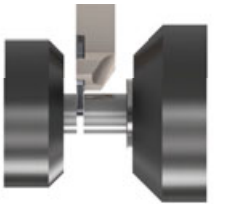
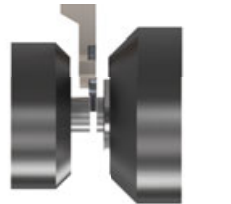
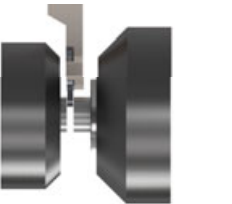
SPARE PARTS

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 → **G145 - G147**, Standard cutting conditions → **G148**

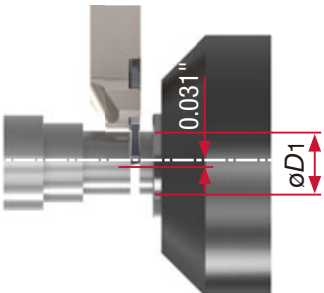
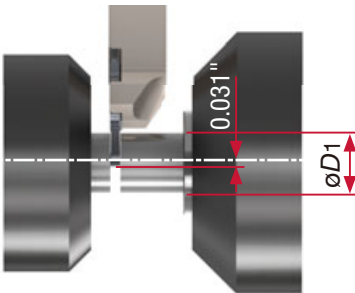
HOW TO SELECT TOOLS

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 Position of parting-off is at the side of the main spindle	 Sub-spindle Main spindle Position of parting-off is at the side of the sub-spindle	 Sub-spindle Main spindle Position of parting-off is at the side of the main spindle	 Sub-spindle 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
ø1.575	- ø0.236	0.375	4.514	JXPG06*	JSXXR/L063-S
ø1.575	- ø0.236	0.500	4.514	JXPG06*	JSXXR/L083-S
ø1.575	- ø0.472	0.375	4.593	JXPG12*	JSXXR/L063-S
ø1.575	- ø0.472	0.500	4.593	JXPG12*	JSXXR/L083-S
ø1.575	- ø0.630	0.375	4.750	JXPG16*	JSXXR/L063-S
ø1.575	- ø0.630	0.500	4.750	JXPG16*	JSXXR/L083-S
ø1.575	- ø0.787	0.500	3.423	JXPG20*	JSXXR/L083F-S-CHP
ø1.969	- ø0.236	0.500	4.514	JXPG06*	JSXXR/L083-S
ø1.969	- ø0.236	0.625	4.514	JXPG06*	JSXXR/L103X-S-CHP
ø1.969	- ø0.472	0.500	4.593	JXPG12*	JSXXR/L083-S
ø1.969	- ø0.472	0.625	4.593	JXPG12*	JSXXR/L103X-S-CHP
ø1.969	- ø0.630	0.500	4.750	JXPG16*	JSXXR/L083-S
ø1.969	- ø0.630	0.500	4.750	JXPG16*	JSXXR/L083-S
ø1.969	- ø0.630	0.625	4.750	JXPG16*	JSXXR/L103X-S-CHP
ø1.969	- ø0.787	0.500	3.423	JXPG20*	JSXXR/L083F-S-CHP
ø1.969	- ø0.787	0.500	4.829	JXPG20*	JSXXR/L083X-S-CHP
ø1.969	- ø0.787	0.625	4.829	JXPG20*	JSXXR/L103X-S-CHP

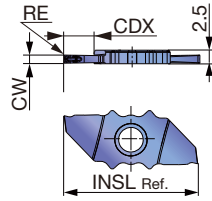
MAX. PARTING-OFF DIA. & DEPTH

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 0.031" or more.

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								

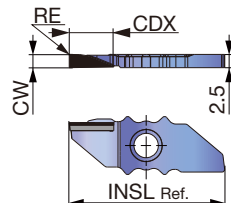
★ : First choice

Designation	HAND	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	Coated					CUTDIA (in)	CDX* (in)	INSL (in)
					SH725							
JXPS06R06F	R	0.6	0.024	0.002	●					0.236	0.138	0.827
JXPS06L06F	L	0.6	0.024	0.002	●					0.236	0.138	0.827
JXPS12R08F	R	0.8	0.031	0.002	●					0.472	0.256	0.984
JXPS12L08F	L	0.8	0.031	0.002	●					0.472	0.256	0.984
JXPS12R10F	R	1	0.039	0.002	●					0.472	0.256	0.984
JXPS12L10F	L	1	0.039	0.002	●					0.472	0.256	0.984
JXPS12R15F	R	1.5	0.059	0.002	●					0.472	0.256	0.984
JXPS12L15F	L	1.5	0.059	0.002	●					0.472	0.256	0.984
JXPS16R15F	R	1.5	0.059	0.002	●					0.630	0.335	1.142
JXPS16L15F	L	1.5	0.059	0.002	●					0.630	0.335	1.142
JXPS20R20F	R	2	0.079	0.002	●					0.787	0.413	1.299
JXPS20L20F	L	2	0.079	0.002	●					0.787	0.413	1.299

*Max grooving depth (CDX) varies depending on workpiece diameters.

● : Line up

JXDX**R-F (PCD insert)



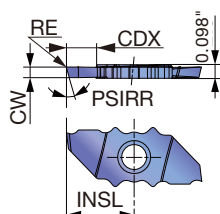
P	Steel								
M	Stainless								
K	Cast iron								
N	Non-ferrous	★							
S	Superalloys								
H	Hard materials								

★ : First choice

Designation	HAND	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	PCD					CDX (in)	INSL (in)
					DX110						
JXDX12R20F	R	2	0.079	< 0.004	●					0.236	0.492
JXDX12R25F	R	2.5	0.098	< 0.004	●					0.256	0.492
JXDX16R25F	R	2.5	0.098	< 0.004	●					0.276	0.571

● : 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

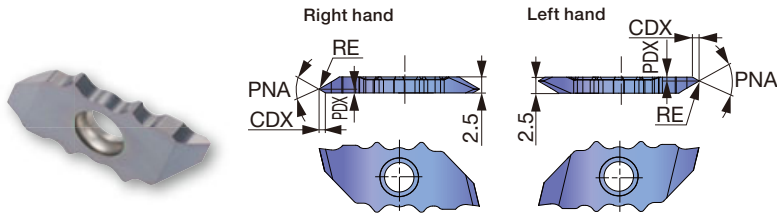
Designation	HAND	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	Coated				CUTDIA (in)	CDX* (in)	INSL (in)	PSIRR/L
					SH725							
JXPG06R10F	R	1	0.039	0.05	●				6	0.138	0.827	0°
JXPG06L10F	L	1	0.039	0.05	●				6	0.138	0.827	0°
JXPG06R15F	R	1.5	0.059	0.05	●				6	0.138	0.827	0°
JXPG06L15F	L	1.5	0.059	0.05	●				6	0.138	0.827	0°
JXPG06R10F-15	R	1	0.039	0.05	●				6	0.138	0.827	15°
JXPG06L10F-15	L	1	0.039	0.05	●				6	0.138	0.827	15°
JXPG06R15F-15	R	1.5	0.059	0.05	●				6	0.138	0.827	15°
JXPG06L15F-15	L	1.5	0.059	0.05	●				6	0.138	0.827	15°
JXPG12R15F	R	1.5	0.059	0.05	●				12	0.256	0.984	0°
JXPG12L15F	L	1.5	0.059	0.05	●				12	0.256	0.984	0°
JXPG12R20F	R	2	0.079	0.05	●				12	0.256	0.984	0°
JXPG12L20F	L	2	0.079	0.05	●				12	0.256	0.984	0°
JXPG12R15F-15	R	1.5	0.059	0.05	●				12	0.256	0.984	15°
JXPG12L15F-15	L	1.5	0.059	0.05	●				12	0.256	0.984	15°
JXPG12R20F-15	R	2	0.079	0.05	●				12	0.256	0.984	15°
JXPG12L20F-15	L	2	0.079	0.05	●				12	0.256	0.984	15°
JXPG16R15F	R	1.5	0.059	0.05	●				16	0.335	1.142	0°
JXPG16L15F	L	1.5	0.059	0.05	●				16	0.335	1.142	0°
JXPG16R20F	R	2	0.079	0.05	●				16	0.335	1.142	0°
JXPG16L20F	L	2	0.079	0.05	●				16	0.335	1.142	0°
JXPG16R15F-15	R	1.5	0.059	0.05	●				16	0.335	1.142	15°
JXPG16L15F-15	L	1.5	0.059	0.05	●				16	0.335	1.142	15°
JXPG16R20F-15	R	2	0.079	0.05	●				16	0.335	1.142	15°
JXPG16L20F-15	L	2	0.079	0.05	●				16	0.335	1.142	15°
JXPG20R15F	R	1.5	0.059	0.05	●				20	0.413	1.299	0°
JXPG20L15F	L	1.5	0.059	0.05	●				20	0.413	1.299	0°
JXPG20R20F	R	2	0.079	0.05	●				20	0.413	1.299	0°
JXPG20L20F	L	2	0.079	0.05	●				20	0.413	1.299	0°
JXPG20R15F-15	R	1.5	0.059	0.05	●				20	0.413	1.299	15°
JXPG20L15F-15	L	1.5	0.059	0.05	●				20	0.413	1.299	15°
JXPG20R20F-15	R	2	0.079	0.05	●				20	0.413	1.299	15°
JXPG20L20F-15	L	2	0.079	0.05	●				20	0.413	1.299	15°

● : Line-up

CUTDIA: Max. parting-off dia.
Packing quantity = 5 pcs.

Reference pages: Toolholders → **G142 - G143**, Standard cutting conditions → **G148**

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 (in)	Coated					TPI Thread per inch	PDX (in)	CDX (in)	PNA
			SH725								
JXTG12FR-60A-000	R	Flat 0.002 max	●					64 - 127	0.010	0.016	60°
JXTG12FL-60A-000	L	Flat 0.002 max	●					64 - 127	0.010	0.016	60°
JXTG12FR-60B-000	R	Flat 0.002 max	●					64 - 127	0.089	0.016	60°
JXTG12FL-60B-000	L	Flat 0.002 max	●					64 - 127	0.089	0.016	60°
JXTG12FR-60A-005	R	R 0.002	●					25 - 64	0.024	0.039	60°
JXTG12FL-60A-005	L	R 0.002	●					25 - 64	0.024	0.039	60°
JXTG12FR-60B-005	R	R 0.002	●					25 - 64	0.075	0.039	60°
JXTG12FL-60B-005	L	R 0.002	●					25 - 64	0.075	0.039	60°
JXTG12FR-60N-010	R	R 0.004	●					16 - 25	0.049	0.081	60°
JXTG12FL-60N-010	L	R 0.004	●					16 - 25	0.049	0.081	60°

● : Line-up
Packing quantity = 5 pcs.

Parting, Grooving

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed f (ipr)
P	Low carbon steels 1015, etc.	SH725	164 - 656	0.00039 - 0.0020
	Carbon steels, Alloy steels 1055, etc.	SH725	164 - 656	0.00039 - 0.0020
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 656	0.00039 - 0.0020
M	Stainless steels 304, etc.	SH725	164 - 656	0.00039 - 0.0020
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 656	0.00039 - 0.0020
	Copper alloy C2600, C280C, etc.	SH725	328 - 656	0.00039 - 0.0020
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.00039 - 0.0020
	Superalloys Inconel718, etc.	SH725	98 - 262	0.00039 - 0.0020

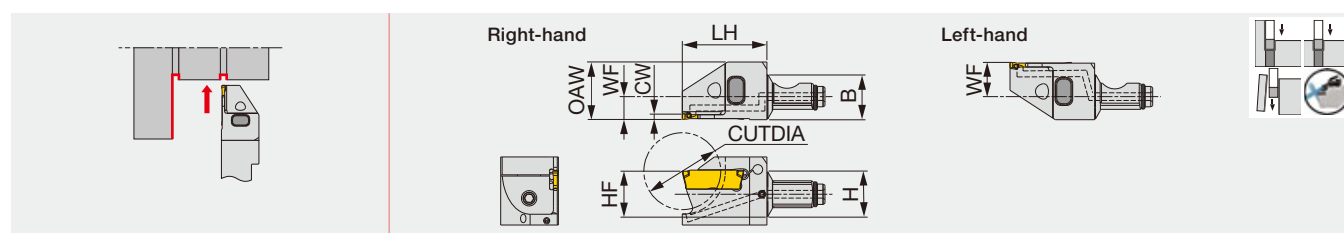
For aluminium and non-ferrous metal PCD insert

ISO	Workpiece materials	Grades	Operation	Cutting speed Vc (sfm)	Feed f (ipr)	Depth of cut ap (in)
N	Aluminum alloys 5056, 6061, etc.	DX110	Grooving	328 - 984	0.0012 - 0.0059	-
		DX110	Turning	328 - 984	0.0012 - 0.0059	< 0.236"

TUNG CUT

QC12-JTTER/L-CHP

Modular head for external grooving and parting, with high pressure coolant capability



Metric	CW	Seat size	CUTDIA	H	B	LH	HF	WF ⁽¹⁾	OAW	Torque*
QC12-JTTER/L1.2D20-CHP	1.2 (0.047")	0.9	20 (0.787")	12 (0.472")	12 (0.472")	22 (0.866")	12 (0.472")	6/9 (0.236/0.354")	15 (0.591")	1.5 (1.11)
QC12-JTTER/L1.4D20-CHP	1.4 (0.055")	1	20 (0.787")	12 (0.472")	12 (0.472")	22 (0.866")	12 (0.472")	6/9 (0.236/0.354")	15 (0.591")	1.5 (1.11)
QC12-JTTER/L2D20-CHP	2 (0.079")	2	20 (0.787")	12 (0.472")	12 (0.472")	22 (0.866")	12 (0.472")	6/9 (0.236/0.354")	15 (0.591")	1.5 (1.11)

(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.

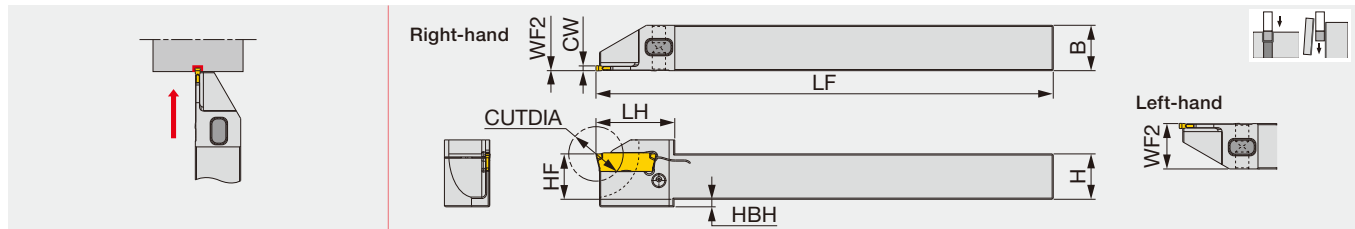
Torque*: Recommended clamping torque: N·m (lbs·ft)

SPARE PARTS

Designation	Clamping screw	Clamping pin	Wrench	O-ring
QC12-JTTER/L...	SSM3.5x0.35	PIN-SL-TC	P-2F	ORSS-0454.5X1.0NBR70

Reference pages: QC12-JTTER/L-CHP: Inserts → **G154 - G161**

Shank, Accessory → **G115 - G116**, Standard cutting conditions → **G162**



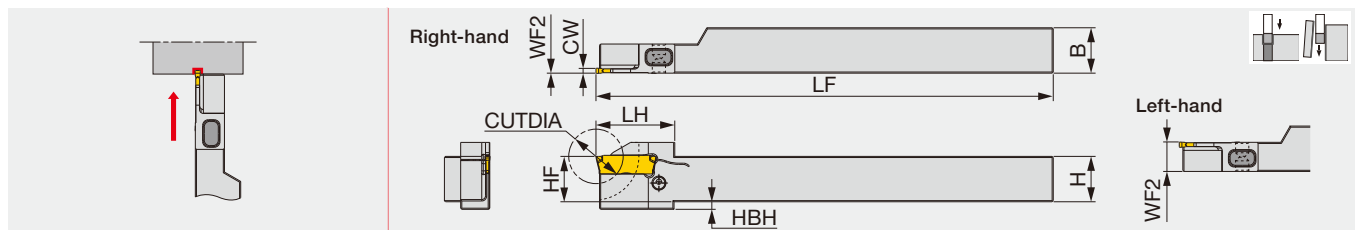
Metric	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	Torque*
JTTER/L1010H1.2D12	1.2	0.9	12	10	10	100	17	10	0/10	-	1.5
JTTER/L1212F1.2D16	1.2	0.9	16	12	12	85	19	12	0/12	-	1.5
JTTER/L1212X1.2D16	1.2	0.9	16	12	12	120	19	12	0/12	-	1.5
JTTER/L1212X1.2D20	1.2	0.9	20	12	12	120	21	12	0/12	2	1.5
JTTER/L1616X1.2D20	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)



Metric	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
JTTER/L1212F1.2D16-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

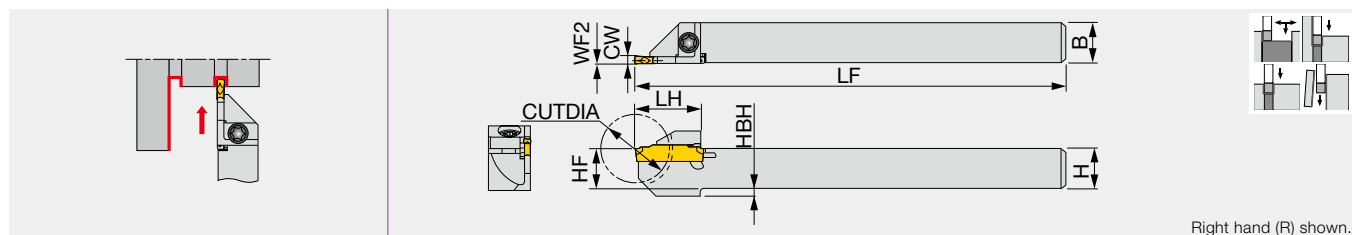
(1) "WF" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

(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



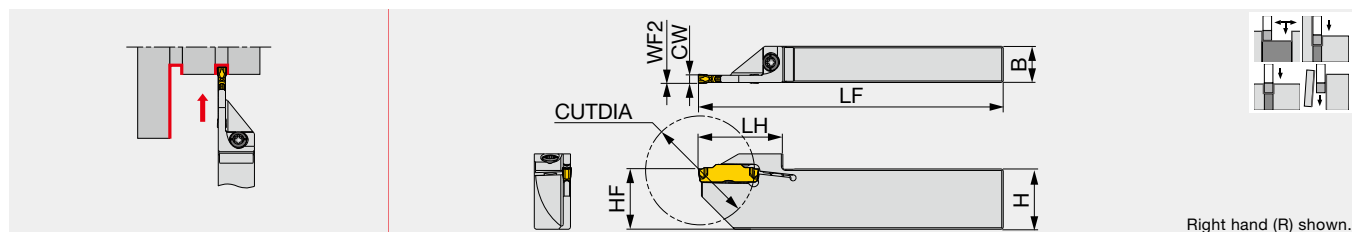
Right hand (R) shown.

Inch	CW (in)	CW (mm)	Seat size	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	Torque
JCTER/L08-2T12	0.079	2	2	0.945	0.500	0.500	4.750	0.748	0.500	0.005/0.505	0.079	2.21
JCTER/L08-3T12	0.118	3	3	0.945	0.500	0.500	4.750	0.748	0.500	0.012/0.512	0.079	2.21
JCTER/L10-2T16	0.079	2	2	1.260	0.625	0.625	4.750	0.945	0.625	0.005/0.630	-	2.21
JCTER/L10-3T16	0.118	3	3	1.260	0.625	0.625	4.750	0.945	0.625	0.012/0.637	-	2.21
Metric	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) The value for "WF2" is true when the insert with the width, indicated in "CW" in the table is mounted. • CUTDIA: Maximum parting-off diameter
Torque: Recommended clamping torque: lbs-ft (*N·m)

JCTER/L2012

External grooving and parting toolholder, for Swiss lathes



Right hand (R) shown.

Metric	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

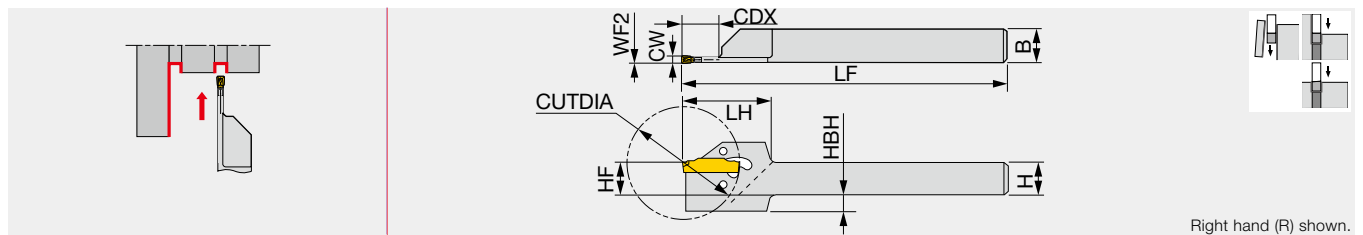
(1) "WF2" value is calculated with groove width "CW" shown in the table. • CUTDIA: Max. parting diameter
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
JCTER/L..., JCTER/L2012...	CSHB-4-A	T-15F

CGER/L

External deep grooving and parting toolholder, for Swiss lathes



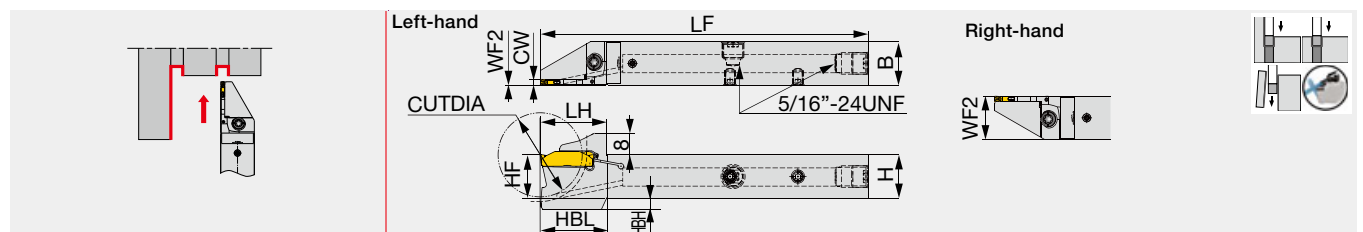
Metric	CW	Seat size	CUTDIA ⁽¹⁾	CDX	H	B	LF	LH	HF	WF2 ⁽²⁾	HBH
CGER/L2020-1.4T14	1.4	1	29/29	9.7	20	20	125	31	20	0.2/20.2	-
CGER/L1212-2T17	2	2	35/35	11.8	12	12	150	31	12	0.1/12.1	6
CGER/L1616-2T17	2	2	35/35	11.8	16	16	150	31	16	0.1/16.1	2
CGER/L2020-2T17	2	2	35/35	9.8	20	20	125	31	20	0.1/20.1	-
CGER/L1212-3T19	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	-

(1) DG*/SG* Maximum diameter of parting off Dmax, can be increased by using SG* insert for some toolholders. (2) "WF2" value is calculated with groove width "CW" shown in the Wrench, CRW**, should be ordered separately. Insert is clamped by the elastic deformation of upper jaw.

JCTER/L-CHP

Direct connection

External grooving and parting-off toolholder, high pressure coolant compatible



Inch	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	HBL	Torque
JCTER/L08X2T12-CHP	0.079	2	0.980	0.500	0.500	4.750	0.972	0.500	0 / 0.500	0.169	0.965	2.21
JCTER/L10X2T12-CHP	0.079	2	0.980	0.625	0.625	4.750	0.972	0.625	0 / 0.625	0.039	0.965	2.21
JCTER/L10X2T16-CHP	0.079	2	1.260	0.625	0.625	4.750	0.972	0.625	0 / 0.625	0.157	0.965	2.21
JCTER/L12X2T16-CHP	0.079	2	1.260	0.750	0.750	4.750	0.972	0.750	0 / 0.750	0.037	0.965	2.21

Metric	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

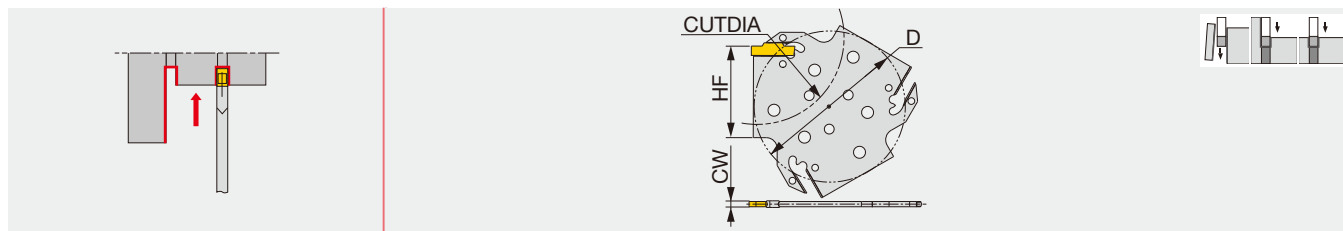
(1) "WF2" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.

Torque: Recommended clamping torque: lbs-ft (*N-m)

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench	Wrench (Option)
CGER/L2020-1.4T14	-	-	-	-	-	-	CRW23
CGER/L***-2T17 - 4T19	-	-	-	-	-	-	CRW33
JCTER/L...	CSHB-4-A	T-15F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2	-

Reference pages: CGER/L, JCTER/L-CHP: Inserts → **G154 - G161**, Standard cutting conditions → **G162**

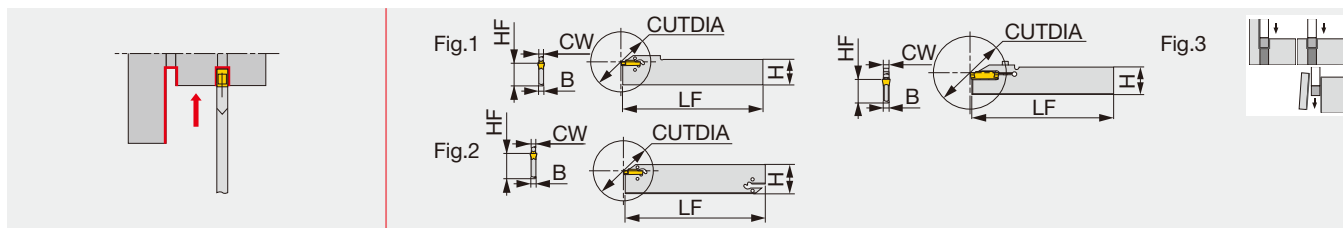


Metric	CW	Seat size	CUTDIA	HF	D
CHGP52-2T	2	2	52	27	48.3
CHGP52-3T	3	3	52	27	48.3
CHGP82-3T	3	3	82	42	69.3
CHGP82-4T	4	4	82	42	69.3

.When depth is deeper than insert length - 1.5mm, 1 corner type is recommended

CGP

External deep grooving and parting blade



Metric	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.

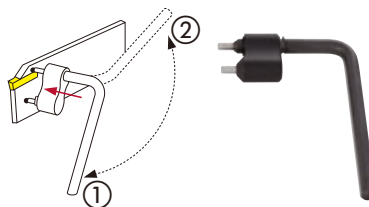
Wrench (CRW...) is not included. Please order it separately.

*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

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench	Wrench (Optional)
CGP**-1.4*	-	-	-	CRW23
CHGP..., CGP**-2/3/4/5/6	-	-	-	CRW33
CGP32-8S-CL	-	CM4X0.7X20-M0-A	P-3	-

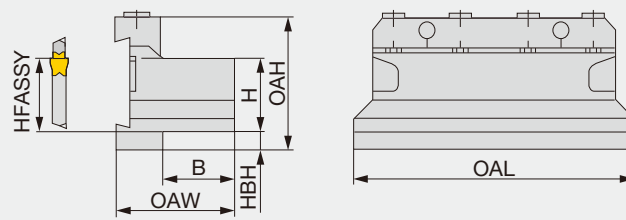
Reference pages: CHGP: Inserts → **G154 - G161**, Toolblock → **G165**

CGP: Inserts → **G154 - G161**, Toolblock → **F252 - F253, G153**

Standard cutting conditions → **G162**

CTBU

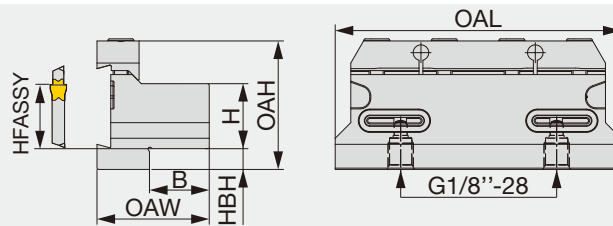
Tool blocks for CGP blade



Inch	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU12-26-U	0.750	0.827	3.386	0.750	0.354	1.693	1.496	CGP26...
CTBU16-26-U	1.000	0.906	4.331	1.000	0.197	1.772	1.654	CGP26...
CTBU12-32-U	0.750	0.748	3.937	0.750	0.512	1.969	1.496	CGP32...
CTBU16-32-U	1.000	0.906	4.331	1.000	0.315	1.969	1.654	CGP32...
CTBU20-32-U	1.250	1.142	4.331	1.250	0.197	2.126	1.890	CGP32...
Metric	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...

CTBU-CHP

Tool block for CGP-CHP blade with high pressure internal coolant capacity



Inch	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU16-32-U-CHP	1.000	0.906	4.331	1.000	0.315	1.97	1.654	CGP32-"D"-CHP
Metric	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
CTBU12-26-U , CTBU20-26	CM6X30-S	CT-86	P-5	-
CTBU12-32-U, CTBU25-26	CM6X30-S	CT-105	P-5	-
CTBU16-26-U, CTBU20-32	CM6X30-S	CT-100	P-5	-
CTBU16-32-U, CTBU20-32-U , CTBU25-32, CTBU32-32	CM6X30-S	CT-110	P-5	-
CTBU16-32-U-CHP, CTBU25-32-CHP	SRM6X16DIN912-12.9	CT-110	P-5	OR14X2.5NN

Reference pages: CTBU: Blade → **G152**, CTBU-CHP: Blade → **F254**

External grooving and parting

DGS type (2 corners) SGS type (1 corner)

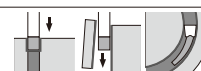
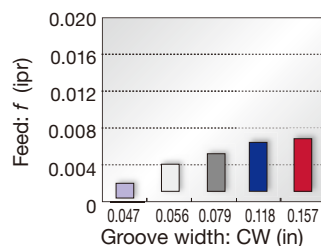


G156, G159

For Swiss lathes

Unique-designed edge
and chipbreaker
Handed insert available
CW = 0.047" - 0.157"

Standard feed



DGM type (2 corners) SGM type (1 corner)

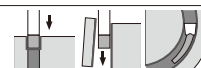
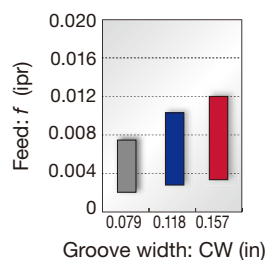


G157, G158

High fracture resistance

Smooth chip evacuation
Well-designed edge with
high strength
Handed insert available
CW = 0.079" - 0.157"

Standard feed



DGL type (2 corners)

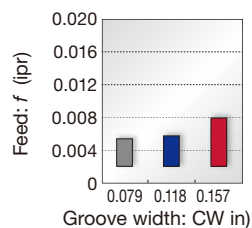


G161

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 = 0.079" - 0.157"

Standard feed



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

External grooving

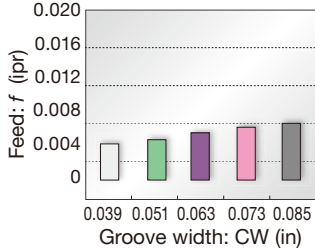
DGE type (2 corners)



For shallow grooves with high accuracy

Excellent chip control
CW = 1 - 2.15 mm
(0.039" - 0.085")

Standard feed



Feed: f (ipr)

Groove width: CW (in)

G160



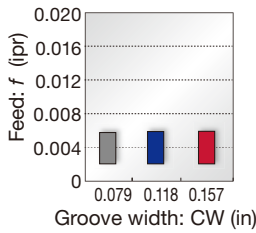
DGG type (2 corners)



For non-ferrous materials and titanium alloys

Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 0.079" - 0.157"

Standard feed



Feed: f (ipr)

Groove width: CW (in)

G160



External grooving of hardened steels

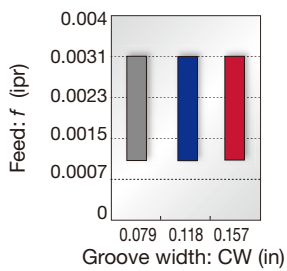
SGN-CBN type (1 corner)



For hardened steel cutting

Optimum cutting edge shape for grooving of hardened steels
Close tolerance width for finishing (W = ±0.001")
CW = 0.079" - 0.157"

Standard feed



Feed: f (ipr)

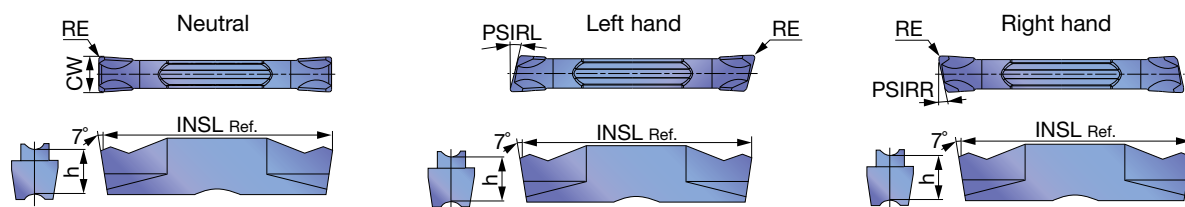
Groove width: CW (in)

G161



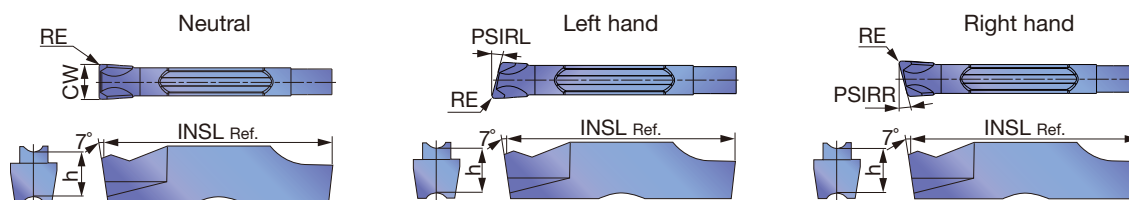
Please see page G*** for the product details.

External grooving and parting

[illegible]

Designation	Seat size	HAND	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated						Cermet		Uncoated		INSL (in)	h (in)	PSIRL	PSIRR
						T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F				
DGM2-020	2	N	2	0.079	0.008	●	●	●	●		●	●		●	●	0.787	0.197	0°	0°
DGM2-020-6R	2	R	2	0.079	0.008		●	●			●					0.787	0.197	0°	6°
DGM2-020-6L	2	L	2	0.079	0.008		●	●			●					0.787	0.197	6°	0°
DGM2-020-8R	2	R	2	0.079	0.008		●	●			●					0.787	0.197	0°	8°
DGM2-020-8L	2	L	2	0.079	0.008		●	●			●					0.787	0.197	8°	0°
DGM2-020-15R	2	R	2	0.079	0.008		●	●			●					0.787	0.197	0°	15°
DGM2-020-15L	2	L	2	0.079	0.008		●	●			●					0.787	0.197	15°	0°
DGM2-002-15R	2	R	2	0.079	0.001			●			●					0.762	0.197	0°	15°
DGM2-002-15L	2	L	2	0.079	0.001			●			●					0.762	0.197	15°	0°
DGM2.39-020	2	N	2.39	0.094	0.008		●		●			●				0.787	0.197	0°	0°
DGM3-020	3	N	3	0.118	0.008	●	●	●	●	●	●	●	●	●	●	0.787	0.197	0°	0°
DGM3-020-6R	3	R	3	0.118	0.008		●	●			●					0.787	0.197	0°	6°
DGM3-020-6L	3	L	3	0.118	0.008		●	●			●					0.787	0.197	6°	0°
DGM3-002-6R	3	R	3	0.118	0.001			●			●					0.766	0.197	0°	6°
DGM3-002-6L	3	L	3	0.118	0.001			●								0.766	0.197	6°	0°
DGM3-020-15R	3	R	3	0.118	0.008		●	●			●					0.787	0.197	0°	15°
DGM3-020-15L	3	L	3	0.118	0.008		●	●			●					0.787	0.197	15°	0°
DGM3.18-020	3	N	3.18	0.125	0.008		●		●			●				0.787	0.197	0°	0°
DGM4-030	4	N	4	0.157	0.012	●	●	●	●	●	●	●	●	●	●	0.787	0.197	0°	0°
DGM4-030-4R	4	R	4	0.157	0.012		●	●			●					0.787	0.197	0°	4°
DGM4-030-4L	4	L	4	0.157	0.012		●	●			●					0.787	0.197	4°	0°
DGM4-030-15R	4	R	4	0.157	0.012		●	●			●					0.787	0.197	0°	15°
DGM4-030-15L	4	L	4	0.157	0.012		●	●			●					0.787	0.197	15°	0°
DGM4.76-040	5	N	4.76	0.187	0.016		●		●			●				0.984	0.217	0°	0°
DGM5-030	5	N	5	0.197	0.012	●	●	●	●	●	●	●	●	●	●	0.984	0.217	0°	0°
DGM5-030-4R	5	R	5	0.197	0.012		●	●			●					0.984	0.217	0°	4°
DGM6-030	6	N	6	0.236	0.012	●	●	●	●	●	●	●			●	0.984	0.217	0°	0°
DGM6.35-040	6	N	6.35	0.250	0.016		●		●			●				0.984	0.217	0°	0°
DGM8-040	8	N	8	0.315	0.016	●	●	●	●		●	●			●	1.181	0.264	0°	0°

● : Line up

[illegible]

★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated					Uncoated			INSL (in)	h (in)	PSIRL	PSIRR
						AH7025	AH725	AH8005	GH130	AH6235	KS05F						
SGM2-020	2	N	2	0.079	0.008	●	●	●	●	●	●			0.787	0.197	0°	0°
SGM2-020-6R	2	R	2	0.079	0.008	●	●							0.787	0.197	0°	6°
SGM2-020-6L	2	L	2	0.079	0.008	●	●		●					0.787	0.197	6°	0°
SGM3-020	3	N	3	0.118	0.008	●	●	●	●	●	●			0.787	0.197	0°	0°
SGM3-020-6R	3	R	3	0.118	0.008	●	●		●					0.787	0.197	0°	6°
SGM3-020-6L	3	L	3	0.118	0.008	●	●		●					0.787	0.197	6°	0°
SGM3-020-15R	3	R	3	0.118	0.008	●	●		●					0.787	0.197	0°	15°
SGM3-020-15L	3	L	3	0.118	0.008	●	●		●					0.787	0.197	15°	0°
SGM4-030	4	N	4	0.157	0.012	●	●	●	●	●	●			0.787	0.197	0°	0°
SGM4-030-4R	4	R	4	0.157	0.012	●	●		●					0.787	0.197	0°	4°
SGM4-030-4L	4	L	4	0.157	0.012	●	●		●					0.787	0.197	4°	0°
SGM5-030	5	N	5	0.197	0.012	●	●	●	●	●	●			0.984	0.217	0°	0°
SGM6-030	6	N	6	0.236	0.012	●	●	●	●	●	●			0.984	0.217	0°	0°
SGM8-040	8	N	8	0.315	0.016	●		●		●	●			1.181	0.264	0°	0°

● : Line up

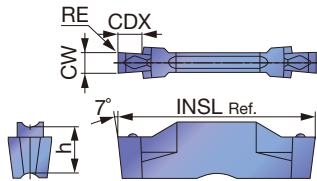


★ : First choice
☆ : Second choice

● : Line up

DGE

External grooving (for high precision)



P	Steel	★	☆	☆		★				
M	Stainless	★	☆	★						
K	Cast iron	★		☆		☆				
N	Non-ferrous									
S	Superalloys	★	☆							
H	Hard materials									

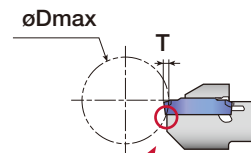
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05 (mm)	CW±0.0008 (in)	RE (in)	Coated			Cermet				CDX (in)	INSL (in)	h (in)
					AH7025	AH725	GH130		NS9530					
DGE100-000	2	1	0.039	0		●	●		●			0.098	0.787	0.197
DGE130-000	2	1.3	0.051	0		●	●		●			0.098	0.787	0.197
DGE160-010	2	1.6	0.063	0.004	●	●	●		●			0.098	0.787	0.197
DGE185-010	2	1.85	0.073	0.004	●	●	●		●			0.138	0.787	0.197
DGE215-015	2	2.15	0.085	0.006	●	●	●		●			0.138	0.787	0.197

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 (in)	øDmax (in)				
		T = 0.039	T = 0.059	T = 0.079	T = 0.098	T = 0.118
DGE100-000	0.079	∞	0.73	0.45	-	-
DGE130-000					-	-
DGE160-010					-	-
DGE185-010	0.118				0.35	0.28
DGE215-015					0.35	0.28

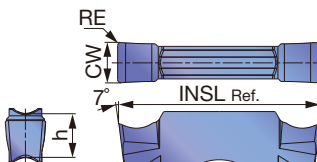


Relevant area (Interference)

● : Line up

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

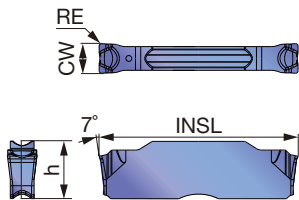
Designation	Seat size	CW±0.02 (mm)	CW±0.0008 (in)	RE (in)	Coated		Cermet	Uncoated		INSL (in)	h (in)
					AH7025			NS9530	KS05F		
DGG200-020	2	2	0.079	0.008	●		●	●	●	0.787	0.197
DGG300-020	3	3	0.118	0.008	●		●	●	●	0.787	0.197
DGG400-040	4	4	0.157	0.016	●		●	●	●	0.787	0.197
DGG500-040	5	5	0.197	0.016	●		●	●	●	0.984	0.217
DGG600-040	6	6	0.236	0.016	●		●	●	●	0.984	0.217

● : Line up

Reference pages: Toolholders → **G149 - G153**, Standard cutting conditions → **G162**

DGL

External grooving and parting



P	Steel	★	★	★
M	Stainless	★	★	★
K	Cast iron	★	★	★
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

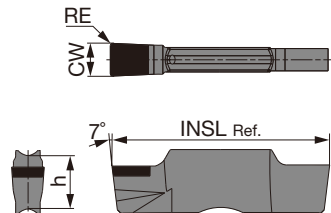
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated								INSL (in)	h (in)
					AH7025	AH8005	AH6235							
DGL2-020	2	2	0.079	0.008	●	●	●						0.787	0.197
DGL3-025	3	3	0.118	0.010	●	●	●						0.787	0.197
DGL4-030	4	4	0.157	0.012	●	●	●						0.787	0.197
DGL5-030	5	5	0.197	0.012	●	●	●						0.984	0.217
DGL6-080	6	6	0.236	0.031	●	●	●						0.984	0.217

● : Line up

SGN

External grooving



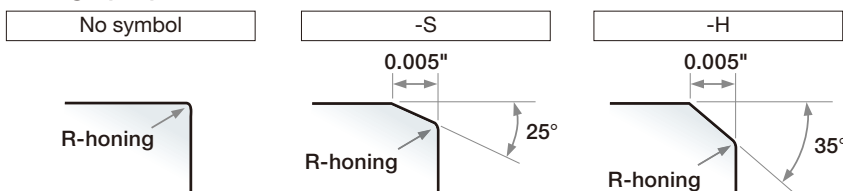
P	Steel			
M	Stainless			
K	Cast iron			
N	Non-ferrous			
S	Superalloys			
H	Hard materials	★		

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	CBN								INSL (in)	h (in)	Edge prep.		
					BX360										No symbol	S	H
SGN200-020	2	2	0.079	0.008	●								0.787	0.197	○		
SGN200-020-S	2	2	0.079	0.008	●								0.787	0.197		○	
SGN200-020-H	2	2	0.079	0.008	●								0.787	0.197			○
SGN300-020	3	3	0.118	0.008	●								0.787	0.197	○		
SGN300-020-S	3	3	0.118	0.008	●								0.787	0.197		○	
SGN300-020-H	3	3	0.118	0.008	●								0.787	0.197			○
SGN400-020	4	4	0.157	0.008	●								0.787	0.197	○		
SGN400-020-S	4	4	0.157	0.008	●								0.787	0.197		○	
SGN400-020-H	4	4	0.157	0.008	●								0.787	0.197			○
SGN500-020-S	5	5	0.197	0.008	●								0.984	0.217		○	
SGN500-020-H	5	5	0.197	0.008	●								0.984	0.217			○

● : Line up

Edge preparations



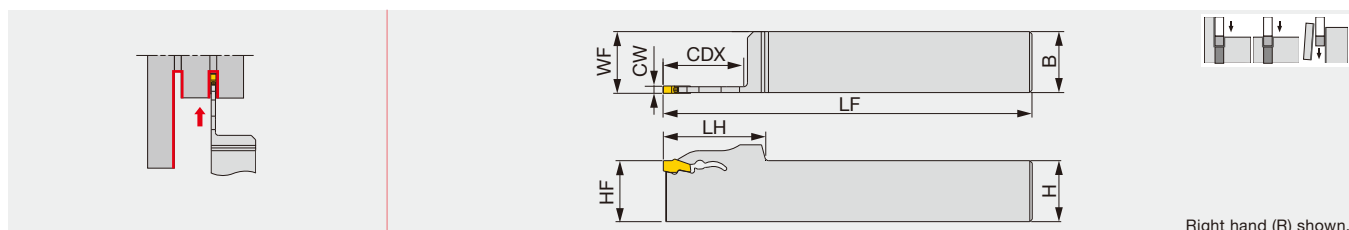
Reference pages: Toolholders → **G149 - G153**, Standard cutting conditions → **G162**

STANDARD CUTTING CONDITIONS

	ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed V _c (sfm)
 External	P	Steel 1045, 4135, etc.	< 300 HB	First choice	AH7025, AH725	164 - 591
			< 300 HB	Wear resistance	T9225, AH8005	262 - 984
			< 300 HB	Impact resistance	AH6235, GH130	164 - 394
			< 300 HB	Surface quality	NS9530	262 - 722
 Grooving	M	Stainless steel 304SS, 316SS, 17-4 PH, etc.	< 200 HB	First choice	AH7025, AH725	164 - 394
			< 200 HB	Wear resistance	AH8005	164 - 394
			< 200 HB	Impact resistance	AH6235, GH130	164 - 394
 Internal	K	Gray cast iron Class 25, Class 30, etc.	-	First choice	T515	492 - 2297
			-	Impact resistance	AH8005, AH7025, AH6235, GH130	164 - 591
		Ductile cast iron 60-40-18, 80-55-06, etc.	-	First choice	T515	492 - 984
			-	Impact resistance	AH8005, AH7025, AH6235, GH130	164 - 394
 Parting-off	N	Aluminum alloys Si < 12%	-	First choice	TH10	328 - 1640
			-	First choice	KS05F	328 - 1969
 Threading	S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	66 - 197
			< HRC 40	Impact resistance	AH7025, AH725, AH6235	66 - 131
		Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	66 - 328
			< HRC 40	Impact resistance	AH7025, AH725	66 - 262
	H	Hardened steel 4137, etc.	> HRC 50	First choice	BX360	262 - 492

Please see page **G154**, **G155** for feed: f (mm/rev).

External toolholders for grooving and parting

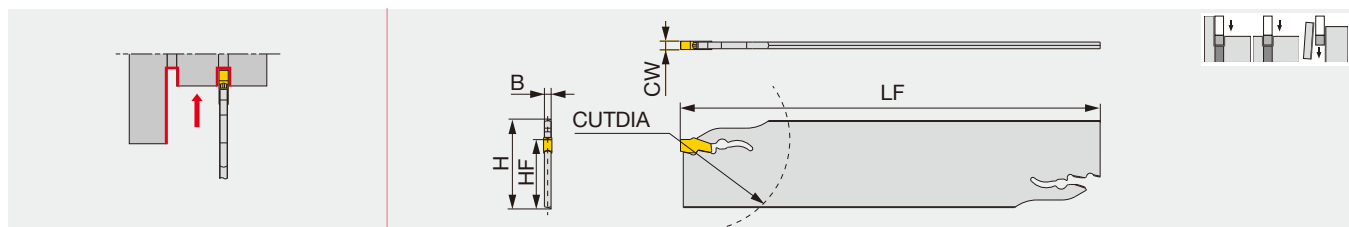


Right hand (R) shown.

Inch	CW	CDX	Seat size	H	B	LF	LH	HF	WF
QSER/L12-2T26	0.079	1.024	2	0.750	0.750	5.000	1.417	0.750	0.756
QSER/L12-2T33	0.079	1.299	2	0.750	0.750	5.000	1.654	0.750	0.756
QSER/L16-2T26	0.079	1.024	2	1.000	1.000	6.000	1.417	1.000	1.004
QSER/L16-2T33	0.079	1.299	2	1.000	1.000	6.000	1.654	1.000	1.004
QSER/L12-3T26	0.118	1.024	3	0.750	0.750	5.000	1.417	0.750	0.764
QSER/L12-3T33	0.118	1.299	3	0.750	0.750	5.000	1.654	0.750	0.764
QSER/L16-3T26	0.118	1.024	3	1.000	1.000	6.000	1.417	1.000	1.012
QSER/L16-3T33	0.118	1.299	3	1.000	1.000	6.000	1.654	1.000	1.012
QSER/L12-4T33	0.157	1.299	4	0.750	0.750	5.000	1.654	0.750	0.768
QSER/L16-4T33	0.157	1.299	4	1.000	1.000	6.000	1.654	1.000	1.016
QSER/L16-5T33	0.197	1.299	5	1.000	1.000	6.000	1.654	1.000	1.020
Metric	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

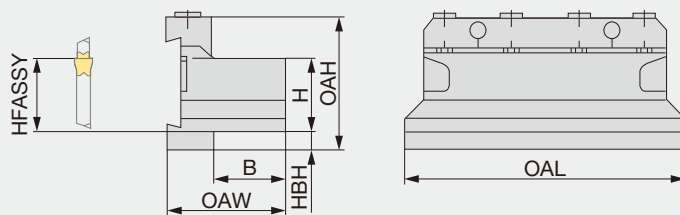


Metric	CW	CUTDIA	Seat size	H	B	LF	HF
QSP26-2D	2	50	2	26	1.8	150	21.4
QSP32-2D	2	66	2	32	1.8	150	24.8
QSP26-3D	3	75	3	26	2.4	150	21.4
QSP32-3D	3	120	3	32	2.4	150	24.8
QSP26-4D	4	80	4	26	3.2	150	21.4
QSP32-4D	4	120	4	32	3.2	150	24.9
QSP32-5D	5	120	5	32	4	150	24.9

SPARE PARTS

Designation	Wrench
QSER/L..., QSP...	QL-39

Reference pages: QSER/L: Inserts → **G166**
 QSP: Inserts → **G166**, Toolblock → **G164**
 Standard cutting conditions → **G167**



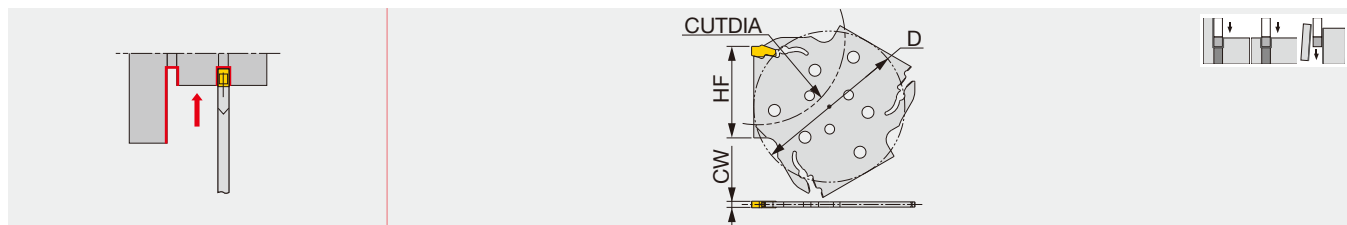
Inch	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU12-26-U	0.750	0.827	3.386	0.750	0.354	1.690	1.496	QSP26...
CTBU16-26-U	1.000	0.906	4.331	1.000	0.197	1.770	1.654	QSP26...
CTBU12-32-U	0.750	0.748	3.937	0.750	0.512	1.970	1.496	QSP32...
CTBU16-32-U	1.000	0.906	4.331	1.000	0.315	1.970	1.654	QSP32...
CTBU20-32-U	1.250	1.142	4.331	1.250	0.197	2.130	1.890	QSP32...
Metric	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
CTBU12-26-U, CTBU20-26	CT-86	CM6X30-S	P-5
CTBU16-26-U, CTBU20-32	CT-100	CM6X30-S	P-5
CTBU12-32-U, CTBU25-26	CT-105	CM6X30-S	P-5
CTBU16-32-U, CTBU20-32-U, CTBU25-32, CTBU32-32	CT-110	CM6X30-S	P-5

QSG

Parting-off and external grooving blade

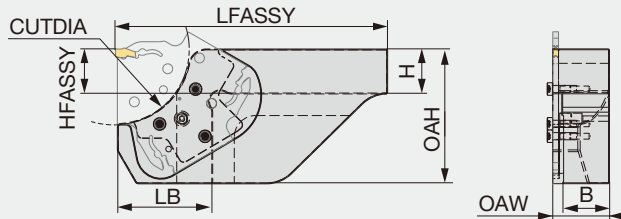


Metric	CW	Seat size	CUTDIA	HF	D
QSG52-2T	2	2	52	27	48.3
QSG82-2T	2	2	82	42	69.3
QSG52-3T	3	3	52	27	48.3
QSG82-3T	3	3	82	42	69.3
QSG52-4T	4	4	52	27	69.3
QSG82-4T	4	4	82	42	69.3

Reference pages: CTBU: Blade → **G163**
 QSG: Inserts → **G166**, Toolblock → **G165**
 Standard cutting conditions → **G167**

CHTBR/L

Tool block for QSG blade



Inch	CUTDIA	H	B	LFASSY	HFASSY	OAH	OAW	LB	Blade
CHTBR/L12-52	2.047	0.750	0.770	4.000	0.750	1.970	1.000	1.457	QSG52 / CHGP52
CHTBR/L12-82	3.228	0.750	0.770	5.500	0.750	2.950	1.000	2.087	QSG82 / CHGP82

Metric	CUTDIA	H	B	LFASSY	HFASSY	OAH	OAW	LB	Blade
CHTBR/L2020-52	52	20	20.5	100	20	50	26.5	37	QSG52 / CHGP52
CHTBR/L2020-82	82	20	20.5	140	20	75	26.5	53	QSG82 / CHGP82

The blade clamping screw heads protrude out for as much as 0.122" (3.1 mm) over the insert cutting edge point. Maintain the clearance from the chucking device to avoid interference.

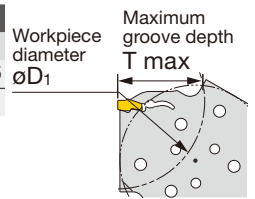
SPARE PARTS

				
Designation	Clamping screw	Grip	Torx bit	Wrench
CHTBR/L...	SR-ISO14580M4X10	SW6-SD	BLDT20/S7	-

Maximum groove depth (T max) as function of workpiece diameter (ϕD_1)

Designation	ϕD_1 (in)															
CHTBR/L***-52	2.087	2.126	2.165	2.205	2.283	2.362	2.441	2.559	2.677	2.835	3.071	3.307	3.622	4.016	4.528	5.236
CHTBR/L***-82	4.094	4.252	4.409	4.567	4.764	5.000	5.276	5.591	5.945	6.378	6.929	7.559	8.346	9.331	10.630	12.323
T max	0.827	0.787	0.748	0.709	0.669	0.630	0.591	0.551	0.512	0.472	0.433	0.394	0.354	0.315	0.276	0.236

Designation	ϕD_1 (in)											
CHTBR/L***-82	3.268	3.307	3.307	3.346	3.386	3.425	3.504	3.543	3.622	3.701	3.780	3.858
T max	1.339	1.299	1.260	1.220	1.181	1.142	1.102	1.063	1.024	0.984	0.945	0.906



Reference pages: CHTBR/L: Blade → **G164**
Standard cutting conditions → **G167**

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Grade	Cutting speed Vc (sfm)	
P	Steels 1045, 4140, etc.	< 300 HB	AH7025	164 - 591	Grade
M	Stainless steel 304, etc.	< 200 HB	AH7025	164 - 394	Insert
K	Gray cast iron No.250B, etc.	-	AH7025	164 - 591	Ext. Toolholder
	Ductile cast irons 65-45-12, etc.	-	AH7025	164 - 394	
S	Superalloys Inconel718, etc.	< HRC 40	AH7025	66 - 197	Int. Toolholder
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	AH7025	66 - 262	
					Threading
					Grooving
					Miniature tool
					Milling cutter
					Endmill
					Drilling tool
					Tooling System
					User's Guide
					Index

A
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M

Right-hand

Left-hand

Metric	Pitch (mm)	TPI	H	B	LH	HF	WF ⁽¹⁾	Insert	Torque*
QC12-SVER/L10-CHP	0.4 - 1.5	64 - 12	12 (0.750")	12 (0.750")	19.5 (0.768")	12 (0.472")	4.19/7.19 (0.165"/0.283")	VG*10...	1.3 (0.96)

Torque*: Recommended clamping torque: N·m (lbs·ft)

(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

Right-hand

Fig.1

Left-hand

Fig.2

Inch	Pitch (mm)	TPI	H	B	LF	HF	WF ⁽¹⁾	Insert	Torque	Fig.
SVER/L06-10	0.4 - 1.5	64 - 12	0.375	0.375	4.750	0.375	0.070/0.304	VG*10...	0.96	1
SVER/L08-10	0.4 - 1.5	64 - 12	0.500	0.500	4.750	0.500	0.070/0.430	VG*10...	0.96	2
Metric	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: lbs·ft (*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

Right-hand

Left-hand

Inch	Pitch (mm)	TPI	H	B	LF	HF	WF ⁽¹⁾	Insert	Torque
SVER/L08-10-CHP	0.4 - 1.5	64 - 12	0.500	0.500	4.750	0.500	0.070/0.430	VG*10...	0.96
Metric	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: lbs·ft (*N·m)

(1) "WF" indicates the distance from the reference position to the center of the cutting edge width.

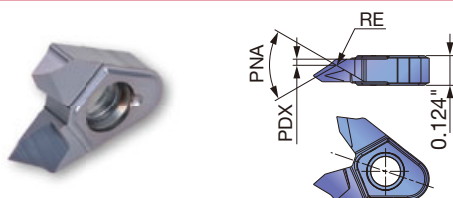
The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

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	-	-	-	-
SVER08-10-CHP, 1012/1212*-CHP...	CSTB-2.5L054DL	T-7F	-	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
SVEL08-10-CHP, 1012/1212*-CHP...	CSTB-2.5L054DR	T-7F	-	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
SVER06/08-10..., SVER1010/1212...	CSTB-2.5L054DL	T-7F	-	-	-	-	-
SVEL06/08-10..., SVEL1010/1212...	CSTB-2.5L054DR	T-7F	-	-	-	-	-

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 (in)	Coated					Pitch (mm)	TPI	PDX (in)	PNA
		SH725								
VGT10F-60A-005	0.002	●					0.4 - 1	64 - 25	0.026	60°
VGT10F-60A-010	0.004	●					1 - 2	25 - 12	0.038	60°
VGT10F-55A-005	0.002	●					0.6 - 1.5	40 - 16	0.033	55°

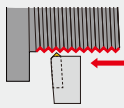
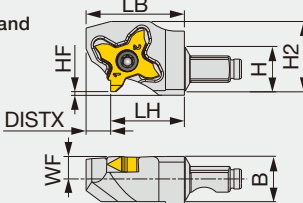
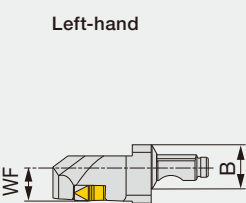
● : Line up

STANDARD CUTTING CONDITIONS

Threading

ISO	Workpiece materials	Grade	Cutting speed Vc (sfm)	Pitch (mm)	TPI
P	Low carbon steels 1015, 1020, etc.	SH725	164 - 492	0.4 - 2	64 - 12
	Carbon steels, Alloy steels 1055, 4140, etc.	SH725	164 - 492	0.4 - 2	64 - 12
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 492	0.4 - 2	64 - 12
M	Stainless steels 304, etc.	SH725	164 - 328	0.4 - 2	64 - 12
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 656	0.4 - 2	64 - 12
	Copper alloy C2600, C280C, etc.	SH725	328 - 656	0.4 - 2	64 - 12
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.4 - 2	64 - 12
	Superalloys Inconel718, etc.	SH725	98 - 262	0.4 - 2	64 - 12

Y-axis turning modular head for external grooving and threading

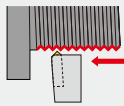
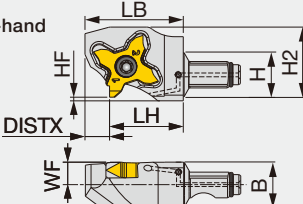
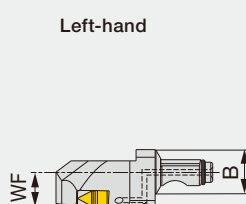
	Right-hand  Left-hand 										
Metric	Pitch	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	0.4 - 3	12 (0.472")	12 (0.472")	19.5 (0.768")	0 (0")	6/9 (0.236" / 0.354")	26 (1.024")	18.6 (0.732")	6.5 (0.256")	TC*18...	1.2 (0.89)

Torque*: Recommended clamping torque: N·m (lbs·ft)

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

	Right-hand  Left-hand 										
Metric	Pitch	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	0.4 - 3	12 (0.472")	12 (0.472")	19.5 (0.768")	0 (0")	6 (0.236")	26 (1.024")	18.6 (0.732")	6.5 (0.256")	TC*18...	1.2 (0.89)

Torque*: Recommended clamping torque: N·m (lbs·ft)

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).

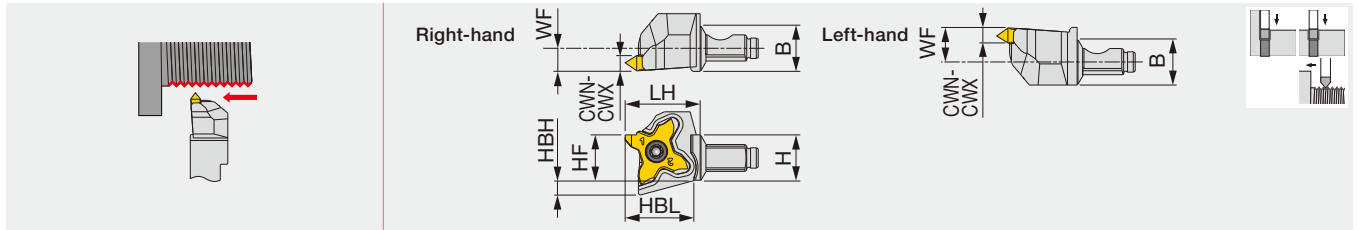
Through-coolant head

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

QC12-STCR/L

Modular head for external grooving and threading



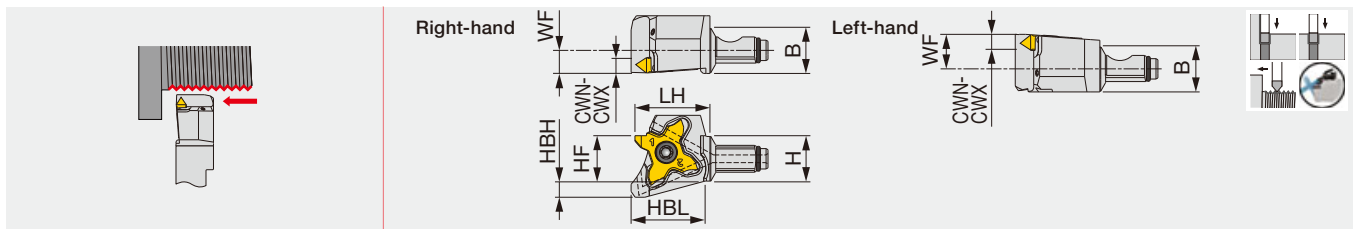
Metric	Pitch	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18	0.4 - 3	12 (0.472")	12 (0.472")	19.5 (0.768")	12 (0.472")	3.9 (0.154")	17.9 (0.705")	6 (0.236")	TC*18R...	1.2 (0.89)
QC12-STCL18	0.4 - 3	12 (0.472")	12 (0.472")	21 (0.827")	12 (0.472")	3.9 (0.154")	18.3 (0.720")	9 (0.354")	TC*18L...	1.2 (0.89)

Torque*: Recommended clamping torque: N·m (lbs·ft)

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



Metric	Pitch	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18-CHP	0.4 - 3	12 (0.472")	12 (0.472")	19.5 (0.768")	12 (0.472")	4.2 (0.165")	19.3 (0.760")	6 (0.236")	TC*18R...	1.2 (0.89)
QC12-STCL18-CHP	0.4 - 3	12 (0.472")	12 (0.472")	21 (0.827")	12 (0.472")	4.2 (0.165")	19.3 (0.760")	9 (0.354")	TC*18L...	1.2 (0.89)

Torque*: Recommended clamping torque: N·m (lbs·ft)

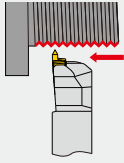
Through-coolant head

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-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 → **G174, G175**
Shank, Accessory → **G115, G116**, Standard cutting conditions → **G175**



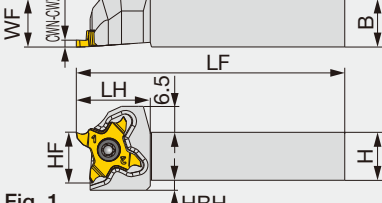


Fig. 1

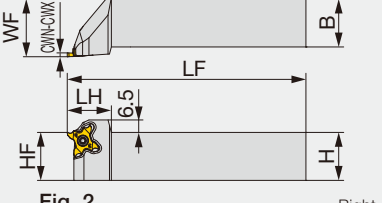


Fig. 2

Right-hand (R) shown.

Inch	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque	Fig.
STCR/L06-18	0.013	0.118	0.375	0.375	4.750	0.740	0.375	0.375	0.177	TC*18...	0.89	1
STCR/L08-18	0.013	0.118	0.500	0.500	4.750	0.740	0.500	0.500	0.098	TC*18...	0.89	1
STCR/L10-18	0.013	0.118	0.625	0.625	4.750	0.740	0.625	0.625	-	TC*18...	0.89	1
STCR/L12-18	0.013	0.118	0.750	0.750	4.750	0.900	0.750	1.000	-	TC*18...	0.89	2
STCR/L16-18	0.013	0.118	1.000	1.000	5.500	0.900	1.000	1.250	-	TC*18...	0.89	2

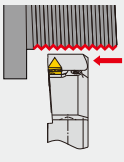
Metric	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	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

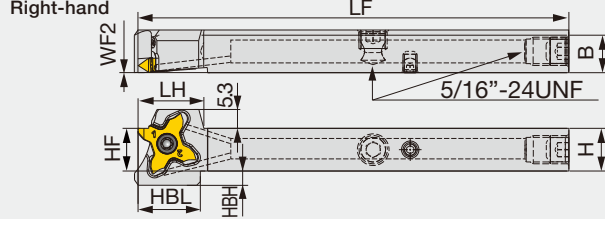
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert is used for the left hand toolholders
 Torque: Recommended clamping torque: lbs-ft (*N·m)

STCR/L-H/X18-CHP

Direct connection

External grooving and threading toolholder, high pressure coolant compatible





Right-hand



Left-hand

STCR/L1012H18-CHP
STCR/L1212*18B-CHP

Inch	Pitch (mm)	H	B	LF	LH	HBL	HF	WF2**	HBH	Insert	Torque
STCR/L08X18-CHP	0.4 - 3	0.500	0.500	4.750	0.728	0.689	0.500	0/0.500	0.130	TC*18...	0.89
STCR/L10X18-CHP	0.4 - 3	0.625	0.625	4.750	0.728	-	0.625	0/0.625	-	TC*18...	0.89

Metric	Pitch	H	B	LF	LH	HBL	HF	WF2**	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

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**).
 WF2** : 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: lbs-ft (*N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
STCFVR**18,STCL**18	CSTC-4L100DR	T-1008/5
STCR**18	CSTC-4L100DL	T-1008/5

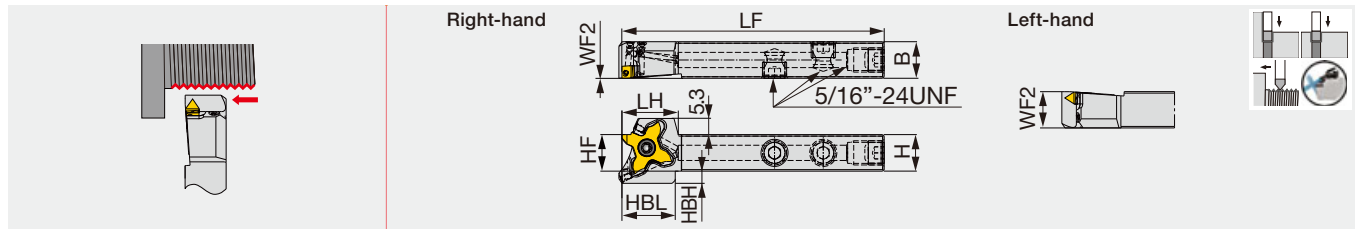
Threading pitch range: 0.8 ~ 3 mm

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	SSH4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2

Reference pages : STCR/L-18, STCR/L-H/X18-CHP: Inserts → **G174, G175**, Standard cutting conditions → **G175**

External grooving and threading toolholder. High pressure coolant capability.

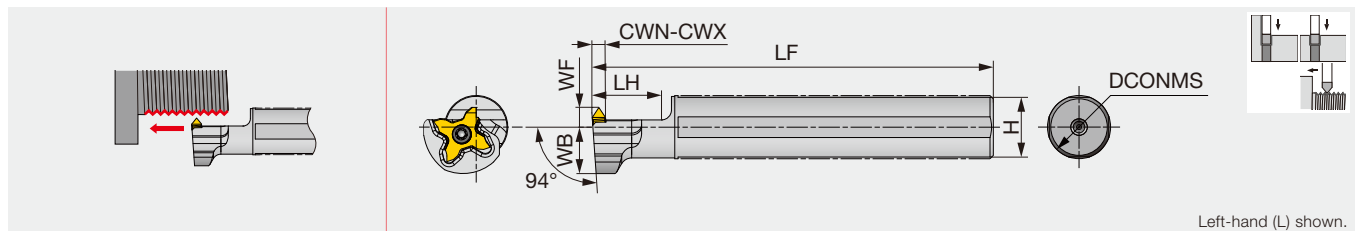


Inch	Pitch (mm)	H	B	LF	LH	HBL	HF	WF2**	HBH	Insert	Torque
STCR/L08F18-CHP	0.4 - 3	0.500	0.500	3.344	0.728	0.689	0.500	0/0.500	0.130	TC*18...	0.89
Metric	Pitch	H	B	LF	LH	HBL	HF	WF2**	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.4 - 3	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

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**).
WF2*: 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: lbs-ft (*N-m)

JS-STCL18

External grooving and threading toolholder with round shank, for Swiss lathes



Metric	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

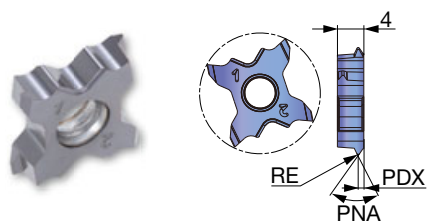
- The left hand toolholder (STCL...) is used with the right hand inserts (TC*18R...)
Torque*: Recommended torque (N-m) for clamping

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	-	-

INSERT

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 (in)	Coated		Pitch (mm)	PDX (in)	PNA
			SH725	AH725			
TCT18FR-05ISO	R	0.002	●		0.5	0.014	60°
TCT18FR-07ISO	R	0.004	●		0.7	0.018	60°
TCT18FR-075ISO	R	0.004	●		0.75	0.020	60°
TCT18FR-08ISO	R	0.004	●		0.8	0.020	60°
TCT18R-10ISO	R	0.005		●	1	0.024	60°
TCT18R-125ISO	R	0.007		●	1.25	0.028	60°
TCT18R-15ISO	R	0.008		●	1.5	0.031	60°

● : Line up

TCT18R/L (for threading)



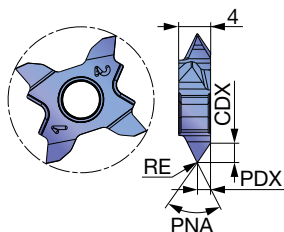
P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	HAND	RE (in)	Coated		Pitch min (mm)	Pitch max (mm)	PDX (in)	CDX (in)	PNA
			AH725						
TCT18R-60N-010	R	0.004	●		0.8	3	0.063	0.105	60°
TCT18L-60N-010	L	0.004	●		0.8	3	0.063	0.105	60°
TCT18R-60N-020	R	0.008	●		1.5	3	0.063	0.101	60°
TCT18L-60N-020	L	0.008	●		1.5	3	0.063	0.101	60°

● : Line up

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 (in)	Coated								Pitch min (mm)	Pitch max (mm)	PDX (in)	CDX (in)	PNA
			SH725												
TCT18FR-60A-005	R	0.002	●								0.4	1	0.024	0.039	60°
TCT18FR-60A-010	R	0.004	●								1	2	0.039	0.064	60°

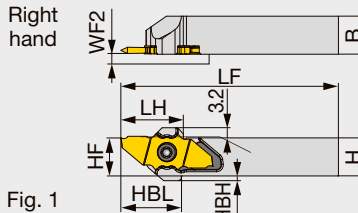
● : Line up

STANDARD CUTTING CONDITIONS

TCT18FR/R-ISO (Full profile threading insert) / TCT18FR (Threading insert)

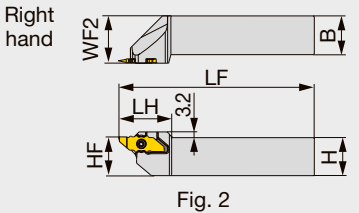
ISO	Workpiece materials	Priority	Grades	Cutting speed Vc (sfm)	Pitch (mm)	TPI
P	Low carbon steel 1015, 1020, etc.	First choice	SH725	197 - 492	0.4 - 2.0	64 - 18
		Toughness	AH725	197 - 492	0.8 - 3.0	32 - 8
	Carbon steels, Alloy steel 1045, 1055 etc.	First choice	SH725	197 - 492	0.4 - 2.0	64 - 18
		Toughness	AH725	197 - 492	0.8 - 3.0	32 - 8
M	Prehardened steel NAK80, PX5, etc.	First choice	SH725	197 - 492	0.4 - 2.0	64 - 18
		Toughness	AH725	197 - 492	0.8 - 3.0	32 - 8
	Stainless steel 304SS, etc	First choice	SH725	164 - 262	0.4 - 2.0	64 - 18
		Toughness	AH725	164 - 262	0.8 - 3.0	32 - 8
K	Gray cast iron Class 25, etc.	First choice	AH725	164 - 328	0.8 - 3.0	32 - 8
		Sharpness	SH725	164 - 328	0.4 - 2.0	64 - 18
	Ductile cast iron 60-40-18, 80-55-06, etc.	First choice	AH725	164 - 328	0.8 - 3.0	32 - 8
		Sharpness	SH725	164 - 328	0.4 - 2.0	64 - 18
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	98 - 328	0.4 - 2.0	64 - 18
		Toughness	AH725	98 - 328	0.8 - 3.0	32 - 8
	Superalloys Inconel718, etc.	First choice	SH725	98 - 328	0.4 - 2.0	64 - 18
		Toughness	AH725	98 - 328	0.8 - 3.0	32 - 8

 External
 Grooving
 Internal
 Parting-off
 Threading



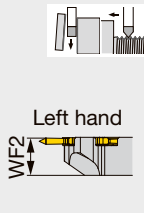
Right hand

Fig. 1



Right hand

Fig. 2



Left hand

Inch	CWN	CWX	H	B	LF**	LH**	HF	WF2 ⁽¹⁾	HBL	HBH	Insert	Torque	Fig.
JSXXR/L063	0.024	0.098	0.375	0.375	4.646	0.774	0.375	0.008 / 0.386	0.748	0.12	JX...	0.89	1
JSXXR/L083	0.024	0.098	0.500	0.500	3.268	0.774	0.500	0.008 / 0.386	0.748	0.06	JX...	0.89	1
JSXXR/L103	0.024	0.098	0.625	0.625	4.646	0.774	0.625	0.008 / 0.386	-	0.06	JX...	0.89	1
JSXXR/L123	0.024	0.098	0.750	0.750	3.950	0.886	0.750	0.008 / 0.742	-	-	JX...	0.89	1
JSXXR/L163	0.024	0.098	1.000	1.000	5.350	1.339	1.000	1.250 / 1.250	-	-	JX...	0.89	2

Metric	CWN	CWX	H	B	LF**	LH**	HF	WF2 ⁽¹⁾	HBL**	HBH	Insert	Torque*	Fig.
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2/9.8	19	3	JX...	1.2	1
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2/11.8	19	1.5	JX...	1.2	1
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2/11.8	19	1.5	JX...	1.2	1
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2/15.8	-	-	JX...	1.2	1
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2/19.8	-	-	JX...	1.2	1

Torque: Recommended clamping torque: lbs-ft (*N·m)

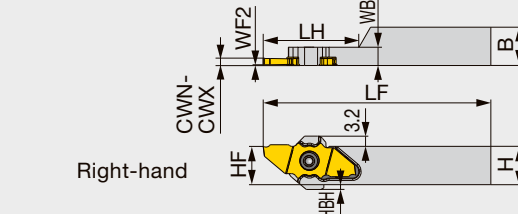
**LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 0.079" (2 mm) shorter than the above values with JX*G12... and JXPG20... inserts, and 0.157" (4 mm) shorter for JXPG06... insert.

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...).

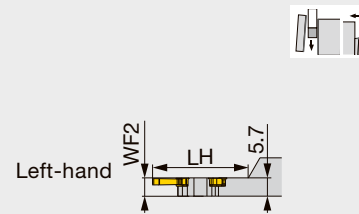
JSXXR/L-S

Parting toolholder, for Swiss lathes (for sub spindle)

 External
 Grooving
 Internal
 Parting-off
 Threading



Right-hand



Left-hand

Inch	CWN	CWX	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque*
JSXXR/L063-S	0.024	0.098	0.375	0.375	4.750	1.030	0.383	0.008/0.217	0.120	JX*G06...,12...,16...	0.890
JSXXR/L083-S	0.024	0.098	0.500	0.500	4.750	1.030	0.500	0.008/0.217	0.060	JX*G06...,12...,16...	0.890

Metric	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 clamping torque: lbs-ft (*N·m)

**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 0.157" (4 mm) shorter for JXPG06... insert. LF, LH, and HBL will all be 0.079" (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*****-S	CSTC-4L055DL	T-1008/5
JSXXL..., JSXXL*****-S	CSTC-4L055DR	T-1008/5

JSXXR/L-F/H/X-CHP

Parting-off toolholders with high pressure coolant capability, for swiss lathes

		Direct connection											
		Right-hand										Left-hand	
		Fig. 1										Fig. 2	
Inch	CWN CWX	H	B	WF	LF**	HF	HBH	LH**	HBL**	Insert	Torque	Fig.	
JSXXR/L083X-CHP	0.024 0.098	0.500	0.500	0.008/0.492	4.750	0.500	0.051	0.764	0.736	JX**G06...,12...,16..., 20...	0.890	1	
JSXXR/L103X-CHP	0.024 0.098	0.625	0.625	0.008/0.617	4.750	0.625	-	0.764	-	JX**G06...,12...,16..., 20...	0.890	1	
JSXXR/L083F-CHP	0.024 0.098	0.500	0.500	0.008/0.492	3.344	0.500	0.051	≤ 0.764	0.736	JX**G06...,12...,16..., 20...	0.890	1	
Metric	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: lbs-ft (*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 0.079" (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.

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											
		Right-hand										Left-hand	
		Fig. 1										Fig. 2	
Inch	CWN CWX	H	B	LF ⁽¹⁾	LH ⁽¹⁾	HF	WF2 ⁽²⁾	HBH	Insert	Torque*	Fig.		
JSXXR/L083F-S-CHP	0.024 0.098	0.5	0.5	3.344	1.024	0.5	0.008/0.217	0.051	JX**06...,12...,16..., 20...	0.89	2		
JSXXR/L083X-S-CHP	0.024 0.098	0.5	0.5	4.75	1.181	0.5	0.008/0.217	0.051	JX**06...,12...,16..., 20...	0.89	1		
JSXXR/L103X-S-CHP	0.024 0.098	0.625	0.625	4.75	1.181	0.625	0.008/0.217	-	JX**06...,12...,16..., 20...	0.89	1		
Metric	CWN CWX	H	B	LF ⁽¹⁾	LH ⁽¹⁾	HF	WF2 ⁽²⁾	HBH	Insert	Torque*	Fig.		
JSXXR/L1212F09-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		
JSXXR/L1616X09-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: lbs-ft (*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 0.079" (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...).

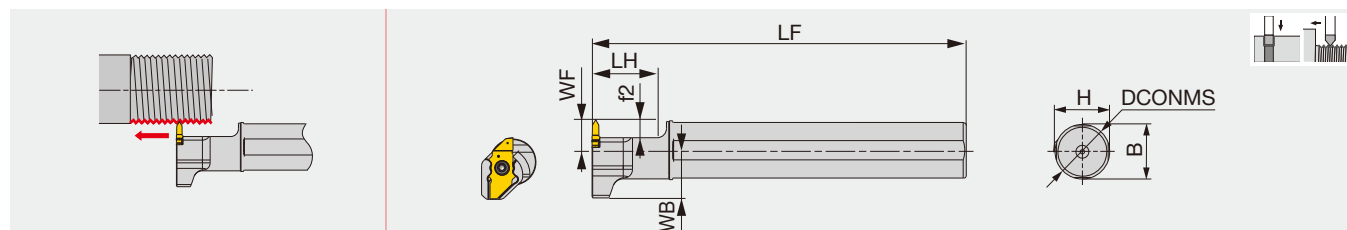
SPARE PARTS

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 → **G178**, Standard cutting conditions → **G179**

Round shanks, for threading



Metric	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)

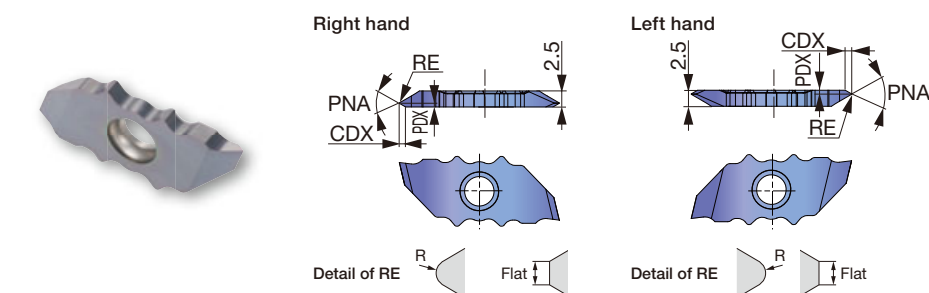
(1) When using JX..06... insert, both WF and f2 sizes will be 2 mm shorter than the values provided above.

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 (mm)	Coated					Pitches (mm)	PDX (mm)	CDX (mm)	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 → **G176 - G178**

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)
P	Low carbon steels 1015, etc.	SH725	164 - 656
	Carbon steels, Alloy steels 1055, etc.	SH725	164 - 656
	Free cutting steels SUH22, SUH23, etc.	SH725	164 - 656
M	Stainless steels 304, etc.	SH725	164 - 656
N	Aluminum alloys 5056, 6061, etc.	SH725	492 - 656
	Copper alloy C2600, C280C, etc.	SH725	328 - 656
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262
	Superalloys Inconel718, etc.	SH725	98 - 262

Grade

A

Insert

B

Ext. Toolholder

C

Int. Toolholder

D

Threading

E

Grooving

F

Miniature tool

G

Milling cutter

H

Endmill

I

Drilling tool

J

Tooling System

K

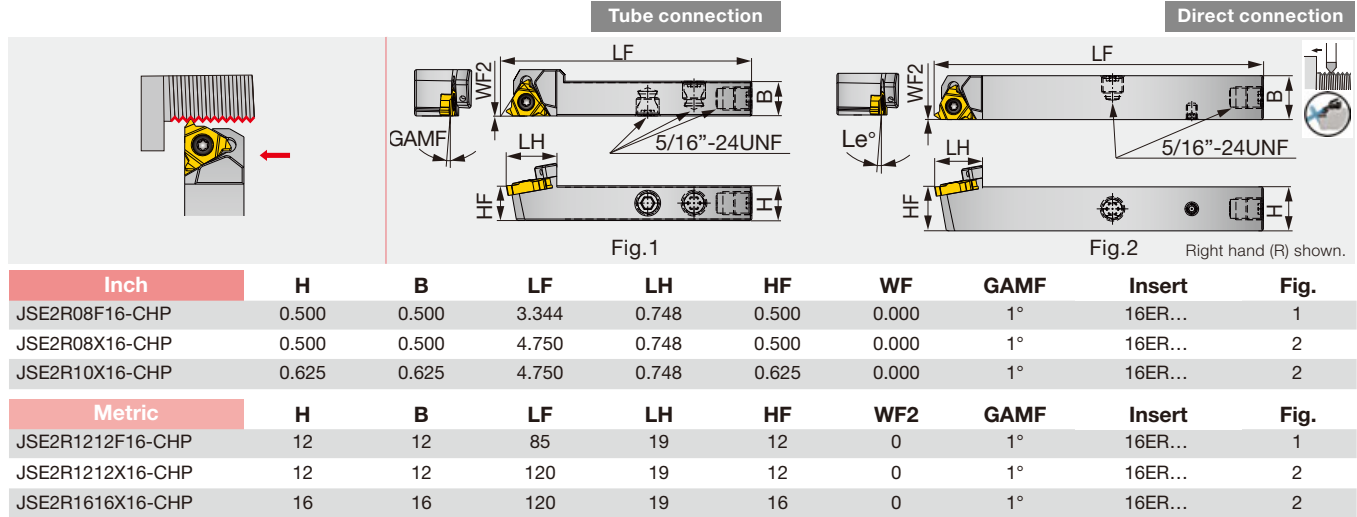
User's Guide

L

Index

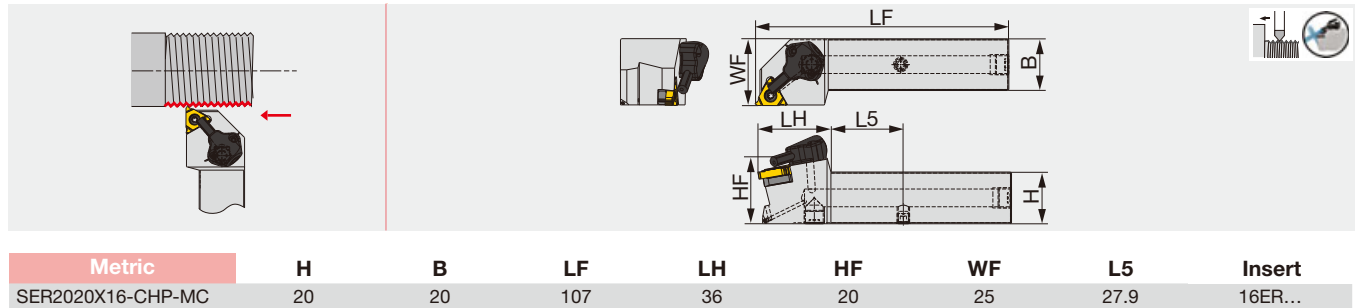
M

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection



SER-X-CHP-MC

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection

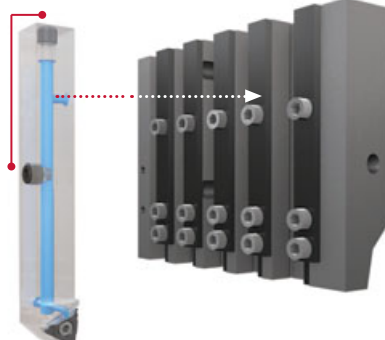


SPARE PARTS

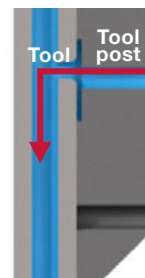
Designation	Clamping screw	Wrench	Shim screw	Shim	Coolant unit	Coolant plug	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F	-	-	-	SR5/16UNFTL360	P-4
SER**X16-CHP-MC	CSTB-3.5ST	T-15F	DTS5-3.5	A16-1DT	CU-V-CHP	PLUGG1/8-6.5TL360	P-3.5

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



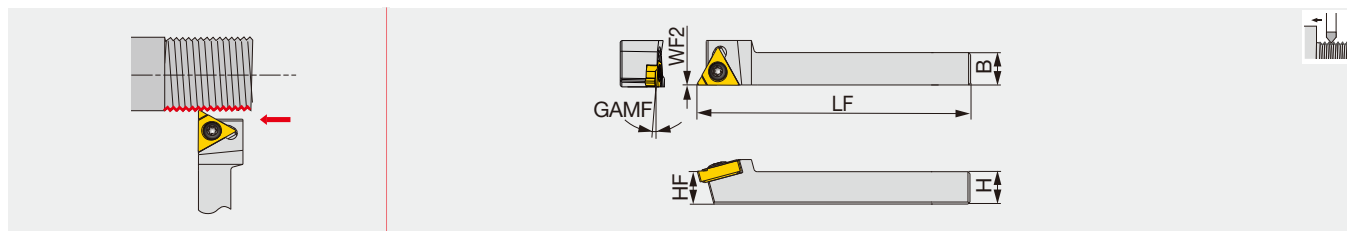
Detailed view of the coolant
flow after connection



Reference pages: JSE2R16-CHP, SER-X-CHP-MC: Inserts → **E010** -, Standard cutting conditions → **E068**

SER

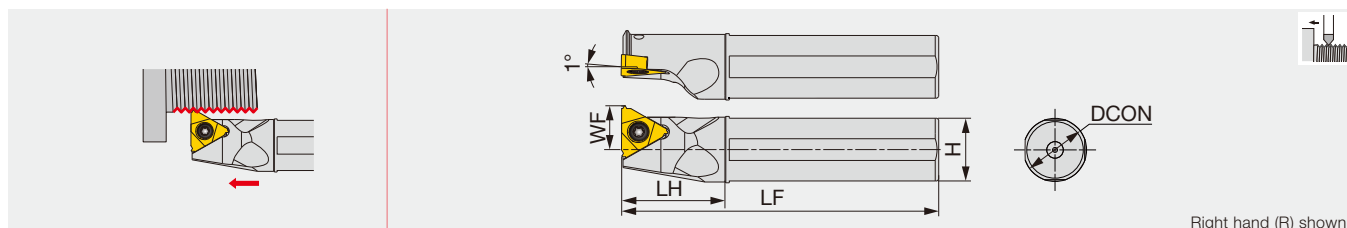
Screw-on external threading toolholders



Metric	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...

JS-SEL16

External threading toolholder, for Swiss lathes

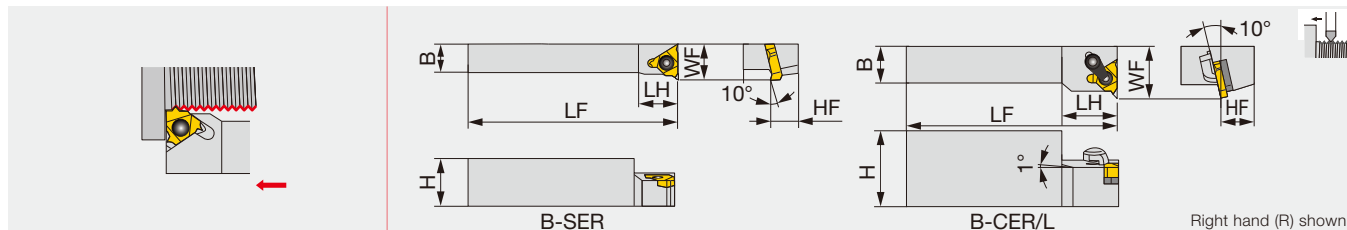


Metric	DCON	H	LF	LH	WF	Insert
JS16F-SEL16	16	15	85	25	11	16ER...
JS19G-SEL16	19.05	18	90	30	12.5	16ER...
JS19X-SEL16	19.05	18	120	30	12.5	16ER...
JS20G-SEL16	20	19	90	30	13	16ER...
JS20X-SEL16	20	19	120	30	13	16ER...
JS25H-SEL16	25	24	100	30	15.5	16ER...
JS254X-SEL16	25.4	24	120	30	15.7	16ER...

Note: Use left-hand toolholders (L) with right-hand inserts (R).

B-S/CER/L

External threading toolholder, for Swiss lathes



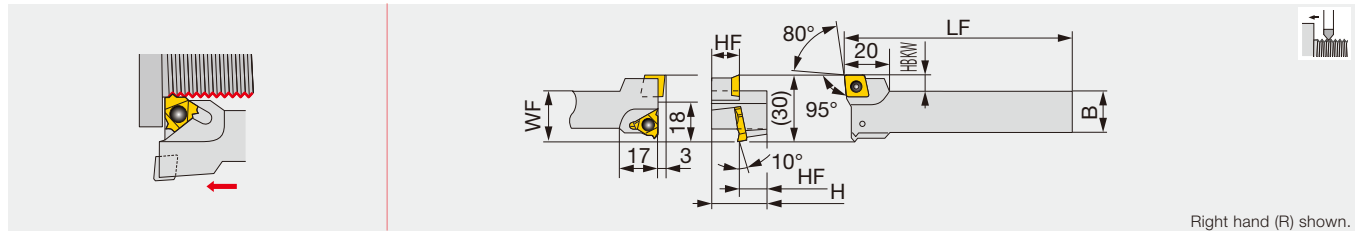
Metric	H	B	LF	LH	HF	WF	Insert
B-SER10H16	20	10	100	15	10	16	16ER...
B-SER12K16	24	12	125	18	12	18	16ER...
B-CER/L16M16	32	16	150	24	16	22	16ER/L...

SPARE PARTS

Designation	Clamping screw	Wrench 1
SER**H11	SR M2.6-L6.7-S11	T-8/5
JS***-SEL16, B-SER**16, BC-SER12K16	CSTB-3.5	T-15F

Reference pages: SER, JS-SEL16, B-S/CER/L:

Inserts → **E010** -, Standard cutting conditions → **E068**



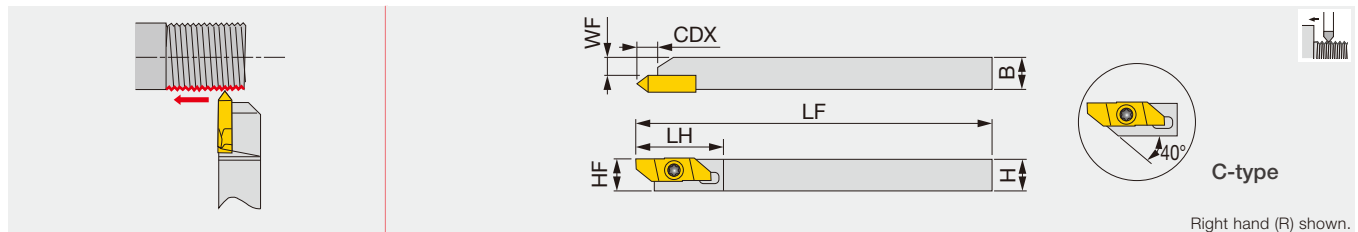
Right hand (R) shown.

Metric	H	B	LF	HF	WF	HBKW	Insert
BC-SER12K16	24	16	125	12	23	7	16ER..., CC*T09T3...

J-SERIES

JSXBR/L

Screw-on external threading toolholder, for Swiss lathes



Right hand (R) shown.

Metric	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.

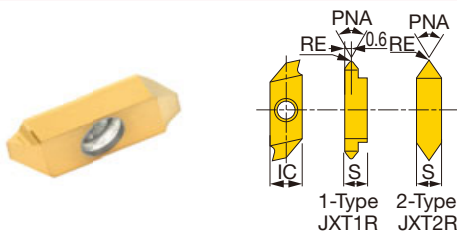
This toolholder is compatible with JXB-type inserts and JXT-type inserts.

SPARE PARTS

Designation	Clamp set	Shim set	Clamping screw	Wrench	Wrench 2 (Optional)
BC-SER12K16	-	-	CSTB-3.5	T-15F	-
JSXBR...	CSP16	A16-1	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								

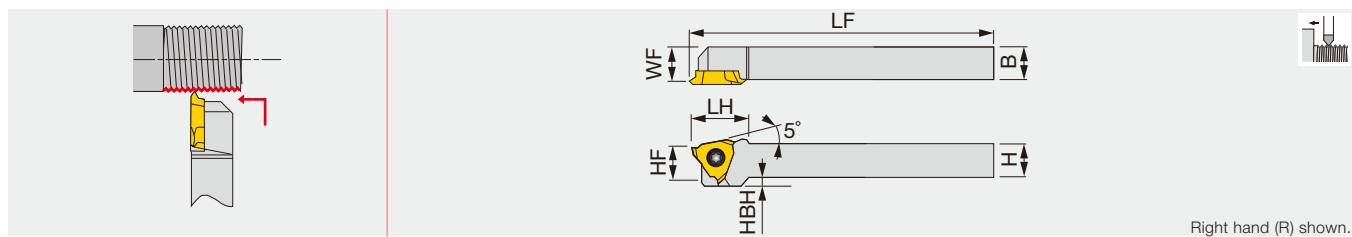
★ : First choice
☆ : Second choice

Designation	RE (mm)	Coated	Uncoated							PNA	IC (mm)	S (mm)
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: BC-SER/L: Inserts → **B112** - (CC*T09T3...), **E010** - (16ER...),
Standard cutting conditions → **E068**

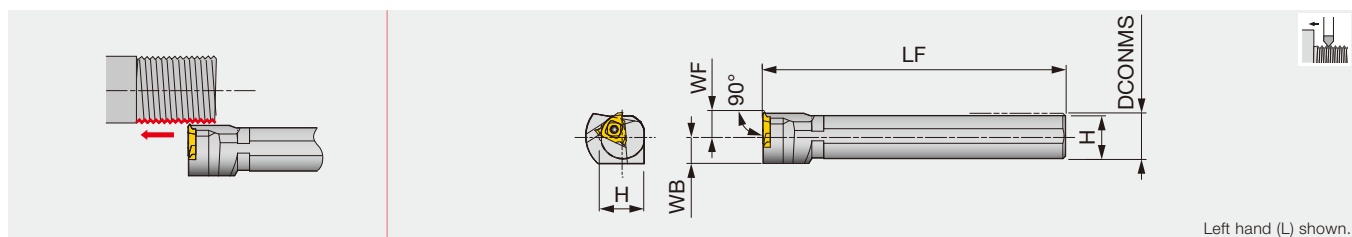


Inch	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L063	0.375	0.375	5.000	0.6875	0.375	0.375	0.100	JTTR/L30...
JSTTR/L083	0.500	0.500	5.000	0.6875	0.500	0.500	-	JTTR/L30...
JSTTR/L103	0.625	0.625	5.000	0.6875	0.625	0.625	-	JTTR/L30...
Metric	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L3...
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: 0.89 lbs-ft, 1.2 N·m

JS-TTL3

Screw-on external threading toolholder, for Swiss lathes



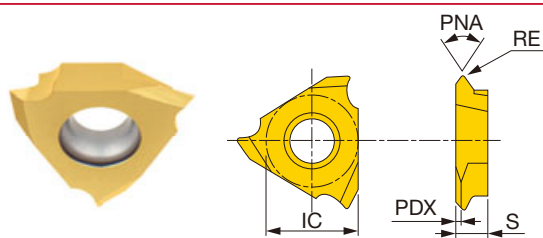
Metric	DCONMS	WF	LF	H	WB	Insert
JS19K-TTL3	19.05	10	125	18	11.5	JTTR30...
JS20K-TTL3	20	10	125	19	11.5	JTTR30...
JS22K-TTL3	22	10	125	21	11.5	JTTR30...
JS25K-TTL3	25.4	10	125	24	12.7	JTTR30...

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	-

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 (in)	Coated		Cermet	Uncoated	PNA	IC (mm)	S (mm)	PDX (mm)
		SH725	J740	NS9530	TH10				
JTTR3005F-55	0.002	●	●			55°	9.525	3.18	0.6
JTTL3005F-55	0.002					55°	9.525	3.18	0.6
JTTR3005F	0.002	●	●	●	●	60°	9.525	3.18	0.9
JTTL3005F	0.002	●				60°	9.525	3.18	0.9
JTTR3010F	0.004	●	●	●	●	60°	9.525	3.18	0.9
JTTL3010F	0.004	●				60°	9.525	3.18	0.9

Machinable pitch range: 0.020" to 0.039" (0.5 to 1 mm)

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Pitch (in)	TPI
P	Low carbon steel 1025, etc.	SH725	197 - 492	0.020 - 0.039	50 - 25
	Carbon steel, Alloy steel 1045, 4140, etc.	SH725	197 - 492	0.020 - 0.039	50 - 25
	Pre-hardened steel NAK80, PX5, etc.	SH725	197 - 492	0.020 - 0.039	50 - 25
M	Stainless steel 304SS, 316SS, 17-4 PH, etc.	SH725	164 - 262	0.020 - 0.039	50 - 25
K	Gray cast iron Class 25, Class 30, etc.	TH10	164 - 328	0.020 - 0.039	50 - 25
	Ductile cast iron 60-40-18, etc.	TH10	164 - 328	0.020 - 0.039	50 - 25
S	Titanium alloy Ti-6Al-4V, etc.	SH725	98 - 328	0.020 - 0.039	50 - 25
	Heat resistant alloy Inconel 718, etc.	SH725	98 - 328	0.020 - 0.039	50 - 25

Reference pages: Toolholder → **G183**

MEMO

Index	User's Guide	Tooling System	Drilling tool	Endmill	Milling cutter	Miniature tool	Grooving	Threading	Int. Toolholder	Ext. Toolholder	Insert	Grade
M	L	K	J	I	H	G	F	E	D	C	B	A