

Miniature Machining



Main products

L	95°	G040
J	93°	G052
N	63°	G070
P	62.5°	G073
A	91°	G074
G	91°	G078
D	45°	G079
F	91°	G080
Special		G081



MODUM^{INI}TURN

Modular head turning toolholder system



G036



MINI^{LOCK}VERGROOVE

High precision grooving and threading tool series for CNC automatic lathes



G022, G030, G110 -, G150 -



MINI^{FORCE}TURN

Economical double-sided inserts with excellent sharpness



G039



J-SERIES

Toolholders for small-part machining



G004 -, G042 -
G051, G054 -, G063 -
G070 -, G073 -, G084 -
G088 -, G133 -, G164 -



TETRA^{MCUT}

Unique insert pocket geometry for grooving with high quality and precision



CW = 0.33 - 3.18 mm

G022 -
G026 -, G030 -
G113 -, G147 -, G152 -



TETRA^{FORCE}CUT

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



CW = 0.5 - 3.18 mm

G022, G126 -



DUO^{FORCE}CUT

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

CW = 0.5 - 1 mm

G026, G086 -, G167 -



DUO^{JUST}CUT

Innovative clamping system for high rigidity in parting



CW = 0.6 - 2 mm

G026 -, G032 -
G158 -, G169 -



TUNG^{CUT}

Multi-functional tool series for various grooving operations



CW = 1.2 - 4 mm

G028 -, G177 -



TINY^{INI}MTURN

Solid boring bar for turning small diameters with high precision



G034 -, G097 -



TUNG^{HEAVY}GROOVE

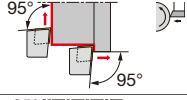
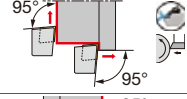
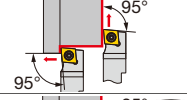
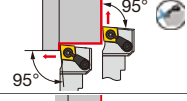
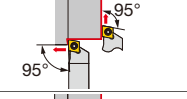
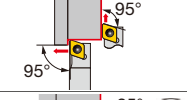
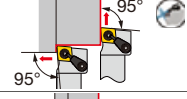
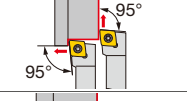
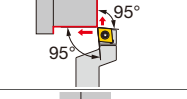
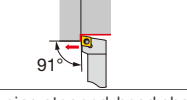
Highly rigid clamping for wide grooving and profiling in one pass

CW = 10 - 25 mm

G024, G138 -

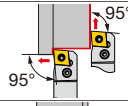
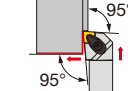
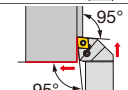
Miniature External Turning - Quick Guide

CC** inserts

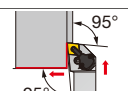
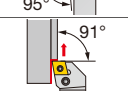
Cutting edge angle	Application	Designation	Insert	Square shank (height x width)						Holder			Clamping style		Offset	Page
				8 x 8	10 x 10	12 x 12	12 x 16	16 x 16	16 x 20	MODUM TM TURN (Modular head)	Y-axis feed	TUNGJET (Through-coolant)	Screw-on	Back-clamp		
95°		QC12-JSCL2CR-Y	CC**09			○	○			○	○		✓		without*	G040
		QC12-JSCL2CR-Y-CHP	CC**09			○	○			○	○	○	✓		without	G040
		QC12-JSCL2CR	CC**09			○	○			○			✓		without*	G040
		QC12-JSCL2CR-CHP	CC**09			○	○			○		○	✓		without*	G041
		JSCL2CR/L	CC**06/09		○	○		○					✓		without*	G042
		JTCL2CR/L	CC**06/09		○	○		○						✓	without	G042
		JSCL2CR/L-CHP	CC**09			○		○				○	✓		without*	G042
		JSCLCR/L	CC**06/09	○	○	○		○					✓		with	G043
		JSCLCR-F15	CC**09				○		○				✓		with	G043
91°		JSCGCR/L	CC**06/09			○		○						✓	with	G078

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

CN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank		Clamping style		Offset	Page
				16 x 16	20 x 20	Lever-lock	Double-clamp		
95°		PCL2NR	CN**1204		○	✓		without	G050
		ACLNR/L	CN**0904/ 1204		○		✓	with	C015
		PCLNR	CN**1204		○	✓		with	G050

CN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank		Holder TUNG TET (Through-coolant)	Clamping style		Offset	Page
				16 x 16	20 x 20		Lever-lock	Double-clamp		
95°		PCLNR/L-CHP	CN**0904/ 1204		○	○	✓		with	C019
91°		PCFNR/L	CN**1204		○		✓		with	C087

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

A

B

C

D

E

F

G

H

I

J

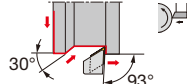
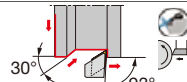
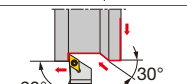
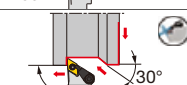
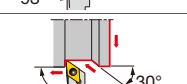
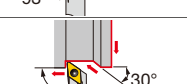
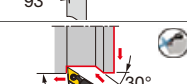
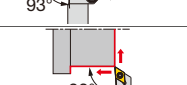
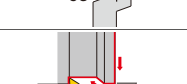
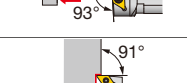
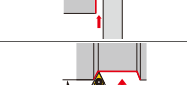
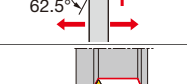
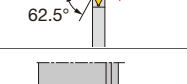
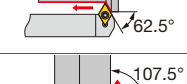
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L

M

Miniature External Turning - Quick Guide

DC** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)								Cylindrical shank (shank dia.)				
				8 x 8	10 x 10	10 x 12	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	ø19.05	ø20	ø22	
93°		QC12-JSDJ2CR-Y	DC**11					○	○							
		QC12-JSDJ2CR-Y-CHP	DC**11					○	○							
		QC12-JSDJ2CR	DC**07/11					○	○							
		QC12-JSDJ2CR-CHP	DC**07/11					○	○							
		JSDJ2CR/L	DC**07/11	○	○			○		○						
		JTDJ2CR/L	DC**07/11		○			○		○						
		JSDJ2CR/L-CHP	DC**07/11			○		○		○						
		JSDJCR-F15	DC**07/11				○		○		○					
		JSDJCR/L	DC**07/11	○	○			○		○						
		JS***-SDUCL	DC**07/11									○	○	○	○	
91°		JSDFCR/L	DC**07/11					○		○						
62.5°		JSDNCN	DC**07/11		○			○		○						
		SDNCN	DC**11							○		○				
		JSDN3CR	DC**07/11					○		○						
107.5°		SDQCR/L	DC**11								○					

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

	Holder			Clamping style		Offset	Page
	MODUM ^{TURN} (Modular head)	Y-axis feed	TUNG ^{JET} (Through-coolant)	Screw-on	Back-clamp		
	○	○		✓		without*	G052
	○	○	○	✓		without	G052
	○			✓		without*	G053
	○		○	✓		without*	G053
				✓		without	G054
					✓	without	G054
			○	✓		without	G055 G056
				✓		with	G057
				✓		with	G056
				✓		—	G081
				✓		with	G080
				✓		with	G070
				✓		with	C073
				✓		with	G070
				✓		with	C096

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

A

B

C

D

E

F

G

H

I

J

K

L

M

Miniature External Turning - Quick Guide



DX*U inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)								Cylindrical shank (shank dia.)				
				10 x 10	10 x 12	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	ø14	ø15.875	ø16	ø19.05	ø20
93°		QC12-JSDJ2XR-Y	DX*U				○	○								
		QC12-JSDJ2XR-Y-CHP	DX*U				○	○								
		QC12-JSDJ2XR	DX*U				○	○								
		QC12-JSDJ2XR-CHP	DX*U				○	○								
		JSDJ2XR/L	DX*U	○			○		○		○					
		JPDJ2XR/L	DX*U	○			○		○							
		JSDJ2XR/L-CHP	DX*U		○		○		○							
		JSDJXR-F15	DX*U			○		○		○						
		JSDJXR/L	DX*U								○					
		JS***-SDUXL	DX*U									○	○	○	○	○
62.5°		QC12-JSDNXR-CHP	DX*U				○	○								

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

	ø22	ø25	ø25.4	Holder			Clamping style		Offset	Page
				MODUMTMTURN (Modular head)	Y-axis feed	TUNGTJET (Through-coolant)	Screw-on	Back-clamp		
				○	○		✓		without*	G058
				○	○	○	✓		without*	G058
				○			✓		without*	G058
				○		○	✓		without*	G059
							✓		without	G059
								✓	without	G060
						○	✓		without	G060
							✓		with	G061
							✓		with	C045
	○	○	○				✓		—	G082
				○		○	✓		with	G072

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

A

B

C

D

E

F

G

H

I

J

K

L

M

Miniature External Turning - Quick Guide



DN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank		Holder TUNGTJET (Through-coolant)	Clamping style		Offset	Page
				16 x 16	20 x 20		Lever-lock	Double-clamp		
93°		ADJNR/L	DN**1104/ 1504/1506		○			✓	with	C034
		PDJNR/L	DN**1104/ 1504/1506	○	○		✓		with	G068
		PDJNR/L-CHP	DN**1104/ 1504		○	○	✓		with	C037
62.5°		ADPNN	DN**1504		○			✓	with	C108
107.5°		ADQNR/L	DN**1104/ 1504/1506		○			✓	with	C092



SC/P** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Clamping style		Offset	Page
				10 x 10	12 x 12	16 x 16	Screw-on	Back-clamp		
93°		SSDC/PN	SC**07/09 SP**04	○	○	○	✓		with	G079



TC** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)				Clamping style		Offset	Page
				8 x 8	10 x 10	12 x 12	16 x 16	Screw-on	Back-clamp		
91°		JSTACR/L	TC**08/11	○	○	○	○	✓		without*	G074



TN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Holder TUNGTJET (Through-coolant)	Clamping style			Offset	Page
				12 x 16	16 x 16	20 x 20		Lever-lock	Back-clamp	Double-clamp		
95°		PTL2NR/L	TN**1604			○		✓			without	G051
		JTTLNR/L	TN**1604	○	○				✓		without	G051
93°		ATJNR/L	TN**1604			○				✓	with	C032
91°		JTTANR/L	TN**1604	○	○				✓		without	G077
		ATGNR/L	TN**1604			○				✓	with	C057
		PTGNR/L	TN**1104/ 1604		○	○		✓			with	C058
		PTGNR/L -CHP	TN**1104/ 1604			○	○	✓			with	C059
		ATFNR/L	TN**1604			○				✓	with	C088
		PTFNR/L	TN**1104/ 1604		○	○		✓			with	C089
105°		ATQNR/L	TN**1604			○				✓	with	C091

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

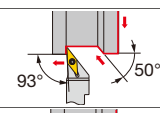
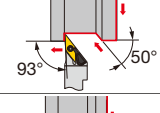
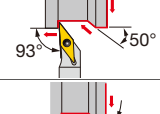
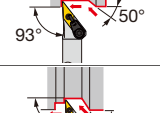
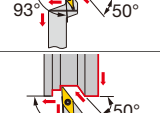
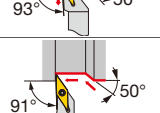
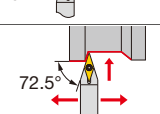
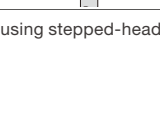
Tooling System

User's Guide

Index

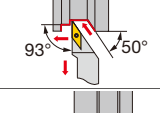
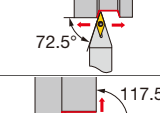
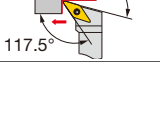
Miniature External Turning - Quick Guide

VB** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)					Holder		Clamping style		Offset	Page
				10 x 10	12 x 12	12 x 16	16 x 16	16 x 20	MODUMTURN (Modular head)	TUNGJET (Through-coolant)	Screw-on	Back-clamp		
93°		QC12-JSVJ2BR	VB**11		○	○			○		✓		without*	G062
		QC12-JSVJ2BR-CHP	VB**11		○	○			○	○	✓		without	G062
		JSVJ2BR/L	VB**11	○	○		○				✓		without	G062
		JSVJ2BR/L-CHP	VB**11		○		○			○	✓		without	G063
		JSVJBR-F15	VB**11			○		○			✓		with	G064
		JSVJBR/L	VB**11	○	○		○				✓		with	G064
91°		JSVABR/L	VB**11	○	○						✓		without	G076
72.5°		JSVNBN	VB**11	○	○		○				✓		with	G071

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

VC** inserts

Cutting edge angle	Application	Designation	Insert	Square shank		Clamping style		Offset	Page
				16 x 16	20 x 20	Screw-on	Back-clamp		
93°		SVJCR	VC**16	○	○	✓		with	C048
72.5°		SVVCN	VC**16		○	✓		with	C052
117.5°		SVQCR/L	VC**16		○	✓		with	C097



VP** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Clamping style		Offset	Page
				10 x 10	12 x 12	16 x 16	Screw-on	Back-clamp		
95°		JSVL2PR/L	VP**08/11	○	○	○	✓		without	G044
117.5°		JSVP2PR/L	VP**08/11	○	○	○	✓		without	G073



YWMT inserts

Cutting edge angle	Application	Designation	Insert	Square shank	Clamping style		Offset	Page
				20 x 20	Screw-on	Back-clamp		
93°		SYJBR/L	YWMT16	○	✓		with	C049
100°		SYHBR/L	YWMT16	○	✓		with	C099
77.5°		SYIBN	YWMT16	○	✓		with	C053
122.5°		SYQBR/L	YWMT16	○	✓		with	C098

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

A

B

C

D

E

F

G

H

I

J

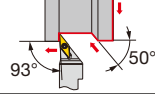
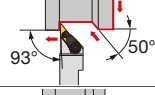
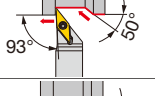
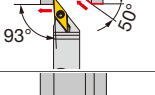
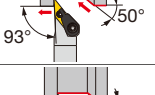
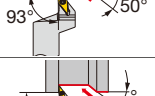
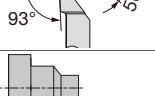
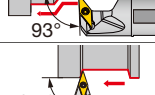
K

L

M

Miniature External Turning - Quick Guide

VXGU inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)								Cylindrical shank (shank dia.)				
				10 x 10	10 x 12	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	ø15.875	ø16	ø19.05	ø20	ø22
93°		QC12-JSVJ2XR	VXGU				○	○								
		QC12-JSVJ2XR-CHP	VXGU				○	○								
		JSVJ2XR/L	VXGU	○			○		○		○					
		JPVJ2XR/L	VXGU	○			○		○							
		JSVJ2XR/L-CHP	VXGU		○		○		○							
		JSVJXR-F15	VXGU			○		○		○						
		JSVJXR/L	VXGU								○					
		JS***-SVUXL	VXGU									○	○	○	○	○
72.5°		QC12-JSVVXR-CHP	VXGU				○	○								

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

	ø25	ø25.4	Holder		Clamping style		Offset	Page
			MODUM ^{TURN} (Modular head)	TUNG ^{TJET} (Through-coolant)	Screw-on	Back-clamp		
			○		✓		without*	G065
			○	○	✓		without*	G066
					✓		without	G065
						✓	without	G066
					✓		without	G067
					✓		with	G067
				○	✓		with	C047
	○	○			✓		–	C114
			○	○	✓		with	G083

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

A

B

C

D

E

F

G

H

I

J

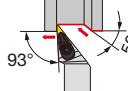
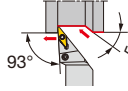
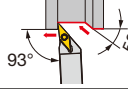
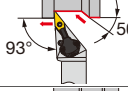
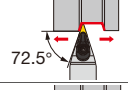
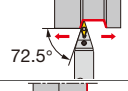
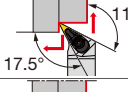
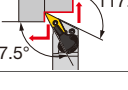
K

L

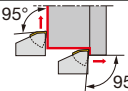
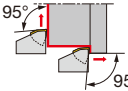
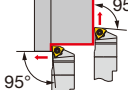
M

Miniature External Turning - Quick Guide

V/YN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Holder 	Clamping style			Offset	Page
				12 x 12	16 x 16	20 x 20		Lever-lock	Back-clamp	Double-clamp		
93°		AVJNR/L	VN**1204 V/YN**1604			○				✓	with	C041
		PVJNR/L	VN**1204		○	○		✓			with	C042
		JPVJ2NR/L	VN**1204	○	○				✓		without	G069
		PVJNR/L-CHP	VN**1204 V/YN**1604			○	○	✓			with	C043
72.5°		AVVNN	VN**1204 V/YN**1604			○				✓	with	C050
		PVVNN	VN**1204			○		✓			with	C050
117.5°		AVQNR/L	VN**1204 V/YN**1604			○				✓	with	C094
		PVQNR/L	VN**1204			○		✓			with	C094
		PVQNR/L-CHP	V/YN**1604			○	○	✓			with	C095

WXGU inserts

Cutting edge angle	Application	Designation	Insert	Square shank		Holder		Clamping style		Offset	Page
				12 x 12	12 x 16	MODUMTURN (Modular head) Y-axis feed		Screw-on	Back-clamp		
95°		QC12-JSWL2XR-Y	WXGU	○	○	○	○	✓		without*	G045
		QC12-JSWL2XR-Y-CHP	WXGU	○	○	○	○	✓		without	G045
		QC12-JSWL2XR	WXGU	○	○	○		✓		without*	G046

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



WXGU inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)							Holder		Clamping style		Offset	Page
				10 x 10	10 x 16	12 x 12	12 x 16	16 x 16	16 x 20	20 x 20	MODUMTURN (Modular head)	TUNGJET (Through-coolant)	Screw-on	Back-clamp		
95°		QC12-JSWL2XR-CHP	WXGU			○	○				○	○	✓		without*	G046
		JSWL2XR/L	WXGU	○		○		○		○			✓		without	G046
		JPWL2XR/L	WXGU	○		○		○						✓	without	G047
		JSWL2XR/L-CHP	WXGU			○		○				○	✓		without	G048
		JSWLXR-F15	WXGU		○		○		○				✓		with	G049

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



WN** inserts

Cutting edge angle	Application	Designation	Insert	Square shank	Holder	Clamping style		Offset	Page
				20 x 20		Lever-lock	Double-clamp		
95°		AWLNR/L	WN**0604/ 0804	○			✓	with	C024
		PWLNR/L	WN**0604	○		✓		with	C026
		PWLNR/L-CHP	WN**0604/ 0804	○	○	✓		with	C026

Miniature External Turning - Quick Guide



JV*N inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)				Clamping style		Offset	Page
				6 x 6	7 x 7	8 x 8	10 x 10	Screw-on	Back-clamp		
Front turning		JSXXR/L*05	JVFN45R/L	○	○	○	○	✓		without	G086



JXF inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)				Clamping style		Offset	Page
				10 x 10	12 x 12	16 x 16	20 x 20	Screw-on	Back-clamp		
Front turning, Reverse turning		JSXGR/L	JXFR/L8 JXRR/L8	○	○	○	○	✓		without	G088



JXB inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)				Clamping style		Offset	Page
				10 x 10	12 x 12	16 x 16	20 x 20	Screw-on	Back-clamp		
Front turning		JSXBR/L	JXBR/L	○	○	○	○	✓		without	G092



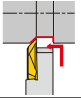
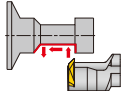
J10E inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)				Holder	Clamping style		Offset	Page
				10 x 10	12 x 12	12 x 16	16 x 16		Screw-on	Back-clamp		
Back turning		QC12-JSEGR	J10ER		○	○			✓		without	G089
		QC12-JSEGR-CHP	J10ER		○	○			✓		without	G089
		JSEGR/L	J10ER/L	○	○		○		✓		without	G089

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



JTB inserts

Cutting edge angle	Application	Designation	Insert	Square shank (height x width)			Cylindrical shank (shank dia.)				Clamping style		Offset	Page
				10 x 10	12 x 12	16 x 16	ø19.05	ø20	ø22	ø25.4	Screw-on	Back-clamp		
Back turning		JSTBR/L3	JTBR/L3	○	○	○					✓		without	G083
		JS-TBL3	JTBR3				○	○	○	○	✓		-	G084

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

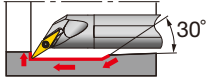
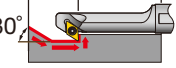
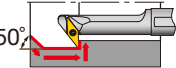
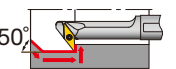
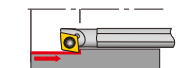
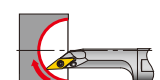
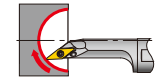
Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

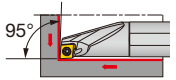
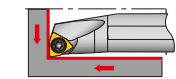
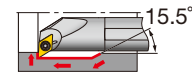
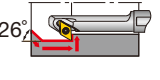
Appli- cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	Y-PRO	Min. bore diameter DMIN (mm)						Page
								0	10	20	30	40	50	
Boring & Internal facing		SEXPR/L	EP ...	Steel Carbide	○	✓		ø4.5	ø7					D034 D035
		SCLCR/L	CC...	Steel Carbide	○	✓		ø5			ø27			D014 D016
		SCLPR/L	CP ...	Steel Carbide	○	✓		ø10			ø27			D018 D019
Boring & internal profiling		SDUCR/L	DC ...	Steel Carbide	○	✓		ø13			ø32			D056
		SDUPR/L	DPMT...	Steel Carbide	○	✓		ø15			ø22			D058
		SVUCR/L	VC ...	Steel Carbide	○	✓		ø16			ø32			D061 D062
		SVUBR/L	VB ...	Steel Carbide	○	✓		ø20			ø32			D059 D060
		SDQCR/L	DC ...	Steel Carbide	○	✓		ø13			ø30			D076 D077
		SDQPR/L	DPMT...	Steel Carbide	○	✓		ø15			ø22			D078
		SVQCR/L	VC ...	Steel Carbide	○	✓		ø13.5			ø21.5			D081 D082
		SVQBR/L	VB ...	Steel Carbide	○	✓		ø17			ø30.5			D079 D080
		SYUBR/L	YW ...	Steel Carbide	○		✓	ø20					ø24.5	D064
		SWUBR/L	WB...	Steel Carbide	○	✓		ø6	ø8					D052
Boring		STUPR/L	TP ...	Steel Carbide	○	✓		ø8			ø34			D053 D055
		STFPR/L	TP...	Steel Carbide	○	✓		ø10			ø27			D046
		STFCR/L	TC...	Steel Carbide	○	✓		ø12			ø18			D045
Blind hole boring		STFCR/L	TC...	Steel Carbide	○	✓		ø12			ø18			D045

StreamJet-Bar

Appli- cation	Style	Designation	Insert	Material	Through coolant	ISO Insert	Y-PRO	Min. bore diameter DMIN (mm)						Page
								0	10	20	30	40	50	
Internal undercut & profiling		SYQBR/L	YW...	Steel Carbide	○	✓		ø17	ø21.5	ø17	ø21.5			D083
		SDZCR/L	DC...	Steel Carbide	○	✓		ø14	ø25	ø18	ø22			D085
		SVZCR/L	VC...	Steel	○	✓				ø16				D088
		SVZBR/L	VB...	Steel	○	✓		ø20	ø40					D087
		SEZPR/L	EP...	Steel Carbide	○	✓		ø5.5	ø6.5	ø5.5	ø6.5			D084
		SVJCR/L	VC...	Steel	○	✓		ø16	ø20					D039
Internal sphere cutting		SVJBR/L	VB...	Steel	○	✓		ø25	ø30					D038

Double-sided insert with positive cutting edges

MiniForce-Turn

Appli- cation	Style	Designation	Insert	Material	Through coolant	MINI F TURN	Min. bore diameter DMIN (mm)						Page
							0	10	20	30	40	50	
Boring & Internal facing		SCLXR/L	CXMU...	Steel Carbide	○	✓	ø12	ø22	ø12	ø22			D021
		SWLXR/L	WX*U...	Steel Carbide	○	✓	ø12	ø22	ø12	ø22			D023
Boring & Internal profiling		SDXXR/L	DX*U...	Steel Carbide	○	✓	ø13	ø24	ø13	ø24			D036
Back boring		SDZXR/L	DX*U...	Steel Carbide	○	✓	ø14	ø20	ø18	ø22			D086

Miniature Grooving - Quick Guide

External Grooving



MiniVLockGroove

Application	Designation	Insert	Square shank (height x width)					Holder			Groove width (mm)			Max. groove depth (mm)	Page
			8 x 8	10 x 10	10 x 12	12 x 12	12 x 16	MODULTURN (Modular head)	TUNGET (Through-coolant)	Direct connection	0	1	2		
	QC12-SVER/L-CHP Modular head	VGP...				○	○	○	○	○	0.33	1		2.5 - 4	G110
	SVER/L	VGP...	○	○	○						0.5	1		2 - 4	G110
	SVER/L-CHP	VGP...			○	○			○	○	0.5	1		2.5 - 4	G110



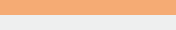
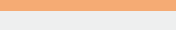
TetraMini-Cut

Application	Designation	Insert	Square shank (height x width)						Cylindrical shank (shank dia.)							
			10 x 10	10 x 12	12 x 12	12 x 16	16 x 16	20 x 20	ø14	ø15.875	ø16	ø19.05	ø20	ø22	ø25	ø25.4
	QC12-STCR/L-Y Modular head	TC*18R/L...			○	○										
	QC12-STCR/L-Y-CHP Modular head	TC*18R/L...			○	○										
	QC12-STCR/L Modular head	TC*18R/L...			○	○										
	QC12-STCR/L-CHP Modular head	TC*18R/L...			○	○										
	STCR/L-18	TC*18R/L...	○		○		○	○								
	STCR/L-18-CHP	TC*18R/L...		○	○		○	○								
	JS-STCL18	TC*18R...							○	○	○	○	○	○	○	○



TetraForce-Cut

Application	Designation	Insert	Square shank (height x width)				Holder		Groove width (mm)						Max. groove depth (mm)	Page
			10 x 10	12 x 12	16 x 16	20 x 20	TUNGET (Through-coolant)	Direct connection	0	1	2	3	4	5		
	STCR/L-27	TC*27...	○	○	○	○			0.5				3.18		1 - 6.4	G126
	STCR/L-27-CHP	TC*27...		○		○	○	○	0.5				3.18		1 - 6.4	G126
	STCR/L-38	TCL38...				○			0.5				4		9 - 10	G132

	Holder				Groove width (mm)							Max. groove depth (mm)	Page
	MODUL ^{TURN} (Modular head)	Y-axis feed	TUNE ^{TJET} (Through-coolant)	Direct connection	0	1	2	3	4	5			
													
	☐	☐			0.33					3.18	0.8 - 3.5	G113	
	☐	☐	☐	☐	0.33					3.18	0.8 - 3.5	G113	
	☐				0.33					3.18	0.8 - 3.5	G114	
	☐		☐	☐	0.33					3.18	0.8 - 3.5	G114	
					0.33					3.18	0.8 - 3.5	G115	
			☐	☐	0.33					3.18	0.8 - 3.5	G115 G116	
					0.33					3.18	0.8 - 3.5	G116	

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

Miniature Parting - Quick Guide

External Grooving



GTGN

Application	Designation	Insert	Square shank (height x width)			Groove width (mm)						Max. groove depth (mm)	Page
			12 x 12	16 x 16	20 x 20	0	1	2	3	4	5		
	CER/L	GTGN-16E...	☐	☐	☐		1		2.25			1 - 1.8	F093



TungHeavyGroove

Application	Designation	Insert	Square shank (height x width)			Groove width (mm)						Max. groove depth (mm)	Page
			12 x 12	16 x 16	20 x 20	0	10	20	30	40	50		
	FPGN	PSGB...	☐	☐	☐		10		25			-	G138
	SPGN	PSGB...	☐	☐	☐		10		25			-	G139

Internal Grooving



AddInternalCut

Application	Designation	Insert	Cylindrical shank		Groove width (mm)	Max. groove depth (mm)	Through coolant
			ø12	ø16			
	A/E-STCIR/L	TCIG10/12...	☐	☐	0.5 - 3	1 - 3	☐



SNG

Application	Designation	Insert	Cylindrical shank (shank dia.)					Groove width (mm)	Max. groove depth (mm)	Through coolant
			ø8	ø10	ø12	ø16	ø20			
	A/E-SNGR	*GR/L... *GMR...	☐	☐	☐	☐	☐	1 - 3.5	1.5 - 3	☐

Min. bore diameter DMIN (mm)							Page
0	5	10	15	20	25		
		ø10.5			ø20		G140

Min. bore diameter DMIN (mm)							Page
0	5	10	15	20	25		
		ø8			ø24		G142

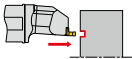
Grade	A
Insert	B
Ext. Toolholder	C
Int. Toolholder	D
Threading	E
Grooving	F
Miniature tool	G
Milling cutter	H
Endmill	I
Drilling tool	J
Tooling System	K
User's Guide	L
Index	M

Miniature Parting - Quick Guide

Face Grooving



TetraMini-Cut

 TetraMini-Cut			Square shank (height x width)			Cylindrical shank (shank dia.)							
			10 x 10	12 x 12	16 x 16	ø14	ø15.875	ø16	ø19.05	ø20	ø22	ø25	ø25.4
Application	Designation	Insert											
	JS-STCFL18	TCF18L...											
	STCFVR-18	TCF18L...											

Parting



DuoForceCut

Application	Designation	Insert	Square shank (height x width)				Groove width (mm)	Max. parting diameter (mm)						Page
			6 x 6	7 x 7	8 x 8	10 x 10		0	10	20	30	40	50	
	JSXXR/L*05	JVPN...	○	○	○	○	0.5 - 1	ø4	ø12					G167



DuoJustCut

Application	Designation	Insert	Square shank (height x width)					Groove width (mm)	Holder TUNGJET (Through-coolant)
			10 x 10	10 x 12	12 x 12	16 x 16	20 x 20		
	JSXXR/L*09	JXP...	○		○	○	○	0.6 - 2	
	JSXXR/L*09-CHP	JXP...		○	○	○		0.6 - 2	○
	JSXXR/L-S	JXP...			○	○		0.6 - 2	
	JSXXR/L*09-S-CHP	JXP...	○		○	○		0.6 - 2	○

	Groove width (mm)	Max. groove depth (mm)	Min. face groove outside diameter (mm)						Page
			0	5	10	15	20	25	
	0.5 - 2.5	1 - 3	ø6 						G147
	0.5 - 2.5	1 - 3	ø6 						G147

Max. parting diameter (mm)							
	0	10	20	30	40	50	Page
	ø6						G169
	ø6						G170
	ø6						G169
	ø6						G170

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

Miniature Parting - Quick Guide

Parting

			Square shank (height x width)						Groove width (mm)	Holder		
			10 x 10	12 x 12	12 x 16	16 x 16	20 x 12	20 x 20		MODUMTURN (Modular head)	TUNGJET (Through-coolant)	Direct connection
Application	Designation	Insert										
	QC12-JTTER/L-CHP Modular head	DG.../ SG...		○	○				1.2 - 2.39	○	○	○
	J*TER/L	DG.../ SG...	○	○		○	○	○	1.2 - 3.18			
	JCTER/L-CHP	DG.../ SG...		○		○		○	2 - 2.39		○	○
	CGER/L	DG.../ SG...		○		○		○	1.4 - 4			
	CHGP	DG.../ SG...						○	2 - 4			
	CGP	DG.../ SG...						○	1.4 - 8			

			Square shank			Max. parting diameter (mm)						
			20 x 20		Groove width (mm)	0	25	50	75	100	125	Page
 AddForceCut	Application	Designation	Insert									
		QSER/L	QG...		2 - 4	ø52  ø66						G191
		QSG	QG...		2 - 4	ø52  ø82						G192
		QSP	QG...		2 - 5	ø50  ø120						G191

Max. parting diameter (mm)							Page
10	25	50	75	100	125		
ø20							G178
ø12		ø42					G177 G178 G179
ø25		ø32					G180
ø29		ø55					G179
		ø52		ø82			G180
ø26					ø120		G181

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

Miniature Threading - Quick Guide

External Threading



MiniVLockGroove

Application	Designation	Insert	Square shank (height x width)			Corner R (mm)	Holder			Pitch (mm)						Page
			10 x 10	12 x 12	12 x 16		MODUM ^{TURN} (Modular head)	TUNG ^{TJET} (Through-coolant)	Direct connection	0	1	2	3	4	5	
	QC12-SVER/L-CHP Modular head	VGT10F...		○	○	0.05 - 0.1	○	○	○	0.4			2			G150
	SVER/L	VGT10F...	○	○		0.05 - 0.1				0.4			2			G150
	SVER/L-CHP	VGT10F...		○		0.05 - 0.1		○	○	0.4			2			G150



TetraMini-Cut

Application	Designation	Insert	Square shank (height x width)					Cylindrical shank (shank dia.)							
			10 x 10	12 x 12	12 x 16	16 x 16	20 x 20	ø14	ø15.875	ø16	ø19.05	ø20	ø22	ø25	ø25.4
	QC12-STCR/L-Y Modular head	TCT18R/L...		○	○										
	QC12-STCR/L-Y-CHP Modular head	TCT18R/L...		○	○										
	QC12-STCR/L Modular head	TCT18R/L...		○	○										
	QC12-STCR/L-CHP Modular head	TCT18R/L...		○	○										
	STCR/L-18	TCT18R/L...	○	○		○	○								
	STCR/L-18-CHP	TCT18R/L...	○	○		○	○								
	JS-STCL18	TCT18R...						○	○	○	○	○	○	○	○

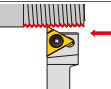
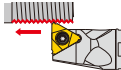
	Corner R (mm)	Holder				Pitch (mm)							Page
		MODUL ^{IT} URN (Modular head)	Y-axis feed	TUNG ^{IT} JET (Through-coolant)	Direct connection	0	1	2	3	4	5		
	0.05 - 0.2	○	○			0.4					3	G152	
	0.05 - 0.2	○	○	○	○	0.4					3	G152	
	0.05 - 0.2	○				0.4					3	G153	
	0.05 - 0.2	○		○	○	0.4					3	G153	
	0.05 - 0.2					0.4					3	G154	
	0.05 - 0.2			○	○	0.4					3	G154 G155	
	0.05 - 0.2					0.4					3	G155	

Miniature Threading - Quick Guide

External Threading

			Square shank (height x width)					Cylindrical shank (shank dia.)					Corner R (mm)	Holder TUNGJET (Through-coolant)	Direct connection
Application	Designation	Insert	10 x 10	10 x 12	12 x 12	16 x 16	20 x 20	ø19.05	ø20	ø22	ø25	ø25.4			
	JSXXR/L*09	JXTG12...	○		○	○	○						0.05Max. - 0.1		
	JSXXR/L*09-CHP	JXTG12...		○	○	○							0.05Max. - 0.1	○	○
	JSXXR/L*09-S	JXTG12...	○		○	○							0.05Max. - 0.1		
	JSXXR/L*09-S-CHP	JXTG12...			○	○							0.05Max. - 0.1	○	○
	JS-SXXL09	JXTG12R...						○	○	○	○	○	0.05Max. - 0.1		



			Square shank (height x width)									Cylindrical shank (shank dia.)				
Application	Designation	Insert	8 x 8	10 x 10	12 x 12	16 x 16	20 x 10	20 x 20	24 x 12	24 x 16	32 x 16	ø16	ø19.05	ø20	ø25	ø25.4
	SER*11	11ER...	○	○												
	JSE2R16-CHP	16ER...			○	○										
	CER/L	16ER/L...			○	○		○								
	JS-SEL16	16ER...										○	○	○	○	○
	B-S/CER/L	16ER/L...					○		○		○					
	BC-SER/L	16ER/L...								○						

Internal Threading

			Min. bore diameter DMIN (mm)	Corner R (mm)	Pitch (mm)						Page
Application	Designation	Insert			0	1	2	3	4	5	
	SIR	6/8IR...	ø6.4 - ø8	0.04 - 0.17	0.5		2				E054
	SNR	6IR...	ø8 - ø10	0.04 - 0.1	0.5		1.75				E054

Pitch (mm)							Page
0	1	2	3	4	5		
0.2		1.5					G158
0.2		1.5					G159
0.2		1.5					G158
0.2		1.5					G159
0.2		1.5					G160

Corner R (mm)	Holder			Pitch (mm)						Page
	MODUL [®] TURN (Modular head)	TUNG [®] TJET (Through-coolant)	Direct connection	0	1	2	3	4	5	
0.04 - 0.19				0.35		1.5				G164
0.05 - 0.22	○	○	○	0.5		3				G162
0.05 - 0.22				0.5		3				E036
0.05 - 0.22				0.5		3				G163
0.05 - 0.22				0.5		3				G163
0.05 - 0.22				0.5		3				G163

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index

A

B

C

D

E

F

G

H

I

J

K

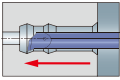
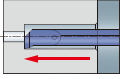
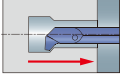
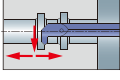
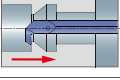
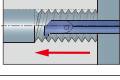
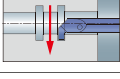
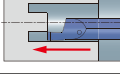
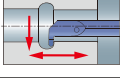
L

M

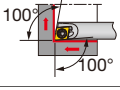
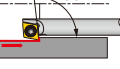
Miniature Internal Turning - Quick Guide

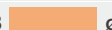
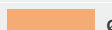
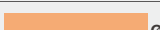
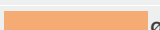
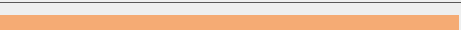
TinyMini-Turn

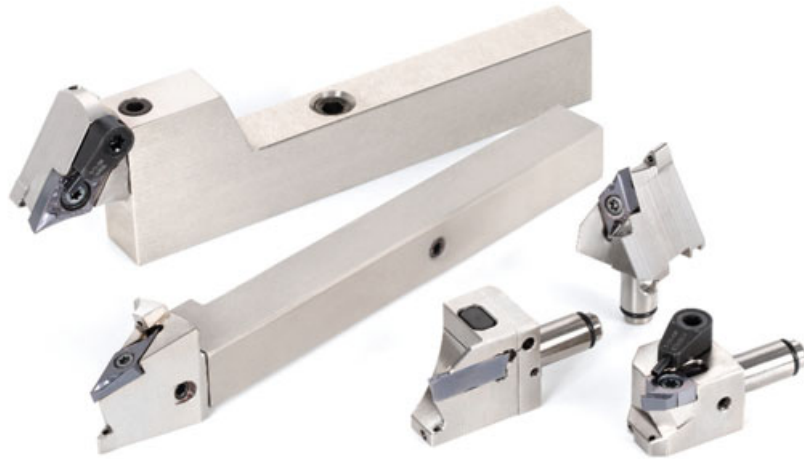
Solid carbide tools for small diameters turning

	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		G106
Back boring		SEZPR	○	○				ø5.5			G106

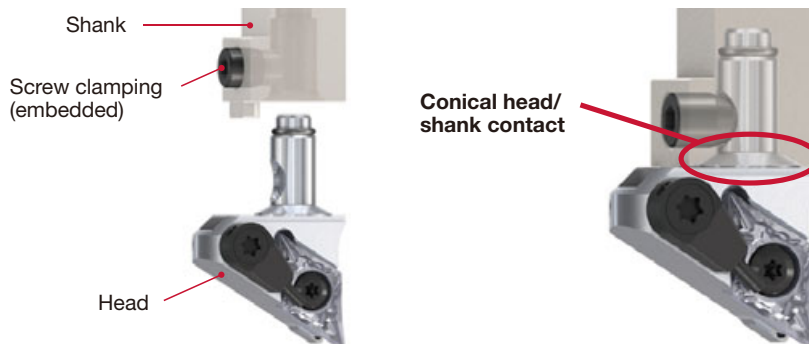
Min. bore diameter DMIN (mm)										Page	Grade
0	2	4	6	8	10	12	14	15			Insert
ø0.6									ø7	G097	C
ø1									ø7	G098	B
	ø2.8							ø5	G099	D	
	ø2.8							ø5		E	
			ø5							G099	F
			ø5							G100	G
			ø5					ø6.8	G100	H	
			ø5					ø6.8		I	
		ø3						ø7	G101	J	
		ø3						ø5		K	
			ø4					ø7	G101	L	
			ø4					ø6	G102	M	
	ø2							ø6.8	G102		
	ø2							ø6.8	G103		
			ø6						ø15	G104	
			ø6						ø15		
			ø6							G105	
			ø6								
		ø5					ø6.8		G105		
		ø5					ø6.8				



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

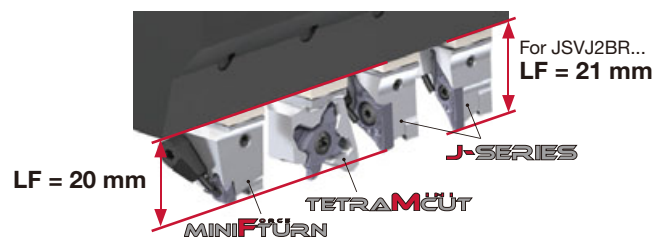
Unique coupling design

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 : **G040 - , G045 - , G052 - , G058 - , G062 , G065 , G072 , G083 , G089 , G110 , G113 - , G150 , G152 - , G178**
Shank, Accessory : **G095 , G096**



Thru-coolant holder system

- High pressure coolant is supplied through the holder to facilitate smooth chip evacuation, improved chip breaking and reduced machine down-time

External coolant supply at normal pressure



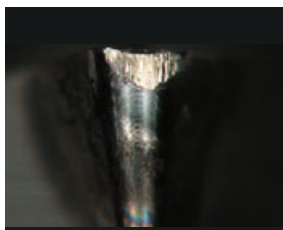
High pressure coolant (7 MPa)



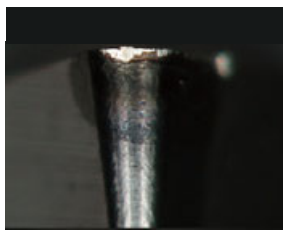
- Coolant jets from two outlets ensure high cutting efficiency and extended tool life

Directly to the cutting edge

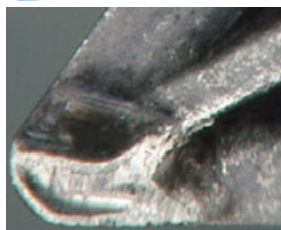
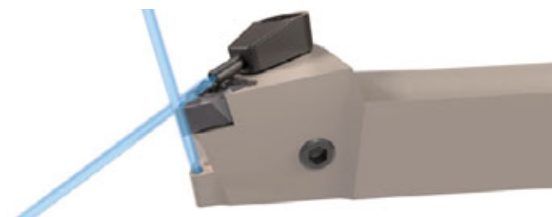
- Reliable chip control
- Reduces crater and notch wears



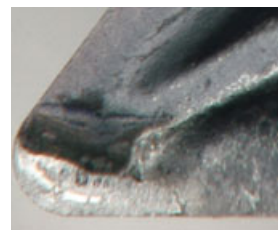
Excessive wear with external coolant supply (at normal pressure)



High pressure coolant (7 MPa)



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

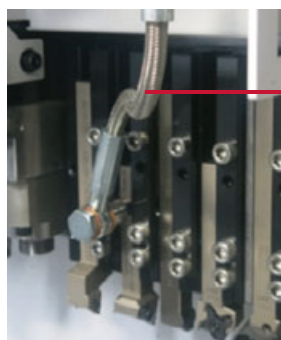


High pressure coolant (7 MPa)

Reference pages: [G040](#) -, [G045](#), [G052](#) -, [G055](#) -, [G058](#) -, [G062](#) -, [G065](#) -, [G072](#), [G083](#), [G089](#), [G095](#), [G110](#), [G113](#) - [G126](#), [G132](#), [G148](#), [G150](#), [G152](#) -, [G159](#), [G162](#), [G170](#), [G178](#) -

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

Conventional



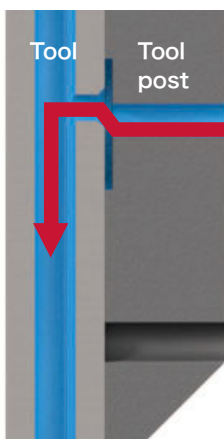
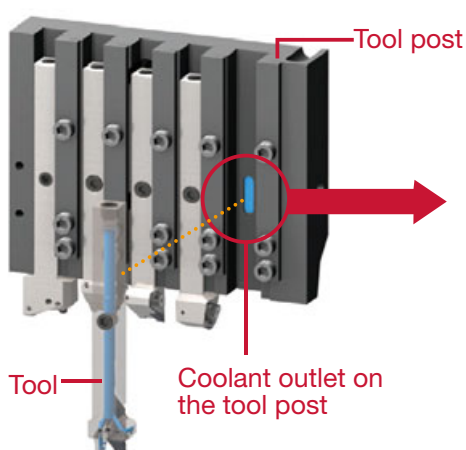
Hose

DirectTung-Jet system

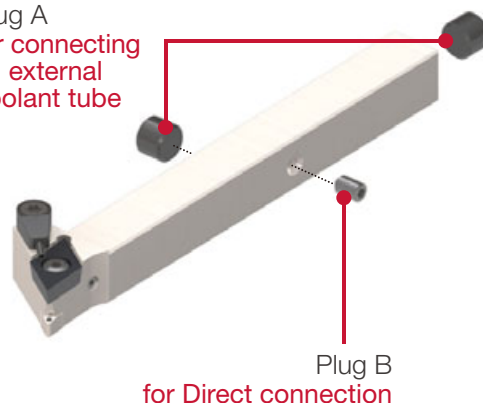


No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

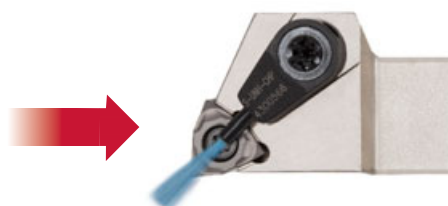
Coolant is supplied from the tool post directly to the tools.



Plug A
for connecting
an external
coolant tube



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

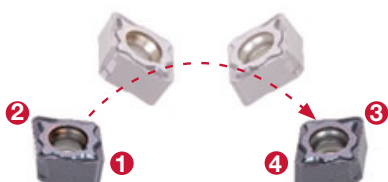


Economical double-sided positive insert

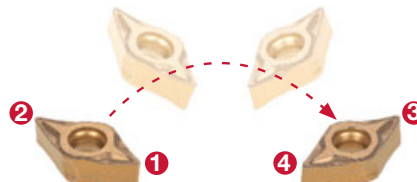
Innovative geometry and seat interface ensures stability and high performance.

■ Insert

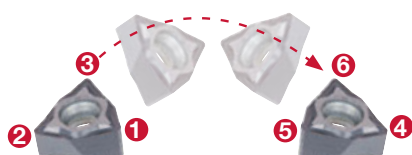
CXMU0603... 4 edges, rhombic 80°



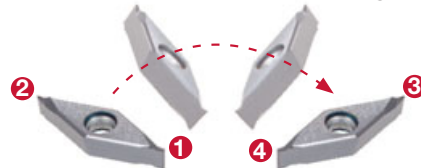
DXM/GU0703... 4 edges, rhombic 55°



WXGU0403... 6 positive cutting edges



VXGU09T2... 4 positive cutting edges



■ High rake angle

WXGU0403...

External turning

External turning



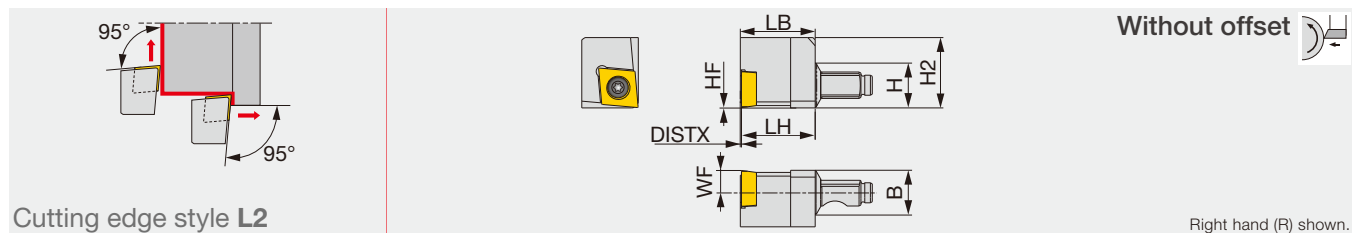
DXGU0703...

Internal turning

Internal turning



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



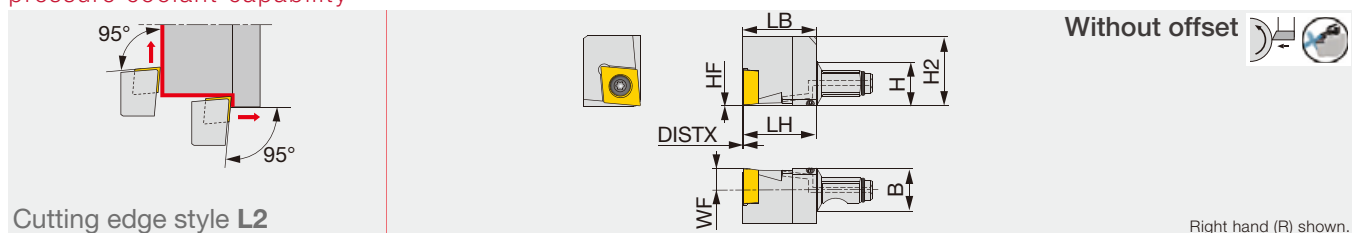
Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSCL2CR09-Y	12	12	19.5	0	6	19.8	18.6	0.3	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

QC12-JSCL2CR-Y-CHP

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



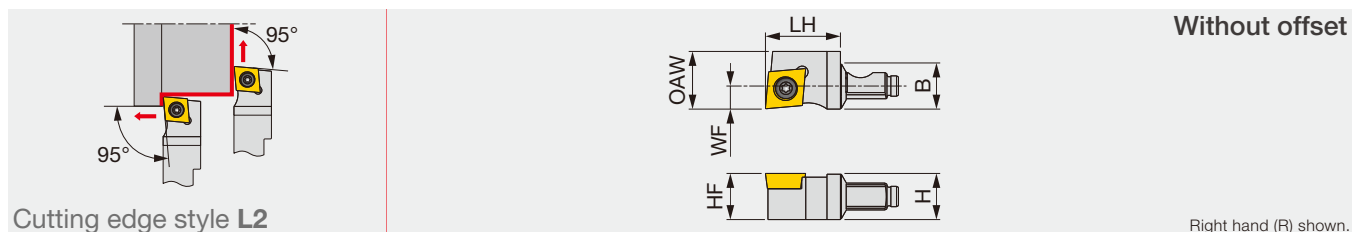
Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSCL2CR09-Y-CHP	12	12	19.5	0	6	19.8	18.6	0.3	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

QC12-JSCL2CR

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR09	12	12	19.5	12	6	15	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

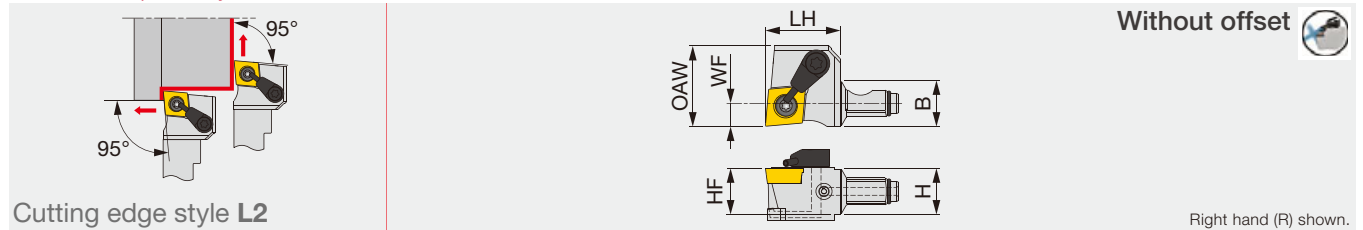
Designation	Clamping screw	Wrench	O-ring
QC12-JSCL2CR09-Y, QC12-JSCL2CR09	CSTB-4SD	T-8F	-
QC12-JSCL2CR09-Y-CHP	CSTB-4SD	T-8F	ORSS-0454.5X1.0NBR70

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

Inserts → **B112** -, CBN → **B191**, PCD → **B213**, Shank, Accessory → **G095**, **G096**

QC12-JSCL2CR-CHP

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSCL2CR09-CHP	12	12	19.5	12	6	21	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSCL2CR09-CHP	CSTB-4SD	S-CU-CHP	T-8F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

P	Application areas	Precision finishing		Finish cutting	Medium to finish cutting
	Grade	SH725		SH725	SH725
	Breaker Shape	01	JP	JS	JS
	Cutting conditions	G094			

P	Application areas	Medium to finish cutting
	Grade	SH725
	Breaker Shape	J10
	Cutting conditions	G094

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

S	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JS	JS
	Cutting conditions	G094	

M	Application areas	Precision finishing		Finish cutting	Medium to finish cutting
	Grade	SH725		SH725	SH725
	Breaker Shape	01	JP	JS	JS
	Cutting conditions	G094			

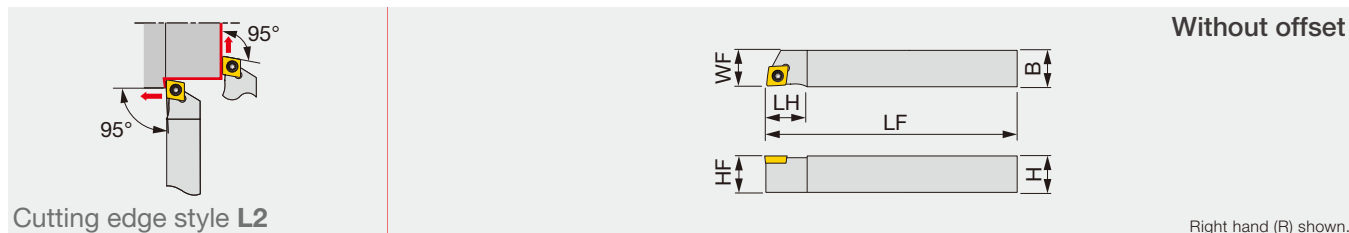
M	Application areas	Medium to finish cutting
	Grade	SH725
	Breaker Shape	J10
	Cutting conditions	G094

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	BXA10	BXA20
	Breaker Shape	CBN	CBN
	Cutting conditions	B026	

Reference pages : QC12-JSCL2CR-CHP: Inserts → **B112** -, CBN → **B191**, PCD → **B213**,
Shank, Accessory → **G095**, **G096**

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

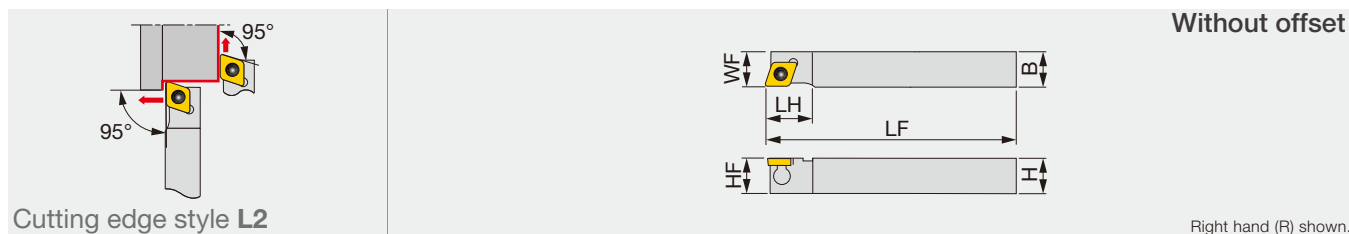


Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCL2CR/L1010X06	10	10	120	12	10	10	0.2	CC**0602...	1.2
JSCL2CR/L1212F06	12	12	85	12	12	12	0.2	CC**0602...	1.2
JSCL2CR/L1212X06	12	12	120	12	12	12	0.2	CC**0602...	1.2
JSCL2CR/L1212F09	12	12	85	16	12	12	0.2	CC**09T3...	1.2
JSCL2CR/L1212X09	12	12	120	16	12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

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

JTCL2CR/L

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



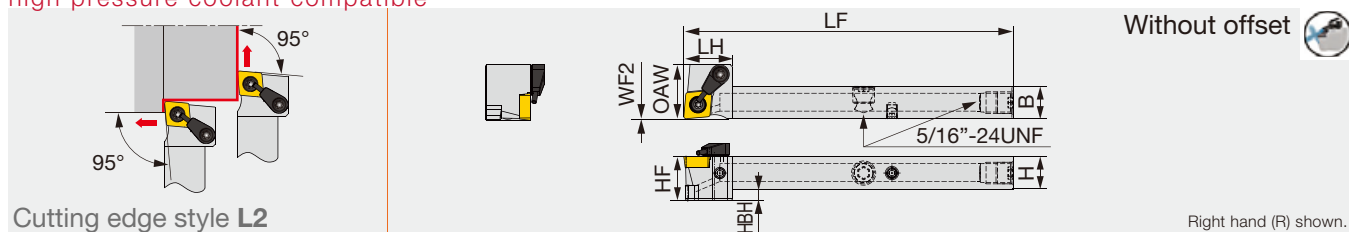
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTCL2CR/L1010X06	10	10	120	12	10	10	0.2	CC**0602...	0.9
JTCL2CR/L1212F09	12	12	85	16	12	12	0.2	CC**09T3...	1.2
JTCL2CR/L1212X09	12	12	120	16	12	12	0.2	CC**09T3...	1.2
JTCL2CR/L1616X09	16	16	120	16	16	16	0.2	CC**09T3...	1.2

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

JSCL2CR-CHP

Direct connection

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



Designation	H	B	LF	LH	HF	HBH	WF2	OAW	RE	Insert	Torque*
JSCL2CR1212X09B-CHP	12	12	120	18	12	1.5	0	20	0.2	CC**09T3	1.2
JSCL2CR1616X09-CHP	16	16	120	18	16	0	0	20	0.2	CC**09T3	1.2

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

SPARE PARTS

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

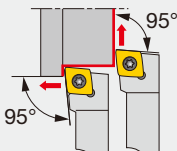
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench 1	DirectJet plug	Wrench 2	Wrench 3 (Optional)
JSCL2CR**-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2	-

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

JSCLCR/L

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

									
Cutting edge style L		Right hand (R) shown.							
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCLCR/L0808H06	8	8	100	12	8	10	0.4	CC**0602...	1.2
JSCLCR/L1010H06	10	10	100	12	10	12	0.4	CC**0602...	1.2
JSCLCR/L1212H09	12	12	100	16	12	16	0.8	CC**09T3...	1.2
JSCLCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

JSCLCR-F

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

Diagram illustrating the cutting edge style L, showing two 95° angles.

Cutting edge style L

Technical drawing of the JSCLCR-F toolholder showing dimensions: LF, HBKL, LH, HF, WF, OAW, B, H.

Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSCLCR1216F09-F15	12	16	85	12	27	12.5	12	15	28	0.2	CC**09T3...	1.2
JSCLCR1216X09-F15	12	16	120	12	27	12.5	12	15	28	0.2	CC**09T3...	1.2
JSCLCR1620X09-F15	16	20	120	12	27	12.5	16	15	28	0.2	CC**09T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

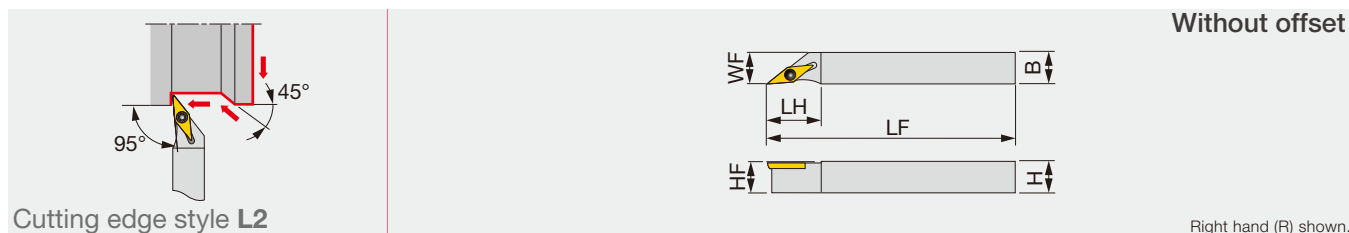
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSCLCR/L**H06	CSTB-2.5	T-8F	-
JSCLCR/L**H09	CSTB-4SD	T-8F	-
JSCLCR**F15	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape			
	Cutting conditions	G094		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape			
	Cutting conditions	G094		
K	Application areas	medium to finish cutting		
	Grade	T515		
	Breaker Shape			
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
	Breaker Shape			
	Cutting conditions	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape			
	Cutting conditions	G094		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape			
	Cutting conditions	G094		
N	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	DX110	TH10	KS05F
	Breaker Shape			
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	BXA10	BXA20	
	Breaker Shape			
	Cutting conditions	B026		

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

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVL2PR/L1010X08	10	10	120	16	10	10	0.2	VP**0802...	0.6
JSVL2PR/L1010K08	10	10	125	16	10	10	0.2	VP**0802...	0.6
JSVL2PR/L1212F08	12	12	85	16	12	12	0.2	VP**0802...	0.6
JSVL2PR/L1212F11	12	12	85	21	12	12	0.2	VP**1103...	1.2
JSVL2PR/L1212X08	12	12	120	16	12	12	0.2	VP**0802...	0.6
JSVL2PR/L1212X11	12	12	120	21	12	12	0.2	VP**1103...	1.2
JSVL2PR/L1212K08	12	12	125	16	12	12	0.2	VP**0802...	0.6
JSVL2PR/L1616X08	16	16	120	16	16	16	0.2	VP**0802...	0.6
JSVL2PL1616K08	16	16	125	16	16	16	0.2	VP**0802...	0.6
JSVL2PR/L1616X11	16	16	120	21	16	16	0.2	VP**1103...	1.2

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

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVL2PR/L**08	CSTB-2L	T-6F	(T-6L)
JSVL2PR/L**11	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P	Application areas	Finish cutting	Finish cutting	M	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JRP	JSP		Breaker Shape	JRP	JSP
	Cutting conditions	G094			Cutting conditions	G094	

S	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JSP
	Cutting conditions	G094	

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

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

Without offset

Right hand (R) shown.

Cutting edge style **L2**

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSWL2XR04-Y	12	12	19.5	0	6	22.3	12	2.8	0.2	WXGU0403**L...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

QC12-JSWL2XR-Y-CHP

Screw-on Y-axis turning modular head with 95° approach angle, for WXGU inserts, with high pressure coolant capability

Constant capacity

Diagram illustrating the cutting edge style L2, showing a 95° approach angle and a red cutting path.

Small inset diagram showing a tool tip.

Diagram illustrating the tool dimensions: LB (tool length), LF (tool length), H2 (tool height), H1 (tool height), WF (tool width), DISTX (tool distance), LH (tool length), and B (tool width).

Without offset

Diagram showing the right hand (R) and left hand (L) tool configurations.

Right hand (R) shown.

Cutting edge style L2

Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSWL2XR04-Y-CHP	12	12	19.5	0	6	22.3	12	2.8	0.2	WXGU0403**L...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSWL2XR04-Y	SR34-514	T-7F	-
QC12-JSWL2XR04-Y-CHP	SR34-514	T-7F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

For Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS 	JS 
	Cutting conditions G094		

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS 	JS 
	Cutting conditions G094		

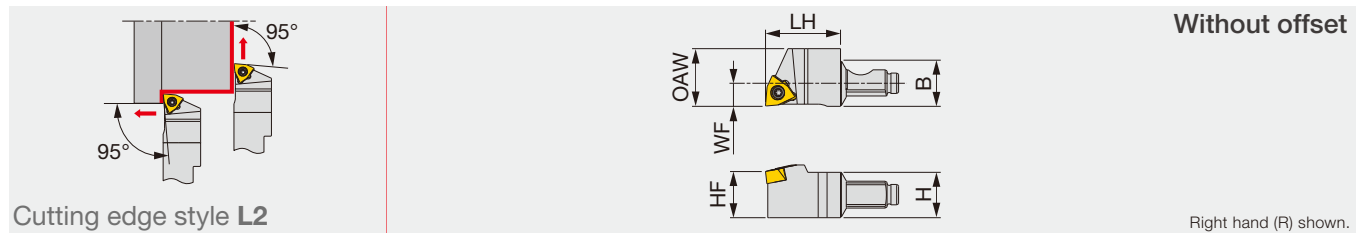
H	Application areas	Precision finishing
	Grade	BXA10
	Breaker Shape	HP 
	Cutting conditions B026	

For Small CNC lathes

P	Application areas	Finish cutting	Medium cutting
	Grade	AH725	AH725
	Breaker Shape	SS 	TS 
	Cutting conditions	G094	
M	Application areas	Finish cutting	Medium cutting
	Grade	AH8015	AH8015
	Breaker Shape	SS 	TS 
	Cutting conditions	G094	
N	Application areas	Medium to finish cutting	
	Grade	KS05F	KS05F
	Breaker Shape	SS 	TS 
	Cutting conditions	B022	

Reference pages : JSCLCR-F: Inserts → **B157** -, CBN → **B210**, Standard cutting conditions → **G094**

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSWL2XR04	12	12	19.5	12	6	15	0.2	WXGU0403**L...	0.9

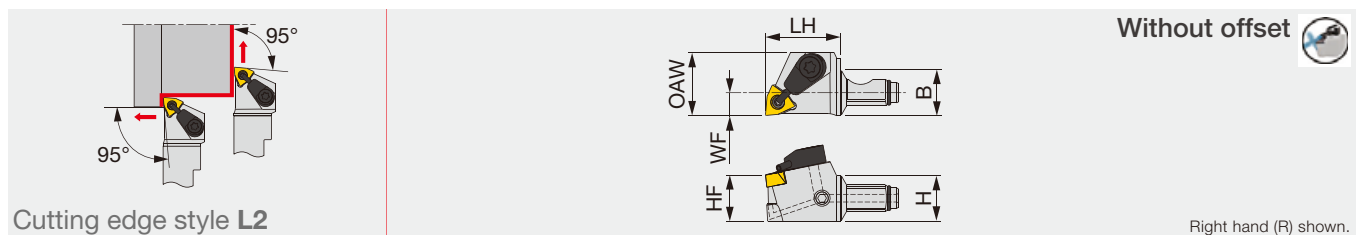
Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

QC12-JSWL2XR-CHP

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSWL2XR04-CHP	12	12	19.5	12	6	16.5	0.2	WXGU0403**L...	0.9

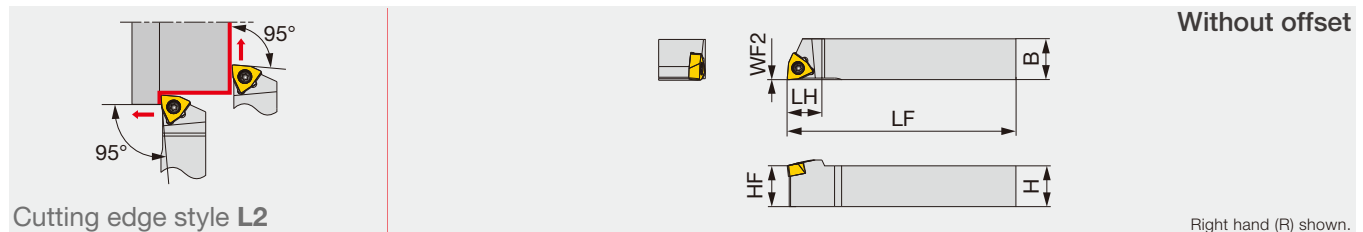
Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

JSWL2XR/L

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



Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSWL2XR/L1010X04	10	10	120	11	10	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1212F04	12	12	85	11	12	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1212X04	12	12	120	11	12	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L1616X04	16	16	120	13	16	0	0.2	WXGU0403**L/R...	0.9
JSWL2XR/L2020H04	20	20	100	13	20	0	0.2	WXGU0403**L/R...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

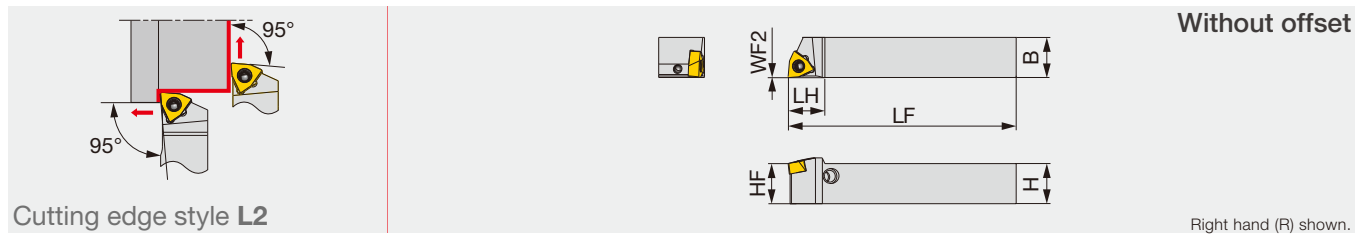
SPARE PARTS

Designation	Clamping screw 1	Coolant unit	Wrench 1	O-ring
QC12-JSWL2XR04-CHP	SR34-514	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70
QC12-JSWL2XR04 JSWL2XR/L...	SR34-514	-	T-7F	-

Reference pages : QC12-JSWL2XR, QC12-JSWL2XR-CHP, JSWL2XR/L: Inserts → **B157 -**, CBN → **B210**
Shank, Accessory → **G095**, **G096**, Standard cutting conditions → **G094**

JPWL2XR/L

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



Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPWL2XR/L1010X04	10	10	120	11	10	0	0.2	WXGU0403**L/R...	0.9
JPWL2XR/L1212F04	12	12	85	11	12	0	0.2	WXGU0403**L/R...	0.9
JPWL2XR/L1212X04	12	12	120	11	12	0	0.2	WXGU0403**L/R...	0.9
JPWL2XR/L1616X04	16	16	120	13	16	0	0.2	WXGU0403**L/R...	0.9

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

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

SPARE PARTS

Designation	Clamping screw 1	Lever	Pin	Clamping screw 2	Wrench 1	Wrench 2
JSWL2XR/L...	SR34-514	-	-	-	T-7F	-
JPWL2XR/L...	-	SLLV-2	SL-PI-2	SR10400611	-	HW2.0/5RED

INSERT SELECTION

For Swiss lathes

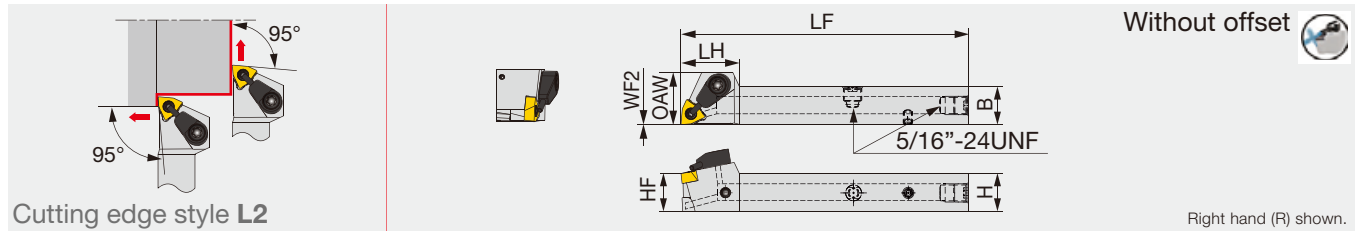
P	Application areas	Finish cutting	Medium to finish cutting	M	Application areas	Finish cutting	Medium to finish cutting	H	Application areas	Precision finishing
	Grade	SH725	SH725		Grade	SH725	SH725		Grade	HP
	Breaker Shape				Breaker Shape				Breaker Shape	
	Cutting conditions	G094			Cutting conditions	G094			Cutting conditions	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				Breaker Shape				Breaker Shape	
	Cutting conditions	G094			Cutting conditions	G094			Cutting conditions	B022

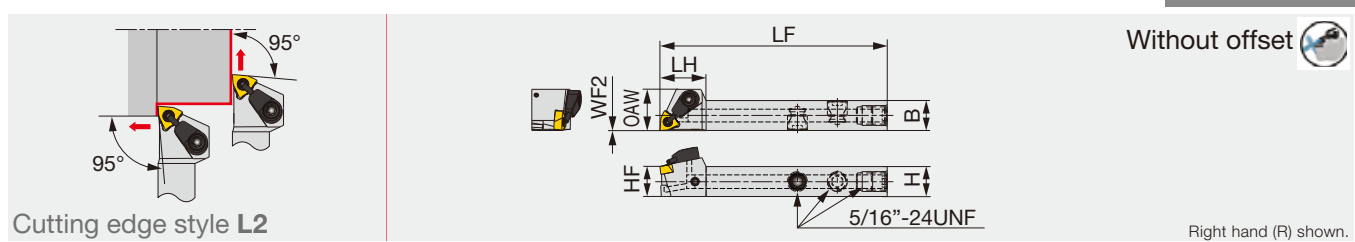
Reference pages : JPWL2XR/L: Inserts → **B157** -, CBN → **B210**, Standard cutting conditions → **G094**

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



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSWL2XR1212X04-CHP	12	12	120	18.5	12	0	16.5	0.2	WXGU0403**L	0.9
JSWL2XR1616X04-CHP	16	16	120	18.5	16	0	16.5	0.2	WXGU0403**L	0.9

Tube connection



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSWL2XR/L1212F04-CHP	12	12	85	18	12	0	16.5	0.2	WXGU0403**L/R...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

SPARE PARTS

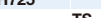
Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSWL2XR**04-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSWL2XR/L1212F04-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-

INSERT SELECTION

For Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting	M	Application areas	Finish cutting	Medium to finish cutting	H	Application areas	Precision finishing
	Grade	SH725	SH725		Grade	SH725	SH725		Grade	BXA10
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS		Breaker Shape	HP
	Cutting conditions	G094			Cutting conditions	G094			Cutting conditions	B026

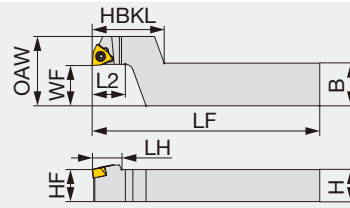
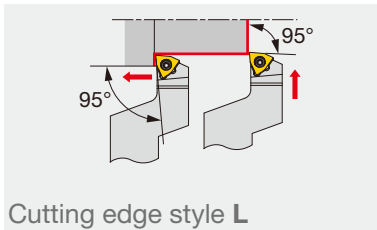
For Small CNC lathes

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	KS05F
	Breaker Shape	SS 	TS 		Breaker Shape	SS 	TS 		Breaker Shape	SS 	TS 
	Cutting conditions	G094			Cutting conditions	G094			Cutting conditions	B022	

Reference pages : JSWL2XR/L-CHP: Inserts → **B157** -, CBN → **B210**
Standard cutting conditions → **G094**

JSWLXR-F

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



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSWLXR1016X04-F15	10	16	120	12	27	11	10	15	26	0.2	WXGU0403**L...	0.9
JSWLXR1216F04-F15	12	16	85	12	27	11	12	15	26	0.2	WXGU0403**L...	0.9
JSWLXR1216X04-F15	12	16	120	12	27	11	12	15	26	0.2	WXGU0403**L...	0.9
JSWLXR1620X04-F15	16	20	120	12	27	11	16	15	26	0.2	WXGU0403**L...	0.9

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSWLXR**-F15	SR34-514	T-7F

INSERT SELECTION

For Swiss lathes

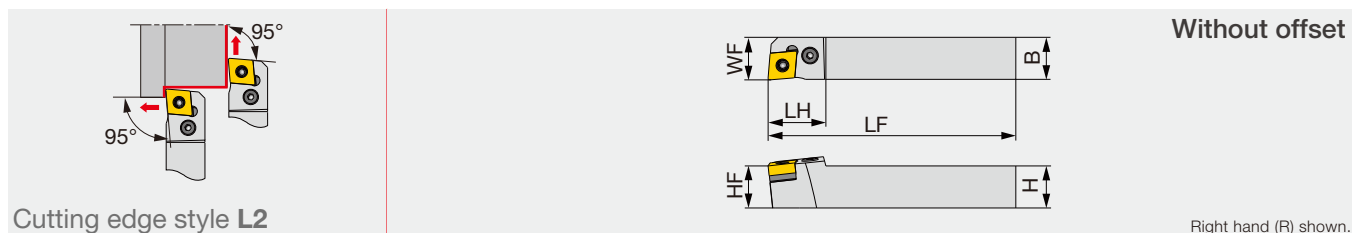
P	Application areas Grade	Finish cutting SH725	Medium to finish cutting SH725	M	Application areas Grade	Finish cutting SH725	Medium to finish cutting SH725	H	Application areas Grade	Precision finishing BXA10
	Breaker Shape	JSS	JS		Breaker Shape	JSS	JS		Breaker Shape	HP
	Cutting conditions	G094			Cutting conditions	G094			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	G094			Cutting conditions	G094			Cutting conditions	B022

Reference pages : JSWLXR-F: Inserts → **B157** -, CBN → **B210**, Standard cutting conditions → **G094**

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCL2NR2020H12	20	20	100	26	20	20	0.8	CN/GN**1204...	3

Torque*: Recommended clamping torque (N·m)

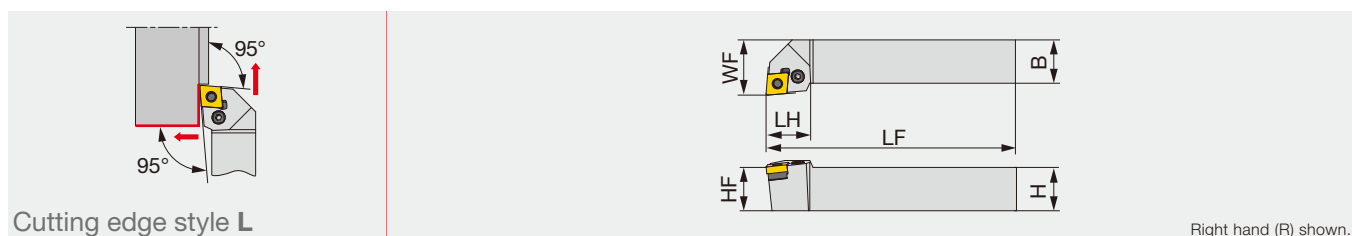
RE**: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCL2NR2020H12	LSC42	LCS4	LCL4	LSP4	P-3

PCLNR

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR2020H12	20	20	100	26	20	25	0.8	CN/GN**1204...	3

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCLNR2020H12	LSC42	LCS4	LCL4	LSP4	P-3

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Breaker Shape	TF	TSF	TM	TH
	Cutting conditions	B004			

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

K	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Breaker Shape	All-round	All-round	All-round
	Cutting conditions	B008		

N	Application areas	Finish cutting	Medium cutting	
	Grade	DX110	TH10	KS05F
	Breaker Shape	DIA	P	28
	Cutting conditions	B010		

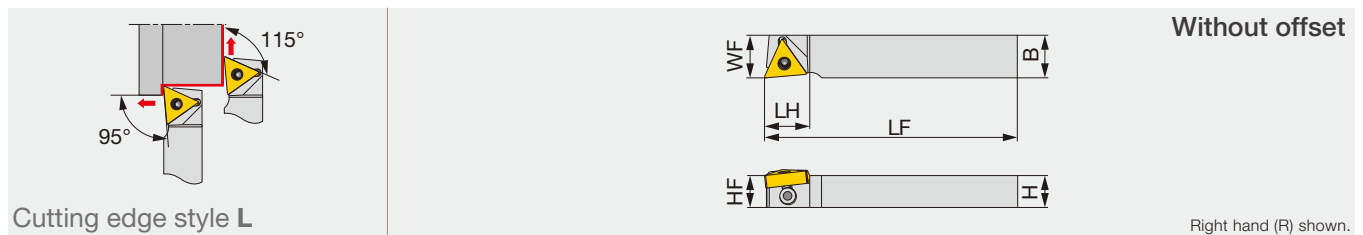
S	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	CBN	HRF	HRM
	Breaker Shape			
	Cutting conditions	B012		

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

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

JTTLNR/L

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



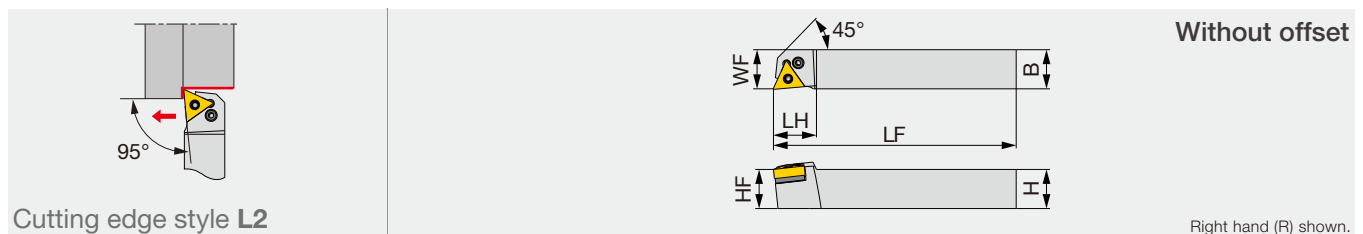
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTTLNR/L1216F16	12	16	85	17	12	16	0.4	TN**1604...	1
JTTLNR/L1216X16	12	16	120	17	12	16	0.4	TN**1604...	1
JTTLNR/L1616X16	16	16	120	17	16	16	0.4	TN**1604...	1

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

PTL2NR/L

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTL2NR/L2020H16	20	20	100	22	20	20	0.4	TN**1604...	2

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

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

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting		Medium cutting
	Grade	SH725	SH725	GT9530	T9215
	Breaker Shape	01 	JRP 	TSF 	TM 
	Cutting conditions	G094		B004	

P	Application areas	Medium to heavy cutting
	Grade	T9215
	Breaker Shape	TH 
	Cutting conditions	B004

N	Application areas	Precision finishing	Finish cutting	Medium cutting	
	Grade	DX110	DX140	TH10	KS05F
	Breaker Shape	DIA  with rake	DIA 	P 	28 
	Cutting conditions	B010			

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

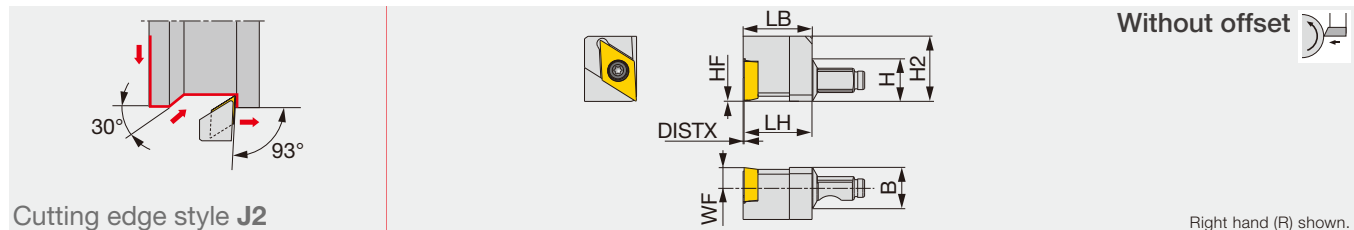
M	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	SH725	SH725	AH6225
	Breaker Shape	01 	JRP 	SM 
	Cutting conditions	G094		B006

K	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Breaker Shape	All-round 	All-round 	All-round 
	Cutting conditions	B008		

S	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	BX950	AH8005	AH8005
	Breaker Shape	CBN 	HRF 	HRM 
	Cutting conditions	B012		

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

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

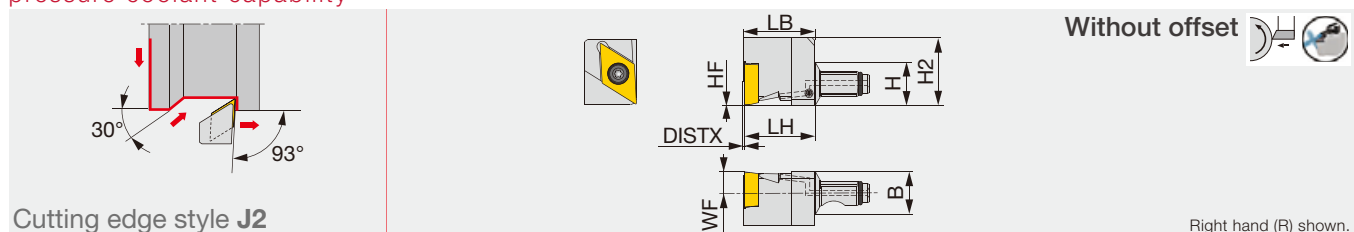


Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2CR11-Y	12	12	19.5	0	6	19.8	18.7	0.3	0.2	DC**11T3...	1.2

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

QC12-JSDJ2CR-Y-CHP

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



Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2CR11-Y-CHP	12	12	19.5	0	6	19.8	18.7	0.3	0.2	DC**11T3...	1.2

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

SPARE PARTS

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

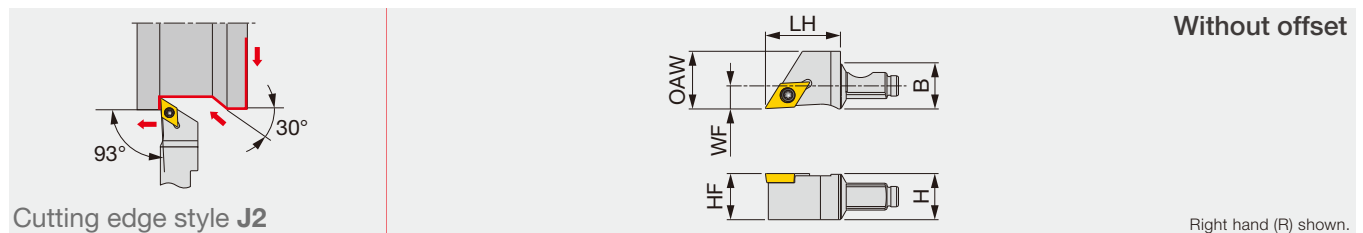
INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G094		
K	Application areas	Medium to finish cutting		
	Grade	T515		
	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
	Breaker Shape	JS	JS	
	Cutting conditions	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G094		
N	Application areas	Precision finishing	Medium cutting	
	Grade	DX110	KS05F	
	Breaker Shape	NS	AL	
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	CBN	BXA10	
	Breaker Shape	CBN	BXA20	
	Cutting conditions	B026		

Reference pages : QC12-JSDJ2CR-Y, QC12-JSDJ2CR-Y-CHP: Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**
Shank, Accessory → **G095**, **G096**

QC12-JSDJ2CR

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



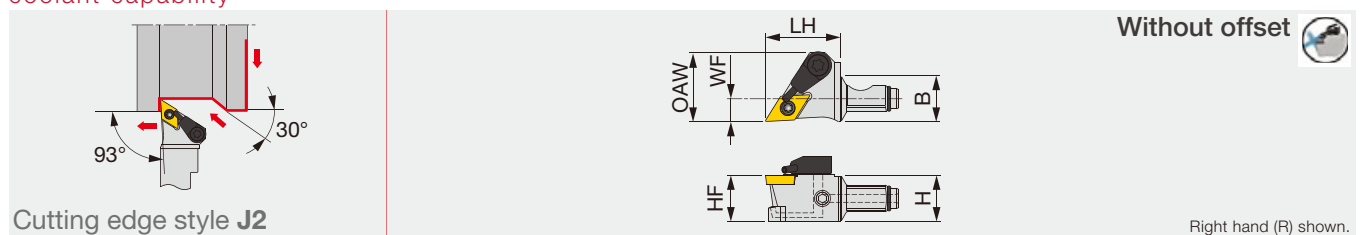
Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2CR07	12	12	19.5	12	6	15	0.2	DC**0702...	1.2
QC12-JSDJ2CR11	12	12	19.5	12	6	15	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

QC12-JSDJ2CR-CHP

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2CR07-CHP	12	12	19.5	12	6	18	0.2	DC**0702...	1.2
QC12-JSDJ2CR11-CHP	12	12	19.5	12	6	21	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

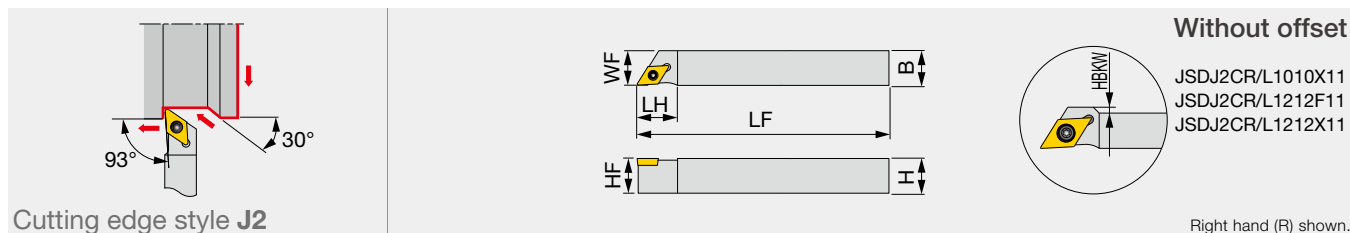
Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSDJ2CR07	CSTB-2.5	-	T-8F	-
QC12-JSDJ2CR07-CHP	CSTB-2.5	S-CU-CHP	T-8F	ORSS-0454.5X1.0NBR70
QC12-JSDJ2CR11-CHP	CSTB-4SD	S-CU-CHP	T-8F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
P	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
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	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
M	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
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	CBN	CBN	
H	Breaker Shape	BXA10	BXA20	
	Cutting conditions	B026		

Reference pages : QC12-JSDJ2CR, QC12-JSDJ2CR-CHP: Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**,
Shank, Accessory → **G095**, **G096**

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



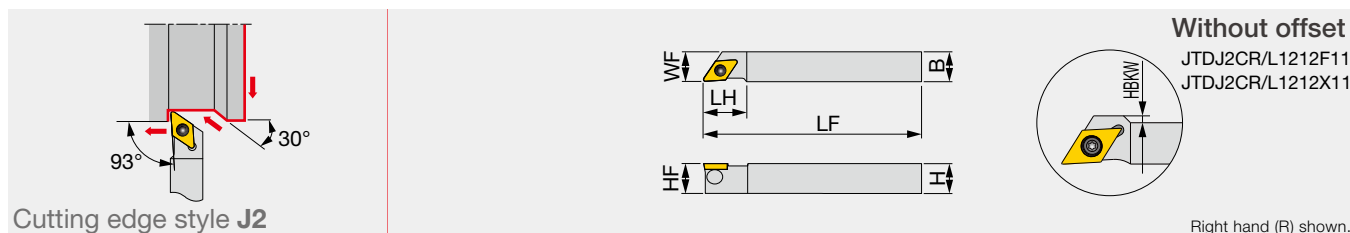
Cutting edge style J2

Designation	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque*
JSDJ2CR/L0808F07	8	8	85	14	8	8	-	0.2	DC**0702...	1.2
JSDJ2CR/L1010X07	10	10	120	14	10	10	-	0.2	DC**0702...	1.2
JSDJ2CR/L1010X11	10	10	120	20	10	10	4	0.2	DC**11T3...	1.2
JSDJ2CR/L1212F07	12	12	85	14	12	12	-	0.2	DC**0702...	1.2
JSDJ2CR/L1212F11	12	12	85	20	12	12	2	0.2	DC**11T3...	1.2
JSDJ2CR/L1212X07	12	12	120	14	12	12	-	0.2	DC**0702...	1.2
JSDJ2CR/L1212X11	12	12	120	20	12	12	2	0.2	DC**11T3...	1.2
JSDJ2CR/L1616X11	16	16	120	20	16	16	-	0.2	DC**11T3...	1.2

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

JTDJ2CR/L

Back-clamp toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style J2

Designation	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque*
JTDJ2CR/L1010X07	10	10	120	14	10	10	-	0.2	DC**0702...	0.9
JTDJ2CR/L1212F07	12	12	85	14	12	12	-	0.2	DC**0702...	0.9
JTDJ2CR/L1212X07	12	12	120	14	12	12	-	0.2	DC**0702...	0.9
JTDJ2CR/L1212F11	12	12	85	20	12	12	2	0.2	DC**11T3...	1.2
JTDJ2CR/L1212X11	12	12	120	20	12	12	2	0.2	DC**11T3...	1.2
JTDJ2CR/L1616X11	16	16	120	20	16	16	-	0.2	DC**11T3...	1.2

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

SPARE PARTS

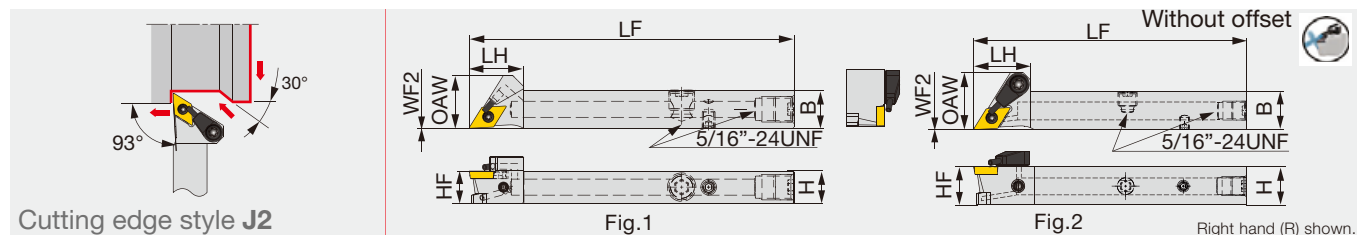
Designation	Clamping screw	Clamp	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDJ2CR/L**07	CSTB-2.5	-	-	T-8F	(T-8L)
JSDJ2CR/L**11	CSTB-4SD	-	-	T-8F	(T-8L)
JTDJ2CR/L**07	-	JCP-2	JDS-3525	P-2F	-
JTDJ2CR/L**11	-	JCP-3	JDS-5040	P-2.5F	-

Reference pages : JSDJ2CR/L, JTDJ2CR/L: Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**,
Shank, Accessory → **G095**, **G096**

JSDJ2CR-CHP

Direct connection

Screw-on toolholder without offset, 93° approach angle for positive 55° rhombic inserts, high pressure coolant compatible



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*	Fig.
JSDJ2CR1012H07-CHP	10	12	100	17	10	0	16.4	0.2	DC**0702	1.2	1
JSDJ2CR1212X11-CHP	12	12	120	19	12	0	20.5	0.2	DC**11T3	1.2	2
JSDJ2CR1616X11-CHP	16	16	120	19	16	0	20.5	0.2	DC**11T3	1.2	2

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

SPARE PARTS

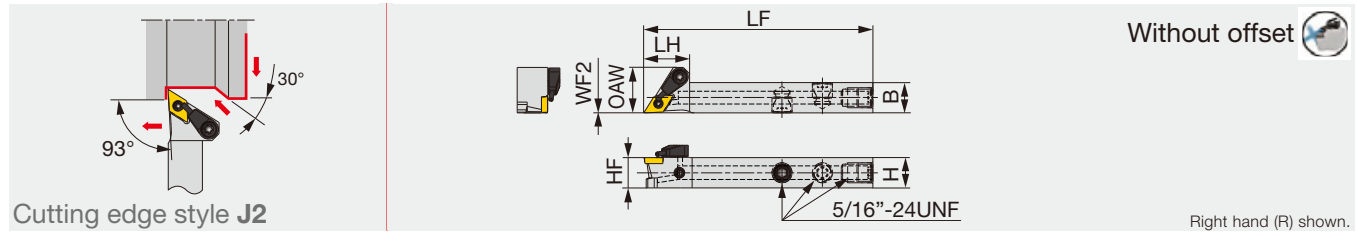
Designation	Clamping screw	Coolant nozzle	Nozzle retainer screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSDJ2CR1012H07-CHP	CSTB-2.5	NZ-1.10-7-CHP	SSHM4-4-TB	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
								
Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench	
JSDJ2CR**11-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2	

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G094		
K	Application areas	Medium to finish cutting		
	Grade	T515		
	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
	Breaker Shape	JS	JS	
	Cutting conditions	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G094		
N	Application areas	Precision finishing	Medium cutting	
	Grade	DX110	KS05F	
	Breaker Shape	NS	AL	
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	BXA10	BXA20	
	Breaker Shape	CBN	CBN	
	Cutting conditions	B026		

Reference pages : JSDJ2CR-CHP: Inserts → **B121** -, CBN → **B193** -, PCD → **B214**
Shank, Accessory → **G095**, **G096**

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

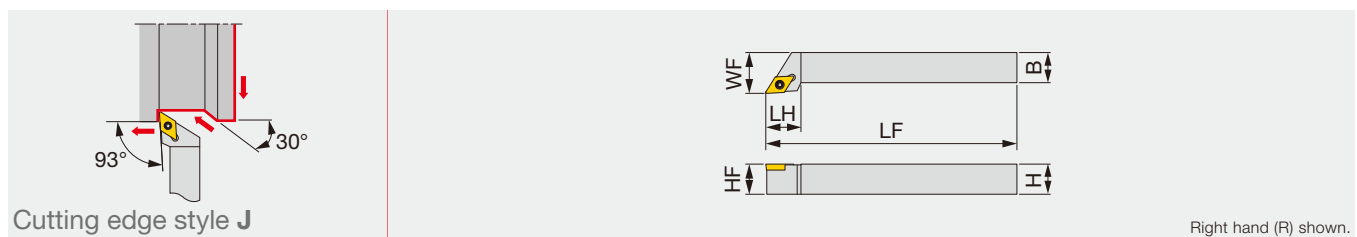


Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSDJ2CR/L1212F07-CHP	12	12	85	18	12	0	18	0.2	DC**0702...	1.2
JSDJ2CR/L1212F11-CHP	12	12	85	19	12	0	20.5	0.2	DC**11T3...	1.2

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

JSDJCR/L

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDJCR/L0808H07	8	8	100	14	8	10	0.4	DC**0702...	1.2
JSDJCR/L1010H11	10	10	100	18	10	12	0.8	DC**11T3...	1.2
JSDJCR/L1212H07	12	12	100	14	12	16	0.4	DC**0702...	1.2
JSDJCR/L1212H11	12	12	100	18	12	16	0.8	DC**11T3...	1.2
JSDJCR/L1616H11	16	16	100	18	16	20	0.8	DC**11T3...	1.2

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

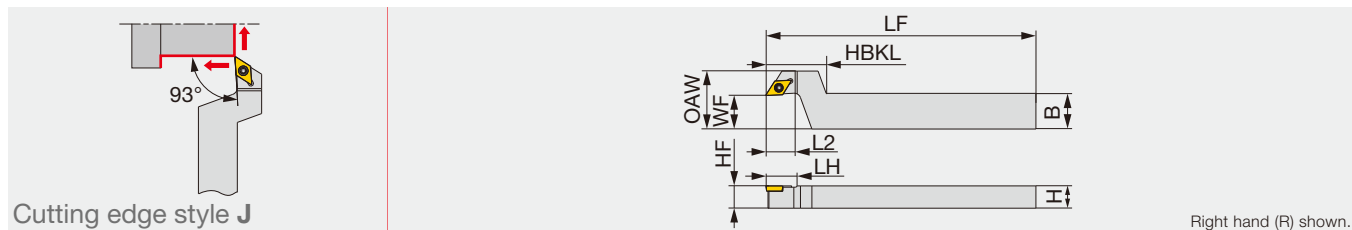
SPARE PARTS

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

Reference pages : JSDJ2CR/L-CHP, JSDJCR/L: Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**
Shank, Accessory → **G095**, **G096**

JSDJCR-F

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



Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJCR1016X07-F15	10	16	120	12.5	27	14	10	15	26	0.2	DC**0702...	1.2
JSDJCR1216F07-F15	12	16	85	12.5	27	14	12	15	26	0.2	DC**0702...	1.2
JSDJCR1216X07-F15	12	16	120	12.5	27	14	12	15	26	0.2	DC**0702...	1.2
JSDJCR1216F11-F15	12	16	85	12.5	27	20	12	15	28	0.2	DC**11T3...	1.2
JSDJCR1216X11-F15	12	16	120	12.5	27	20	12	15	28	0.2	DC**11T3...	1.2
JSDJCR1620X11-F15	16	20	120	12.5	27	20	16	15	28	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

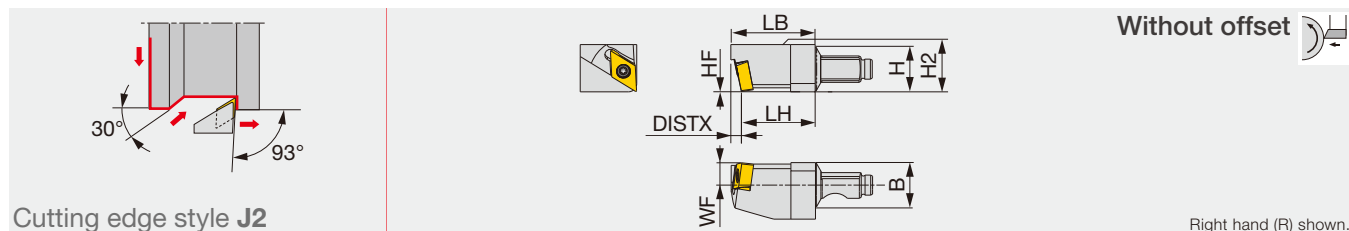
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDJC**H07, JSDJCR**07-F15	CSTB-2.5	T-8F	(T-8L)
JSDJC**H11, JSDJCR**11-F15	CSTB-4SD	T-8F	(T-8L)

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
P	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
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	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
M	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
M	Breaker Shape	01		
	Cutting conditions	G094		
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 : JSDJCR-F: Inserts → **B121 -**, CBN → **B193 -**, PCD → **B214**
Shank, Accessory → **G095, G096**

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



Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2XR07-Y	12	12	19.5	0	6	22.3	12.5	2.8	0.2	DX*U0703**L...	0.9

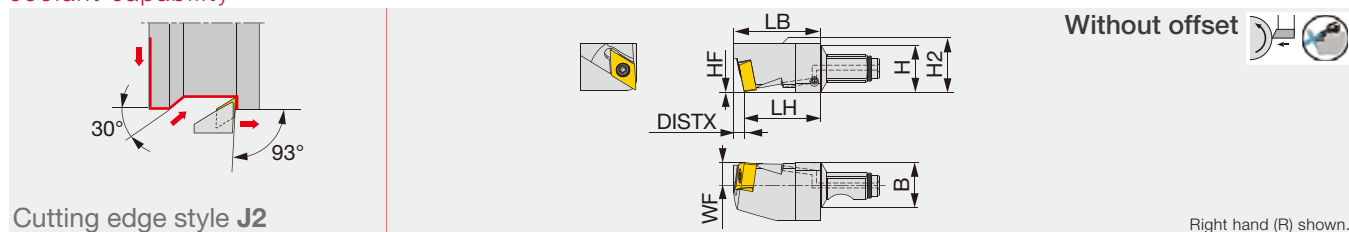
Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

QC12-JSDJ2XR-Y-CHP

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



Designation	H	B	LH	HF	WF	LB	H2	DISTX	RE**	Insert	Torque*
QC12-JSDJ2XR07-Y-CHP	12	12	19.5	0	6	22.3	12.5	2.8	0.2	DX*U0703**L...	0.9

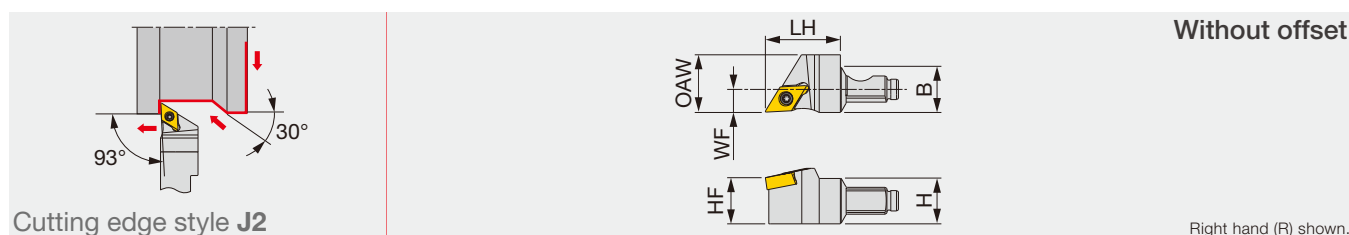
Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

QC12-JSDJ2XR

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2XR07	12	12	19.5	12	6	15	0.2	DX*U0703**L...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

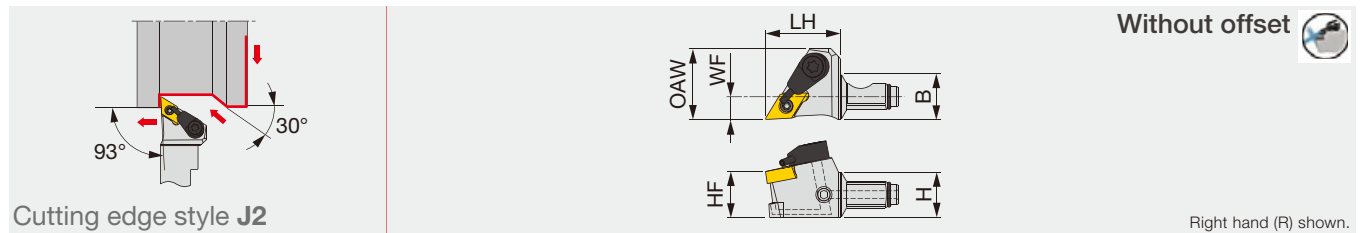
SPARE PARTS

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

Reference pages : QC12-JSDJ2XR-Y, QC12-JSDJ2XR-Y-CHP, QC12-JSDJ2XR: Inserts → **B126**
Shank, accessory → **G095**, **G096**, Standard cutting conditions → **G094**

QC12-JSDJ2XR-CHP

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDJ2XR07-CHP	12	12	19.5	12	6	18.4	0.2	DX*U0703**L...	0.9

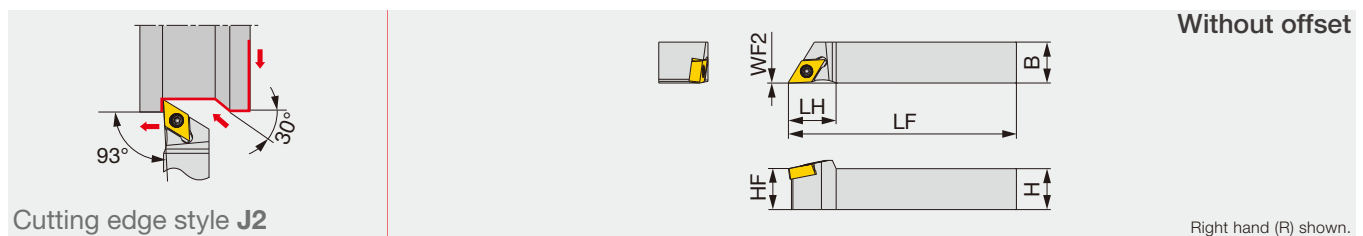
Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

JSDJ2XR/L

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



Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**L/R...	0.9
JSDJ2XR/L2020H07	20	20	100	18	20	0	0.2	DX*U0703**L/R...	0.9

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

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

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring
QC12-JSDJ2XR07-CHP	SR34-514	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70
JSDJ2XR/L...	SR34-514	-	T-7F	-

INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting	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	G094			Cutting conditions	G094	

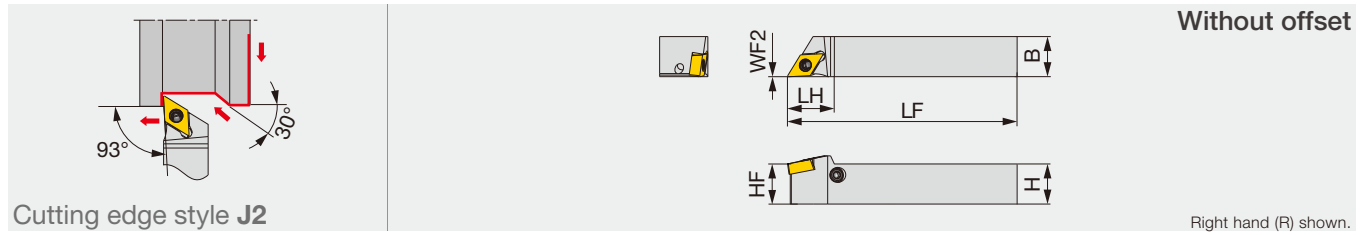
for Small CNC lathes

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	G094			Cutting conditions	G094			Cutting conditions	B022	

Reference pages : QC12-JSDJ2XR-CHP, JSDJ2XR/L: Inserts → **B126**

Shank, accessory → **G095, G096**, Standard cutting conditions → **G094**

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



Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**L/R...	0.9
JPDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**L/R...	0.9
JPDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**L/R...	0.9
JPDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**L/R...	0.9

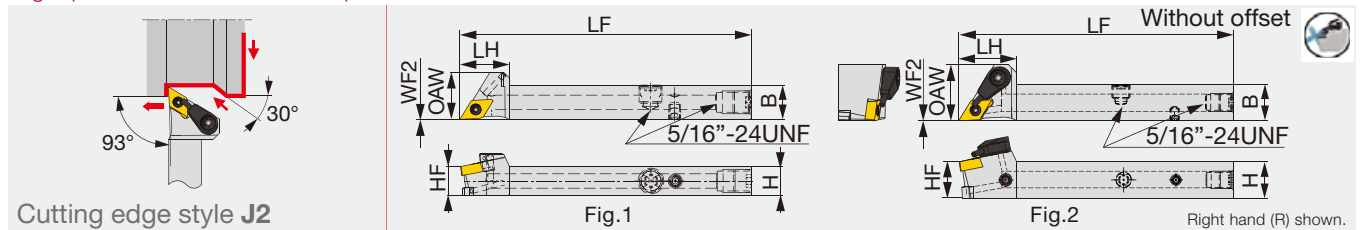
Torque*: Recommended clamping torque (N-m) RE**: Standard corner radius

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

JSDJ2XR-CHP

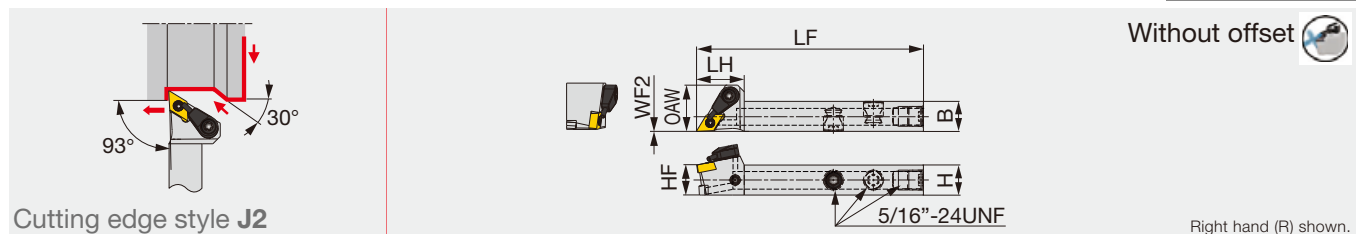
Direct connection

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



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*	Fig.
JSDJ2XR1012H07-CHP	10	12	100	17	10	0	14.7	0.2	DX*U0703**L	0.9	1
JSDJ2XR1212X07-CHP	12	12	120	19	12	0	18.5	0.2	DX*U0703**L	0.9	2
JSDJ2XR1616X07-CHP	16	16	120	19	16	0	18.5	0.2	DX*U0703**L	0.9	2

Tube connection



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSDJ2XR/L1212F07-CHP	12	12	85	19	12	0	18.5	0.2	DX*U0703**L/R...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

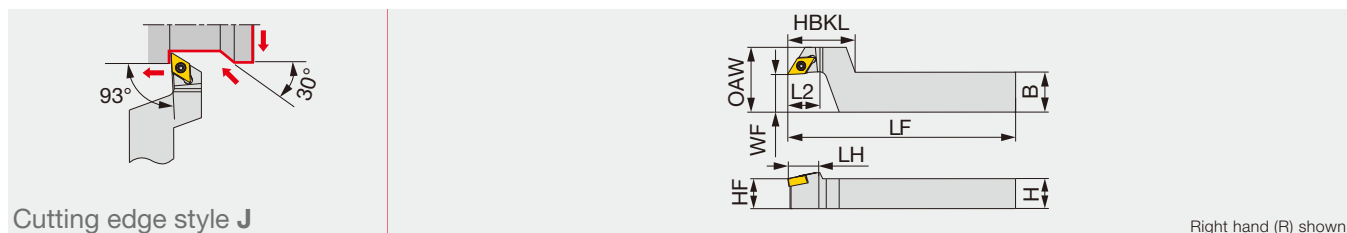
SPARE PARTS

Designation	Lever	Pin	Clamping screw 1	Wrench 1	Clamping screw 2	Coolant unit	Wrench 2	Coolant plug	Wrench 3	DirectJet plug	Wrench 4
JPDJ2XR/L**07	SLLV-2	SL-PI-2	SR10400611	HW2.0/5RED	-	-	-	-	-	-	-
JSDJ2XR1012H07-CHP	-	-	-	-	SR34-514	-	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSDJ2XR**07-CHP	-	-	-	-	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSDJ2XR/L1212F07-CHP	-	-	-	-	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-
JSDJXR**F15	-	-	-	-	SR34-514	-	T-7F	-	-	-	-

Reference pages : JPDJ2XR/L, JSDJ2XR-CHP: : Inserts → **B126** -
Standard cutting conditions → **G094**

JSDJXR-F

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



Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJXR1016X07-F15	10	16	120	12	27	14	10	15	26	0.2	DX*U0703**L...	0.9
JSDJXR1216F07-F15	12	16	85	12	27	14	12	15	26	0.2	DX*U0703**L...	0.9
JSDJXR1216X07-F15	12	16	120	12	27	14	12	15	26	0.2	DX*U0703**L...	0.9
JSDJXR1620X07-F15	16	20	120	12	27	14	16	15	26	0.2	DX*U0703**L...	0.9

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSDJXR***F15	SR34-514	T-7F

INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G094	

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G094	

for Small CNC lathes

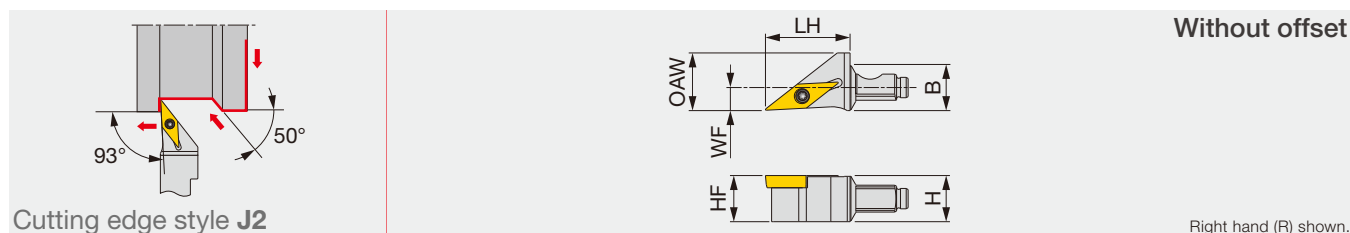
P	Application areas	Finish cutting	Medium cutting
	Grade	AH725	AH725
	Breaker Shape	SS	TS
	Cutting conditions	G094	

M	Application areas	Finish cutting	Medium cutting
	Grade	AH8015	AH8015
	Breaker Shape	SS	TS
	Cutting conditions	G094	

N	Application areas	Medium to finish cutting
	Grade	KS05F
	Breaker Shape	SS
	Cutting conditions	B022

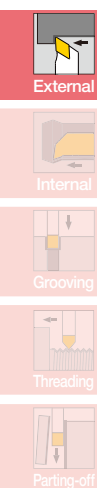
Reference pages : JSDJXR-F: Inserts → **B126** -, Standard cutting conditions → **G094**

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



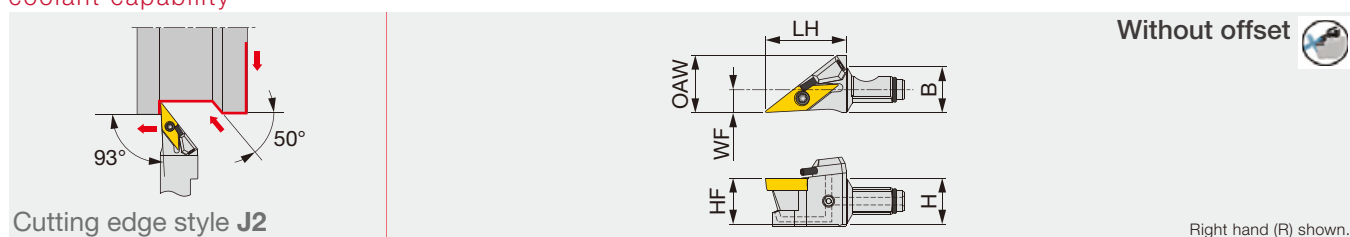
Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2BR11	12	12	22	12	6	15	0.2	VB**1103...	1.2

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



QC12-JSVJ2BR-CHP

Screw-on modular head with 93° approach angle, for positive 35° rhombic inserts, with high pressure coolant capability



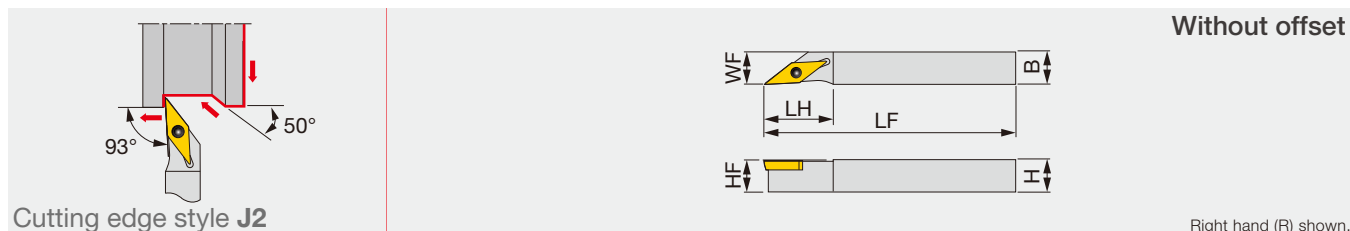
Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2BR11-CHP	12	12	21	12	6	15	0.2	VB**1103...	1.2

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



JSVJ2BR/L

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJ2BR/L1010X11	10	10	120	21	10	10	0.2	VB**1103...	1.2
JSVJ2BR/L1212F11	12	12	85	21	12	12	0.2	VB**1103...	1.2
JSVJ2BR/L1212X11	12	12	120	21	12	12	0.2	VB**1103...	1.2
JSVJ2BR/L1616X11	16	16	120	21	16	16	0.2	VB**1103...	1.2

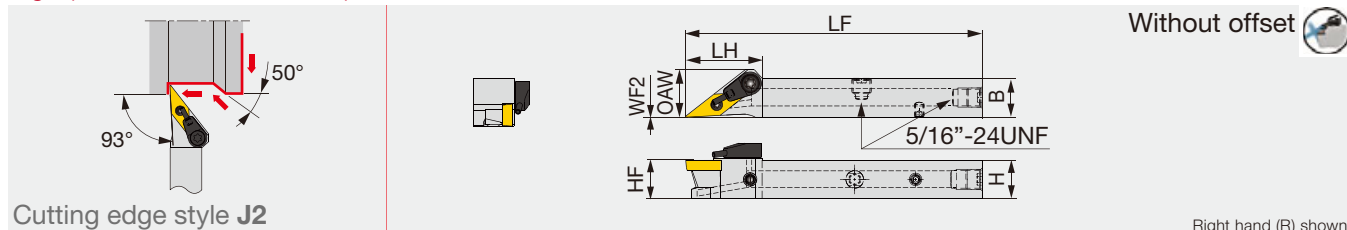
Torque*: Recommended clamping torque (N-m)
RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	O-ring	Coolant nozzle	Screw	Wrench 2
QC12-JSVJ2BR11, JSVJ2BR/L...	CSTB-2.5	T-8F	-	-	-	-
QC12-JSVJ2BR11-CHP	CSTB-2.5	T-8F	ORSS-0454.5X1.0NBR70	NZ-1.10-7-CHP	SSHM4-4-TB	P-2

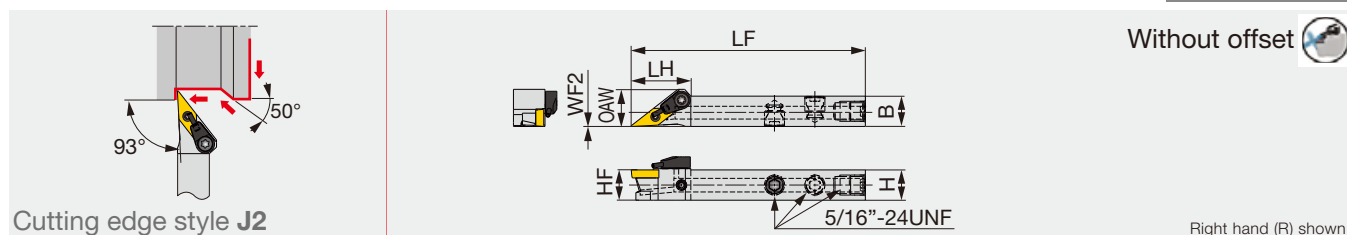
Reference pages : QC12-JSVJ2BR, QC12-JSVJ2BR-CHP, JSVJ2BR/L: Inserts → **B150 -**, CBN → **B207 -**,
Shank, Accessory → **G095, G096**

Screw-on toolholder without offset, 93° approach angle for positive 35° rhombic inserts, high pressure coolant compatible



Designation	H	B	LF	LH	HF	WF2	OAW	RE	Insert	Torque*
JSVJ2BR1212X11-CHP	12	12	120	23.6	12	0	14.7	0.2	VB**1103	1.2
JSVJ2BR1616X11-CHP	16	16	120	23.6	16	0	16	0.2	VB**1103	1.2

Tube connection



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSVJ2BR/L1212F11-CHP	12	12	85	23.6	12	0	14.7	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

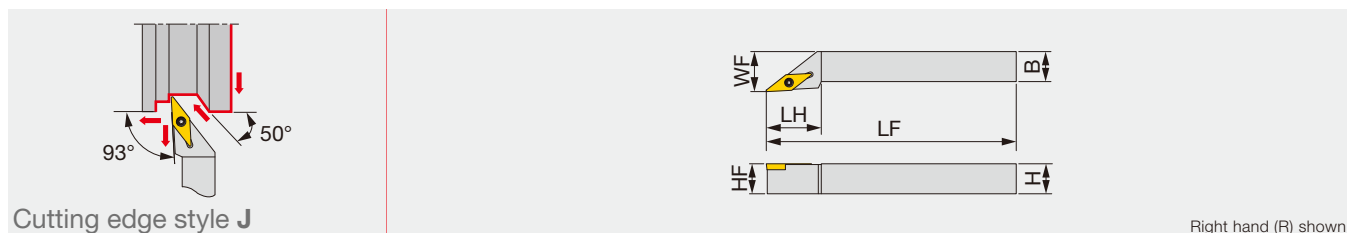
Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSVJ2B**X11-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSVJ2B**F11-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	-	-

INSERT SELECTION

P	Application areas Grade Breaker Shape Cutting conditions	Precision finishing SH725 JP G094	Finish cutting SH725 JS G094	Medium to finish cutting SH725 JS G094	Medium to finish cutting SH725 J10 G094
K	Application areas Grade Breaker Shape Cutting conditions	Medium to finish cutting T515 CM B020			
H	Application areas Grade Breaker Shape Cutting conditions	Precision finishing BXA10 HP B026	Finish cutting BXA10 CBN B026		
M	Application areas Grade Breaker Shape Cutting conditions	Precision finishing SH725 JP G094	Finish cutting SH725 JS G094	Medium to finish cutting SH725 JS G094	Medium to finish cutting SH725 J10 G094
S	Application areas Grade Breaker Shape Cutting conditions	Finish cutting SH725 JS G094	Medium to finish cutting SH725 JS G094		

Reference pages : JSVJ2BR/L-CHP: Inserts → **B150** -, CBN → **B207** -

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

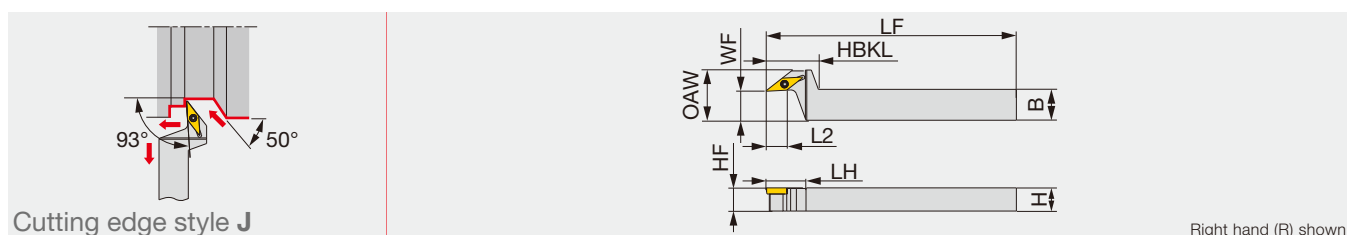


Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJBR/L1010H11	10	10	100	20	10	12	0.4	VB**1103...	1.2
JSVJBR/L1212H11	12	12	100	22	12	16	0.4	VB**1103...	1.2
JSVJBR/L1616H11	16	16	100	22	16	20	0.4	VB**1103...	1.2

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

JSVJBR-F

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



Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSVJBR1216F11-F15	12	16	85	12.6	27	21	12	15	26	0.2	VB**1103...	1.2
JSVJBR1216X11-F15	12	16	120	12.6	27	21	12	15	26	0.2	VB**1103...	1.2
JSVJBR1620X11-F15	16	20	120	12.6	27	21	16	15	26	0.2	VB**1103...	1.2

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

SPARE PARTS

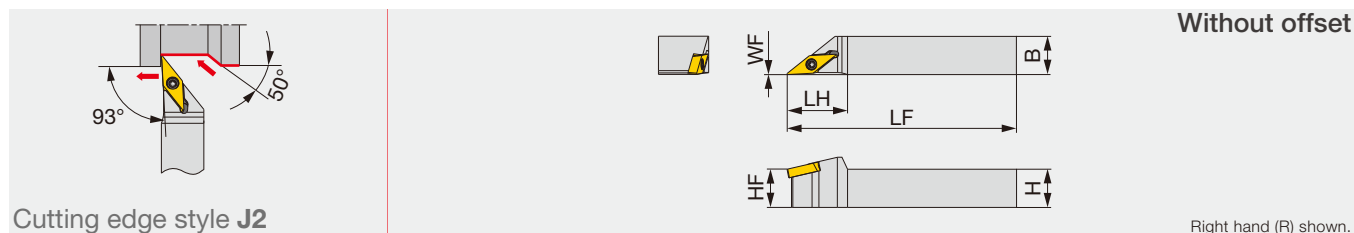
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVJBR/L..., JSVJBR**-F15	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P	Application areas Grade Breaker Shape Cutting conditions	Precision finishing SH725 JP G053	Finish cutting SH725 JS G053	Medium to Finish cutting AH725 JS G053	Medium to finish cutting SH725 J10 G053
K	Application areas Grade Breaker Shape Cutting conditions	Medium to finish cutting T515 CM B022			
H	Application areas Grade Breaker Shape Cutting conditions	Precision finishing BXA10 HP B028	Finish cutting BXA10 CBN		
M	Application areas Grade Breaker Shape Cutting conditions	Precision finishing SH725 JP G053	Finish cutting SH725 JS G053	Medium to finish cutting AH725 JS G053	Medium to finish cutting SH725 J10 G053
S	Application areas Grade Breaker Shape Cutting conditions	Finish cutting SH725 JS G053	Medium to finish cutting AH725 JS G053		

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

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJ2XR/L1010X09	10	10	120	17	10	0	0.2	VXGU09T2**/L...	0.9
JSVJ2XR/L1212F09	12	12	85	19	12	0	0.2	VXGU09T2**/L...	0.9
JSVJ2XR/L1212X09	12	12	120	19	12	0	0.2	VXGU09T2**/L...	0.9
JSVJ2XR/L1616X09	16	16	120	19	16	0	0.2	VXGU09T2**/L...	0.9
JSVJ2XR/L2020H09	20	20	100	19	20	0	0.2	VXGU09T2**/L...	0.9

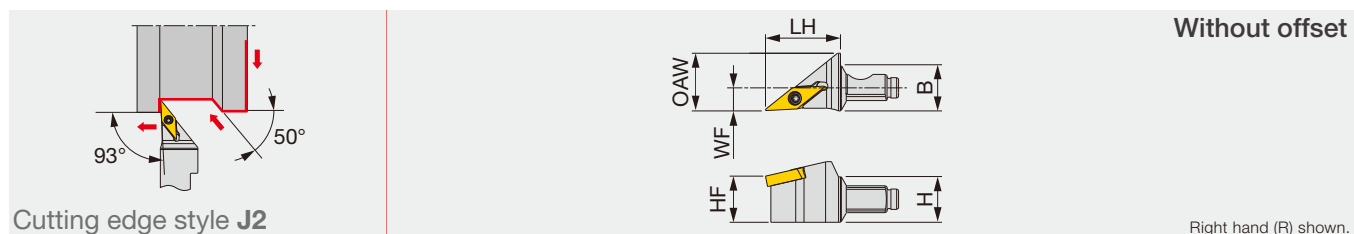
Torque*: Recommended clamping torque (N-m) RE**: Standard corner radius

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

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

QC12-JSVJ2XR

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2XR09	12	12	19.5	12	6	15	0.2	VXGU09T2**/L...	0.9

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSVJ2XR/L..., QC12-JSVJ2XR09	SR34-508	T-7F

INSERT SELECTION

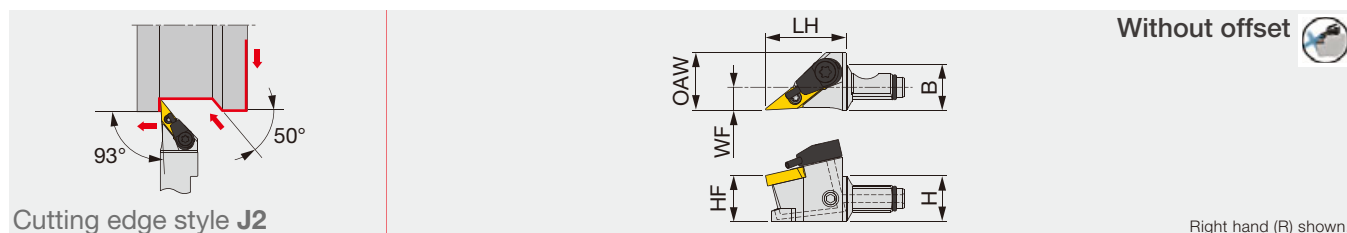
P	Application areas	Finish cutting	Medium to finish cutting	M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725		Grade	SH725	SH725
	Breaker Shape	JRP	JS		Breaker Shape	JRP	JS
	Cutting conditions	G094			Cutting conditions	G094	

Reference pages : JSVJ2XR/L, QC12-JSVJ2XR: Inserts → **B155**, Shank, Accessory → **G095**, **G096**
Standard cutting conditions → **G094**

MINIFORCE

QC12-JSVJ2XR-CHP

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



Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSVJ2XR09-CHP	12	12	21	12	6	15	0.2	VXGU09T2**L...	0.9

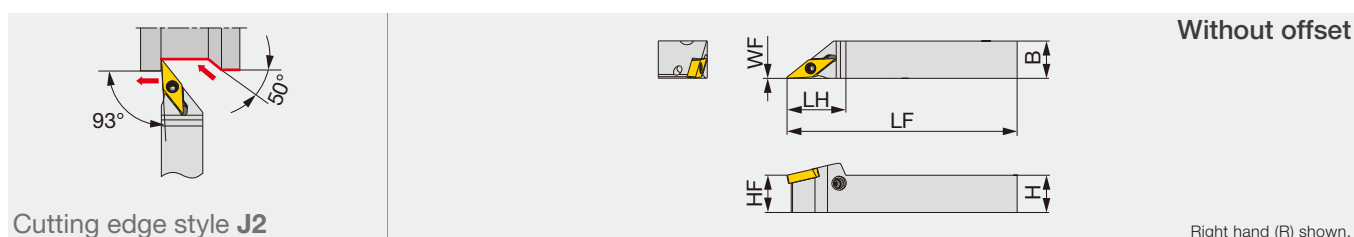
Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

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

JPVJ2XR/L

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JPVJ2XR/L1010X09	10	10	120	19	10	0	0.2	VXGU09T2**L/R...	0.9
JPVJ2XR/L1212F09	12	12	85	19	12	0	0.2	VXGU09T2**L/R...	0.9
JPVJ2XR/L1212X09	12	12	120	19	12	0	0.2	VXGU09T2**L/R...	0.9
JPVJ2XR/L1616X09	16	16	120	19	16	0	0.2	VXGU09T2**L/R...	0.9

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

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

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

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	O-ring	Lever	Pin	Clamping screw	Wrench
QC12-JSVJ2XR09-CHP	SR34-508	S-CU-CHP	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-
JPVJ2XR/L...	-	-	-	-	SLLV-1	SL-PI-2	SR10400611	HW2.0/5RED

INSERT SELECTION

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JS
	Cutting conditions	G094	

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JS
	Cutting conditions	G094	

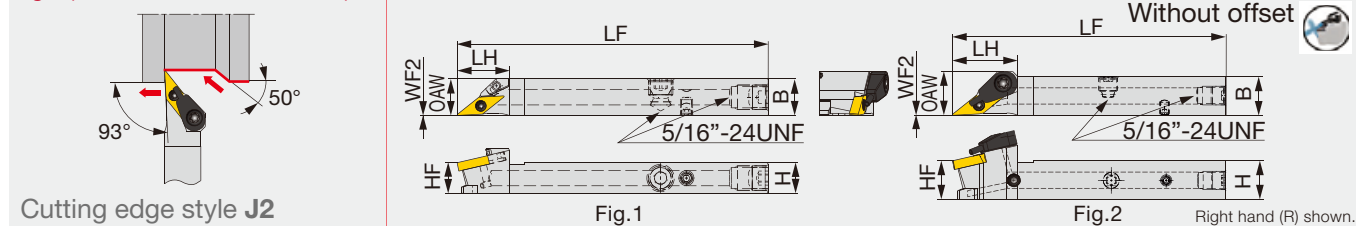
Reference pages : QC12-JSVJ2XR-CHP, JPVJ2XR/L: Inserts → **B155**

Shank, Accessory → **G095, G096**, Standard cutting conditions → **G094**

JSVJ2XR/L-CHP

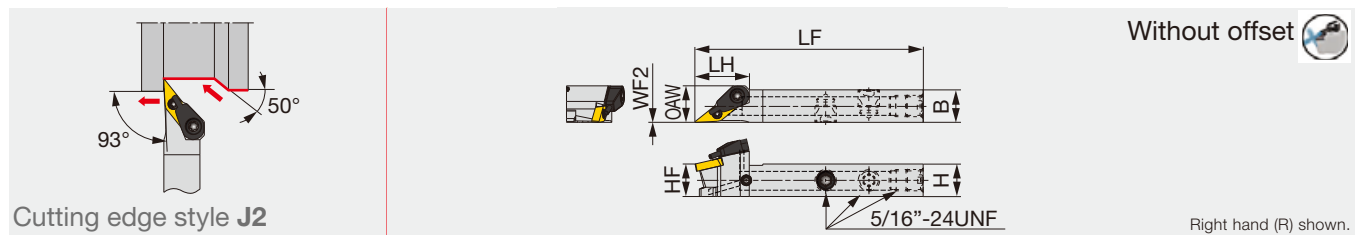
Direct connection

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



Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*	Fig.
JSVJ2XR1012H09-CHP	10	12	100	17	10	0	12	0.2	VXGU09T2**L	0.9	1
JSVJ2XR1212X09-CHP	12	12	120	19.5	12	0	13.4	0.2	VXGU09T2**L	0.9	2
JSVJ2XR1616X09-CHP	16	16	120	19.5	16	0	16	0.2	VXGU09T2**L	0.9	2

Tube connection

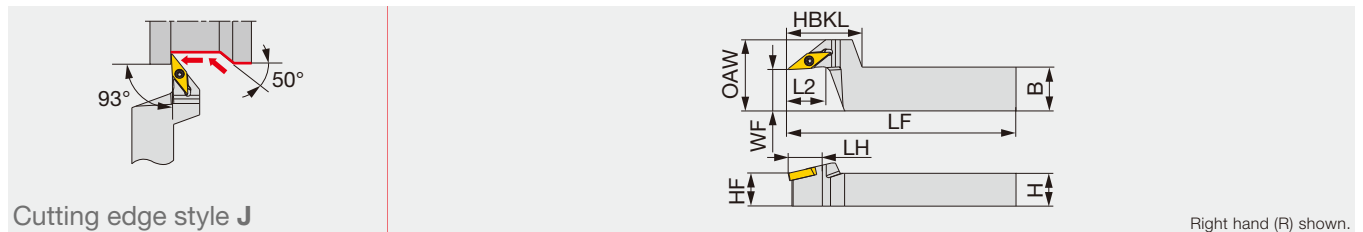


Designation	H	B	LF	LH	HF	WF2	OAW	RE**	Insert	Torque*
JSVJ2XR/L1212F09-CHP	12	12	85	20	12	0	13.5	0.2	VXGU09T2**L/R...	0.9

Torque*: Recommended clamping torque (N-m) RE**: Standard corner radius
Right-hand toolholders (R) are used with left-hand inserts (L). Left-hand toolholders (L) are used with right-hand inserts (R).

JSVJXR-F

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



Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSVJXR1016X09-F15	10	16	120	12	27	19	10	15	26	0.2	VXGU09T2**L...	0.9
JSVJXR1216F09-F15	12	16	85	12	27	19	12	15	26	0.2	VXGU09T2**L...	0.9
JSVJXR1216X09-F15	12	16	120	12	27	19	12	15	26	0.2	VXGU09T2**L...	0.9
JSVJXR1620X09-F15	16	20	120	12	27	19	16	15	26	0.2	VXGU09T2**L...	0.9

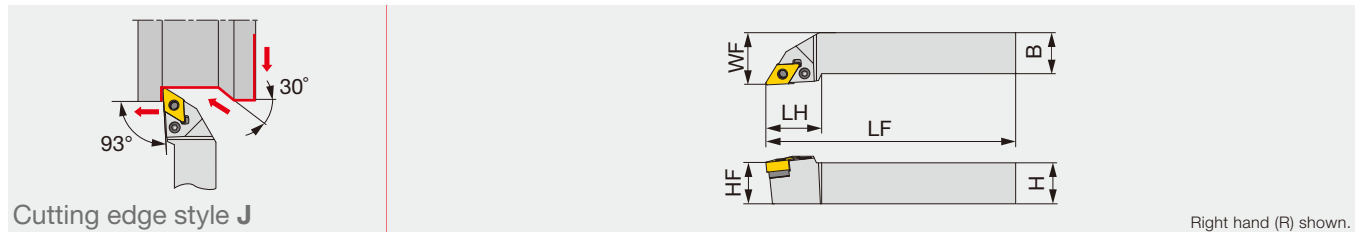
Torque*: Recommended clamping torque (N-m) RE**: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
JSVJ2XR1012H09-CHP	SR34-508	-	T-7F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSVJ2XR**X09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSVJ2XR/L1212F09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	-	-
JSVJXR**-F15	SR34-508	-	T-7F	-	-	-	-

PDJNR

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR2020H15	20	20	100	32	20	25	0.8	DN**1504...	3

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PDJNR2020H15	LSD42	LCS4	LCL4	LSP4	P-3



INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Breaker Shape	TF	TSF	TM	TH
	Cutting conditions	B004			

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

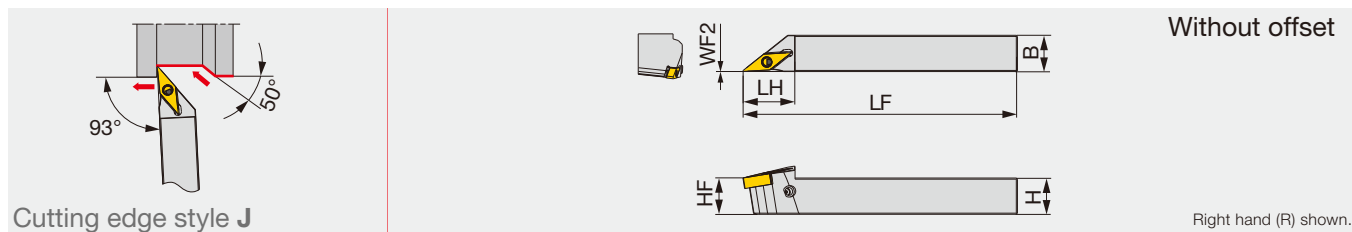
K	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Breaker Shape	All-round	All-round	All-round
	Cutting conditions	B008		

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

S	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	CBN	HRF	HRM
	Breaker Shape	BXA10	BXA10	BXA10
	Cutting conditions	B012		

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

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



Designation	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JPVJ2NR/L1212X1204	12	12	120	23	12	0	0.2	VN**1204...	0.9
JPVJ2NR/L1616X1204	16	16	120	23	16	0	0.2	VN**1204...	0.9

Torque*: Recommended clamping torque (N-m)

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

SPARE PARTS

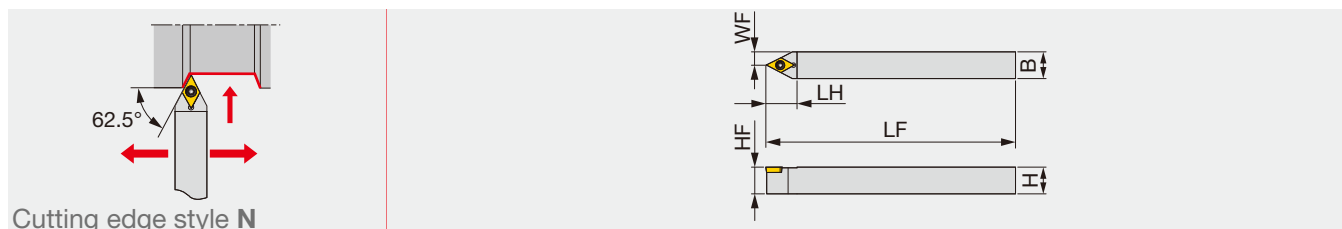
Designation	Lever	Pin	Clamping screw	Wrench
JPVJ2NR/L**1204	SLLV-4	SL-PI-2	SR10400611	HW2.0/5RED

INSERT SELECTION

P	Application	Finishing	Medium cutting
	Grade	T9215	T9215
	Chipbreaker shape	TSF	TM
	Cutting conditions	B004	

M	Application	Finishing	Medium cutting
	Grade	AH6225	AH6225
	Chipbreaker shape	SS	SM
	Cutting conditions	B006	

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



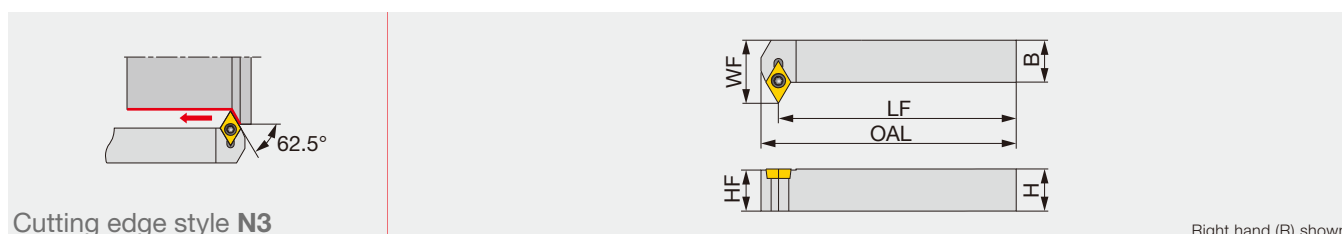
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDNCN1010X07	10	10	120	15	10	5	0.2	DC**0702...	1.2
JSDNCN1010X11	10	10	120	21	10	5	0.2	DC**11T3...	1.2
JSDNCN1212F07	12	12	85	15	12	6	0.2	DC**0702...	1.2
JSDNCN1212X07	12	12	120	15	12	6	0.2	DC**0702...	1.2
JSDNCN1212F11	12	12	85	21	12	6	0.2	DC**11T3...	1.2
JSDNCN1212X11	12	12	120	21	12	6	0.2	DC**11T3...	1.2
JSDNCN1616X11	16	16	120	21	16	8	0.2	DC**11T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

JSDN3CR

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



Right hand (R) shown.

Designation	H	B	OAL	LF	HF	WF	RE**	Insert	Torque*
JSDN3CR1212H07	12	12	105	100	12	18	0.4	DC**0702...	1.2
JSDN3CR1616H11	16	16	107	100	16	25	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDNCN**07, JSDN3CR1212H07	CSTB-2.5	T-8F	(T-8L)
JSDNCN**11, JSDN3CR1616H11	CSTB-4SD	T-8F	(T-8L)

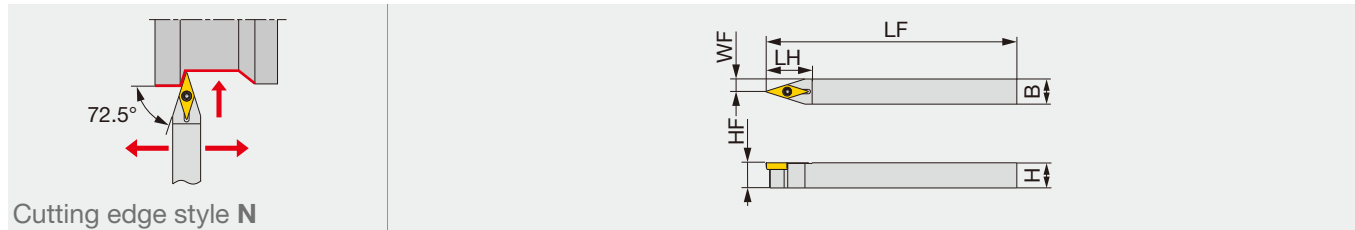
INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
P	Application areas	Medium to finish cutting		
	Grade	SH725		
K	Application areas	Medium to finish cutting		
	Grade	T515		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
M	Application areas	Medium to finish cutting		
	Grade	SH725		
N	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	DX110	DX140	KS05F
H	Application areas	Precision finishing	Finish cutting	
	Grade	BXA10	BXA10	

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

JSVNB

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



Cutting edge style N

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
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

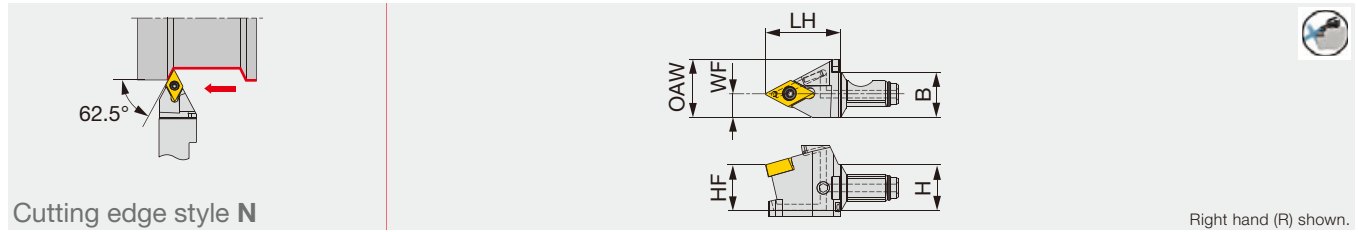
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVNB...	CSTB-2.5	T-8F	(T-8L)

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	G094			
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	G094			
S	Application areas	Finish cutting	Medium to finish cutting		
	Grade	SH725	SH725		
	Breaker Shape	JS	JS		
	Cutting conditions	G094			

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

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



Cutting edge style N

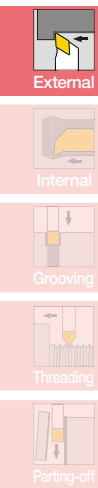
Right hand (R) shown.

Designation	H	B	LH	HF	WF	OAW	RE**	Insert	Torque*
QC12-JSDNXR07-CHP	12	12	19.5	12	6	15	0.2	DX*U0703**L...	0.9

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

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



SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-JSDNXR07-CHP	SR34-508	T-7F	ORSS-0454.5X1.0NBR70

INSERT SELECTION

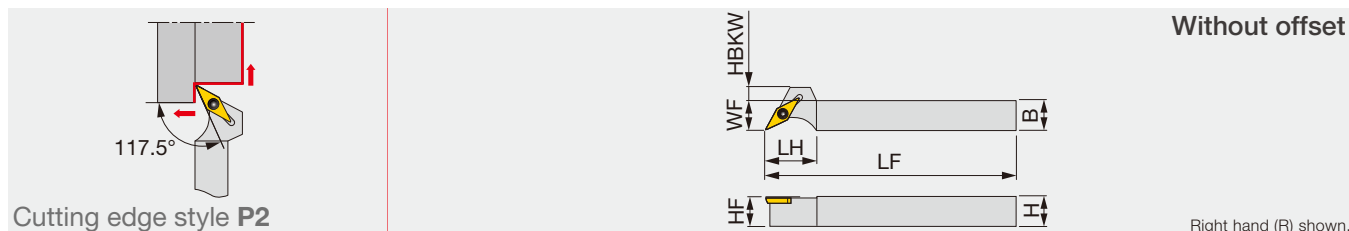
for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting	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	G094			Cutting conditions	G094	

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		G094		Cutting conditions		G094		Cutting conditions		B022

Reference pages : JSVJ2XR/L-CHP: Inserts → **B126 -**, Shank, Accessory → **G095, G096**
Standard cutting conditions → **G094**



Designation	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque*
JSVP2PR/L1010K08	10	10	125	16	10	10	4	0.2	VP**0802...	0.6
JSVP2PR/L1010K11	10	10	125	20	10	10	8	0.2	VP**1103...	1.2
JSVP2PR/L1212K08	12	12	125	16	12	12	2	0.2	VP**0802...	0.6
JSVP2PR/L1212K11	12	12	125	20	12	12	6	0.2	VP**1103...	1.2
JSVP2PR/L1616K08	16	16	125	16	16	16	2	0.2	VP**0802...	0.6
JSVP2PR/L1616K11	16	16	125	20	16	16	6	0.2	VP**1103...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

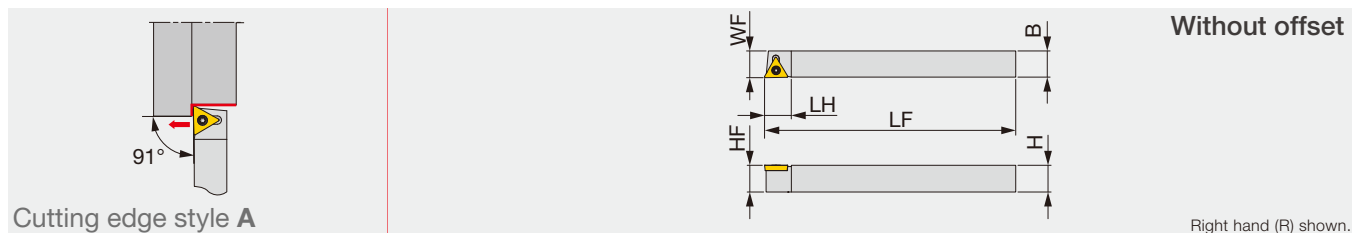
Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVP2PR/L**08	CSTB-2L	T-6F	(T-6L)
JSVP2PR/L**11	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JSP
	Cutting conditions	G094	

M	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JSP
	Cutting conditions	G094	

S	Application areas	Finish cutting	Finish cutting
	Grade	SH725	SH725
	Breaker Shape	JRP	JSP
	Cutting conditions	G094	



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSTACR/L0808K08	8	8	125	10	8	8	0.2	TC**0802...	0.6
JSTACR/L1010K08	10	10	125	10	10	10	0.2	TC**0802...	0.6
JSTACR/L1212K11	12	12	125	12	12	12	0.4	TC**1102...	1.2
JSTACR/L1616H11	16	16	100	12	16	16	0.4	TC**1102...	1.2

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

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTACR/L**K08	CSTB-2L	T-6F	(T-6L)
JSTACR/L**11	CSTB-2.5	T-8F	(T-8L)

INSERT SELECTION

P	Application areas	Precision finishing		Finish cutting	Medium to finish cutting
	Grade	SH725		SH725	SH725
		01	JP	JS	JS
	Breaker Shape				
Cutting conditions		G094			

P	Application areas	Medium to finish cutting
	Grade	SH725
		J10
	Breaker Shape	
Cutting conditions		G094

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		G094			

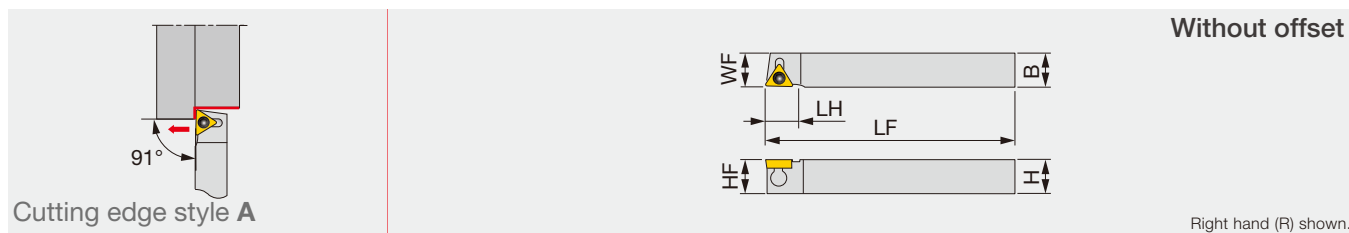
M	Application areas	Medium to finish cutting
	Grade	SH725
		J10
	Breaker Shape	
Cutting conditions		G094

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTTACL0810K08	8	10	125	10	8	10	0.2	TC**0802...	0.9
JTTACR/L1212M11	12	12	150	12	12	12	0.4	TC**1102...	0.9
JTTACR/L1616M11	16	16	150	12	16	16	0.4	TC**1102...	0.9

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

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
JTTACL0810K08	JCP-1	JDS-3525	P-2F
JTTACR/L**M11	JCP-2	JDS-3525	P-2F

INSERT SELECTION

P	Application areas	Precision finishing		Finish cutting	Medium to finish cutting				
	Grade	SH725		SH725	SH725				
	Breaker Shape	01	JP	JS	JS				
									
Cutting conditions						G094			

P	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
					
Cutting conditions				G094	

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

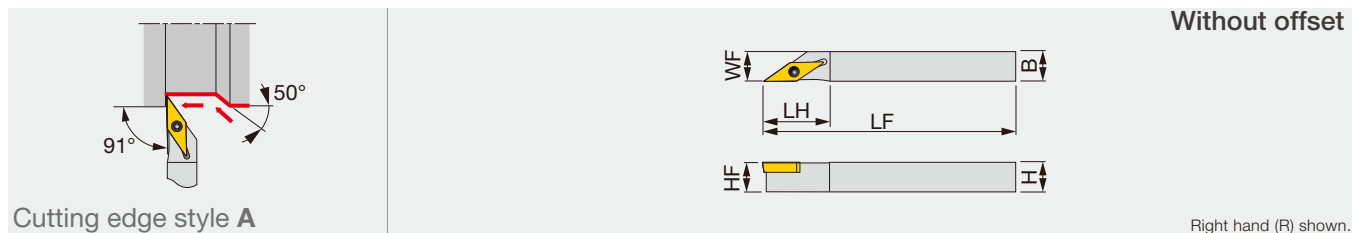
H	Application areas	Finish cutting			
	Grade	BXA10			
	Breaker Shape	CBN			
					
Cutting conditions				B026	

M	Application areas	Precision finishing		Finish cutting	Medium to finish cutting				
	Grade	SH725		SH725	SH725				
	Breaker Shape	01	JP	JS	JS				
									
Cutting conditions						G094			

M	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
					
Cutting conditions				G094	

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**



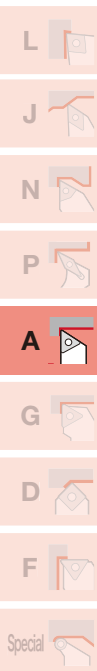
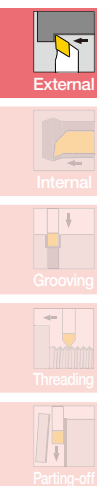
Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVABR/L1010K11	10	10	125	21	10	10	0.2	VB**1103...	1.2
JSVABL1212K11	12	12	125	21	12	12	0.2	VB**1103...	1.2

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVABR/L...	CSTB-2.5	T-8F	(T-8L)



INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725	SH725
	Breaker Shape	JP	JS	JS	J10
	Cutting conditions	G094			

M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725	SH725
	Breaker Shape	JP	JS	JS	J10
	Cutting conditions	G094			

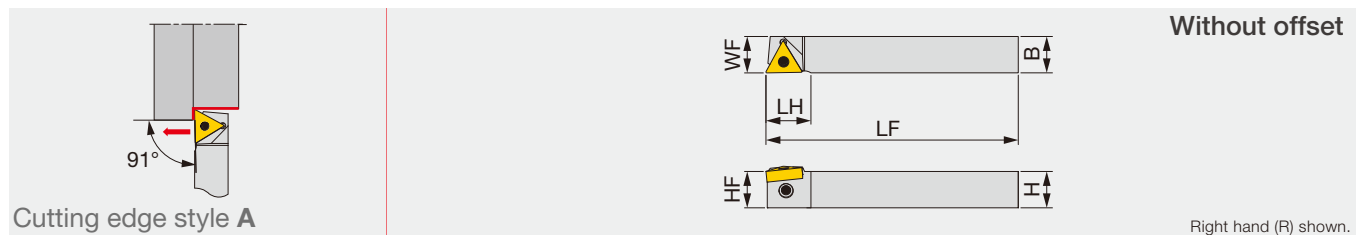
K	Application areas	Medium to finish cutting
	Grade	T515
	Breaker Shape	CM
	Cutting conditions	B020

S	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JS	JS
	Cutting conditions	G094	

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

JTTANR/L

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JTTANR/L1216K16	12	16	125	19.8	12	16	0.4	TN**1604...	1.2
JTTANR/L1616K16	16	16	125	19.8	16	16	0.4	TN**1604...	1.2

Torque*: Recommended clamping torque (N-m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
JTTANR/L...	JCP-3N	JDS-5040	P-2.5F

INSERT SELECTION

P	Application areas	Precision finishing		Finish cutting		Medium cutting
	Grade	SH725		SH725	GT9530	T9215
	Breaker Shape	01	JRP	TSF	TM	
	Cutting conditions	G094				B004

P	Application areas	Medium to heavy cutting	
	Grade	T9215	
	Breaker Shape	TH	
	Cutting conditions	B004	

N	Application areas	Precision finishing	Finish cutting	Medium cutting	
	Grade	DX110	DX140	TH10	KS05F
	Breaker Shape	DIA	DIA with rake	P	28
	Cutting conditions	B010			

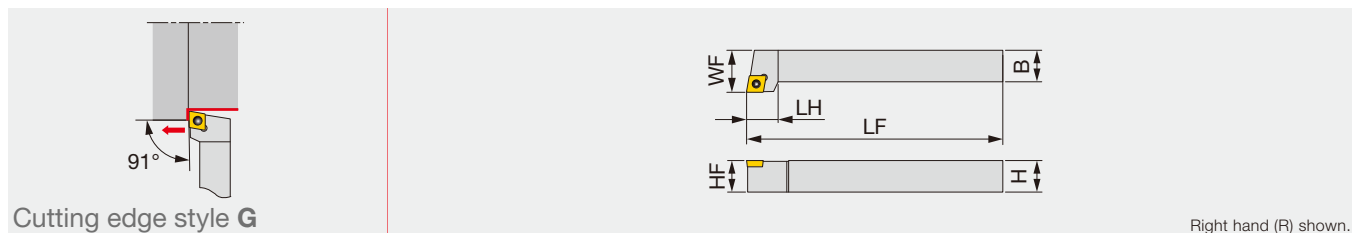
H	Application areas	Precision finishing	Finish cutting
	Grade	BXA10	BXA10
	Breaker Shape	HP	HS
	Cutting conditions	B014	

M	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	SH725	SH725	AH6225
	Breaker Shape	01	JRP	SM
	Cutting conditions	G094		B006

K	Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Breaker Shape	All-round	All-round	All-round
	Cutting conditions	B008		

S	Application areas	Precision finishing	Finish cutting	Medium cutting
	Grade	BX950	AH8005	AH8005
	Breaker Shape	CBN	HRF	HRM
	Cutting conditions	B012		

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSCGCR/L1212H06	12	12	100	12	12	16	0.4	CC**0602...	1.2
JSCGCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...	1.2

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSCGCR/L1212H06	CSTB-2.5	T-8F	(T-8L)
JSCGCR/L1616H09	CSTB-4SD	T-8F	(T-8L)

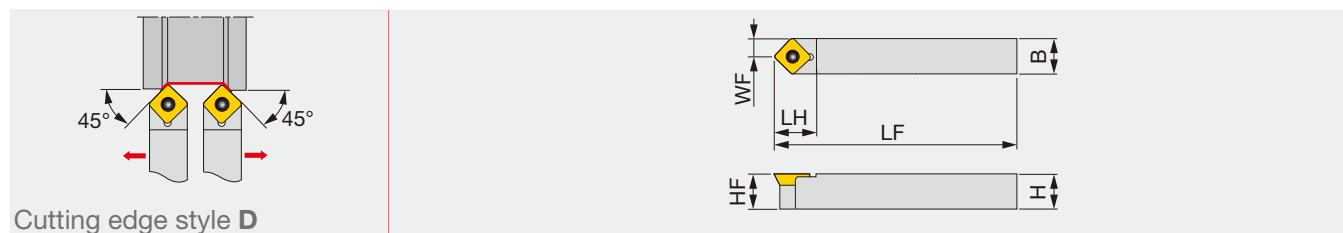
INSERT SELECTION

P	Application areas	Precision finishing		Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725	SH725
	Breaker Shape	01	JP	JS	JS
	Cutting conditions	G094			
P	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
	Cutting conditions	G094			
K	Application areas	medium to finish cutting			
	Grade	T515			
	Breaker Shape	CM			
	Cutting conditions	B020			
S	Application areas	Finish cutting	Medium to finish cutting		
	Grade	SH725	SH725		
	Breaker Shape	JS	JS		
	Cutting conditions	G094			
M	Application areas	Precision finishing		Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725	SH725
	Breaker Shape	01	JP	JS	JS
	Cutting conditions	G094			
M	Application areas	Medium to finish cutting			
	Grade	SH725			
	Breaker Shape	J10			
	Cutting conditions	G094			
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	BXA10	BXA20		
	Breaker Shape	CBN	CBN		
	Cutting conditions	B026			

Reference pages : JSCGCR/L: Inserts → **B112 -**, CBN → **B191**, PCD → **B213**
Shank, Accessory → **G095**, **G096**

SSDC/PN

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



Designation	H	B	LF	LH	HF	WF	RE**	Insert
SSDCN1010K07	10	10	125	12	10	5	0.4	SC**0702...
SSDPN1010H	10	10	100	12	10	5	0.4	SP*P042...
SSDCN1212K09	12	12	125	15	12	6	0.8	SC**09T3...
SSDPN1212H	12	12	100	12	12	6	0.4	SP*P042...
SSDCN1616H09	16	16	100	15	16	8	0.8	SC**09T3...
SSDPN1616H	16	16	100	14	16	8	0.8	SP*M322...

RE**: Standard corner radius

SPARE PARTS

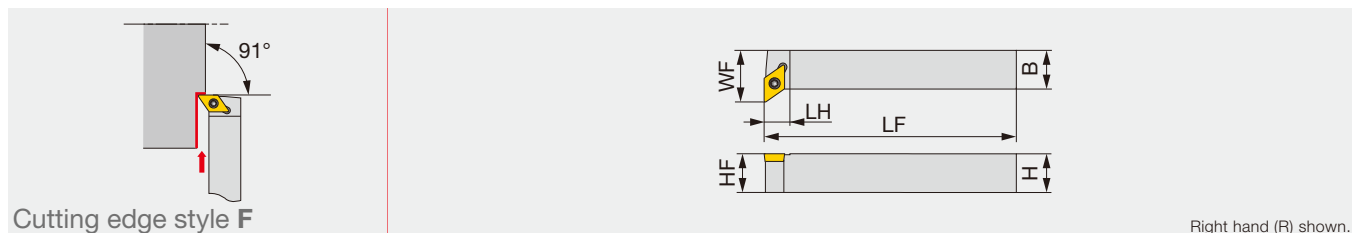
Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SSDCN1010K07	CSTB-3	-	-	-	T-9F
SSDPN1010H	CSTA-NO3	-	-	-	T-9F
SSDCN1212K09	CSTB-4	-	-	-	T-15F
SSDPN1212H	CSTA-NO3	-	-	-	T-9F
SSDCN1616H09	CSTB-3.5L	DTS5-3.5	SSS32	P-3.5	T-15F
SSDPN1616H	CSTA-NO5	-	-	-	T-9F

INSERT SELECTION

P	Application areas	Medium to finish cutting	Medium cutting
	Grade	AH725	AH725
	Breaker Shape	PS	PM
Cutting conditions		B016	
M	Application areas	Medium cutting	
	Grade	AH725	
	Breaker Shape	PM	
Cutting conditions		B018	
K	Application areas	Medium to finish cutting	
	Grade	T515	
	Breaker Shape	CM	
Cutting conditions		B020	

Reference pages : SSDC/PN: Inserts → **B134** -

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



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

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

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSDFCR/L1212H07	CSTB-2.5	T-8F	(T-8L)
JSDFCR/L1616H11	CSTB-4SD	T-8F	(T-8L)

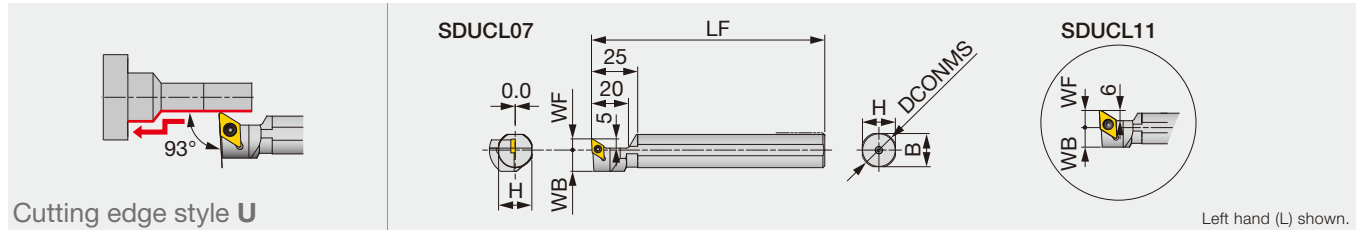
INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	J10		
	Cutting conditions	G094		
K	Application areas	Medium to finish cutting		
	Grade	T515		
	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
	Breaker Shape	JS	JS	
	Cutting conditions	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	J10		
	Cutting conditions	G094		
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 : JSDFCR/L: Inserts → B121 -, CBN → B193 -, PCD → B214

JS-SDUCL

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



Designation	DCONMS	WF	LF	H	B	WB	RE**	Insert	Torque*
JS19K-SDUCL07	19.05	6	125	18	18	11.5	0.4	DC**0702...	1.2
JS20K-SDUCL07	20	6	125	19	19	11.5	0.4	DC**0702...	1.2
JS22K-SDUCL07	22	6	125	21	21	11.5	0.4	DC**0702...	1.2
JS19K-SDUCL11	19.05	10	125	18	18	11.5	0.8	DC**11T3...	1.2
JS20K-SDUCL11	20	10	125	19	19	11.5	0.8	DC**11T3...	1.2
JS22K-SDUCL11	22	11	125	21	21	11.5	0.8	DC**11T3...	1.2
JS25K-SDUCL11	25	12	125	24	24	12.5	0.8	DC**11T3...	1.2
JS254K-SDUCL11	25.4	12	125	24	24	12.7	0.8	DC**11T3...	1.2

Torque*: Recommended clamping torque (N·m)

RE**: Standard corner radius

SPARE PARTS

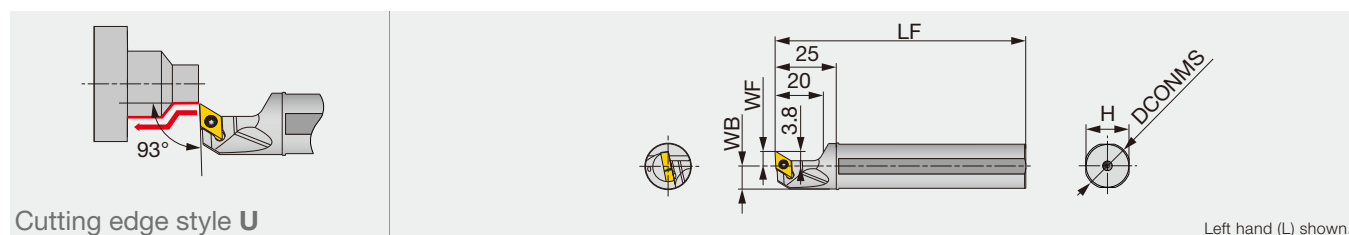
Designation	Clamping screw	Wrench
JS**K-SDUCL07	CSTB-2.5	T-8F
JS**K-SDUCL11	CSTB-4SD	T-8F

INSERT SELECTION

P	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
P	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G094		
K	Application areas	Medium to finish cutting		
	Grade	T515		
	Breaker Shape	CM		
	Cutting conditions	B020		
S	Application areas	Finish cutting	Medium to finish cutting	
	Grade	SH725	SH725	
	Breaker Shape	JS	JS	
	Cutting conditions	G094		
M	Application areas	Precision finishing	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725	SH725
	Breaker Shape	01	JP	JS
	Cutting conditions	G094		
M	Application areas	Medium to finish cutting		
	Grade	SH725		
	Breaker Shape	01		
	Cutting conditions	G094		
N	Application areas	Precision finishing	Medium cutting	
	Grade	DX110	KS05F	
	Breaker Shape	NS	AL	
	Cutting conditions	B022		
H	Application areas	Precision finishing	Finish cutting	
	Grade	BXA10	BXA20	
	Breaker Shape	CBN	CBN	
	Cutting conditions	B026		

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

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



Designation	DCONMS	WF	LF	H	WB	RE**	Insert	Torque*
JS14H-SDUXL07	14	6	100	13	6.75	0.2	DX*U0703**L...	0.9
JS159F-SDUXL07	15.875	6	85	15	7.687	0.2	DX*U0703**L...	0.9
JS16F-SDUXL07	16	6	85	15	7.75	0.2	DX*U0703**L...	0.9
JS19G-SDUXL07	19.05	6	90	18	9.275	0.2	DX*U0703**L...	0.9
JS19X-SDUXL07	19.05	6	120	18	9.275	0.2	DX*U0703**L...	0.9
JS20G-SDUXL07	20	6	90	19	9.75	0.2	DX*U0703**L...	0.9
JS20X-SDUXL07	20	6	120	19	9.75	0.2	DX*U0703**L...	0.9
JS22X-SDUXL07	22	10	120	21	10.75	0.2	DX*U0703**L...	0.9
JS25H-SDUXL07	25	10	100	24	12.25	0.2	DX*U0703**L...	0.9
JS254X-SDUXL07	25.4	10	120	24	12.45	0.2	DX*U0703**L...	0.9

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

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-SDUXL07	SR34-514	T-7F

INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting	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	G094			Cutting conditions	G094	

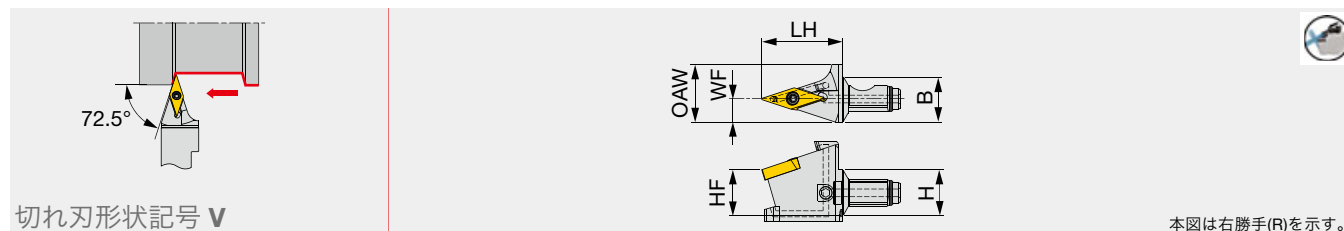
for Small CNC lathes

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	G094			Cutting conditions	G094			Cutting conditions	B022	

Reference pages : JS-SDUXL: Inserts → **B126 -**, Standard cutting conditions → **G094**

QC12-JSVVXR-CHP

高圧クーラント対応スクリーオン式ヘッド、アプローチ角72.5°、使用インサートVXGU形



切れ刃形状記号 V

本図は右勝手(R)を示す。

形番	H	B	LH	HF	WF	OAW	RE**	インサート	トルク*
QC12-JSVVXR09-CHP	12	12	21	12	6	15	0.2	VXGU09T2**L...	0.9

トルク*：推奨締付けトルク (N・m)

RE**：基準コーナ

右勝手のホルダ (R) には左勝手のインサート (L) を使用。

部品

形番	締付けねじ	スパナ	Oリング
QC12-JSVVXR09-CHP	SR34-508	T-7F	ORSS-0454.5X1.0NBR70

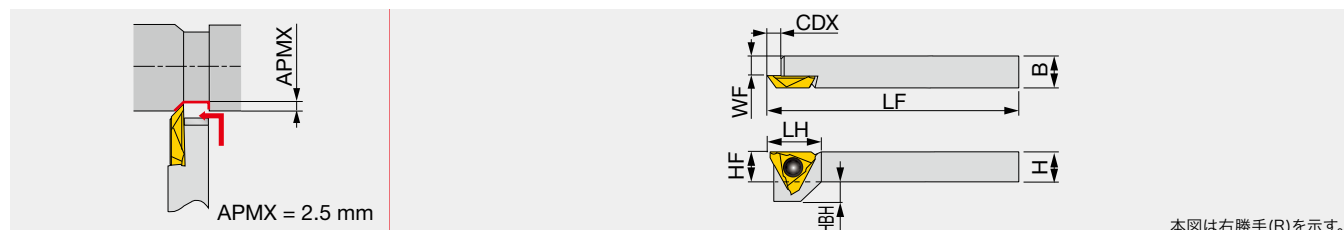
インサート基本選択

P	適応領域	仕上げ	仕上げ～中切削	M	適応領域	仕上げ	仕上げ～中切削
	材種	SH725	SH725		材種	SH725	SH725
	ブレーカ形状	JRP	JS		ブレーカ形状	JRP	JS
	標準切削条件	G094			標準切削条件	G094	

J-SERIES

JSTBR/L

スクリーオン式バイト、後挽き用



本図は右勝手(R)を示す。

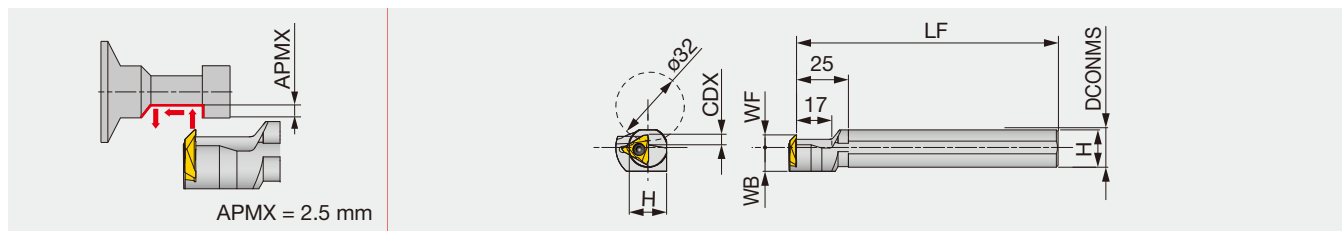
形番	H	B	LF	LH	CDX	HF	WF	HBH	インサート	トルク*
JSTBR/L1010X3	10	10	120	15	5	10	6	5	JTBR/L3...	1.2
JSTBL1010K3	10	10	125	15	5	10	6	5	JTBR/L3...	1.2
JSTBR/L1212F3	12	12	85	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1212X3	12	12	120	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1616X3	16	16	120	15	5	16	12	-	JTBR/L3...	1.2

トルク*：推奨締付けトルク (N・m)

部品

形番	締付けねじ	スパナ1	スパナ2 (オプション)
JSTBR/L...	CSTB-4SD	T-8F	(T-8L)

参照ページ：QC12-JSVVXR-CHP: インサート → **B155**, シャンク, 関連部品 → **G095**, **G096**, 標準切削条件 → **G094**
JSTBR/L: インサート → **G084**, **G085**, 標準切削条件 → **G085**



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

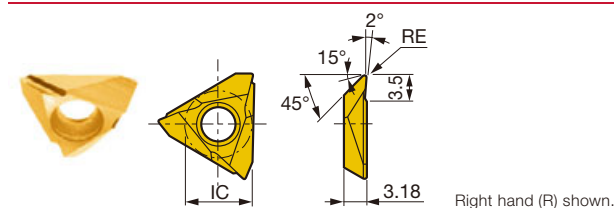
Torque*: Recommended clamping torque (N-m)

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-TBL3	CSTB-4S	T-15F

INSERT

JTB (Sharp edge)



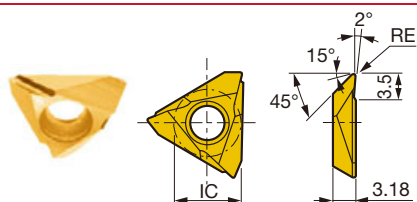
P	Steel	★	☆		★								
M	Stainless	★	☆										
K	Cast iron	★			☆		☆						
N	Non-ferrous						★						
S	Superalloys	☆	☆				★						
H	Hard materials						★						

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated		Cermet	Uncoated		IC	Max. depth of cut
			SH725	J740	NS9530	TH10			
JTBR3000F	R	0.03	●	●		●		9.438	2.5
JTBL3000F	L	0.03	●	●		●		9.438	2.5
JTBR3005F	R	0.05	●	●		●		9.438	2.5
JTBL3005F	L	0.05	●	●		●		9.438	2.5
JTBR3010F	R	0.1	●	●	●	●		9.438	2.5
JTBL3010F	L	0.1	●	●	●	●		9.438	2.5
JTBR3015F	R	0.15	●	●				9.438	2.5
JTBL3015F	L	0.15	●	●				9.438	2.5

● : Line up

JTBR/L (Honed edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

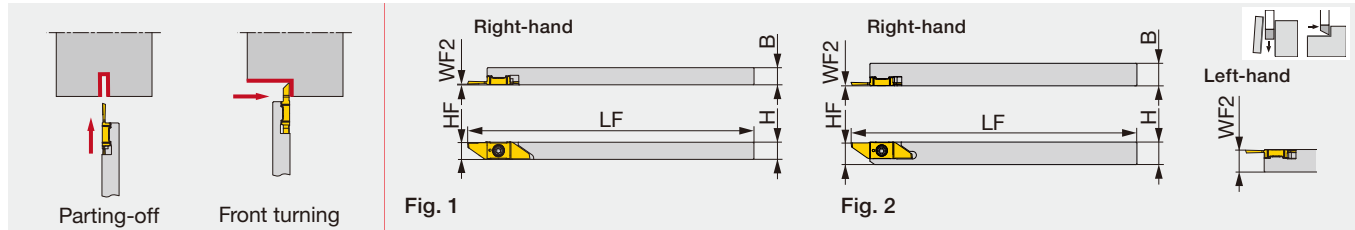
[illegible]

● : Line up

STANDARD CUTTING CONDITIONS (JTB type insert)

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Steel (S45C, etc. C45, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
	Free-cutting steel (SUM22, etc. 11SMn28, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel (SUS304, etc. X5CrNi18-9, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
N	Aluminium alloys, Brass (Si < 12%, C3604B, etc. CW614N, etc.)	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-machine material, Titanium alloys (Ti-6Al-4V, etc.)	TH10	10 - 30	0.01 - 0.1

Parting-off and front turning toolholders



Designation	H	B	LF	HF	WF2 ⁽¹⁾	Insert	Torque*	Fig.
JSXXL0606X05	6	6	120	5.6	5.8	JV*N..., JVN...	1.3	1
JSXXR/L0707X05	7	7	120	6.6	0.2/6.8	JV*N..., JVN...	1.3	1
JSXXR/L0808F05	8	8	85	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L0808H05	8	8	100	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L1010H05	10	10	100	9.7	0.2/9.8	JV*N..., JVN...	1.3	2

Torque*: Recommended clamping torque (N-m)

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

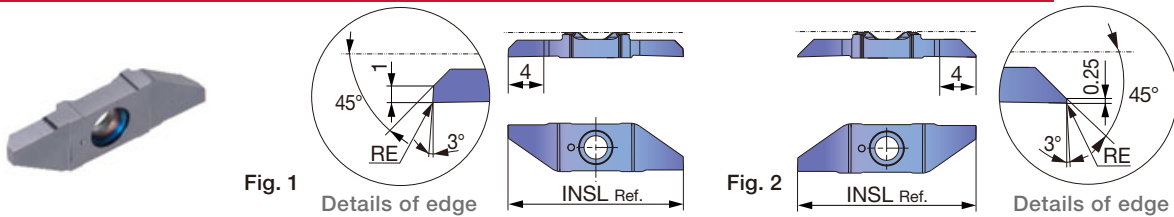
Use the right-hand insert (JV***R...) for a right-hand holder (JSXXR...); the left-hand insert (JV***L...) for a left-hand holder (JSXXL...).

SPARE PARTS

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

INSERT

JVFN45R/L (For front turning)



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

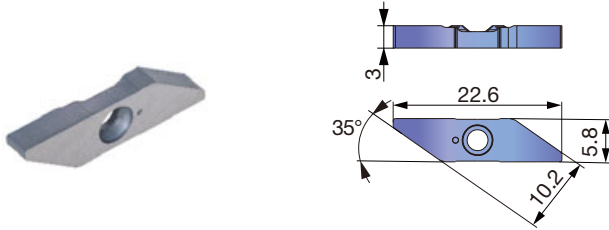
★ : First choice

Designation	HAND	RE	Coated				INSL	Fig.
			SH725					
JVFN45R0310F	R	0	●				21	1
JVFN45L0302FL	L	0	●				21	2

● : Line up

INSERT

JVNR/L (Semi-finished blanks)



Right-hand (R) shown.

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

★ : First choice

Designation	HAND	Uncoated					
		KS15F					
JVNR30	R	●					
JVNL30	L	●					

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grade	Cutting speed V _c (m/min)	Feed f (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 180	0.01 - 0.03
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 180	0.01 - 0.03
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 180	0.01 - 0.03
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 120	0.01 - 0.03
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.03
	Copper alloys C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.03
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.03
	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.03

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

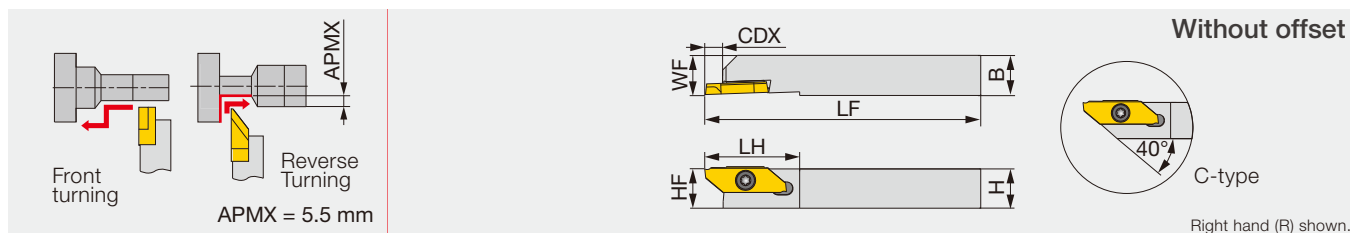
Endmill

Drilling tool

Tooling System

User's Guide

Index



Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXGR/L1010K8-C	10	10	125	29	6.7	10	10	JXFR/L8..., JXRR/L8...
JSXGR/L1212K8-C	12	12	125	29	6.7	12	12	JXFR/L8..., JXRR/L8...
JSXGR/L1616K8	16	16	125	29	6.5	16	16	JXFR/L8..., JXRR/L8...
JSXGR/L2020K8	20	20	125	29	6.5	20	20	JXFR/L8..., JXRR/L8...
JSXGR/L2525K8	25	25	125	29	6.5	25	25	JXFR/L8..., JXRR/L8...

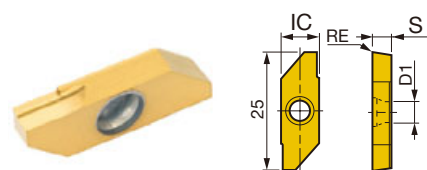
Can be used with JXG insert for parting and grooving.
Can be wrenched also from the back with a double-head screw.

SPARE PARTS

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

INSERT

JXF (For front turning)



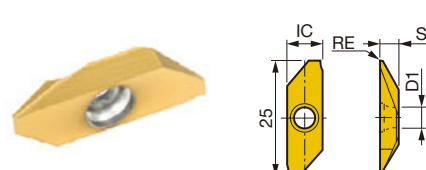
P Steel	★					
M Stainless	★					
K Cast iron						
N Non-ferrous	★					
S Superalloys	★					
H Hard materials						

★ : First choice

Designation	HAND	RE	Coated		Uncoated		IC	S	D1
			J740		TH10				
JXFR8000F	R	0.03	●		●		8	3.97	4.4
JXFR8010F	R	0.1	●		●		8	3.97	4.4

● : Line up

JXR (For reverse turning)



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

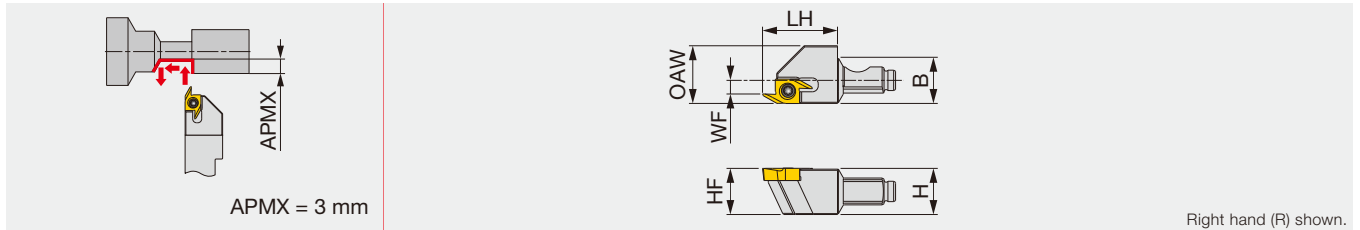
★ : First choice

Designation	HAND	RE	Coated		Uncoated		IC	S	D1
			J740		TH10				
JXRR8000F	R	0.03	●		●		8	3.97	4.4
JXRR8010F	R	0.1	●		●		8	3.97	4.4

● : Line up

QC12-JSEGR

Screw-on modular head for back turning

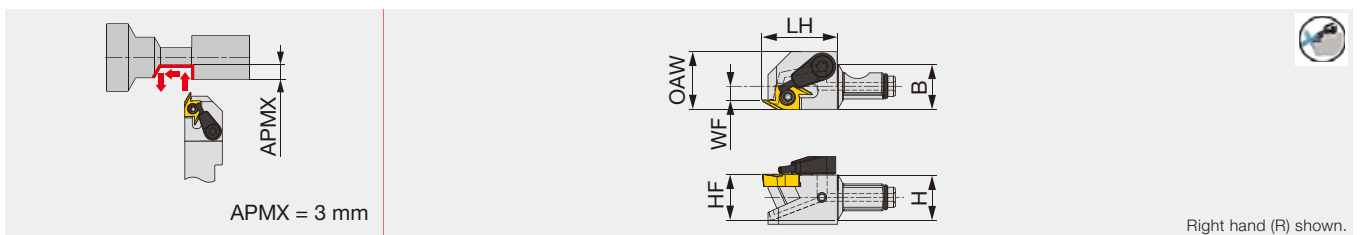


Designation	H	B	LH	HF	WF	OAW	Insert	Torque*
QC12-JSEGR10	12	12	19.5	12	3.5	15	J10ER...	1.2

Torque*: Recommended clamping torque (N-m)

QC12-JSEGR-CHP

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

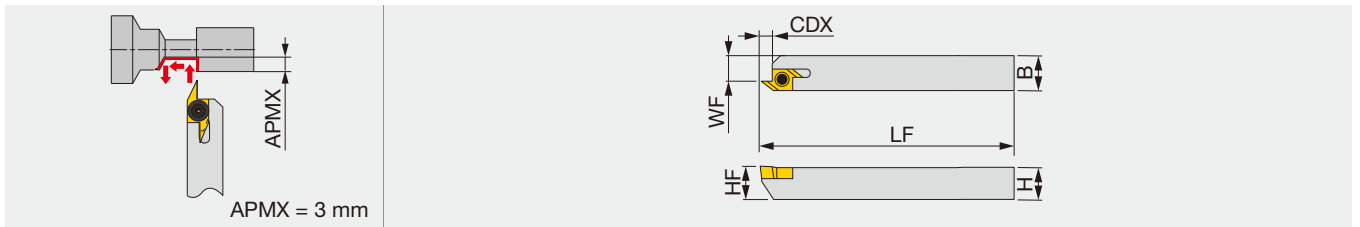


Designation	H	B	LH	HF	WF	OAW	Insert	Torque*
QC12-JSEGR10-CHP	12	12	19.5	12	3.5	15	J10ER...	1.2

Torque*: Recommended clamping torque (N-m)

JSEGR/L

Screw-on toolholder for back turning



Designation	H	B	LF	CDX	HF	WF	Insert	Torque*
JSEGR/L1010K10	10	10	125	3.3	10	7.5	J10ER/L...	1.2
JSEGR/L1212K10	12	12	125	3.3	12	9.5	J10ER/L...	1.2
JSEGR/L1616K10	16	16	125	3.3	16	13.5	J10ER/L...	1.2

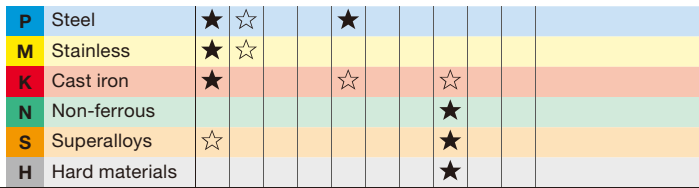
Torque*: Recommended clamping torque (N-m)

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Wrench 2 (Optional)	O-ring
QC12-JSEGR10	CSTB-2.5		T-8F		
QC12-JSEGR10-CHP	CSTB-2.5	S-CU-CHP	T-8F		ORSS-0454.5X1.0NBR70
JSEGR/L...	CSTB-2.5		T-8F	(T-8L)	

Reference pages : QC12-JSEGR, QC12-JSEGR-CHP, JSEGR/L: Inserts → **G090**
Shank, Accessory → **G095, G096**, Standard cutting conditions → **G091**

J10E (Sharp edge)



● : Line up

0.5 RE

30°

60°

3

IC

3.18

Right hand (R) shown.

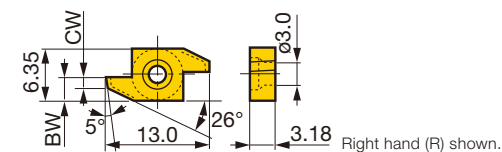
● : Line up

STANDARD CUTTING CONDITIONS (J10E type insert)

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Steel S45C, etc. C45, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel SUS303, SUS304 etc. X10CrNiS18-9, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
N	Aluminium alloys, Brass Si < 12% C3604B, etc. CW614N, etc.	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.1

INSERT

10E (Insert blank)

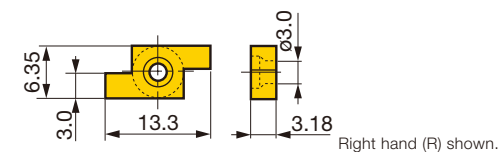


Designation	HAND	Uncoated	
		TH10	
10ER100B	R	●	
10EL100B	L	●	
10ER150B	R	●	
10EL150B	L	●	

● : 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)

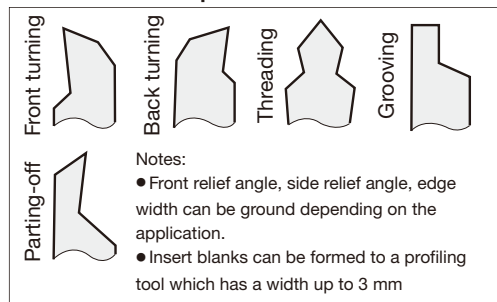


Designation	HAND	Uncoated	
		TH10	
10ER300	R	●	
10EL300	L	●	

● : Line up

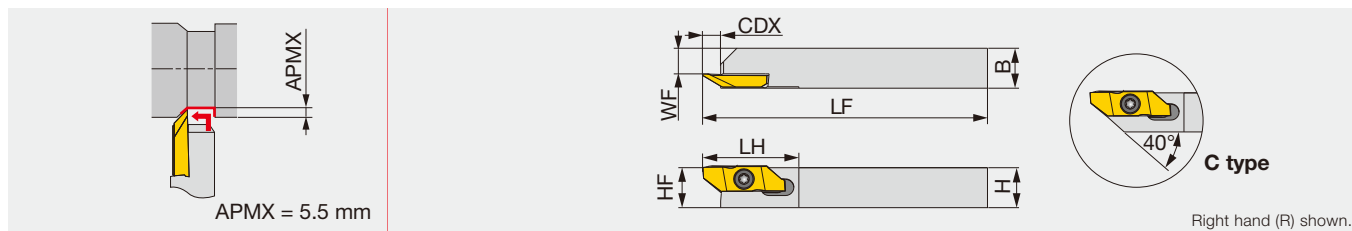
Note: Right hand holder (JSEGR...) use right hand insert (10ER...) and left hand holder (JSEGL...) use left hand insert (10EL...)

Formed examples of insert blanks



Standard cutting conditions

Operations		Workpiece material	Carbon steels	Stainless steels	Brass
Lateral feed (external turning)	Cutting speed (m/min)		~ 100	~ 50	~ 200
	Feed (mm/rev)	Roughing	~ 0.06	~ 0.03	~ 0.1
		Medium	~ 0.03	~ 0.025	~ 0.06
		Finishing	~ 0.02	~ 0.015	~ 0.04
Parting-off Grooving Forming	Cutting speed (m/min)		~ 80	~ 30	~ 150
	Feed (mm/rev)	Roughing	~ 0.02	~ 0.015	~ 0.05
		Medium	~ 0.015	~ 0.01	~ 0.03
		Finishing	~ 0.01	~ 0.008	~ 0.015



Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR/L1010K8-C	10	10	125	29	6.7	10	5.7	JXBR/L8..., JXT*R...
JSXBR/L1212K8-C	12	12	125	29	6.7	12	7.7	JXBR/L8..., JXT*R...
JSXBR/L1616K8	16	16	125	29	6.4	16	11.7	JXBR/L8..., JXT*R...
JSXBR/L2020K8	20	20	125	29	6.4	20	15.7	JXBR/L8..., JXT*R...
JSXBR/L2525K8	25	25	125	29	6.4	25	20.7	JXBR/L8..., JXT*R...

Can be used with JXT insert for threading.

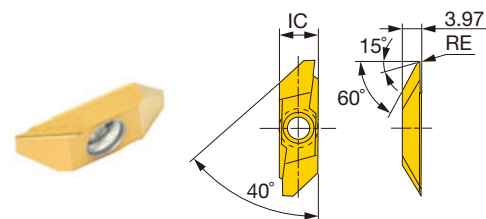
Can be wrenched also from the back with a double-head screw.

SPARE PARTS

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

INSERT

JXB (Sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated		Uncoated		IC	Max. depth of cut
			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	Coated							IC	Max. depth of cut
			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

STANDARD CUTTING CONDITIONS (JXB type insert)

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed: <i>f</i> (mm/rev)	
				Grooving	Turning
P	General steel S45C, etc. C45, etc.	J740	10 - 100	0.01 - 0.03	0.02 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	J740	10 - 100	0.01 - 0.03	0.02 - 0.1
M	Stainless steel SUS303, etc. X10CrNiS18-9, etc.	J740	10 - 100	0.01 - 0.02	0.02 - 0.08
N	Aluminium alloys, Brass Si < 12% C3604B, etc. CW614N, etc	TH10	50 - 200	0.01 - 0.05	0.02 - 0.1
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.02	0.02 - 0.05

Technical Guide

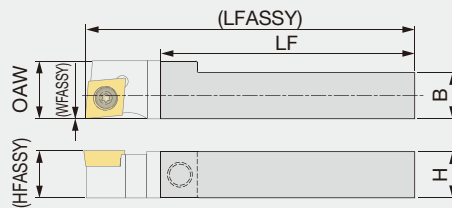
MINIFORCE STANDARD CUTTING CONDITIONS FOR EXTERNAL TURNING

Applications	ISO	Workpiece material	Priority	Chip breaker	Grade	Cutting speed Vc (m/min)	Depth of cut ap (mm)	Feed f (mm/rev)
For swiss type automatic lathes	P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	JS	SH725	50 - 180	0.1 - 3	0.03 - 0.1
			With high sharpness	JSS	SH725	50 - 180	0.1 - 1.5	0.03 - 0.1
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	JS	SH725	50 - 180	0.1 - 1.25	0.03 - 0.1
			With high sharpness	JSS	SH725	50 - 180	0.1 - 1.5	0.03 - 0.1
For small size CNC lathes	P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	SS	AH725	50 - 180	0.15 - 1.5	0.05 - 0.2
				TS	AH725	50 - 180	0.3 - 2	0.08 - 0.3
			For improved surface finish	SS	NS9530	50 - 200	0.15 - 1.5	0.05 - 0.2
				TS	NS9530	50 - 200	0.3 - 2	0.08 - 0.3
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	For wear resistance	SS	GT9530	50 - 250	0.15 - 1.5	0.05 - 0.2
				TS	GT9530	50 - 250	0.3 - 2	0.08 - 0.3
	M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	SS	AH8015	50 - 150	0.15 - 1.5	0.05 - 0.2
			For impact resistance	TS	AH8015	50 - 150	0.3 - 2	0.08 - 0.3

J-SERIES STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Priority	Grade	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Low carbon steel SS400, etc. E275A, etc. Carbon steel S45C, etc. C45, etc. Low alloy steel SCM415, etc. 18CrMo4, etc. Alloy steel SCM440, etc. 42CrMo4, etc.	First choice	SH725	50 - 200	0.01 - 0.2
		For impact resistance	AH725	50 - 200	0.01 - 0.2
M	Stainless steel (Austenitic) SUS304, etc. X5CrNi18-9, etc. Stainless steel (Martensitic and ferritic) SUS430, etc. X6Cr17, etc. Stainless steel (Precipitation hardened) SUS630, etc. X5CrNiCuNb16-4, etc.	First choice	SH725	50 - 200	0.01 - 0.2
		For impact resistance	AH725	50 - 200	0.01 - 0.2
S	Titanium alloys Ti-6Al-4V, etc. Superalloys Inconel718, etc.	First choice	SH725	20 - 80	0.01 - 0.2
		For impact resistance	AH725	20 - 80	0.01 - 0.2

Shank for modular heads



Designation	H	B	WFASSY	LF	OAW	HFASSY	LFASSY ⁽¹⁾	Torque*
QC-1212F	12	12	0	65	15	12	85	3
QC-1212X	12	12	0	100	15	12	120	3

Torque* : Recommended clamping torque (N·m)

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

QC-1212-CHP

Shank for modular heads, with high pressure coolant capability

Tube connection

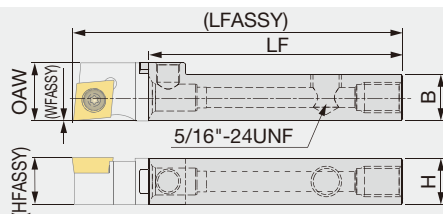


Fig.1

Direct connection

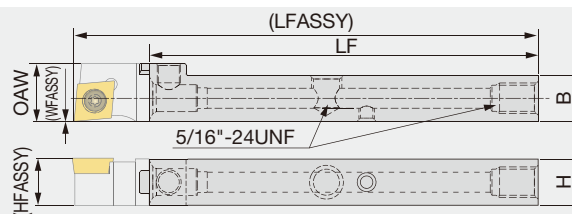


Fig.2

Designation	H	B	LF	WFASSY	OAW	HFASSY	LFASSY ⁽¹⁾	Torque*	Fig.
QC-1212F-CHP	12	12	65	0	15	12	85	3	1
QC-1212X-CHP (*)	12	12	100	0	15	12	120	3	2

Torque* : Recommended clamping torque (N·m)

Through-coolant shank

(*) : Compatible to the direct internal coolant supply system without the use of external coolant hose.

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

QC-1216-F15-CHP

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

Tube connection

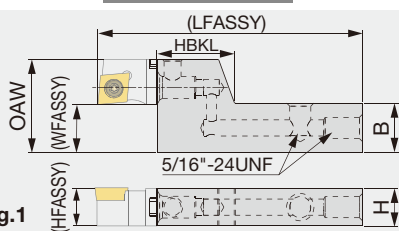


Fig.1

Direct connection

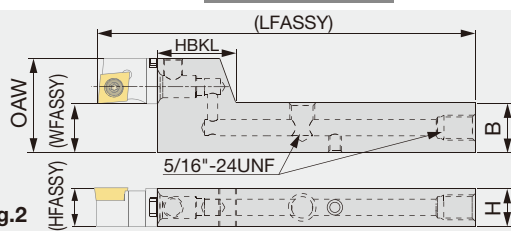


Fig.2

Designation	H	B	LF	OAW	WFASSY	HFASSY	LFASSY ⁽¹⁾	HBKL	Torque*	Fig.
QC-1216F-F15-CHP	12	16	65	30	15	12	85	25	3	1
QC-1216X-F15-CHP ⁽¹⁾	12	16	100	30	15	12	120	25	3	2

Torque* : Recommended clamping torque (N·m)

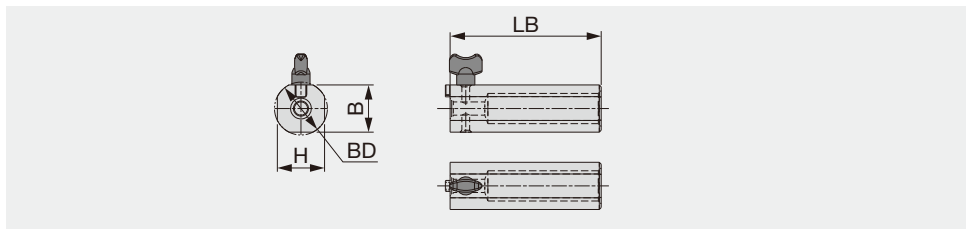
QC12 heads only can be mounted on these shanks.

(*) : Compatible to the direct internal coolant supply system without the use of external coolant hose.

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

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
QC-1212*	SRM6X0.5-26977	P-3	-	-	-	-
QC-1212F-CHP, QC-1216F-F15-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	-	-
QC-1212X-CHP, QC-1216X-F15-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2



Designation	BD	LB	H	B
QC-12D28EXC	28	80	25	25

Note: This is a dedicated modular-head holder designed to facilitate insert changes. Do not use this holder for machining as it may cause damages to tool, workpiece, machine, and possible human injury.

SPARE PARTS



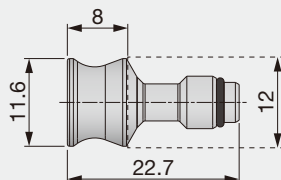
Designation	Fixing screw
QC-12D28EXC	KNOBM5X10



ModuMini-Turn modular heads are small. When it is difficult to change inserts while holding the modular head with fingers, use the dedicated holder to facilitate insert changes.

QC12-STOPPER

Protective plug for shank

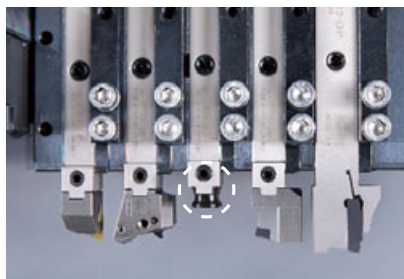


Designation
QC12-STOPPER

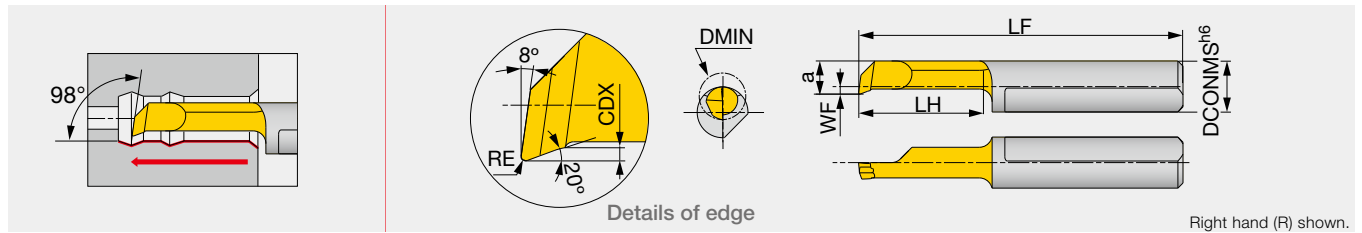
SPARE PARTS



Designation	O-ring
QC12-STOPPER	ORSS-0454.5X1.0NBR70

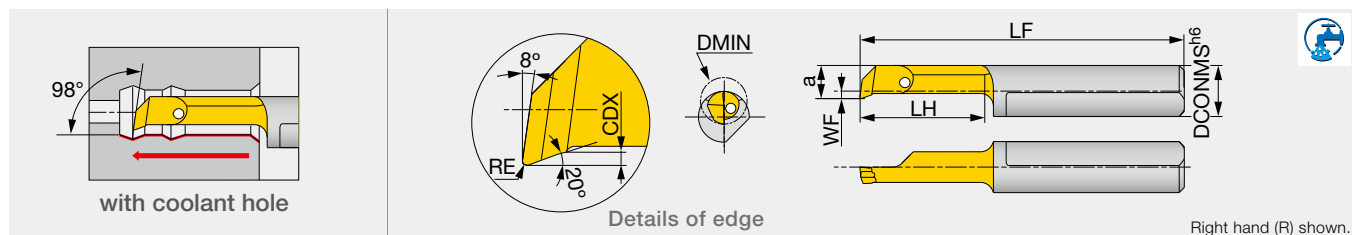


The cutting head located in the feed direction of the Y-axis tool can be removed to make room for machining larger-sized barstock. If this is the case, attach the plug to the shank to protect the coupling surface from chips, as well as prevent coolant leakage during machining.



Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBTR04045005-D010	●	1	4	-1.1	0.9	21	4.5	0.1	0.05
TBTR04065005-D010	●	1	4	-1.1	0.9	23	6.5	0.1	0.05
TBTR04040005-D020	●	2	4	-0.3	1.7	20.5	4	0.1	0.05
TBTR04090005-D020	●	2	4	-0.3	1.7	25.5	9	0.1	0.05
TBTR04140005-D020	●	2	4	-0.3	1.7	30.5	14	0.1	0.05
TBTR/L04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
TBTR04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
TBTR04190010-D028	●	2.8	4	0.9	2.6	35.5	19	0.2	0.1
TBTR04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
TBTR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
TBTR04190010-D040	●	4	4	1.5	3.5	35.5	19	0.3	0.1
TBTR04230010-D040	●	4	4	1.5	3.5	39.5	23	0.3	0.1
TBTR04270010-D040	●	4	4	1.5	3.5	43.5	27	0.3	0.1
TBTR07090015-D050	●	5	7	0.9	4.4	25	9	0.5	0.15
TBTR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
TBTR07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15
TBTR07240015-D050	●	5	7	0.9	4.4	40	24	0.5	0.15
TBTR07290015-D050	●	5	7	0.9	4.4	45	29	0.5	0.15
TBTR07340015-D050	●	5	7	0.9	4.4	50	34	0.5	0.15
TBTR07140015-D060	●	6	7	1.8	5.3	30	14	0.5	0.15
TBTR/L07210015-D060	●	6	7	1.8	5.3	37	21	0.5	0.15
TBTR07240015-D060	●	6	7	1.8	5.3	40	24	0.5	0.15
TBTR07290015-D060	●	6	7	1.8	5.3	45	29	0.5	0.15
TBTR07340015-D060	●	6	7	1.8	5.3	50	34	0.5	0.15
TBTR07410015-D060	●	6	7	1.8	5.3	57	41	0.5	0.15
TBTR07190015-D068	●	6.8	7	2.8	6.3	35	19	0.6	0.15
TBTR07240015-D068	●	6.8	7	2.8	6.3	40	24	0.6	0.15
TBTR07290015-D068	●	6.8	7	2.8	6.3	45	29	0.6	0.15
TBTR07340015-D070	●	7	7	2.8	6.3	50	34	0.6	0.15
TBTR07390015-D070	●	7	7	2.8	6.3	55	39	0.6	0.15
TBTR07440015-D070	●	7	7	2.8	6.3	60	44	0.6	0.15
TBTR07490015-D070	●	7	7	2.8	6.3	65	49	0.6	0.15

● : Line up

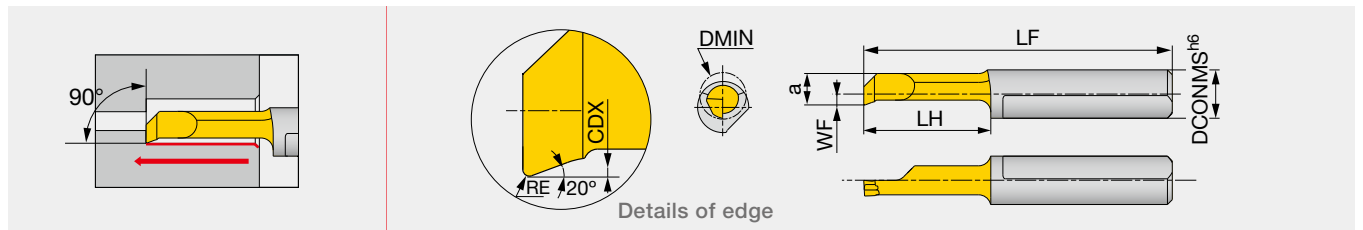


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_0$
JBTR04020004-D006	●	0.6	4	-1.5	0.5	18.5	2	0.08	0.04
JBTR04030004-D006	●	0.6	4	-1.5	0.5	19.5	3	0.08	0.04
JBTR04045005-D010	●	1	4	-1.1	0.9	21	4.5	0.1	0.05
JBTR04065005-D010	●	1	4	-1.1	0.9	23	6.5	0.1	0.05
JBTR04040005-D020	●	2	4	-0.3	1.7	20.5	4	0.1	0.05
JBTR04090005-D020	●	2	4	-0.3	1.7	25.5	9	0.1	0.05
JBTR04140005-D020	●	2	4	-0.3	1.7	30.5	14	0.1	0.05
JBTR/L04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBTR/L04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBTR/L04190010-D028	●	2.8	4	0.9	2.6	35.5	19	0.2	0.1
JBTR/L04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
JBTR/L04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
JBTR/L04190010-D040	●	4	4	1.5	3.5	35.5	19	0.3	0.1
JBTR04230010-D040	●	4	4	1.5	3.5	39.5	23	0.3	0.1
JBTR04270010-D040	●	4	4	1.5	3.5	43.5	27	0.3	0.1
JBTR/L07090015-D050	●	5	7	0.9	4.4	25	9	0.5	0.15
JBTR/L07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
JBTR/L07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15
JBTR/L07240015-D050	●	5	7	0.9	4.4	40	24	0.5	0.15
JBTR07290015-D050	●	5	7	0.9	4.4	45	29	0.5	0.15
JBTR07340015-D050	●	5	7	0.9	4.4	50	34	0.5	0.15
JBTL07340015-D050	●	5	7	0.9	4.4	50	34	0.5	0.15
JBTR/L07140015-D060	●	6	7	1.8	5.3	30	14	0.5	0.15
JBTR/L07210015-D060	●	6	7	1.8	5.3	37	21	0.5	0.15
JBTR/L07240015-D060	●	6	7	1.8	5.3	40	24	0.5	0.15
JBTR/L07290015-D060	●	6	7	1.8	5.3	45	29	0.5	0.15
JBTR07340015-D060	●	6	7	1.8	5.3	50	34	0.5	0.15
JBTR07410015-D060	●	6	7	1.8	5.3	57	41	0.5	0.15
JBTR/L07190015-D068	●	6.8	7	2.8	6.3	35	19	0.6	0.15
JBTR07240015-D068	●	6.8	7	2.8	6.3	40	24	0.6	0.15
JBTR/L07290015-D068	●	6.8	7	2.8	6.3	45	29	0.6	0.15
JBTR/L07340015-D070	●	7	7	2.8	6.3	50	34	0.6	0.15
JBTR07390015-D070	●	7	7	2.8	6.3	55	39	0.6	0.15
JBTR07440015-D070	●	7	7	2.8	6.3	60	44	0.6	0.15
JBTR07490015-D070	●	7	7	2.8	6.3	65	49	0.6	0.15

● : Line up

TBPR

Solid boring bar for boring and chamfering

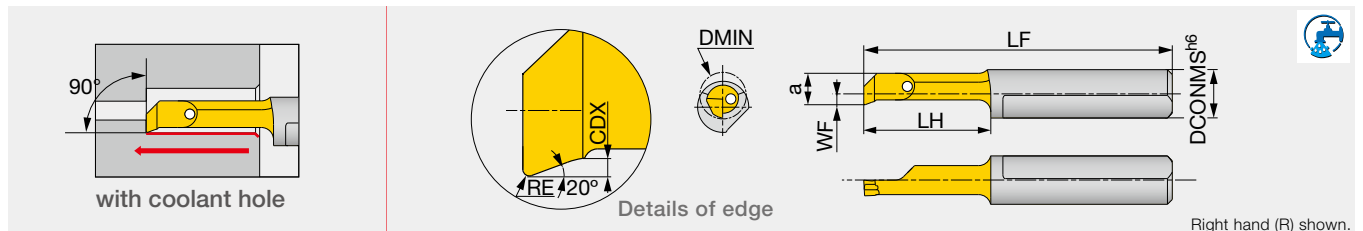


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
TBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
TBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
TBPR07190015-D050	●	5	7	0.9	4.4	35	19	0.5	0.15

● : Line up

JBPR

Solid boring bar for boring and chamfering

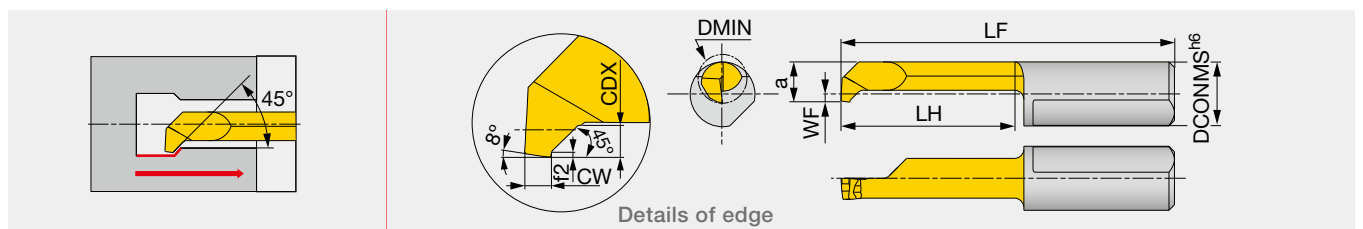


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
JBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBPR04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBPR04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
JBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
JBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
JBPR07190015-D050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

● : Line up

TBUR

Solid boring bar for back boring and chamfering

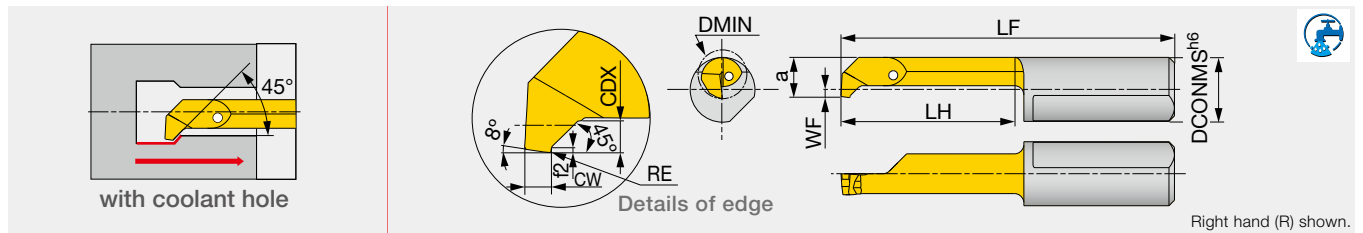


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW ^{+0.05} ₀
TBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1
TBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1

● : Line up

Reference pages : TBPR, JBPR, TBUR: Standard cutting conditions → **G109**

Solid boring bar for back boring and chamfering



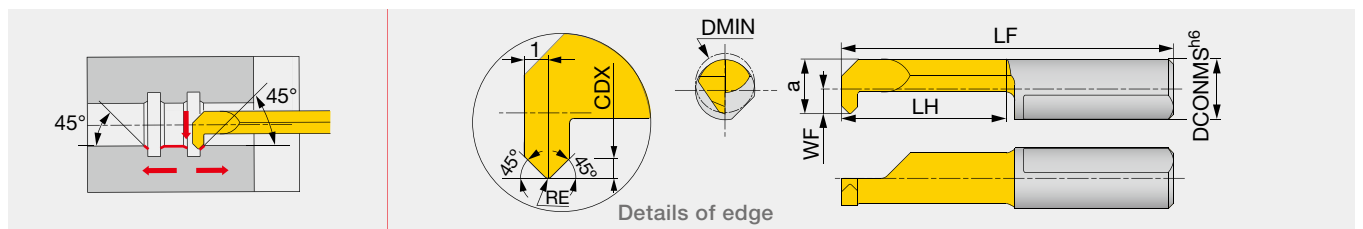
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW ^{+0.05} ₀	RE
JBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1	0.1
JBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1	0.1

● : Line up



TBCR

Solid boring bar for boring and 45° chamfering



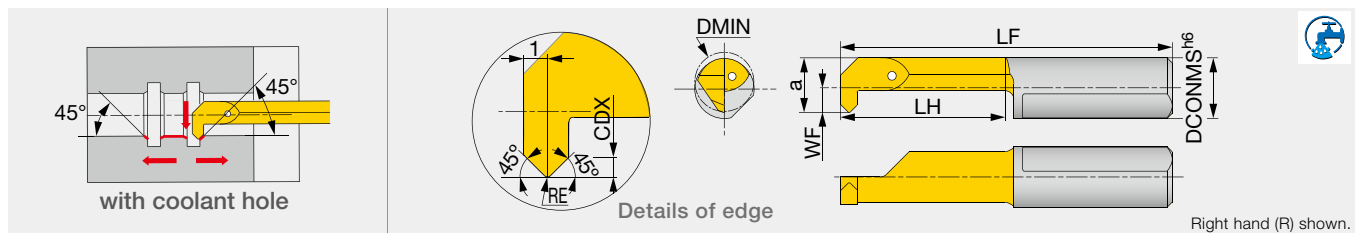
Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
TBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

● : Line up



JBCR

Solid boring bar for boring and 45° chamfering

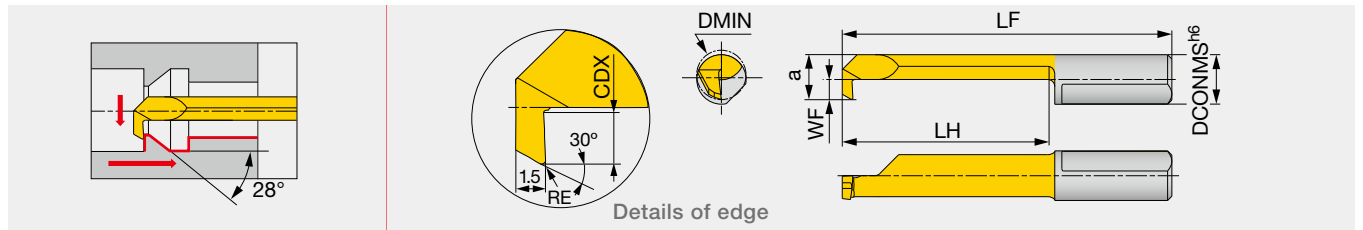


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{±0.05}
JBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
JBCR07190020-D050	●	5	7	0.9	4.4	35	19	0.7	0.2
JBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

● : Line up

TBBR

Solid boring bar for back boring

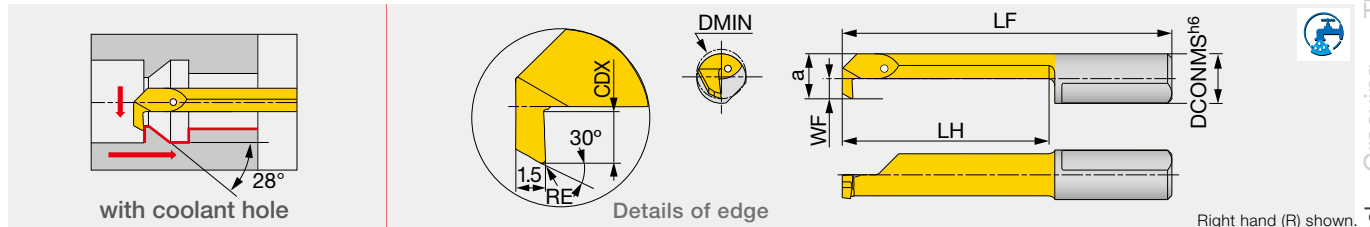


Designation	SH725	DMIN	DCONMS	WF	a	LF	LH	CDX	RE ^{+0.05} ₀
TBBR04140020-D030	●	3	4	0.6	2.6	30	14	0.5	0.2
TBBR04140015-D040	●	4	4	1.5	3.5	30	14	0.8	0.15
TBBR07190020-D050	●	5	7	0.9	4.4	35	19	1	0.2

● : Line up

JBBR

Solid boring bar for back boring



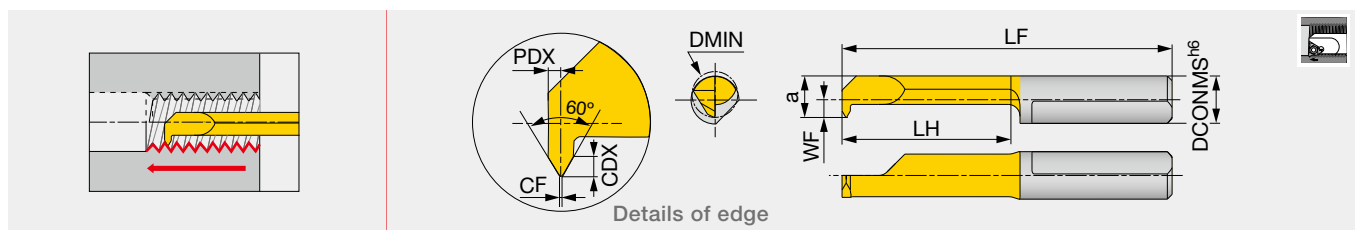
Right hand (R) shown.

Designation	SH725	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

TBIR

Solid boring bar for threading (metric)

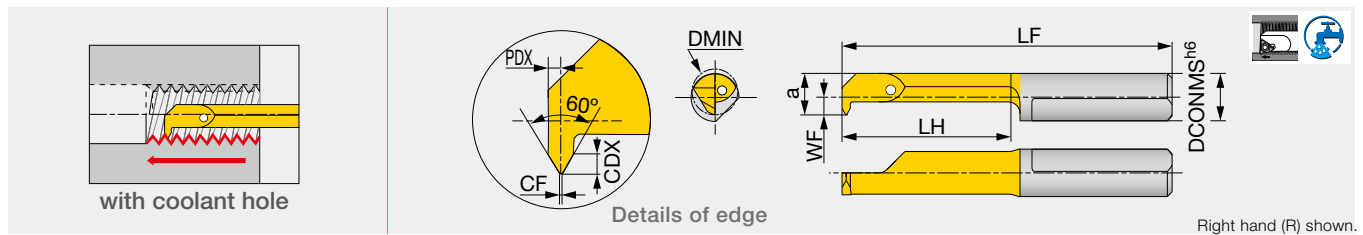


Designation	SH725	Pitch	DMIN	CF ⁰ _{-0.02}	DCONMS	WF	a	LF	LH	CDX	PDX
TBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
TBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
TBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
TBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
TBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
TBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75

● : Line up

Reference pages : TBBR, JBBR, TBIR: Standard cutting conditions → **G109**

Solid boring bar for threading (metric)



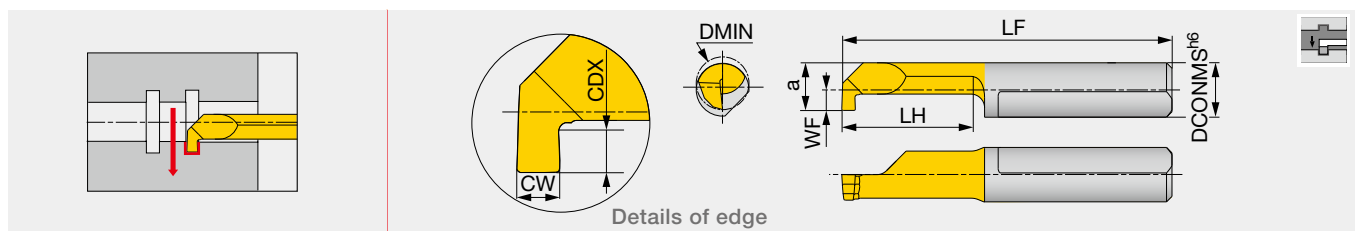
Designation	SH725	Pitch	DMIN	CF _{0.02}	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
JBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
JBIR07140125-D060	●	1.25	6	0.15	7	1.8	5.3	30	14	0.7	0.65
JBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75
JBIR07140150-D070	●	1.5	7	0.18	7	2.8	6.3	30	14	0.8	0.75

● : Line up



TBGR

Solid boring bar for internal grooving



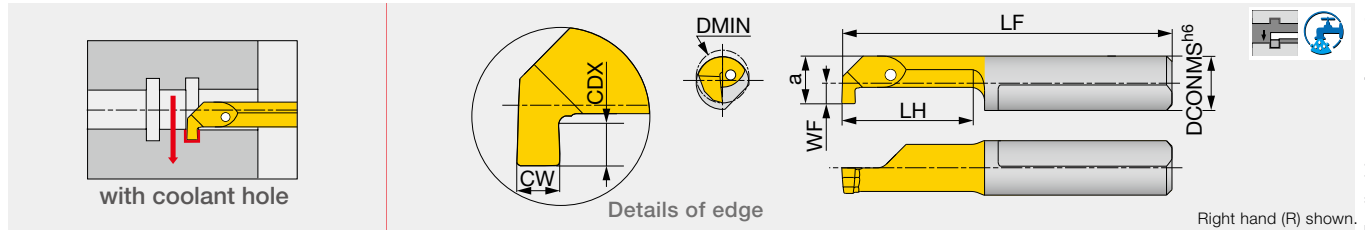
Designation	SH725	CW _{0.05}	DMIN	DCONMS	WF	a	LF	LH	CDX
TBGR04100050-D020	●	0.5	2	4	-0.2	1.8	26	10	0.4
TBGR04090100-D040	●	1	4	4	1.5	3.5	25.5	9	0.8
TBGR04150100-D040	●	1	4	4	1.5	3.5	31.5	15	0.8
TBGR07090200-D050	●	2	5	7	0.9	4.4	25	9	1
TBGR07090100-D060	●	1	6	7	1.8	5.3	25	9	1.8
TBGR07140100-D060	●	1	6	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

JBGR/L

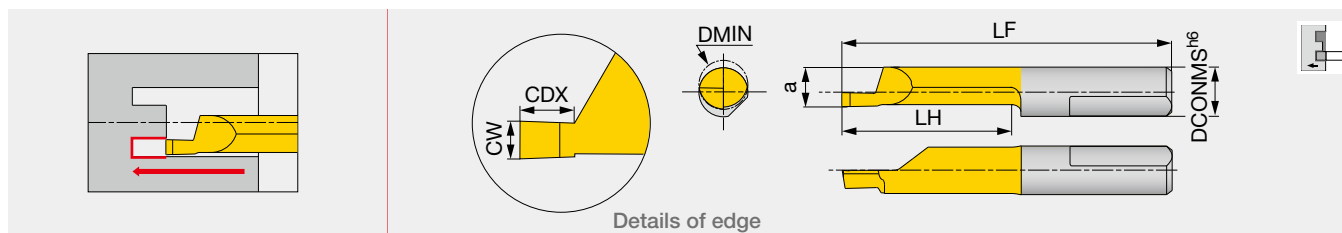
Solid boring bar for internal grooving



Designation	SH725	CW ^{+0.05} ₀	DMIN	DCONMS	WF	a	LF	LH	CDX
JBGR04050050-D020	●	0.5	2	4	0.2	1.8	21	5	0.4
JBGR04100050-D020	●	0.5	2	4	0.2	1.8	26	10	0.4
JBGR04050070-D030	●	0.7	3	4	0.7	2.7	21	5	0.6
JBGR04100070-D030	●	0.7	3	4	0.7	2.7	26	10	0.6
JBGR04090100-D040	●	1	4	4	1.5	3.5	25.5	9	0.8
JBGR04150100-D040	●	1	4	4	1.5	3.5	31.5	15	0.8
JBGR07090100-D050	●	1	5	7	0.9	4.4	25	9	1
JBGR07140100-D050	●	1	5	7	0.9	4.4	30	14	1
JBGR07090150-D050	●	1.5	5	7	0.9	4.4	25	9	1
JBGR07140150-D050	●	1.5	5	7	0.9	4.4	30	14	1
JBGR07090200-D050	●	2	5	7	0.9	4.4	25	9	1
JBGR07190200-D050	●	2	5	7	0.9	4.4	35	19	1
JBGR/L07090100-D060	●	1	6	7	1.8	5.3	25	9	1.8
JBGR07140100-D060	●	1	6	7	1.8	5.3	30	14	1.8
JBGR07210100-D060	●	1	6	7	1.8	5.3	37	21	1.8
JBGR07290100-D060	●	1	6	7	1.8	5.3	45	29	1.8
JBGR/L07090150-D060	●	1.5	6	7	1.8	5.3	25	9	1.8
JBGR07140150-D060	●	1.5	6	7	1.8	5.3	30	14	1.8
JBGR07210150-D060	●	1.5	6	7	1.8	5.3	37	21	1.8
JBGR07240150-D060	●	1.5	6	7	1.8	5.3	40	24	1.8
JBGR07290150-D060	●	1.5	6	7	1.8	5.3	45	29	1.8
JBGR07090200-D060	●	2	6	7	1.8	5.3	25	9	1.8
JBGR07140200-D060	●	2	6	7	1.8	5.3	30	14	1.8
JBGR07210200-D060	●	2	6	7	1.8	5.3	37	21	1.8
JBGR07240200-D060	●	2	6	7	1.8	5.3	40	24	1.8
JBGR07290200-D060	●	2	6	7	1.8	5.3	45	29	1.8
JBGR07090100-D068	●	1	6.8	7	2.7	6.2	25	9	2.5
JBGR07140100-D068	●	1	6.8	7	2.7	6.2	30	14	2.5
JBGR07210100-D068	●	1	6.8	7	2.7	6.2	37	21	2.5
JBGR07090150-D068	●	1.5	6.8	7	2.7	6.2	25	9	2.5
JBGR07140150-D068	●	1.5	6.8	7	2.7	6.2	30	14	2.5
JBGR07210150-D068	●	1.5	6.8	7	2.7	6.2	37	21	2.5
JBGR07290150-D068	●	1.5	6.8	7	2.7	6.2	45	29	2.5
JBGR07090200-D068	●	2	6.8	7	2.7	6.2	25	9	2.5
JBGR/L07140200-D068	●	2	6.8	7	2.7	6.2	30	14	2.5
JBGR07210200-D068	●	2	6.8	7	2.7	6.2	37	21	2.5
JBGR07250200-D068	●	2	6.8	7	2.7	6.2	40	24	2.5
JBGR07290200-D068	●	2	6.8	7	2.7	6.2	45	29	2.5

Corner radius: less than 0.1 mm

● : Line up



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

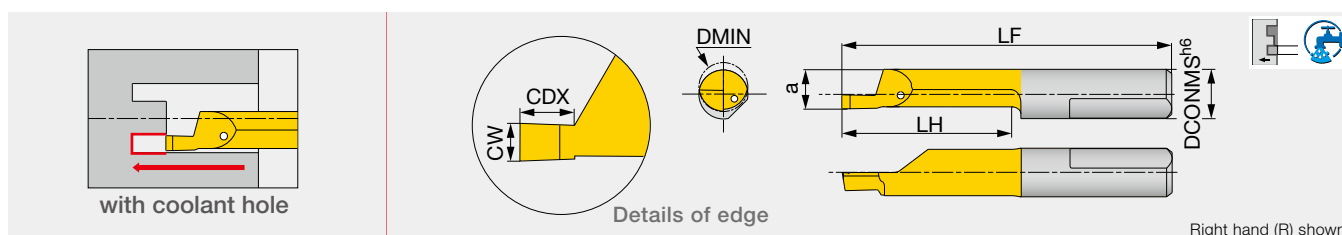
Corner radius : less than 0.1 mm.

● : Line up



JBFR/L

Solid boring bar for face grooving



Right hand (R) shown.

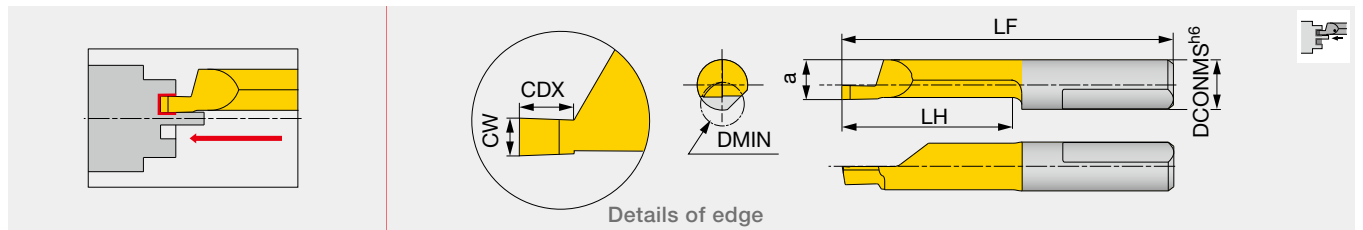
Designation	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
JBFR07110100-D060	●	1	6	7	5.2	26	10	1.5
JBFR07110150-D060	●	1.5	6	7	5.2	26	10	2
JBFR07110200-D060	●	2	6	7	5.2	26	10	3
JBFR07110100-D080	●	1	8	7	5.9	27	11	1.5
JBFR07110150-D080	●	1.5	8	7	5.9	27	11	2.5
JBFR07110200-D080	●	2	8	7	5.9	27	11	3
JBFR07110250-D080	●	2.5	8	7	5.9	27	11	3.5
JBFR07110300-D080	●	3	8	7	5.9	27	11	3.5
JBFR/L07210150-D080	●	1.5	8	7	5.9	36	21	2.5
JBFR07210200-D080	●	2	8	7	5.9	36	21	3
JBFR07210250-D080	●	2.5	8	7	5.9	36	21	3.5
JBFR07210300-D080	●	3	8	7	5.9	36	21	3.5
JBFR/L07300200-D080	●	2	8	7	5.9	46	30	3
JBFR07300300-D080	●	3	8	7	5.9	46	30	3.5
JBFR07200200-D080	●	2	8	7	5.9	36	20	3
JBFR07200250-D150	●	2.5	15	7	5.9	36	20	20
JBFR07200300-D150	●	3	15	7	5.9	36	20	20
JBFR07300300-D150	●	3	15	7	5.9	46	30	30

Corner radius: less than 0.1 mm

● : Line up

TBSR

Solid boring bar for face grooving (for shaft)



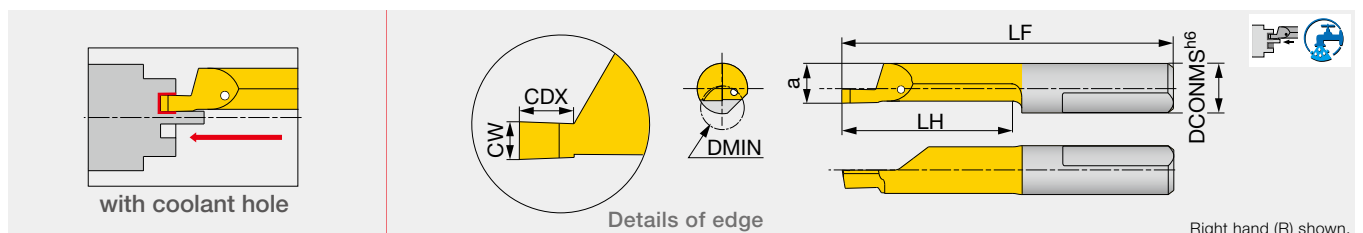
Designation	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
TBSR07200200-D060	●	2	6	7	5.2	36	20	4

Corner radius : less than 0.1 mm.

● : Line up

JBSR

Solid boring bar for face grooving (for shaft)



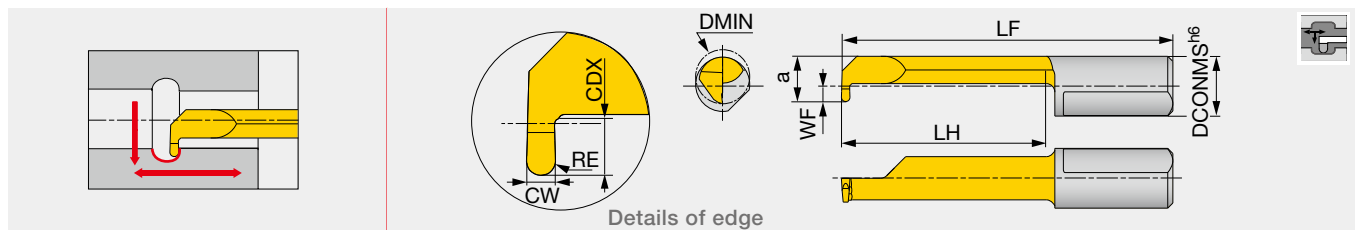
Designation	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	a	LF	LH	CDX
JBSR07200200-D060	●	2	6	7	5.2	36	20	4

Corner radius: less than 0.1 mm

● : Line up

TBRR

Solid boring bar for boring and profiling

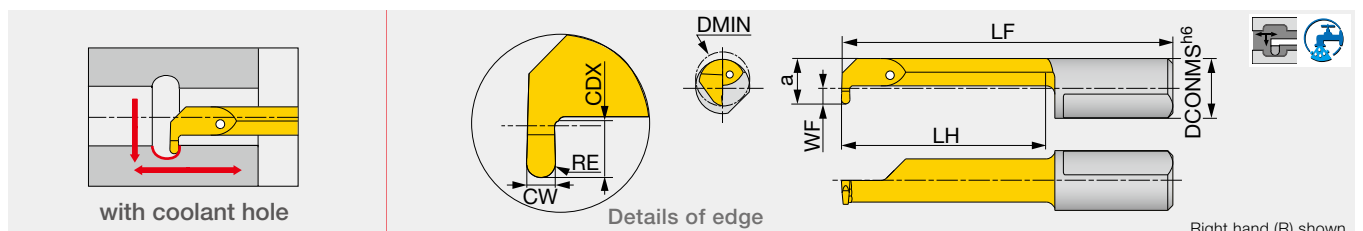


Designation	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	WF	a	LF	LH	CDX	RE
TBRR07190050-D050	●	1	5	7	0.9	4.4	35	19	1	0.5
TBRR07240050-D060	●	1	6	7	1.8	5.3	40	24	1.8	0.5
TBRR07290050-D068	●	1	6.8	7	2.8	6.3	45	29	2.5	0.5

● : Line up

JBRR

Solid boring bar for boring and profiling

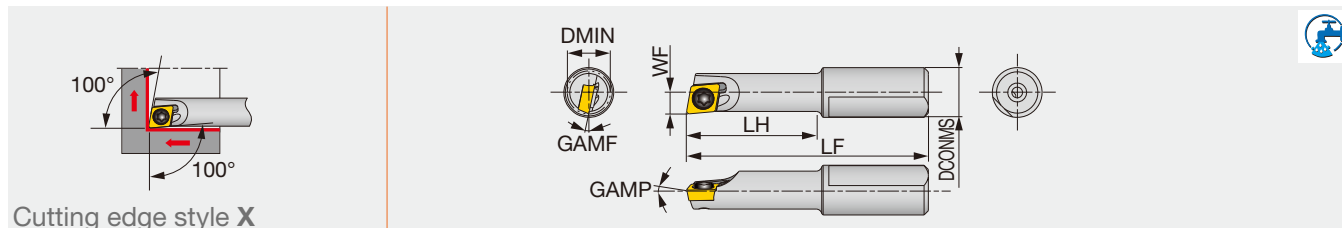


Designation	SH725	$CW^{+0.05}_0$	DMIN	DCONMS	WF	a	LF	LH	CDX	RE
JBRR07190050-D050	●	1	5	7	0.9	4.4	35	19	1	0.5
JBRR07240050-D060	●	1	6	7	1.8	5.3	40	24	1.8	0.5
JBRR07290050-D068	●	1	6.8	7	2.8	6.3	45	29	2.5	0.5

● : Line up

Reference pages : TBSR, JBSR, TBRR, JBRR: Standard cutting conditions → **G109**

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



Designation	Material	DMIN	DCONMS	WF	LF	LH	GAMP	GAMF	RE**	Insert	Torque*
A07050-SEXPR03-3	Steel	5	7	2.5	31	15	0°	-13°	0.2	EPGT03X1...	0.6
A07060-SEXPR04-3	Steel	6	7	3.1	34	18	0°	-12°	0.2	EPGT0401...	0.6
E07050-SEXPR03-4	Carbide	5	7	2.5	37	20	0°	-13°	0.2	EPGT03X1...	0.6
E07050-SEXPR03-5	Carbide	5	7	2.5	42	25	0°	-13°	0.2	EPGT03X1...	0.6
E07060-SEXPR04-5	Carbide	6	7	3.1	46	30	0°	-12°	0.2	EPGT0401...	0.6

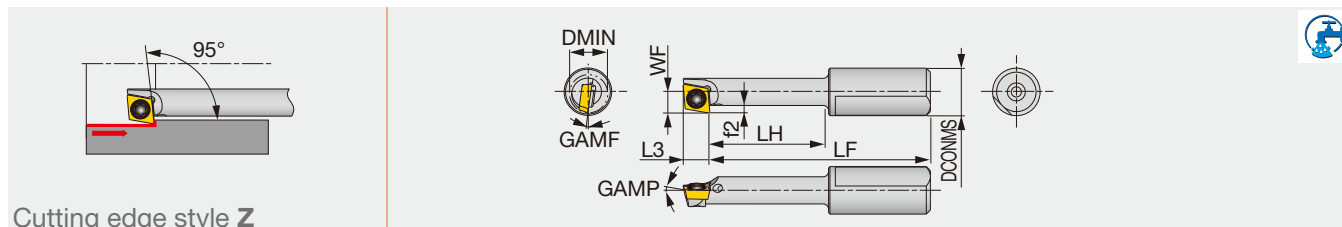
*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

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

A/E-SEZPR

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



Designation	Material	DMIN	DCONMS	WF	LF	LH	f2	L3	GAMP	GAMF	RE**	Insert	Torque*
A07055-SEZPR03-3	Steel	5.5	7	3.2	32.5	16.5	1.2	3.9	0°	-8°	0.2	EPGT03X1...	0.6
E07055-SEZPR03-5	Carbide	5.5	7	3.2	44.7	27.5	1.2	3.9	0°	-8°	0.2	EPGT03X1...	0.6

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

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

SPARE PARTS

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

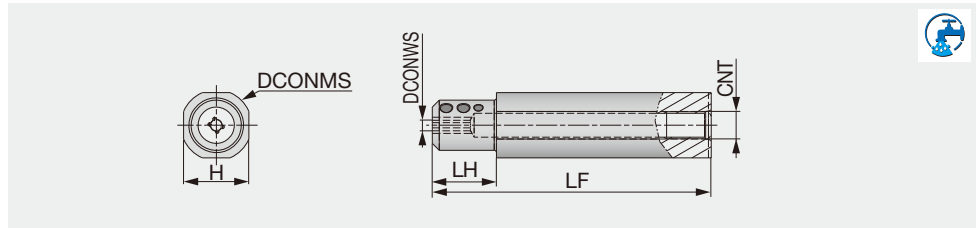
INSERT SELECTION

P	Application	Finishing	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		Application	Precision finishing		Application	Precision finishing
	Grade	DX140		Grade	BX310		Grade	CBN		Grade	CBN
	DIA			CBN			CBN			CBN	
	Breaker Shape			Breaker Shape			Breaker Shape			Breaker Shape	
	Cutting conditions	B022		Cutting conditions	B026		Cutting conditions			Cutting conditions	

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

JBBS-4N

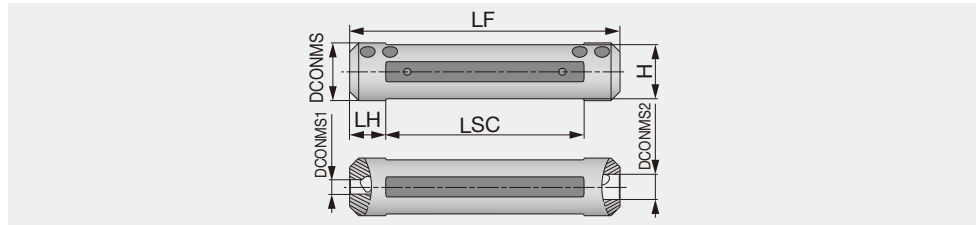
Sleeve for internal coolant supply with 4 coolant holes



Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBS12-4-L80C-4N	12	4	80	10	10.3	Rc1/16
JBBS127-4-L80C-4N	12.7	4	80	10	11.6	Rc1/16
JBBS14-4-L80C-4N	14	4	80	10	12	Rc1/8
JBBS159-4-L100C-4N	15.875	4	100	10	14.58	Rc1/8
JBBS159-7-L100C-4N	15.875	7	100	10	14.58	Rc1/8
JBBS16-4-L100C-4N	16	4	100	10	15	Rc1/8
JBBS16-7-L100C-4N	16	7	100	10	15	Rc1/8
JBBS19-4-L100C-4N	19.05	4	100	20	17.2	Rc1/8
JBBS19-7-L100C-4N	19.05	7	100	20	17.2	Rc1/8
JBBS20-4-L100C-4N	20	4	100	20	18	Rc1/8
JBBS20-7-L100C-4N	20	7	100	20	18	Rc1/8
JBBS22-4-L100C-4N	22	4	100	20	20	Rc1/8
JBBS22-7-L100C-4N	22	7	100	20	20	Rc1/8
JBBS25-4-L100C-4N	25	4	100	23	23	Rc1/8
JBBS25-7-L100C-4N	25	7	100	23	23	Rc1/8
JBBS254-4-L100C-4N	25.4	4	100	23	23.4	Rc1/8
JBBS254-7-L100C-4N	25.4	7	100	23	23.4	Rc1/8

JBBS

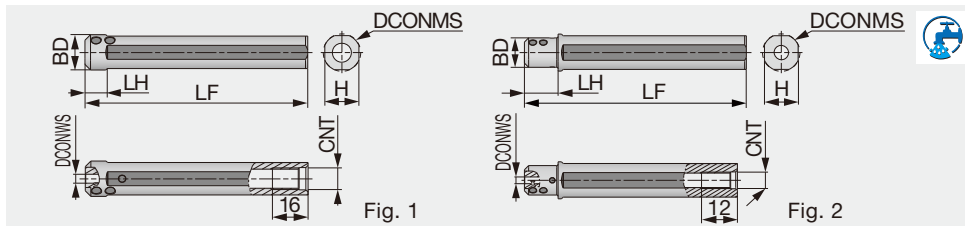
Sleeve for external coolant supply



Designation	DCONMS	DCONWS1	DCONWS2	LF	LH	LSC	H
JBBS12-4-4	12	4	4	75	10	55	10.3
JBBS127-4-4	12.7	4	4	76.2	10	56.2	11.6
JBBS14-4-4	14	4	4	75	10	55	12
JBBS159-4-7	15.875	4	7	76.2	10	56.2	14
JBBS16-4-7	16	4	7	75	10	55	15
JBBS19-4-7	19.05	4	7	89	10	69	17.2
JBBS20-4-7	20	4	7	90	10	70	18
JBBS22-4-7	22	4	7	90	10	70	20
JBBS25-4-7	25	4	7	100	10	80	23
JBBS254-4-7	25.4	4	7	90	10	70	23.4

SPARE PARTS

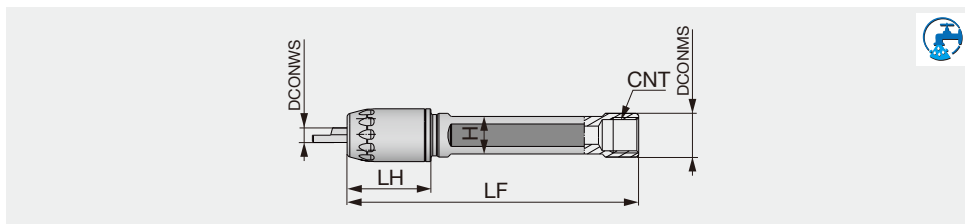
Designation	Clamping screw	Wrench
JBBS**-4-L**C-4N, JBBS127-4-4, JBBS**-4-7	SSHM5-6PF-S	P-2.5
JBBS**-7-L**C-4N, JBBS12-4-4, JBBS14-4-4	SSHM5-4PF-S	P-2.5



Designation	DCONMS	BD	DCONWS	LF	LH	H	CNT	Fig.
JBBS159-4-L100C	15.875	15.875	4	100	10	14.58	Rc1/8	1
JBBS159-7-L100C	15.875	15.875	7	100	10	14.58	Rc1/8	1
JBBS16-4-L100C	16	16	4	100	10	15	Rc1/8	1
JBBS16-7-L100C	16	16	7	100	10	15	Rc1/8	1
JBBS19-4-L100C	19.05	17.5	4	100	20	17.2	Rc1/8	2
JBBS19-7-L100C	19.05	17.5	7	100	20	17.2	Rc1/8	2
JBBS20-4-L100C	20	17.5	4	100	20	18	Rc1/8	2
JBBS20-7-L100C	20	17.5	7	100	20	18	Rc1/8	2
JBBS22-4-L100C	22	17.5	4	100	20	20	Rc1/8	2
JBBS22-7-L100C	22	17.5	7	100	20	20	Rc1/8	2
JBBS25-4-L100C	25	18	4	100	23	23	Rc1/8	2
JBBS25-7-L100C	25	18	7	100	23	23	Rc1/8	2
JBBS254-4-L100C	25.4	18	4	100	23	23.4	Rc1/8	2
JBBS254-7-L100C	25.4	18	7	100	23	23.4	Rc1/8	2

JBBSA-C

Collet chuck sleeve for solid carbide bars



Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBSA16-4-L100C	16	4	100	23	14	Rc1/8
JBBSA16-7-L100C	16	7	100	23	14	Rc1/8
JBBSA20-4-L120C	20	4	120	23	18	Rc1/8
JBBSA20-7-L120C	20	7	120	23	18	Rc1/8

SPARE PARTS

Designation	Clamping screw	Cap	Wrench	Wrench 1
JBBS**-4-L100C	SSHM5-6PF-S		P-2.5	-
JBBS**-7-L100C	SSHM5-4PF-S		P-2.5	-
JBBSA**-4-L100C	-	CAP-A-4	-	WRENCH-A-4
JBBSA**-7-L100C	-	CAP-A-7	-	WRENCH-A-7

STANDARD CUTTING CONDITIONS

Boring, profiling, chamfering, back boring

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed f (mm/rev)	
P	Low carbon steels S15C, S25C, etc. C15E, C15E4, etc.	SH730, SH725	40 - 140	0.01 - 0.08	Insert
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH730, SH725	40 - 140	0.01 - 0.08	
	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	0.01 - 0.08	
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	SH730, SH725	40 - 140	0.01 - 0.08	Ext. Toolholder
K	Grey cast irons FC250, FCD300, etc. GG25, 250, GG30, 300, etc.	SH730, SH725	30 - 100	0.01 - 0.08	Int. Toolholder
	Ductile cast irons FC450, FCD600, etc. GGG60, 600-3, etc.	SH730, SH725	30 - 100	0.01 - 0.08	
N	Aluminium alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	0.01 - 0.08	
S	Titanium alloys Ti-6Al-4V, etc.	SH730, SH725	30 - 100	0.01 - 0.08	Threading
	Superalloys Inconel718, etc.	SH730, SH725	30 - 100	0.01 - 0.08	

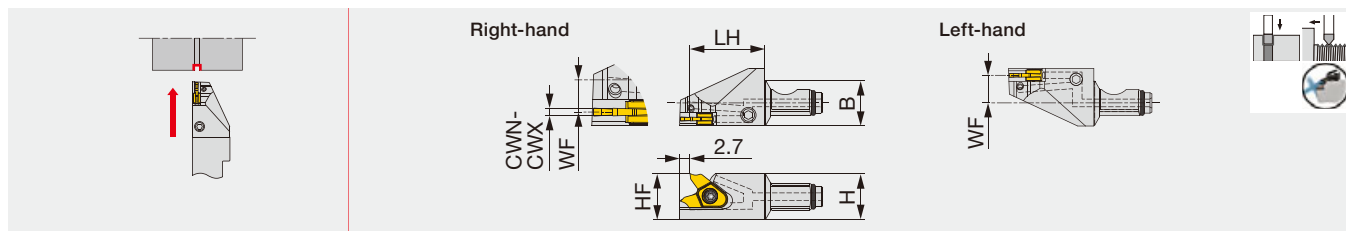
Threading (metric thread)

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Number of passes Pitch (mm)					
				0.5	0.75	1	1.25	1.5	
P	Low carbon steels S15C, S25C, etc. C15E, C15E4, etc.	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18	Grooving
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18	
	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18	Miniature tool
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	SH730, SH725	40 - 140	8	10	12	15	18	
K	Grey cast irons FC250, FCD300, etc. GG25, 250, GG30, 300, etc.	SH730, SH725	30 - 100	7	9	12	14	17	Milling cutter
	Ductile cast irons FC450, FCD600, etc. GGG60, 600-3, etc.	SH730, SH725	30 - 100	7	9	12	14	17	
N	Aluminium alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	6	8	10	12	15	Endmill

Internal and face grooving

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed: f (mm/rev)		
				Internal grooving	Face grooving	
P	Low carbon steels S15C, S25C, etc. C15E, C15E4, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05	Drilling tool
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05	
	Prehardened steels NAK80, PX5, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05	
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	SH730, SH725	40 - 140	0.01 - 0.03	0.01 - 0.05	Tooling System
K	Grey cast irons FC250, FCD300, etc. GG25, 250, GG30, 300, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05	
	Ductile cast irons FC450, FCD600, etc. GGG60, 600-3, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05	User's Guide
N	Aluminium alloys, Copper alloys Si < 12%	SH730, SH725	90 - 200	0.01 - 0.03	0.01 - 0.05	
S	Titanium alloys Ti-6Al-4V, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05	
	Superalloys Inconel718, etc.	SH730, SH725	30 - 100	0.01 - 0.03	0.01 - 0.05	Index

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



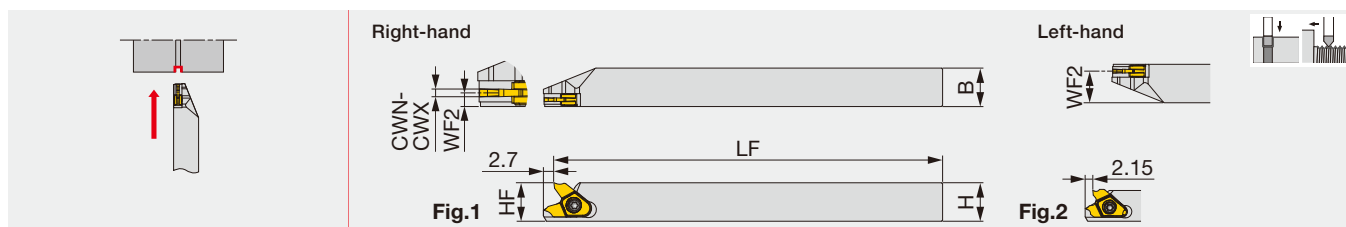
Designation	CWN	CWX	H	B	LH	HF	WF ⁽¹⁾	Insert	Torque*
QC12-SVER/L10-CHP	0.5	1	12	12	19.5	12	4.19/7.19	VG*10...	1.3

Torque*: Recommended clamping torque (N-m)

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

SVER/L

External grooving and threading toolholder



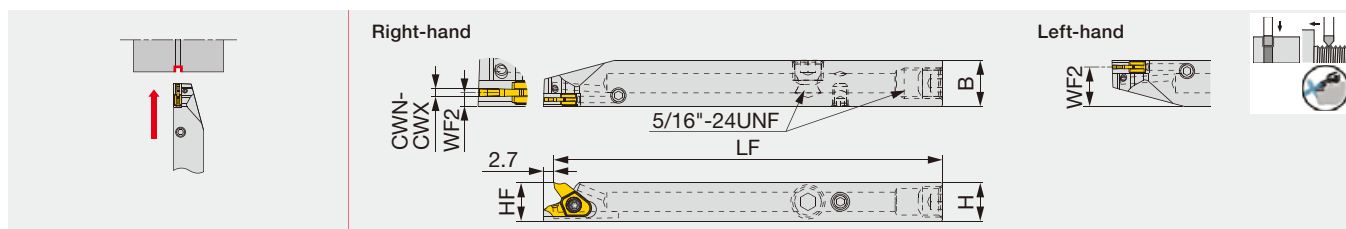
Designation	CWN	CWX	H	B	LF	HF	WF2 ⁽¹⁾	Insert	Torque*	Fig.
SVER/L0808H08	0.33	1	8	8	100	8	1.23/6.78	VGP08...	1.1	2
SVER/L1010H10	0.5	1	10	10	100	10	1.78/8.23	VG*10...	1.3	1
SVER/L1212X10	0.5	1	12	12	120	12	1.78/10.23	VG*10...	1.3	1

Torque*: Recommended clamping torque (N-m)

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

SVER/L-CHP

External grooving and threading toolholder, with high pressure coolant capability



Designation	CWN	CWX	H	B	LF	HF	WF2 ⁽¹⁾	Insert	Torque*
SVER/L1012H10-CHP	0.5	1	10	12	100	10	1.78/10.23	VG*10...	1.3
SVER/L1212X10-CHP	0.5	1	12	12	120	12	1.78/10.23	VG*10...	1.3

Compatible to the direct internal coolant supply system without the use of external coolant hose.

Torque*: Recommended clamping torque (N-m)

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

SPARE PARTS

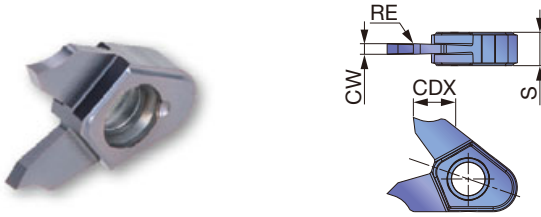
Designation	Clamping screw	Coolant plug	DirectJet plug	Wrench	Wrench 1	Wrench 2	O-ring
QC12-SVER10-CHP	CSTB-2.5L054DL	-	-	-	-	-	ORSS-0454.5X1.0NBR70
QC12-SVEL10-CHP	CSTB-2.5L054DR	-	-	-	-	-	ORSS-0454.5X1.0NBR70
SVER0808...	CSTB-2.2L053DL	-	-	T-7F	-	-	-
SVEL0808...	CSTB-2.2L053DR	-	-	T-7F	-	-	-
SVER1012/1212...	CSTB-2.5L054DL	SR5/16UNFTL360	SSH4-6-TB	T-7F	P-4	P-2	-
SVEL1012/1212...	CSTB-2.5L054DR	SR5/16UNFTL360	SSH4-6-TB	T-7F	P-4	P-2	-

Reference pages : QC12-SVER/L-CHP, SVER/L, SVER/L-CHP:

Shank, accessory → **G095**, **G096**, Standard cutting condition → **G112**

INSERTS

VGP08/10 (For grooving / sharp edge)



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

★ : First choice

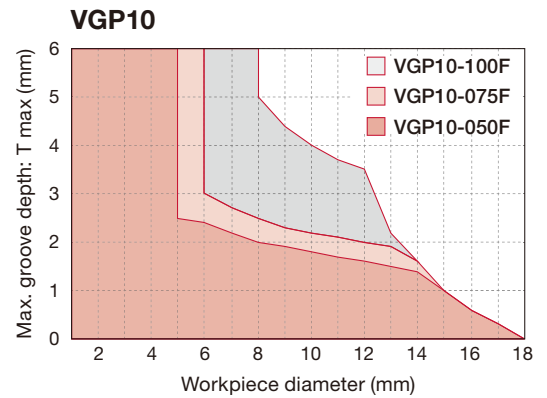
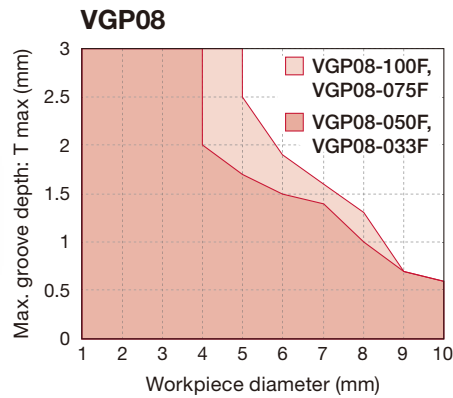
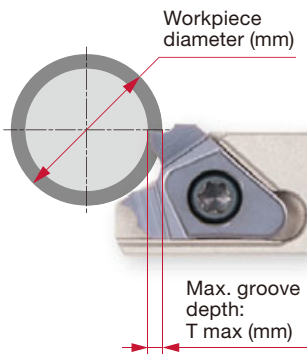
Designation	CW±0.025	RE	Coated					CDX*	CUTDIA	S
			SH725							
VGP08-033F-000	0.33	0	●					2	4	2.2
VGP08-050F-000	0.5	0	●					2	4	2.2
VGP08-075F-000	0.75	0	●					2.5	5	2.2
VGP08-100F-000	1	0	●					2.5	5	2.2
VGP10-050F-000	0.5	0	●					2.5	5	3.15
VGP10-050F-005	0.5	0.05	●					2.5	5	3.15
VGP10-075F-000	0.75	0	●					3	6	3.15
VGP10-075F-005	0.75	0.05	●					3	6	3.15
VGP10-100F-000	1	0	●					4	8	3.15
VGP10-100F-005	1	0.05	●					4	8	3.15

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

● : Line up

Note: Max grooving depths vs workpiece diameters

To avoid tool interference with the workpiece, max grooving depths (T max) for the insert used may be smaller than the CDX values listed above depending on the workpiece diameter.

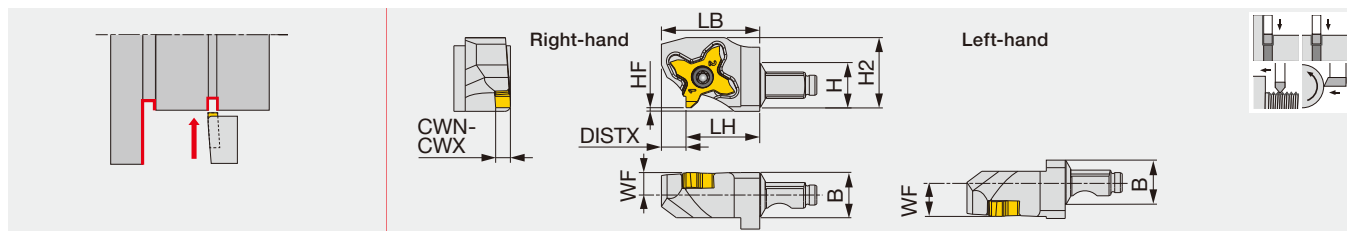


STANDARD CUTTING CONDITIONS

Grooving

ISO	Workpiece materials	Grade	Cutting speed V _c (m/min)	Feed f (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 150	0.005 - 0.1
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 150	0.005 - 0.1
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 150	0.005 - 0.1
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 100	0.005 - 0.1
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.005 - 0.1
	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.005 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.005 - 0.1
	Superalloys Inconel718, etc.	SH725	30 - 80	0.005 - 0.1





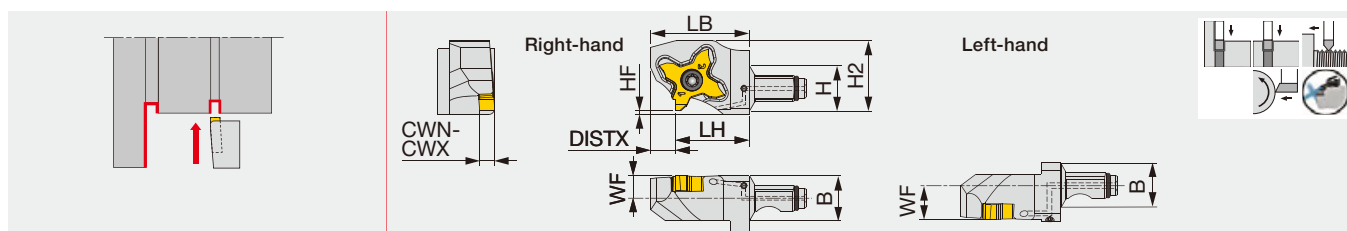
Designation	CWN	CWX	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	0.33	3.18	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)

The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

QC12-STCR/L-Y-CHP

Y-axis turning modular head for external grooving and threading, with high pressure coolant capability



Designation	CWN	CWX	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	0.33	3.18	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N·m)

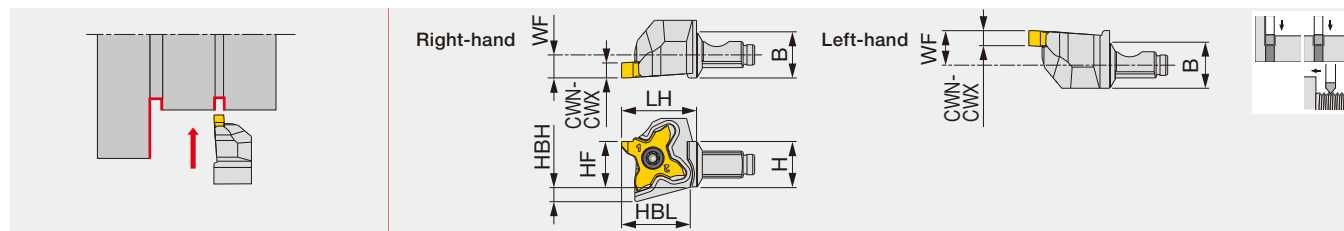
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

Through-coolant head

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y, QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18-Y, QC12-STCL18	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-Y-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-Y-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

Modular head for external grooving and threading



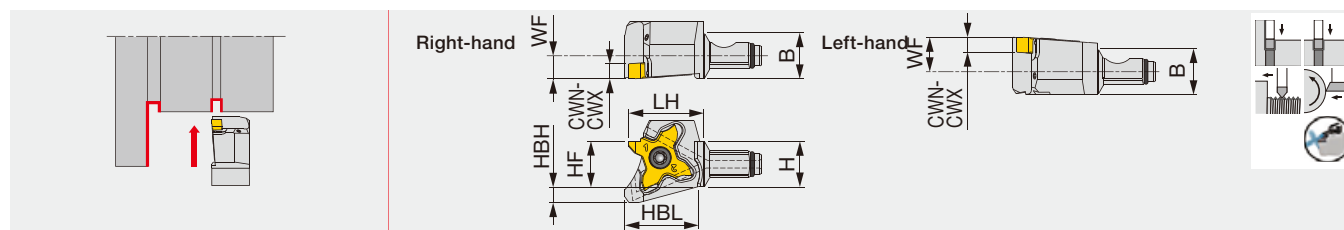
Designation	CWN	CWX	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18	0.33	3.18	12	12	19.5	12	3.9	17.9	6	TC*18R...	1.2
QC12-STCL18	0.33	3.18	12	12	21	12	3.9	18.3	9	TC*18L...	1.2

Torque*: Recommended clamping torque (N-m)

The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

QC12-STCR/L-CHP

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



Designation	CWN	CWX	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR/L18-CHP	0.33	3.18	12	12	21	12	4.2	19.3	9	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N-m)

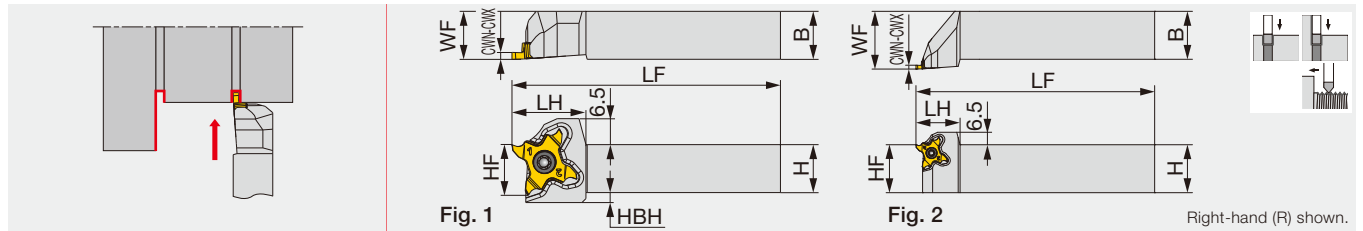
The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

STCR/L-18

External grooving and threading toolholder



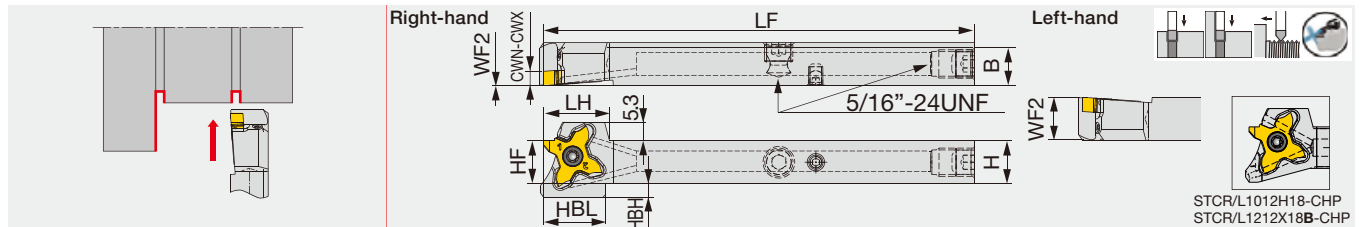
Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2

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

STCR/L-H/X18-CHP

Direct connection

External grooving and threading toolholder, with high pressure coolant capability



Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.33	3.18	10	12	100	17.1	17.1	10	0/12	4	TC**18	1.2
STCR/L1212X18B-CHP	0.33	3.18	12	12	120	18.5	17.5	12	0/12	4	TC**18	1.2
STCR/L1616X18-CHP	0.33	3.18	16	16	120	18.5	-	16	0/16	0	TC**18	1.2

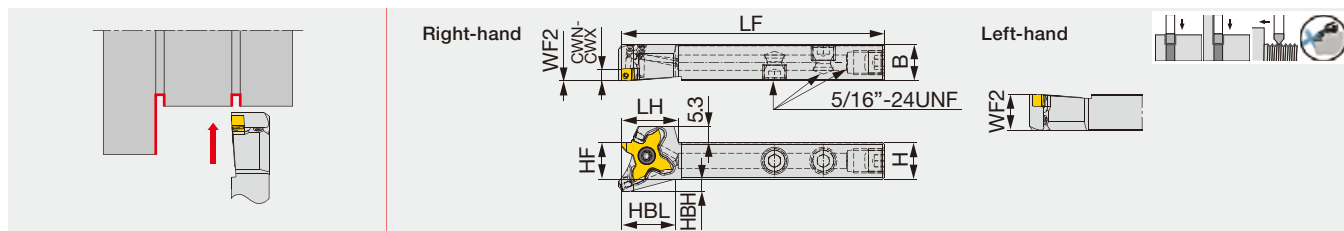
The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).
 *Torque: Recommended torque (N·m) for clamping

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCR**18	CSTC-4L100DL	T-1008/5	-	-	-	-
STCL**18	CSTC-4L100DR	T-1008/5	-	-	-	-
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Threading pitch range: 0.8 ~ 3.0 mm

External grooving and threading toolholder, with high pressure coolant capability

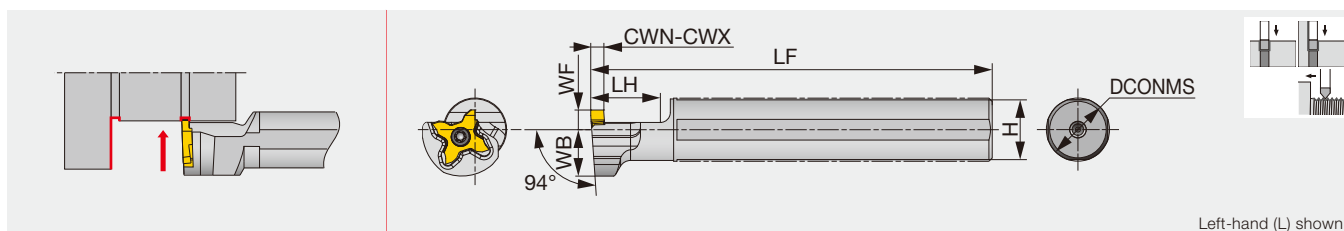


Designation	CWN	CWX	H	B	LF	LH	HBL	HF	WF2 ⁽¹⁾	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.33	3.18	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

The right hand insert (TC*18R**) is used for the right hand toolholders (STCR**), and the left hand insert (TC*18L**) is used for the left hand toolholders (STCL**).
 (1) "0/12" for the WF dimension indicates WF = 0 for the right handed tool, WF = 12 for the left handed tool.
 *Torque: Recommended torque (N-m) for clamping

JS-STCL18

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



Designation	CWN	CWX	DCONMS	LF	LH	H	WB	WF	Insert	Torque*
JS14H-STCL18	0.33	3.18	14	100	20	13	14	6	TC*18R...	1.2
JS159F-STCL18	0.33	3.18	15.875	85	20	15	14	6	TC*18R...	1.2
JS16F-STCL18	0.33	3.18	16	85	20	15	14	6	TC*18R...	1.2
JS19G-STCL18	0.33	3.18	19.05	90	20	18	14	6	TC*18R...	1.2
JS19X-STCL18	0.33	3.18	19.05	120	20	18	14	6	TC*18R...	1.2
JS20G-STCL18	0.33	3.18	20	90	20	19	14	6	TC*18R...	1.2
JS20X-STCL18	0.33	3.18	20	120	20	19	14	6	TC*18R...	1.2
JS22X-STCL18	0.33	3.18	22	120	20	21	12.25	10	TC*18R...	1.2
JS25H-STCL18	0.33	3.18	25	100	20	24	12.25	10	TC*18R...	1.2
JS254X-STCL18	0.33	3.18	25.4	120	20	24	12.25	10	TC*18R...	1.2

The left hand toolholder (STCL...) is used with the right hand inserts (TC*18R...)

*Torque: Recommended clamping torque: N-m

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench
STCL**F18B-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4
STCR**F18B-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
JS...STCL18	CSTC-4L100DL	T-1008/5	-	-

Threading pitch range: 0.8 - 3.0 mm

Selection guide for TetraMini-Cut inserts

Groove width CW (mm)	Corner rad. RE (mm)	TCL18R/L (G118 page)	TCS18R/L (G118 page -)	TCG18R/L (G120 page -)	TCP18R/L (G122 page)	TCP18R/L-F (G123 page)
		AH7025	AH7025	AH7025	AH725	SH725
0.33	0.05				●	●
0.43	0.05				●	●
0.50	0.05				●	●
0.75	0.05				●	●
0.95	0.05				●	●
1.00	0.05					●
	0.1		●	●	●	●
	0.5			●		
1.20	0.05					●
	0.1		●	●	●	●
1.25	0.05					●
	0.1		●	●	●	●
	0.2		●	●		
1.30	0.2		●	●		
1.40	0.1		●	●	●	●
	0.2		●	●		
1.45	0.05					●
	0.1		●	●	●	●
	0.2			●		
1.50	0.05					●
	0.1	●	●	●	●	●
	0.2	●	●	●		
1.58	0.79			●		
1.60	0.2		●	●		
1.70	0.2		●	●		
1.75	0.05					●
	0.1		●	●	●	●
	0.2	●	●	●		
1.85	0.2		●	●		
1.95	0.2		●	●		
2.00	0.05					●
	0.1	●	●	●	●	●
	0.2	●	●	●		
	1.0			●		
2.25	0.2		●	●		
2.30	0.2		●	●		
2.39	1.2			●		
2.50	0.1		●	●	●	●
	0.2		●	●		
	0.3	●	●	●		
2.65	0.3		●	●		
2.80	0.3		●	●		
3.00	0.1	●	●	●	●	●
	0.2	●	●	●		
	0.3	●	●	●		
	1.5			●		
3.18	1.59			●		

● : Line up

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Milling

Endmill

Drilling tool

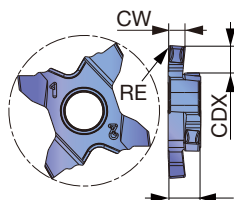
System

Tooling

User's Guide

Index

TCL18R/L (3D chipbreaker, honed edge)

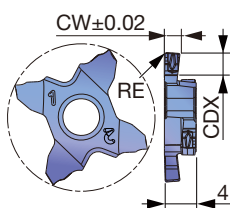


P	Steel	★			
M	Stainless	★			
K	Cast iron	★			
N	Non-ferrous				
S	Superalloys	★			
H	Hard materials				

Designation	HAND	CW±0.02	RE	Coated						CDX	
				AH7025							
TCL18R150-010	R	1.5	0.1	●							3.5
TCL18L150-010	L	1.5	0.1	●							3.5
TCL18R150-020	R	1.5	0.2	●							3.5
TCL18L150-020	L	1.5	0.2	●							3.5
TCL18R175-020	R	1.75	0.2	●							3.5
TCL18L175-020	L	1.75	0.2	●							3.5
TCL18R200-010	R	2	0.1	●							3.5
TCL18L200-010	L	2	0.1	●							3.5
TCL18R200-020	R	2	0.2	●							3.5
TCL18L200-020	L	2	0.2	●							3.5
TCL18R250-030	R	2.5	0.3	●							3.5
TCL18L250-030	L	2.5	0.3	●							3.5
TCL18R300-010	R	3	0.1	●							3.5
TCL18L300-010	L	3	0.1	●							3.5
TCL18R300-020	R	3	0.2	●							3.5
TCL18L300-020	L	3	0.2	●							3.5
TCL18R300-030	R	3	0.3	●							3.5
TCL18L300-030	L	3	0.3	●							3.5

● : Line up

TCS18R (honed edge) (3D chipbreaker, honed edge)



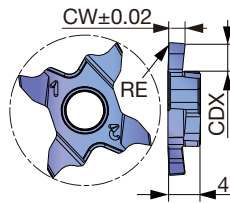
P	Steel	★			
M	Stainless	★			
K	Cast iron	★			
N	Non-ferrous				
S	Superalloys	★			
H	Hard materials				

Designation	HAND	CW±0.02	RE	Coated								CDX
				AH7025								
TCS18R100-010	R	1	0.1	●								2
TCS18L100-010	L	1	0.1	●								2
TCS18R120-010	R	1.2	0.1	●								2
TCS18L120-010	L	1.2	0.1	●								2
TCS18R125-010	R	1.25	0.1	●								2
TCS18L125-010	L	1.25	0.1	●								2

● : Line up

INSERT

TCG18R/L (honed edge)



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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated AH7025											CDX
TCG18R100-010	R	1	0.1	●											2
TCG18L100-010	L	1	0.1	●											2
TCG18R120-010	R	1.2	0.1	●											2
TCG18L120-010	L	1.2	0.1	●											2
TCG18R125-010	R	1.25	0.1	●											2
TCG18L125-010	L	1.25	0.1	●											2
TCG18R125-020	R	1.25	0.2	●											2
TCG18L125-020	L	1.25	0.2	●											2
TCG18R130-020	R	1.3	0.2	●											2
TCG18L130-020	L	1.3	0.2	●											2
TCG18R140-010	R	1.4	0.1	●											3.5
TCG18L140-010	L	1.4	0.1	●											3.5
TCG18R140-020	R	1.4	0.2	●											3.5
TCG18L140-020	L	1.4	0.2	●											3.5
TCG18R145-010	R	1.45	0.1	●											3.5
TCG18L145-010	L	1.45	0.1	●											3.5
TCG18R145-020	R	1.45	0.2	●											3.5
TCG18L145-020	L	1.45	0.2	●											3.5
TCG18R150-010	R	1.5	0.1	●											3.5
TCG18L150-010	L	1.5	0.1	●											3.5
TCG18R150-020	R	1.5	0.2	●											3.5
TCG18L150-020	L	1.5	0.2	●											3.5
TCG18R160-020	R	1.6	0.2	●											3.5
TCG18L160-020	L	1.6	0.2	●											3.5
TCG18R170-020	R	1.7	0.2	●											3.5
TCG18L170-020	L	1.7	0.2	●											3.5
TCG18R175-010	R	1.75	0.1	●											3.5
TCG18L175-010	L	1.75	0.1	●											3.5
TCG18R175-020	R	1.75	0.2	●											3.5
TCG18L175-020	L	1.75	0.2	●											3.5
TCG18R185-020	R	1.85	0.2	●											3.5
TCG18L185-020	L	1.85	0.2	●											3.5
TCG18R195-020	R	1.95	0.2	●											3.5
TCG18L195-020	L	1.95	0.2	●											3.5
TCG18R200-010	R	2	0.1	●											3.5
TCG18L200-010	L	2	0.1	●											3.5
TCG18R200-020	R	2	0.2	●											3.5
TCG18L200-020	L	2	0.2	●											3.5
TCG18R225-020	R	2.25	0.2	●											3.5
TCG18L225-020	L	2.25	0.2	●											3.5
TCG18R230-020	R	2.3	0.2	●											3.5
TCG18L230-020	L	2.3	0.2	●											3.5
TCG18R250-010	R	2.5	0.1	●											3.5
TCG18L250-010	L	2.5	0.1	●											3.5

Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

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

★ : First choice
☆ : Second choice

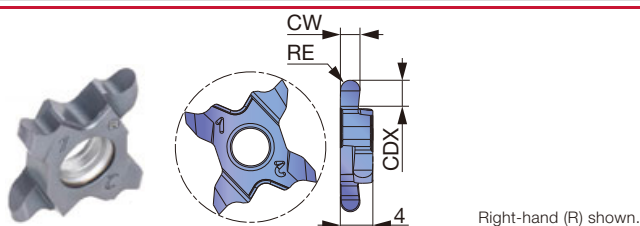
Designation	HAND	CW±0.02	RE	Coated						CDX
				AH7025						
TCG18R250-020	R	2.5	0.2	●						3.5
TCG18L250-020	L	2.5	0.2	●						3.5
TCG18R250-030	R	2.5	0.3	●						3.5
TCG18L250-030	L	2.5	0.3	●						3.5
TCG18R265-030	R	2.65	0.3	●						3.5
TCG18L265-030	L	2.65	0.3	●						3.5
TCG18R280-030	R	2.8	0.3	●						3.5
TCG18L280-030	L	2.8	0.3	●						3.5
TCG18R300-010	R	3	0.1	●						3.5
TCG18L300-010	L	3	0.1	●						3.5
TCG18R300-020	R	3	0.2	●						3.5
TCG18L300-020	L	3	0.2	●						3.5
TCG18R300-030	R	3	0.3	●						3.5
TCG18L300-030	L	3	0.3	●						3.5

Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

TCG18R/L (Full R, honed edge)



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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated						CDX
				AH7025						
TCG18R100-050	R	1	0.5	●						2
TCG18L100-050	L	1	0.5	●						2
TCG18R158-079	R	1.58	0.79	●						3.5
TCG18L158-079	L	1.58	0.79	●						3.5
TCG18R200-100	R	2	1	●						3.5
TCG18L200-100	L	2	1	●						3.5
TCG18R239-120	R	2.39	1.2	●						3.5
TCG18L239-120	L	2.39	1.2	●						3.5
TCG18R300-150	R	3	1.5	●						3.5
TCG18L300-150	L	3	1.5	●						3.5
TCG18R318-159	R	3.18	1.59	●						3.5
TCG18L318-159	L	3.18	1.59	●						3.5

Please see page G125 for precautions of processing.

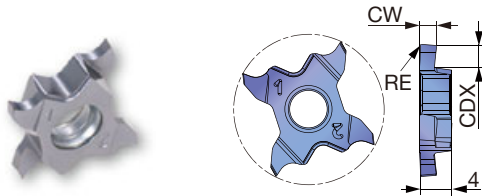
5 pieces per package

● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

INSERT

TCP18R/L (lightly honed edge)



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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated		CDX
				AH725		
TCP18R033-005	R	0.33	0.05	●		0.8
TCP18L033-005	L	0.33	0.05	●		0.8
TCP18R043-005	R	0.43	0.05	●		1.2
TCP18L043-005	L	0.43	0.05	●		1.2
TCP18R050-005	R	0.50	0.05	●		1.2
TCP18L050-005	L	0.50	0.05	●		1.2
TCP18R075-005	R	0.75	0.05	●		2
TCP18L075-005	L	0.75	0.05	●		2
TCP18R095-005	R	0.95	0.05	●		2
TCP18L095-005	L	0.95	0.05	●		2
TCP18R100-010	R	1	0.1	●		2
TCP18L100-010	L	1	0.1	●		2
TCP18R120-010	R	1.2	0.1	●		2
TCP18L120-010	L	1.2	0.1	●		2
TCP18R125-010	R	1.25	0.1	●		2
TCP18L125-010	L	1.25	0.1	●		2
TCP18R140-010-35	R	1.4	0.1	●		3.5
TCP18L140-010-35	L	1.4	0.1	●		3.5
TCP18R145-010	R	1.45	0.1	●		2
TCP18L145-010	L	1.45	0.1	●		2
TCP18R145-010-35	R	1.45	0.1	●		3.5
TCP18L145-010-35	L	1.45	0.1	●		3.5
TCP18R150-010	R	1.5	0.1	●		2
TCP18L150-010	L	1.5	0.1	●		2
TCP18R150-010-35	R	1.5	0.1	●		3.5
TCP18L150-010-35	L	1.5	0.1	●		3.5
TCP18R175-010	R	1.75	0.1	●		2
TCP18L175-010	L	1.75	0.1	●		2
TCP18R175-010-35	R	1.75	0.1	●		3.5
TCP18L175-010-35	L	1.75	0.1	●		3.5
TCP18R200-010	R	2	0.1	●		2.5
TCP18L200-010	L	2	0.1	●		2.5
TCP18R200-010-35	R	2	0.1	●		3.5
TCP18L200-010-35	L	2	0.1	●		3.5
TCP18R250-010	R	2.5	0.1	●		2.5
TCP18L250-010	L	2.5	0.1	●		2.5
TCP18R250-010-35	R	2.5	0.1	●		3.5
TCP18L250-010-35	L	2.5	0.1	●		3.5
TCP18R300-010	R	3	0.1	●		2.5
TCP18L300-010	L	3	0.1	●		2.5
TCP18R300-010-35	R	3	0.1	●		3.5
TCP18L300-010-35	L	3	0.1	●		3.5

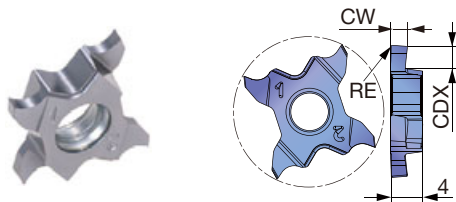
Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

TCP18R/L-F (sharp edge)



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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated		CDX
				SH725		
TCP18R033F-005	R	0.33	0.05	●		0.8
TCP18L033F-005	L	0.33	0.05	●		0.8
TCP18R043F-005	R	0.43	0.05	●		1.2
TCP18L043F-005	L	0.43	0.05	●		1.2
TCP18R050F-005	R	0.5	0.05	●		1.2
TCP18L050F-005	L	0.5	0.05	●		1.2
TCP18R075F-005	R	0.75	0.05	●		2
TCP18L075F-005	L	0.75	0.05	●		2
TCP18R095F-005	R	0.95	0.05	●		2
TCP18L095F-005	L	0.95	0.05	●		2
TCP18R100F-005	R	1	0.05	●		2
TCP18R100F-010	R	1	0.1	●		2
TCP18L100F-010	L	1	0.1	●		2
TCP18R120F-005	R	1.2	0.05	●		2
TCP18R120F-010	R	1.2	0.1	●		2
TCP18L120F-010	L	1.2	0.1	●		2
TCP18R125F-005	R	1.25	0.05	●		2
TCP18R125F-010	R	1.25	0.1	●		2
TCP18L125F-010	L	1.25	0.1	●		2
TCP18R140F-010-35	R	1.4	0.1	●		3.5
TCP18R145F-005-35	R	1.45	0.05	●		3.5
TCP18R145F-010	R	1.45	0.1	●		2
TCP18L145F-010	L	1.45	0.1	●		2
TCP18R145F-010-35	R	1.45	0.1	●		3.5
TCP18L145F-010-35	L	1.45	0.1	●		3.5
TCP18R150F-005-35	R	1.5	0.05	●		3.5
TCP18R150F-010	R	1.5	0.1	●		2
TCP18L150F-010	L	1.5	0.1	●		2
TCP18R150F-010-35	R	1.5	0.1	●		3.5
TCP18L150F-010-35	L	1.5	0.1	●		3.5
TCP18R175F-005-35	R	1.75	0.05	●		3.5
TCP18R175F-010	R	1.75	0.1	●		2
TCP18L175F-010	L	1.75	0.1	●		2
TCP18R175F-010-35	R	1.75	0.1	●		3.5
TCP18L175F-010-35	L	1.75	0.1	●		3.5
TCP18R200F-005-35	R	2	0.05	●		3.5
TCP18R200F-010	R	2	0.1	●		2.5
TCP18L200F-010	L	2	0.1	●		2.5
TCP18R200F-010-35	R	2	0.1	●		3.5
TCP18L200F-010-35	L	2	0.1	●		3.5
TCP18R250F-010	R	2.5	0.1	●		2.5
TCP18L250F-010	L	2.5	0.1	●		2.5
TCP18R250F-010-35	R	2.5	0.1	●		3.5
TCP18L250F-010-35	L	2.5	0.1	●		3.5
TCP18R300F-010	R	3	0.1	●		2.5
TCP18L300F-010	L	3	0.1	●		2.5
TCP18R300F-010-35	R	3	0.1	●		3.5
TCP18L300F-010-35	L	3	0.1	●		3.5

Please see page G125 for precautions of processing.

5 pieces per package

● : Line up

Reference pages : Toolholders → G113 - G116, Standard cutting conditions → G124

STANDARD CUTTING CONDITIONS

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

ISO	Workpiece materials	Grades	Cutting speed Vc (m/min)	Feed: f (mm/rev)	
				TCG	TCS
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	AH7025	80 - 180	0.03 - 0.12	0.03 - 0.15
	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	AH7025	80 - 180	0.03 - 0.12	0.03 - 0.15
	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.03 - 0.15
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.03 - 0.15
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	AH7025	50 - 180	0.03 - 0.12	0.03 - 0.15
	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	AH7025	50 - 180	0.03 - 0.12	0.03 - 0.15
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	0.03 - 0.15
	Superalloys Inconel718, etc.	AH7025	20 - 60	0.03 - 0.12	0.03 - 0.15



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

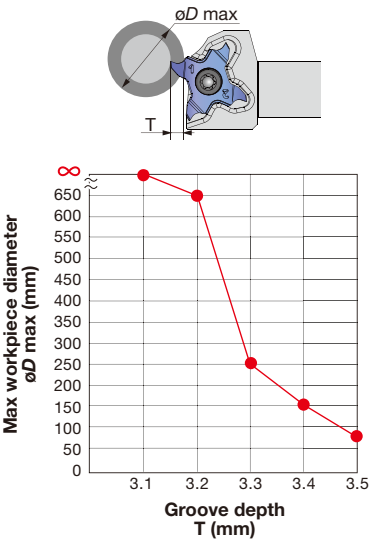
ISO	Workpiece materials	Grades	Cutting speed Vc (m/min)	Feed: f (mm/rev)	
				TCL18	TCG18
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.14
	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.14
	Prehardened steel NAK80, PX5, etc.	AH7025	80 - 180	0.03 - 0.12	0.04 - 0.14
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH7025	50 - 120	0.03 - 0.12	0.04 - 0.14
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.14
	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	AH7025	50 - 180	0.03 - 0.12	0.04 - 0.14
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	0.04 - 0.14
	Superalloys Inconel718, etc.	AH7025	20 - 60	0.03 - 0.12	0.04 - 0.14



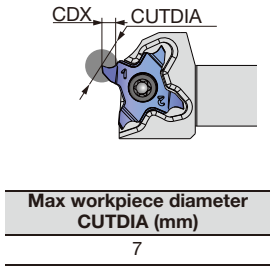
TCP18R/L (lightly honed edge) / TCP18R/L-F (sharp edge)

ISO	Workpiece materials	Priority	Grades	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	First choice	SH725	50 - 120	0.03 - 0.1
		Toughness	AH725	50 - 120	0.03 - 0.1
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	First choice	AH725	50 - 180	0.03 - 0.1
		Sharpness	SH725	50 - 180	0.03 - 0.1
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 80	0.03 - 0.1
		Toughness	AH725	30 - 80	0.03 - 0.1
	Superalloys Inconel718, etc.	First choice	SH725	20 - 60	0.03 - 0.1
		Toughness	AH725	20 - 60	0.03 - 0.1

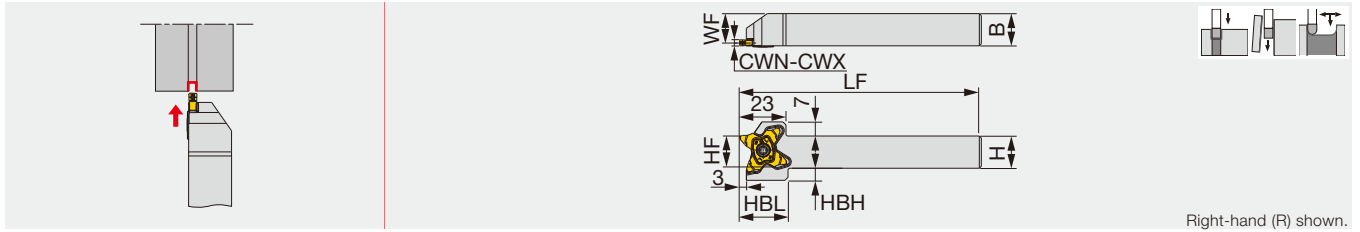
PRECAUTIONS OF PROCESSING



*Groove depth and max workpiece diameter (øDmax)
Maximum workpiece diameter is limited relative to depth of cut in order to avoid collision between insert and workpiece.



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



Right-hand (R) shown.

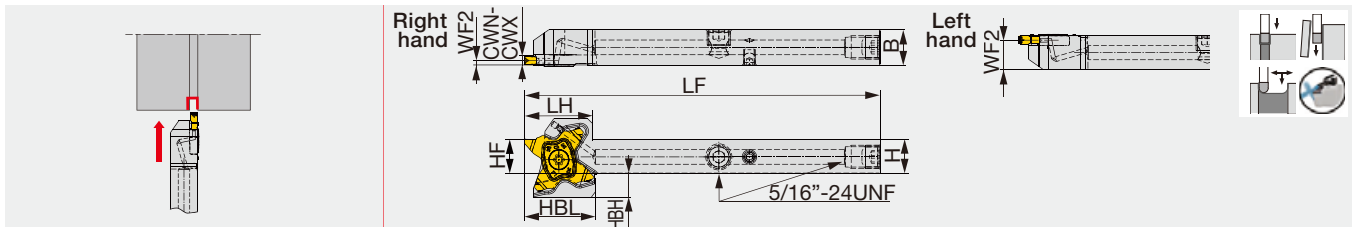
Designation	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
STCR/L1010-27	0.5	3.18	10	10	120	10	8.5	9.5	24	TC*27...	2.5
STCR/L1212-27	0.5	3.18	12	12	120	12	10.5	8	24	TC*27...	2.5
STCR/L1616-27	0.5	3.18	16	16	120	16	14.5	6	24	TC*27...	2.5
STCR/L2020-27	0.5	3.18	20	20	120	20	18.5	2	24	TC*27...	2.5

Torque*: Recommended clamping torque (N-m)

STCR/L1212-27-CHP

Direct connection

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



Designation	CWN	CWX	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	HBL	Insert	Torque*
STCR/L1212-27-CHP	0.5	3.18	12	12	120	23	12	1.5/10.5	8	24	TC*27...	2.5

(1) The above WF value is valid when an insert width of CW=3 is mounted.

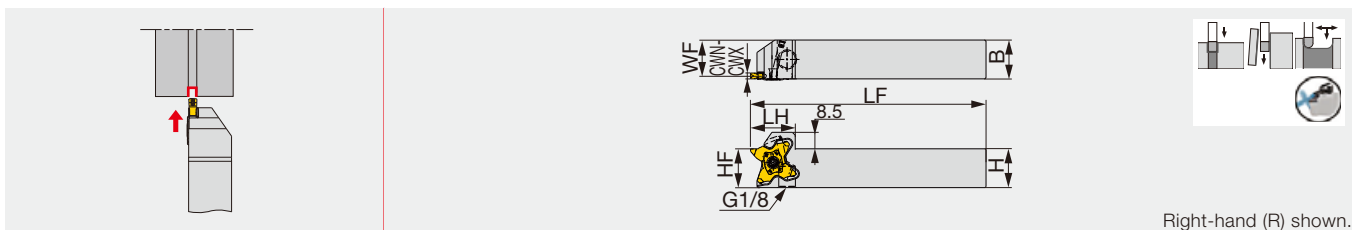
*Torque: Recommended torque (N-m) for clamping

Make sure to avoid tool interferences when used on Swiss machines

STCR/L2020-27-CHP

Tube connection

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



Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque*
STCR/L2020-27-CHP	0.5	3.18	20	20	120	23	20	18.5	TC*27...	2.5

Torque*: Recommended clamping torque (N-m)

SPARE PARTS

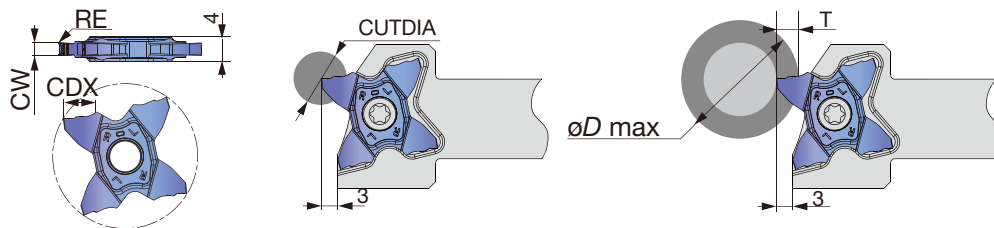
Designation	Screw	Wrench
STCR****-27, STCR...-27-CHP	SR16-212-01397L	T-2010/5
STCL****-27, STCL...-27-CHP	SR16-212-01397	T-2010/5

Reference pages : STCR/L-27, STCR/L1212-27-CHP, STCR/L2020-27-CHP:

Inserts → **G125 - G131**, Standard cutting conditions → **G131**

INSERT - FOR GROOVING AND PARTING OFF

TCL27



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

★ : First choice

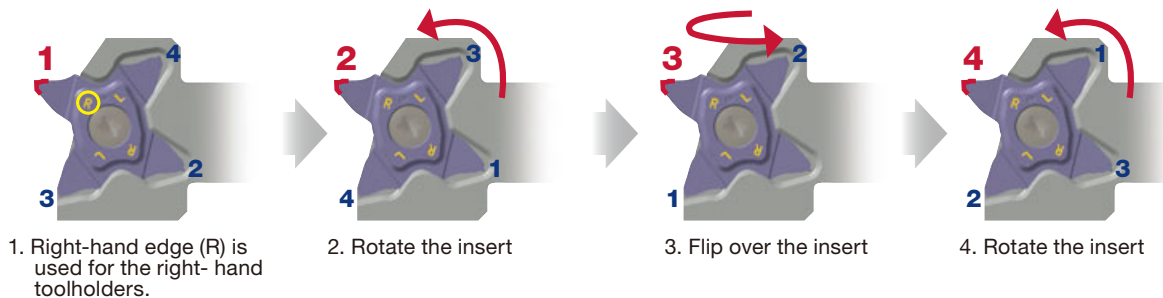
☆ : Second choice

Designation	CW±0.02	RE	Coated AH725	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
						T ≤ 3	T ≤ 3.5	T ≤ 4	T ≤ 4.5	T ≤ 5	T ≤ 5.5	T ≤ 5.7	T ≤ 6	T ≤ 6.2	T ≤ 6.4
TCL27-150-015	1.5	0.15	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCL27-200-020	2	0.2	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCL27-250-020	2.5	0.2	●	6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCL27-300-020	3	0.2	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55

5 pieces per package

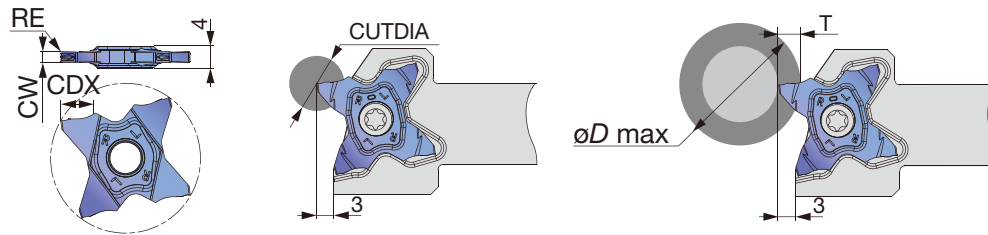
● : Line up

HOW TO INDEX INSERTS



INSERT - FOR GROOVING AND PARTING OFF

TCS27



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

★ : First choice
☆ : Second choice

Designation	CW±0.02	RE	Coated		CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)												
			AH725				T≤1	T≤2	T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4	
TCS27-050-000	0.5	0	●		1	2	∞	-	-	-	-	-	-	-	-	-	-	-	
TCS27-050-004	0.5	0.04	●		2.5	5	∞	∞	-	-	-	-	-	-	-	-	-	-	
TCS27-075-010	0.75	0.1	●		2.5	5	∞	∞	-	-	-	-	-	-	-	-	-	-	
TCS27-080-000	0.8	0	●		1.6	3.2	∞	-	-	-	-	-	-	-	-	-	-	-	
TCS27-100-006	1	0.06	●		3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-	
TCS27-100-010	1	0.1	●		3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-	
TCS27-104-000	1.04	0	●		2	4	∞	∞	-	-	-	-	-	-	-	-	-	-	
TCS27-120-000	1.2	0	●		2	4	∞	∞	-	-	-	-	-	-	-	-	-	-	
TCS27-125-010	1.25	0.1	●		3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-	
TCS27-125-020	1.25	0.2	●		3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-	
TCS27-140-000	1.4	0	●		2	4	∞	∞	-	-	-	-	-	-	-	-	-	-	
TCS27-147-000	1.47	0	●		2.5	5	∞	∞	-	-	-	-	-	-	-	-	-	-	
TCS27-150-010	1.5	0.1	●		5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-	
TCS27-150-020	1.5	0.2	●		5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-	
TCS27-157-015	1.57	0.15	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-170-010	1.7	0.1	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-175-010	1.75	0.1	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-175-020	1.75	0.2	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-178-018	1.78	0.18	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-185-020	1.85	0.2	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-196-015	1.96	0.15	●		3	6	∞	∞	∞	-	-	-	-	-	-	-	-	-	
TCS27-200-010	2	0.1	●		6.4	12.8	∞	∞	∞	600	280	180	130	105	85	60	50	30	
TCS27-200-020	2	0.2	●		6.4	12.8	∞	∞	∞	600	280	180	130	105	85	60	50	30	
TCS27-222-015	2.22	0.15	●		3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-	
TCS27-230-020	2.3	0.2	●		3.5	7	∞	∞	∞	600	-	-	-	-	-	-	-	-	
TCS27-239-015	2.39	0.15	●		5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-	
TCS27-247-020	2.47	0.2	●		5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-	
TCS27-250-010	2.5	0.1	●		5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-	
TCS27-250-030	2.5	0.3	●		5.7	11.4	∞	∞	∞	600	280	180	130	50	35	-	-	-	
TCS27-270-010	2.7	0.1	●		6.2	12.4	∞	∞	∞	600	280	180	135	105	95	85	78	-	
TCS27-287-020	2.87	0.2	●		6.2	12.4	∞	∞	∞	600	280	180	135	105	95	85	78	-	
TCS27-300-000	3	0	●		6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55	
TCS27-300-020	3	0.2	●		6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55	
TCS27-300-030	3	0.3	●		6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55	
TCS27-300-040	3	0.4	●		6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	55	
TCS27-315-015	3.15	0.15	●		6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	68	
TCS27-318-020	3.18	0.2	●		6.4	12.8	∞	∞	∞	600	280	180	135	105	95	85	78	68	

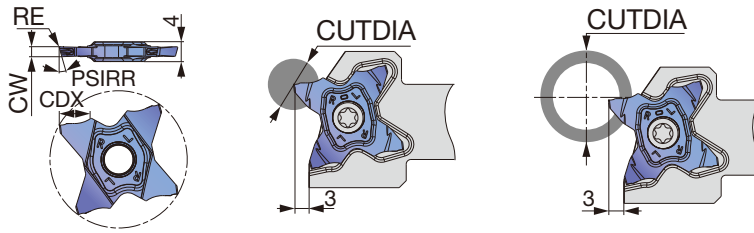
5 pieces per package

● : Line up

Reference pages : Toolholders → **G126**, Standard cutting conditions → **G131**

INSERT- FOR PARTING OFF

TCS27-R/L



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

★ : First choice
☆ : Second choice

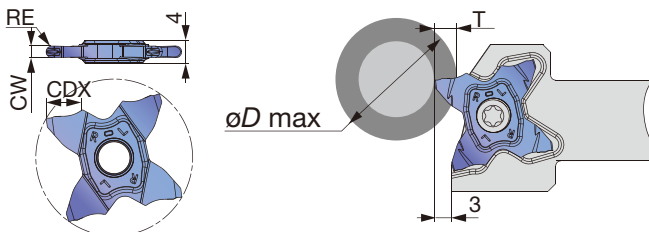
Designation	HAND	CW±0.02	RE	Coated		CDX	PSIRL	PSIRR	Max. parting off dia. CUTDIA	
				AH725					Solid bar	Tube
TCS27-100-15R	R	1	0.06	●		3.5	0°	15°	7	600
TCS27-100-15L	L	1	0.06	●		3.5	15°	0°	7	600
TCS27-150-6R	R	1.5	0.06	●		5.7	0°	6°	11.4	35
TCS27-150-6L	L	1.5	0.06	●		5.7	6°	0°	11.4	35
TCS27-150-15R	R	1.5	0.06	●		5.7	0°	15°	11.4	35
TCS27-150-15L	L	1.5	0.06	●		5.7	15°	0°	11.4	35
TCS27-200-6R	R	2	0.1	●		6.4	0°	6°	12.8	30
TCS27-200-6L	L	2	0.1	●		6.4	6°	0°	12.8	30
TCS27-200-15R	R	2	0.1	●		6.4	0°	15°	12.8	30
TCS27-200-15L	L	2	0.1	●		6.4	15°	0°	12.8	30

5 pieces per package

● : Line up

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

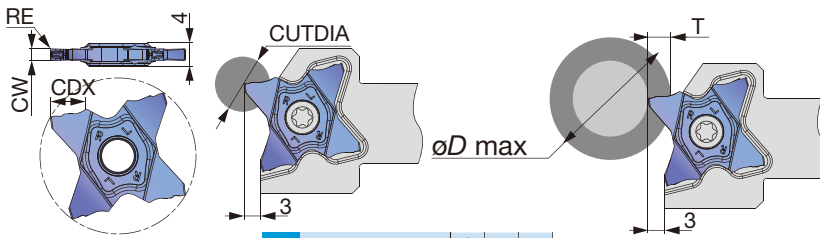
Designation	CW±0.02	RE	Coated		CDX	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725			T ≤ 3	T ≤ 3.5	T ≤ 4	T ≤ 4.5	T ≤ 5	T ≤ 5.5	T ≤ 5.7	T ≤ 6	T ≤ 6.2	T ≤ 6.4
TCS27-157-079	1.57	0.79	●		3	∞	-	-	-	-	-	-	-	-	-
TCS27-200-100	2	1	●		3	∞	-	-	-	-	-	-	-	-	-
TCS27-239-120	2.39	1.2	●		5.7	∞	600	280	180	130	50	35	-	-	-
TCS27-300-150	3	1.5	●		6.4	∞	600	280	180	135	105	95	85	78	55

5 pieces per package

● : Line up

INSERT- FOR GROOVING AND PARTING OFF

TCM27



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

★ : First choice
☆ : Second choice

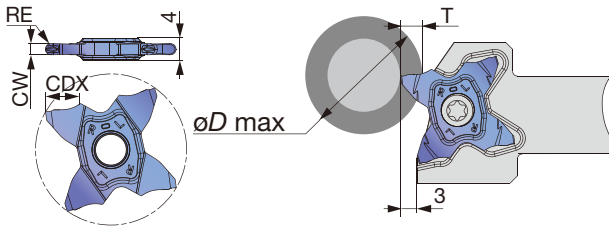
Designation	CW±0.02	RE	Coated		CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725				T ≤ 3	T ≤ 3.5	T ≤ 4	T ≤ 4.5	T ≤ 5	T ≤ 5.5	T ≤ 5.7	T ≤ 6	T ≤ 6.2	T ≤ 6.4
TCM27-150-010	1.5	0.1	●		5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-150-020	1.5	0.2	●		5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-157-015	1.57	0.15	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-170-010	1.7	0.1	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-175-010	1.75	0.1	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-175-020	1.75	0.2	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-178-018	1.78	0.18	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-185-020	1.85	0.2	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-196-015	1.96	0.15	●		3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-200-010	2	0.1	●		6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCM27-200-020	2	0.2	●		6.4	12.8	∞	600	280	180	130	105	85	60	50	30
TCM27-222-015	2.22	0.15	●		3.5	7	∞	600	-	-	-	-	-	-	-	-
TCM27-230-020	2.3	0.2	●		3.5	7	∞	600	-	-	-	-	-	-	-	-
TCM27-239-015	2.39	0.15	●		5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-247-020	2.47	0.2	●		5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-010	2.5	0.1	●		5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-030	2.5	0.3	●		5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-270-010	2.7	0.1	●		6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCM27-287-020	2.87	0.2	●		6.2	12.4	∞	600	280	180	135	105	95	85	78	-
TCM27-300-000	3	0	●		6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-020	3	0.2	●		6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-030	3	0.3	●		6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-300-040	3	0.4	●		6.4	12.8	∞	600	280	180	135	105	95	85	78	55
TCM27-315-015	3.15	0.15	●		6.4	12.8	∞	600	280	180	135	105	95	85	78	68
TCM27-318-020	3.18	0.02	●		6.4	12.8	∞	600	280	180	135	105	95	85	78	68

5 pieces per package

● : Line up

INSERT - FOR GROOVING AND PROFILING

TCM27 (Full R)



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

★ : First choice
☆ : Second choice

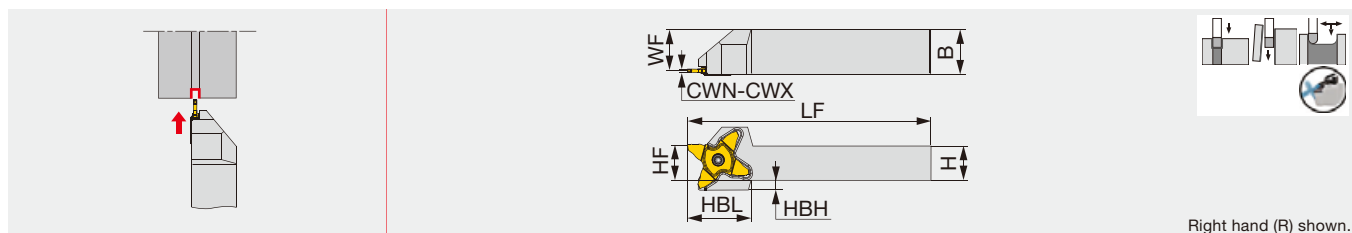
Designation	CW±0.02	RE	Coated	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)									
			AH725			T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCM27-157-079	1.57	0.79	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-200-100	2	1	●	3	6	∞	-	-	-	-	-	-	-	-	-
TCM27-239-120	2.39	1.2	●	5.7	11.4	∞	600	280	180	130	50	35	-	-	-
TCM27-300-150	3	0.02	●	6.4	12.8	∞	600	280	180	135	105	95	85	78	55

5 pieces per package

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grades	Cutting speed Vc (m/min)	Feed: f (mm/rev)						Depth of cut for profiling (with full radius insert)
				Grooving, parting-off		Parting-off (with hand)		Profiling (with full radius insert)		
				TCL27	TCS27	TCM27	TCS27	TCS27	TCM27	
P	Carbon steel S45C, etc. C45, etc.	AH725	100 - 200	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
	Alloy steel SCM435, etc. 34CrMo4, etc.	AH725	50 -180	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	AH725	100 - 150	0.03 - 0.12	0.05 - 0.15	0.05 - 0.20	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
K	Grey cast iron FC250, etc. 250, etc.	AH725	50 - 180	0.03 - 0.12	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
	Ductile cast iron FCD400, etc. 400-15, etc.	AH725	50 - 120	0.03 - 0.12	0.05 - 0.15	0.05 - 0.20	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
S	Titanium alloys Ti-6Al-4V, etc.	AH725	30 - 60	0.03 - 0.12	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.10	0.05 - 0.10	0.5
	Superalloys Inconel718, etc.	AH725	20 - 50	0.03 - 0.12	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.10	0.05 - 0.10	0.5



Right hand (R) shown.

Designation	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
STCR/L2020-38	1.5	4	20	20	120	20	18.1	5	35	TCL38...	2.5

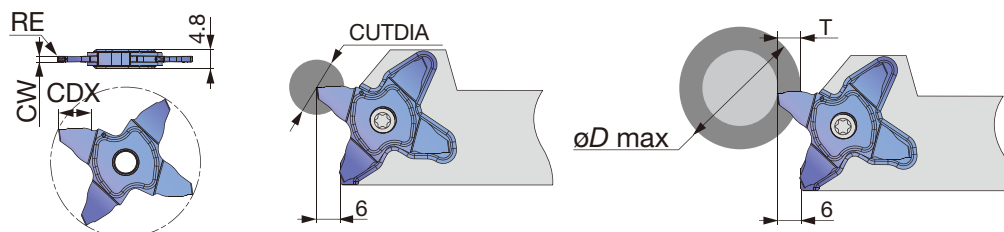
Torque*: Recommended clamping torque (N-m)

SPARE PARTS

Designation	Screw	Wrench
STCR****-38 (-CHP)	SR16-212-01397L	T-2010/5
STCL****-38 (-CHP)	SR16-212-01397	T-2010/5

INSERT - FOR GROOVING AND PARTING OFF

TCL38 (for grooving and parting off)



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

★ : First choice

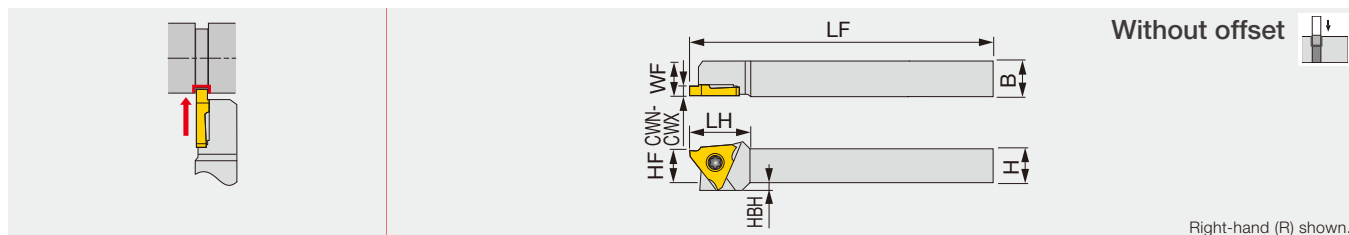
Designation	CW±0.02	RE	Coated AH7025	CDX	CUTDIA	Relation of groove depth (T) and Max. diameter (øD max)					
						T ≤ 5	T ≤ 6	T ≤ 7	T ≤ 8	T ≤ 9	T ≤ 10
TCL38-150-020	1.5	0.2	●	9	18	∞	950	315	190	45	-
TCL38-200-020	2	0.2	●	9	18	∞	950	315	190	45	-
TCL38-300-020	3	0.2	●	10	20	∞	950	315	190	130	50
TCL38-400-030	4	0.3	●	10	20	∞	950	315	190	130	50

5 pieces per package

● : Line up

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed Vc (m/min)	Feed: f (mm/rev)
				Grooving, Parting TCL38
P	Carbon steel (S45C / C45, etc.)	AH7025	80 - 180	0.03 - 0.18
	Alloy steel (SCM435 / 34CrMo4, etc.)	AH7025	50 - 180	0.03 - 0.18
M	Alloy steel (SCM435 / 34CrMo4, etc.)	AH7025	50 - 150	0.03 - 0.14
K	Grey cast iron (FC250 / 250 / GG25, etc.)	AH7025	50 - 180	0.03 - 0.14
	Ductile cast iron (FCD400 / 400-15 / GGG400, etc.)	AH7025	50 - 120	0.03 - 0.14
S	Titanium alloys (Ti-6Al-4V, etc.)	AH7025	30 - 60	0.03 - 0.14
	Superalloys (Inconel718, etc.)	AH7025	20 - 50	0.03 - 0.14

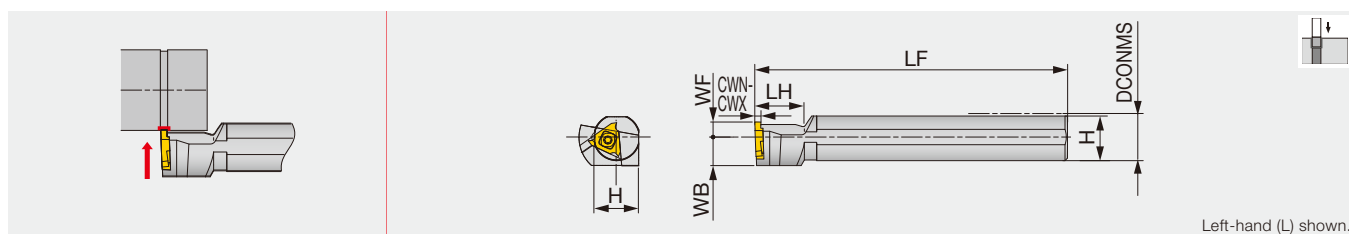


Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
JSTGR/L1010X3	0.33	3	10	10	120	18.5	10	10	2	JTGR/L3...	1.2
JSTGR/L1212F3	0.33	3	12	12	85	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1212X3	0.33	3	12	12	120	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1616X3	0.33	3	16	16	120	18.5	16	16	-	JTGR/L3...	1.2
JSTGL1616K3	0.33	3	16	16	125	18.5	16	16	-	JTGR/L3...	1.2

Torque*: Recommended clamping torque (N-m)

JS-TGL3



Left-hand (L) shown.

Designation	CWN	CWX	DCONMS	WF	LF	LH	H	WB	Insert	Torque*
JS19K-TGL3	0.33	3	19.05	6	125	20	18	11.5	JTGR3...	3.0
JS20K-TGL3	0.33	3	20	6	125	20	19	11.5	JTGR3...	3.0
JS22K-TGL3	0.33	3	22	6	125	20	21	11.5	JTGR3...	3.0
JS25K-TGL3	0.33	3	25.4	10	125	20	24	12.7	JTGR3...	3.0

Torque*: Recommended clamping torque (N-m)

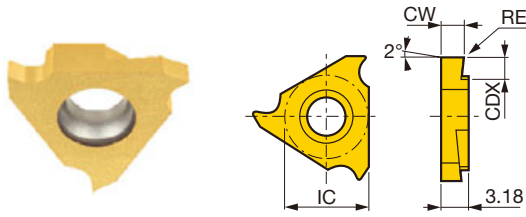
Use left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTGR/L...	CSTB-4SD	T-8F	(T-8L)
JS**-TGL3	CSTB-4S	T-15F	-

INSERT

JTG (Sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	CW ^{+0.05} ₀	RE	Coated		Cermet	Uncoated		CDX	IC	Max. groove depth
				SH725	J740	NS9530	TH10				
JTGR3033F	R	0.33	0.03	●	●		●		0.7	9.53	0.7
JTGL3033F	L	0.33	0.03		●		●		0.7	9.53	0.7
JTGR3033F-005	R	0.33	0.05	●					0.7	9.53	0.7
JTGR3043F	R	0.43	0.03		●				1.1	9.53	0.7
JTGR3050F	R	0.5	0.03	●	●	●	●		1.1	9.53	1.1
JTGL3050F	L	0.5	0.03	●	●		●		1.1	9.53	1.1
JTGR3050F-005	R	0.5	0.05	●					1.1	9.53	1.1
JTGL3050F-005	L	0.5	0.05	●					1.1	9.53	1.1
JTGR3065F	R	0.65	0.03	●	●				1.9	9.53	1.1
JTGR3065F-010	R	0.65	0.1	●					1.9	9.53	1.1
JTGR3075F	R	0.75	0.03	●	●	●	●		1.9	9.53	1.9
JTGL3075F	L	0.75	0.03	●	●	●	●		1.9	9.53	1.9
JTGR3075F-010	R	0.75	0.1	●					1.9	9.53	1.9
JTGL3075F-010	L	0.75	0.1	●					1.9	9.53	1.9
JTGR3080F	R	0.8	0.03	●	●				1.9	9.53	1.9
JTGR3080F-010	R	0.8	0.1	●					1.9	9.53	1.9
JTGR3085F	R	0.85	0.03	●	●				1.9	9.53	1.9
JTGR3095F	R	0.95	0.03	●	●	●	●		1.9	9.53	1.9
JTGL3095F	L	0.95	0.03	●	●		●		1.9	9.53	1.9
JTGR3095F-010	R	0.95	0.1	●					1.9	9.53	1.9
JTGL3095F-010	L	0.95	0.1	●					1.9	9.53	1.9
JTGR3100F	R	1	0.05	●	●	●	●		2.1	9.53	1.9
JTGL3100F	L	1	0.05	●	●		●		2.1	9.53	1.9
JTGR3100F-010	R	1	0.1	●					2.1	9.53	1.9
JTGL3100F-010	L	1	0.1	●					2.1	9.53	1.9
JTGR3110F	R	1.1	0.05	●	●				2.1	9.53	1.9
JTGR3120F	R	1.2	0.05	●	●				2.1	9.53	1.9
JTGR3120F-010	R	1.2	0.1	●					2.1	9.53	1.9
JTGR3125F	R	1.25	0.05	●	●	●	●		2.1	9.53	2.1
JTGL3125F	L	1.25	0.05	●	●		●		2.1	9.53	2.1
JTGR3125F-010	R	1.25	0.1	●					2.1	9.53	2.1
JTGL3125F-010	L	1.25	0.1	●					2.1	9.53	2.1
JTGR3130F	R	1.3	0.05	●	●				2.1	9.53	2.1
JTGR3140F	R	1.4	0.05	●	●				2.1	9.53	2.1
JTGR3140F-010	R	1.4	0.1	●					2.1	9.53	2.1
JTGR3145F	R	1.45	0.05	●	●	●	●		2.1	9.53	2.1
JTGL3145F	L	1.45	0.05		●		●		2.1	9.53	2.1
JTGR3145F-010	R	1.45	0.1	●					2.1	9.53	2.1
JTGR3150F	R	1.5	0.05	●	●	●	●		2.1	9.53	2.1
JTGL3150F	L	1.5	0.05	●	●		●		2.1	9.53	2.1
JTGR3150F-010	R	1.5	0.1	●					2.1	9.53	2.1
JTGL3150F-010	L	1.5	0.1	●					2.1	9.53	2.1
JTGR3175F	R	1.75	0.05	●	●	●	●		2.1	9.53	2.1
JTGL3175F	L	1.75	0.05		●	●	●		2.1	9.53	2.1
JTGR3175F-010	R	1.75	0.1	●					2.1	9.53	2.1

Reference pages: Toolholder → **G133**

●: Line up

★ : First choice
☆ : Second choice

●: Line up

100

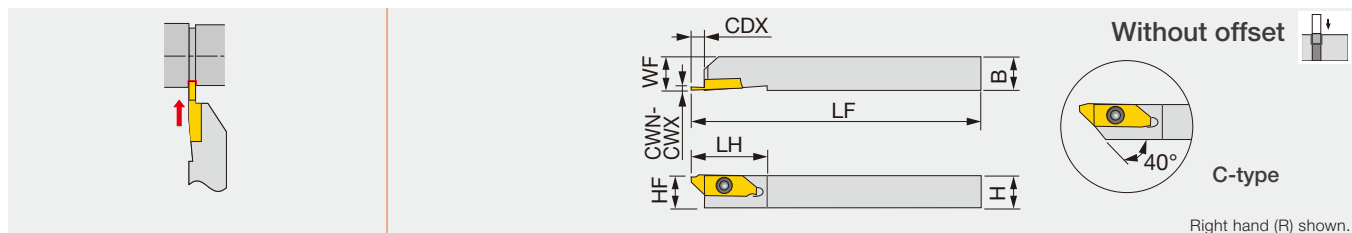


★ : First choice
☆ : Second choice

●: Line up

STANDARD CUTTING CONDITIONS (J-Series grooving tool)

index



Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert
JSXGR/L1010K8-C	0.7	2	6.7	10	10	125	29	10	10	JX*R/L8...
JSXGR/L1212K8-C	0.7	2	6.7	12	12	125	29	12	12	JX*R/L8...
JSXGR/L1616K8	0.7	2	6.5	16	16	125	29	16	16	JX*R/L8...
JSXGR/L2020K8	0.7	2	6.5	20	20	125	29	20	20	JX*R/L8...

Can be wrenched also from the back with a double-head screw.

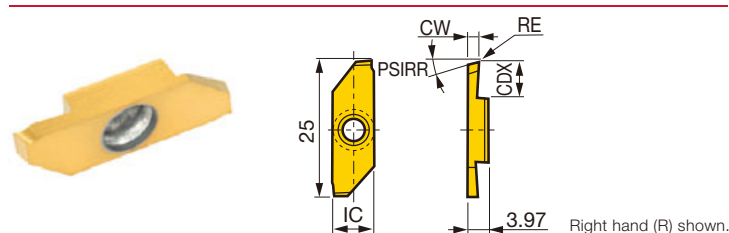
This toolholders can be used for JXG insert (grooving), JFX insert (front-turning), JXK insert (reverse-turning)

SPARE PARTS

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

INSERT

JXG (handed insert with sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

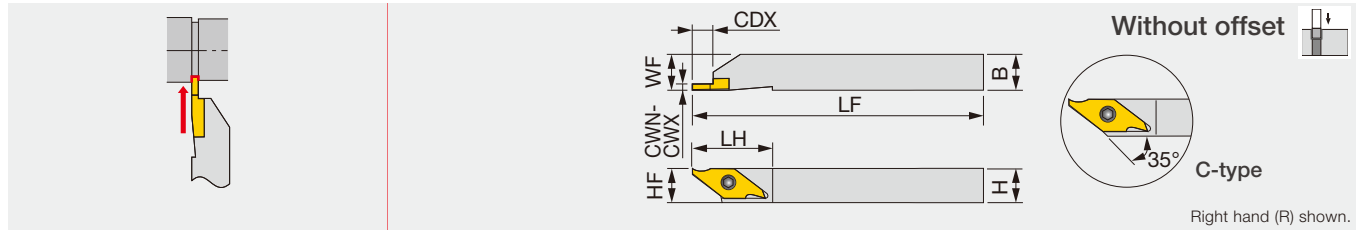
Designation	HAND	CWN±0.025	RE	Coated		Uncoated		CDX	IC	PSIRR
				J740	TH10					
JXGR8070FA	R	0.7	0	●				4.5	8	15
JXGL8070FA	L	0.7	0	●	●			4.5	8	15
JXGR8070FA-005	R	0.7	0.05	●	●			4.5	8	15
JXGR8100FA	R	1	0	●				6	8	15
JXGL8100FA	L	1	0	●	●			6	8	15
JXGR8100FA-005	R	1	0.05	●	●			6	8	15
JXGR8100FA45	R	1	0	●				4.5	8	15
JXGR8100FA45-005	R	1	0.05	●	●			4.5	8	15
JXGR8150FA	R	1.5	0	●				6	8	15
JXGL8150FA	L	1.5	0	●	●			6	8	15
JXGR8150FA-005	R	1.5	0.05	●	●			6	8	15
JXGR8150FA50	R	1.5	0	●				5	8	15
JXGR8150FA50-005	R	1.5	0.05	●	●			5	8	15
JXGR8180FA	R	1.8	0	●				6	8	15
JXGR8180FA-005	R	1.8	0.05	●	●			6	8	15
JXGR8200FA	R	2	0	●				6	8	15
JXGL8200FA	L	2	0	●	●			6	8	15
JXGR8200FA-005	R	2	0.05	●	●			6	8	0
JXGR8200FN	R	2	0	●				6	8	0
JXGL8200FN	L	2	0	●	●			6	8	0
JXGR8200FN-005	R	2	0.05	●	●			6	8	0

●: Line up

Reference pages: JSXGR/L: Standard cutting conditions → **G138**

JSVGR/L

Screw-on external grooving toolholder, for Swiss lathes



Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
JSVGR/L1010K-C	0.33	2	6.2	10	10	125	23	10	10	JVGR/L...	2.3
JSVGR/L1212K-C	0.33	2	6.2	12	12	125	23	12	12	JVGR/L...	2.3
JSVGR/L1616K	0.33	2	6.2	16	16	125	23	16	16	JVGR/L...	2.3

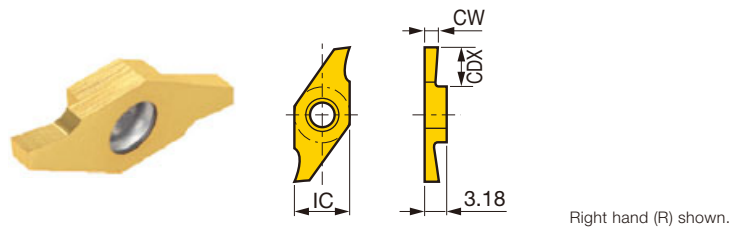
* Torque: Recommended torque (N-m) for clamping

SPARE PARTS

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

INSERT

JVG (with hand, sharp edge)



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

★ : First choice
☆ : Second choice

Designation	HAND	CW ^{+0.05} ₀	RE	Coated		Cermet	Uncoated			CDX	IC
				SH725	J740	NS9530	TH10				
JVGR033F	R	0.33	0	●	●					0.7	7.94
JVGL033F	L	0.33	0	●			●			0.7	7.94
JVGR050F	R	0.5	0	●	●					1.1	7.94
JVGL050F	L	0.5	0	●			●			1.1	7.94
JVGR075F	R	0.75	0	●	●					1.9	7.94
JVGL075F	L	0.75	0	●			●			1.9	7.94
JVGR095F	R	0.95	0	●	●					1.9	7.94
JVGL095F	L	0.95	0	●			●			1.9	7.94
JVGR100F	R	1	0	●	●	●				5.5	7.94
JVGL100F	L	1	0	●		●	●			5.5	7.94
JVGR125F	R	1.25	0	●	●		●			5	7.94
JVGL125F	L	1.25	0	●			●			5	7.94
JVGR150F	R	1.5	0	●	●	●				5.5	7.94
JVGL150F	L	1.5	0	●		●	●			5.5	7.94
JVGR200F	R	2	0	●	●	●	●			5.5	7.94
JVGL200F	L	2	0	●			●			5.5	7.94

● : Line up

Reference pages: JSVGR/L: Standard cutting conditions → **G138**

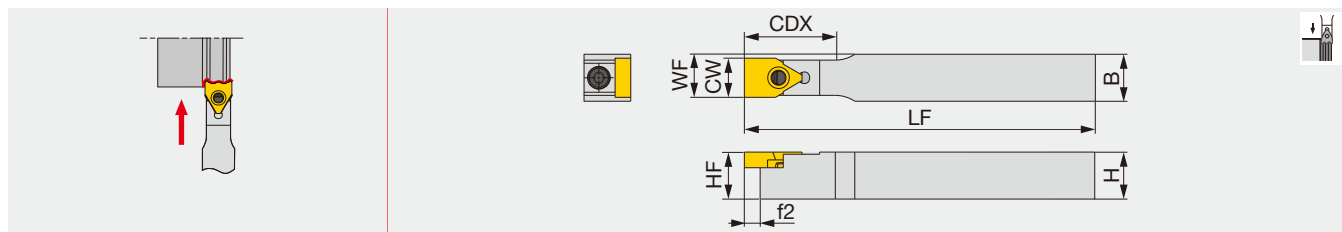
STANDARD CUTTING CONDITIONS (JXG and JVG inserts)

ISO	Workpiece material	Grade	Cutting speed V _c (m/min)	Feed f (mm/rev)
P	Steel S45C, etc. C45, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel SUS303, etc. X5CrNi18-9, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
N	Aluminium alloys, Brass Si < 12%, C3604B, etc. CW614N, etc.	TH10	10 - 200	0.01 - 0.1
		TH10	10 - 200	0.01 - 0.1
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.1



TUNG H^{AVY} GROOVE FPGN

Lever-lock toolholder for external wide grooving and profiling



Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert
FPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10...
FPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10...
FPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10...
FPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15...
FPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15...
FPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20...

PSGB insert blank is available for tailored inserts.

SPARE PARTS

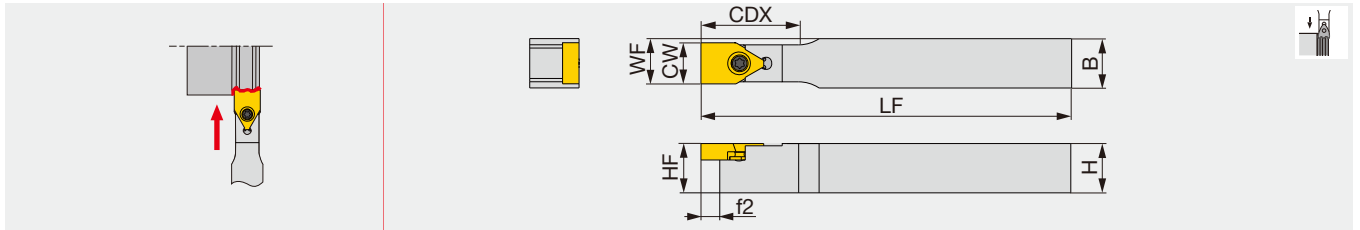


Designation	Lever	Clamping screw	Spring	Wrench
FPGN*****-10T..., 15T...	FCL4	FCS3	BP-5	P-2.5
FPGN*****-20T..., 25T...	FCL8	FCS6	BP-9	P-5

Reference pages: FPGN: Standard cutting conditions → **G140**

SPGN

Screw-on toolholder for external wide grooving and profiling



Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert
SPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10
SPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10
SPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10
SPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15
SPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15
SPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20

PSGB insert blank is available for tailored inserts. Can be used with profile grooving inserts, only

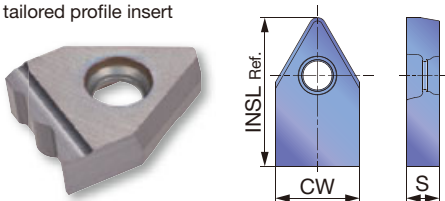
SPARE PARTS

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

INSERT

PSGB (Blank for wide profile grooving inserts*)

Specially tailored profile insert



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

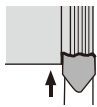
★ : First choice
☆ : Second choice

Designation	CW±0.025	Uncoated		INSL	S
		TH10	UX30		
PSGB10	10.2	●	●	18	4
PSGB15	15.2	●	●	20	5
PSGB20	20.2	●	●	27	6.5
PSGB25	25.2	●	●	27	6.5

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

Package quantity = 5pcs.
● : Line up

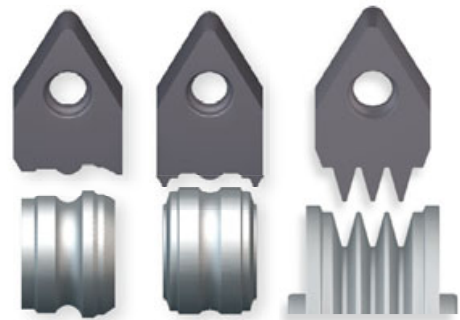
STANDARD CUTTING CONDITIONS



Wide profile grooving

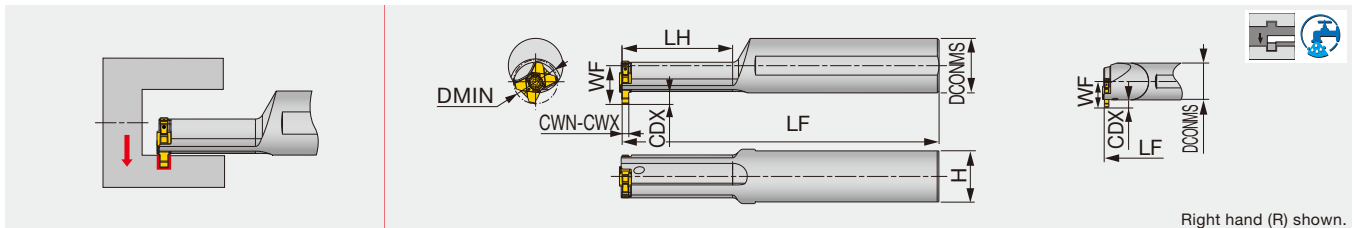
ISO	Workpiece material	Hardness (HB)	Grade	Cutting speed Vc (m/min)
P	Steel S45C, etc. C45, etc.	< 200	UX30	50 - 150
	Alloy steel SCM440, etc. 42CrMo4, etc.	< 300	UX30	50 - 120
M	Stainless steel SUS303, etc. X5CrNi18-9, etc.	< 200	UX30	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	TH10	50 - 150
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	TH10	50 - 120
N	Aluminium alloy Si < 12%, etc.	-	TH10	100 - 500

- Custom shaped inserts can be supplied on customer's request, according to the designated final shape on part drawing.
- Semi-finished blanks PSGB types are offered for purchase.



ADDICUT^{INTERNAL} A/E-STCIR/L

Internal grooving toolholder



Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	DCONMS	LH	LF	WF	H	Insert	Torque*
A12H-STCIR/L10-D105	Steel	1.5	3	10.5	12	25	100	8.3	11	TCIG10...	1
A12H-STCIR/L10-D120	Steel	1.5	3	12	12	31	100	8.3	11	TCIG10...	1
E12K-STCIR/L10-D150	Carbide	1.5	3	15	12	-	125	8.3	11	TCIG10...	1
A16J-STCIR/L12-D130	Steel	1.5	3	13	16	33	110	11.3	15	TCIG12...	1.3
A16J-STCIR/L12-D160	Steel	1.5	3	16	16	41	110	11.3	15	TCIG12...	1.3
E16M-STCIR/L12-D200	Carbide	1.5	3	20	16	-	150	11.3	15	TCIG12...	1.3

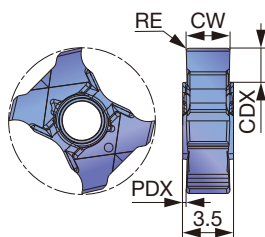
Torque*: Recommended clamping torque (N·m)

SPARE PARTS



Designation	Clamping screw
A/E-STCIR10-...	CSTB-2.2L053DR
A/E-STCIR10-...	CSTB-2.2L053DL
A/E-STCIR12-...	CSTB-2.5L054DR
A/E-STCIR12-...	CSTB-2.5L054DL

TCIG



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

★ : First choice

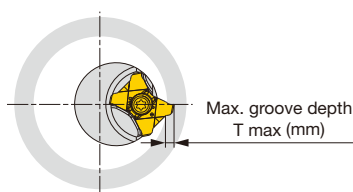
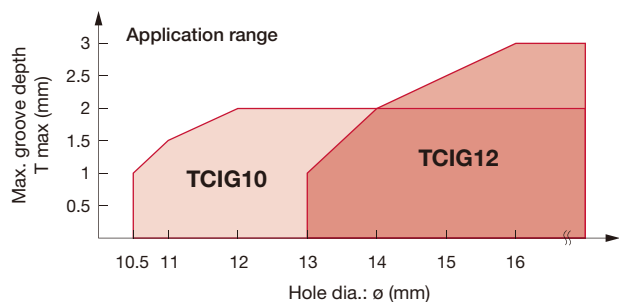
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● : Line up

Shallower groove depths (T max) for smaller bores

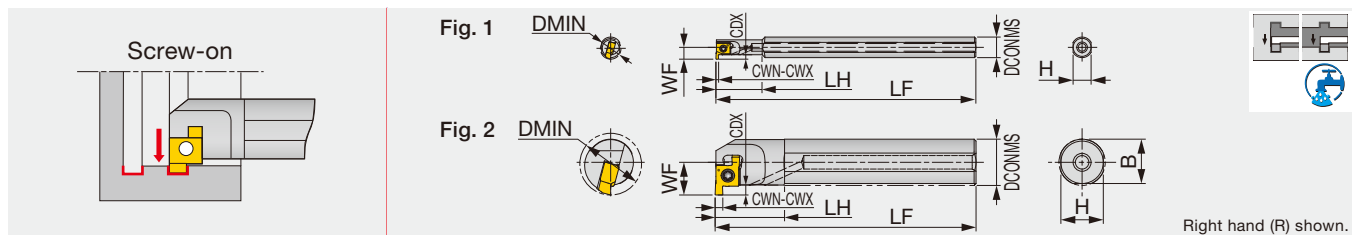
Maximum groove depths (T max) for TCIG10 inserts are smaller than the CDX value shown above when the grooving bore diameter is < 12 mm; and for TCIG12, when the bore diameter is < 16 mm.

See the chart below for T max values in relation to the given bore diameter.



STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Cutting speed <i>V_c</i> (m/min)	Feed <i>f</i> (mm/rev)
P	Steel S45C, C45, SCM435, 34CrMo4, etc.	< 300 HB	First choice	30 - 80	0.01 - 0.05
M	Stainless steel SUS303, X10CrNiS18-9, etc.	< 200 HB	First choice	30 - 50	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	10 - 50	0.01 - 0.05



Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	B	LF	LH	WF	Insert	Torque*	Fig.
A08H-SNGR06-D080	Steel	1	2	8	1.5	8	7	-	100	18	4.73	6GMR..., 6GR...	0.7	1
A08H-SNGR07-D100	Steel	1	2	10	1.5	8	7	-	100	23	5.8	7GMR..., 7GR...	1.0	1
A10K-SNGR07-D120	Steel	1	2	12	1.5	10	9	-	125	29	6.8	7GMR..., 7GR...	1.0	1
A10K-SNGR08-D140	Steel	1.5	3.5	14	2	10	9	-	125	15	7.6	8GMR..., 8GR...	1.0	2
A12M-SNGR08-D160	Steel	1.5	3.5	16	2	12	11	11.5	150	18	8.6	8GMR..., 8GR...	1.0	2
A16Q-SNGR09-D200	Steel	1.5	3.5	20	3	16	15	15.5	180	20	11.6	9GMR..., 9GR...	1.3	2
A20R-SNGR09-D240	Steel	1.5	3.5	24	3	20	18	19	200	25	13.6	9GMR..., 9GR...	1.3	2
E08X-SNGR07-D100	Carbide	1	2	10	1.5	8	7.5	-	120.5	35	5.8	7GMR..., 7GR...	1.0	1
E10X-SNGR07-D120	Carbide	1	2	12	1.5	10	9	-	143.5	45	6.8	7GMR..., 7GR...	1.0	1
E10X-SNGR08-D140	Carbide	1.5	3.5	14	2	10	9	-	146	-	7.6	8GMR..., 8GR...	1.0	2
E12X-SNGR08-D160	Carbide	1.5	3.5	16	2	12	11	-	174.8	-	8.6	8GMR..., 8GR...	1.0	2
E16X-SNGR09-D200	Carbide	1.5	3.5	20	3	16	15	-	194.6	-	11.6	9GMR..., 9GR...	1.5	2

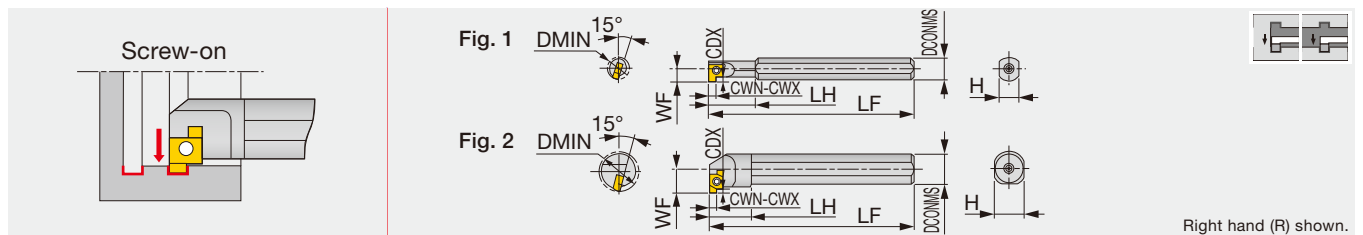
Note: Use the right-hand insert (□GR) with the right-hand holder (□NGR).
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SNGR06-D...	CSTB-2L040	T-6F
A**-SNGR07-D...	CSTB-2.2S	T-7F
A**-SNGR08-D...	CSTB-2.2	T-7F
A**-SNGR09-D...	CSTB-2.5L080	T-8F
E**-SNGR07-D...	CSTB-2.2S	T-7F
E**-SNGR08-D...	CSTB-2.2	T-7F
E**-SNGR09-D...	CSTB-2.5L080	T-8F

SNGR/L

Toolholders for internal grooving



Right hand (R) shown.

Designation	Material	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*	Fig.
SNGR/L08H06	Steel	1	2	8	1.5	8	7	100	18	4.7	6GMR..., 6GR/L...	0.7	1
SNGR/L08H07	Steel	1	2	10	1.5	8	7	100	23	5.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10K07	Steel	1	2	12	1.5	10	9	125	29	6.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10K08	Steel	1.5	3.5	14	2	10	9	125	15	7.6	8GMR..., 8GR/L...	1.0	2
SNGR/L12M08	Steel	1.5	3.5	16	2	12	11	150	18	8.6	8GMR..., 8GR/L...	1.0	2
SNGR/L16Q09	Steel	1.5	3.5	20	3	16	15	180	20	11.6	9GMR..., 9GR/L...	1.3	2
SNGR/L20R09	Steel	1.5	3.5	24	3	20	18	200	25	13.6	9GMR..., 9GR/L...	1.3	2
SNGR/L08K06SC	Carbide	1	2	8	1.5	8	7	125	28	4.7	6GMR..., 6GR/L...	0.7	1
SNGR/L08K07SC	Carbide	1	2	10	1.5	8	7	125	35	5.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10M07SC	Carbide	1	2	12	1.5	10	9	150	45	6.8	7GMR..., 7GR/L...	1.0	1
SNGR/L10M08SC	Carbide	1.5	3.5	14	2	10	9	150	45	7.6	8GMR..., 8GR/L...	1.0	2
SNGR/L12Q08SC	Carbide	1.5	3.5	16	2	12	11	180	-	8.6	8GMR..., 8GR/L...	1.0	2
SNGR/L16R09SC	Carbide	1.5	3.5	20	3	16	15	200	-	11.6	9GMR..., 9GR/L...	1.5	2

Note: Use the right-hand insert (□GR) with the right-hand holder (□NGR), and use the left-hand insert (□GL) with the left-hand holder (□NGL).

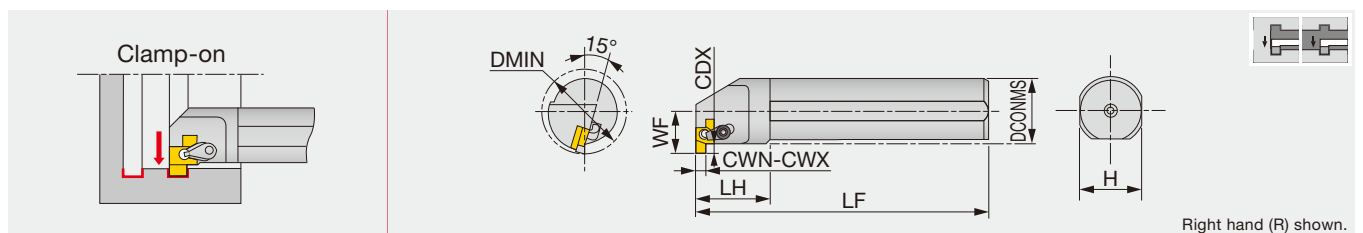
Torque*: Recommended clamping torque (N·m)

SPARE PARTS

Designation	Clamping screw	Wrench
SNGR/L***06	CSTB-2L040	T-6F
SNGR/L***07	CSTB-2.2S	T-7F
SNGR/L***08	CSTB-2.2	T-7F
SNGR/L***09	CSTB-2.5L080	T-8F
SNGR/L***06SC	CSTB-2L040	T-6F
SNGR/L***07SC	CSTB-2.2S	T-7F
SNGR/L***08SC	CSTB-2.2	T-7F
SNGR/L***09SC	CSTB-2.5L080	T-8F

CNGR/L

Toolholders for internal grooving



Right hand (R) shown.

Designation	CWN	CWX	DMIN	CDX	DCONMS	H	LF	LH	WF	Insert	Torque*
CNGR/L25S15	2	5	32	5	25	23	250	30	18.1	15GR/L...	7
CNGR/L32T15	2	5	40	5	32	30	300	35	22.1	15GR/L...	7
CNGR/L40U15	2	5	48	5	40	38	350	45	26.1	15GR/L...	7

Note: Use the right-hand insert (□GR) with the right-hand holder (□NGR), and use the left-hand insert (□GL) with the left-hand holder (□NGL).

Torque*: Recommended clamping torque (N·m)

SPARE PARTS

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

Optional parts for CNG holders

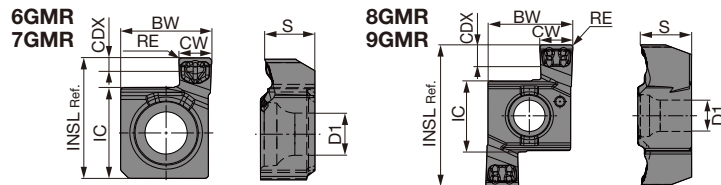
Use the following parts for screw clamp options.

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

Reference pages: SNGR/L, CNGR/L: Inserts → **G144, G145**, Standard cutting conditions → **G146**

INSERTS

****GMR/L**



Single edge

Double edge

Right hand (R) shown.

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

★ : First choice
☆ : Second choice

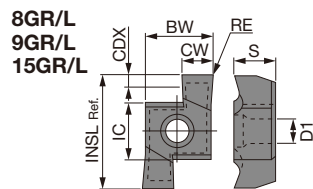
Designation	HAND	CW±0.025	RE	Coated						CDX	BW	S	IC	INSL	D1
				AH7025											
6GMR100-015	R	1	0.15	●						1.5	5.56	2.34	4.76	6.44	2.3
7GMR200-020	R	2	0.2	●						1.5	5.56	3.08	5.56	7.36	2.58
8GMR150-020	R	1.5	0.2	●						2	6.15	3.87	5.56	10.16	2.58
9GMR200-020	R	2	0.2	●						3	7.74	4.66	6.35	12.95	2.86
9GMR300-020	R	3	0.2	●						3	7.74	4.66	6.35	12.95	2.86

● : Line up



Reference pages: Toolholder → **G142**, **G143**, Standard cutting conditions → **G146**

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



Right hand (R) shown.

★ : First choice
☆ : Second choice

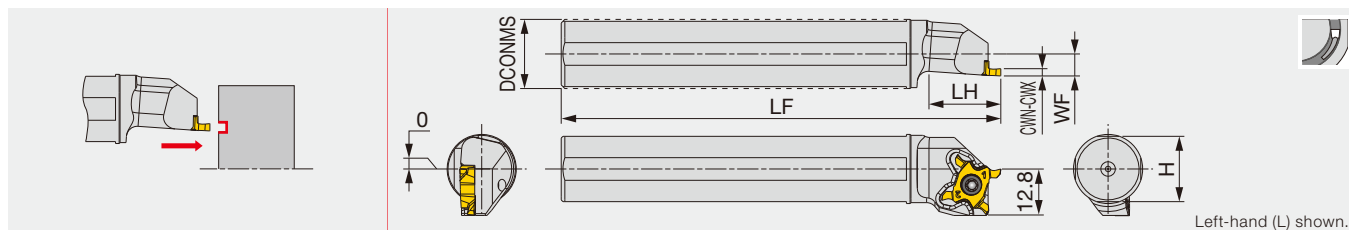
Note: Use the right-hand insert (□GB) with the right-hand holder (□NGB), and use the left-hand insert (□GL) with the left-hand holder (□NGL).

Tungaloy G145

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed rate: f (mm/rev)	
				**GMR...	**GR/L...
P	Carbon steel S45C, C45, etc.	AH7025	80 - 180	0.03 - 0.12	-
		NS9530	80 - 200	-	0.05 - 0.15
		UX30	40 - 150	-	0.05 - 0.15
	Alloy steel SCM435, 34CrMo4, etc.	AH7025	80 - 180	0.03 - 0.12	-
		NS9530	80 - 200	-	0.05 - 0.15
		UX30	40 - 150	-	0.05 - 0.15
M	Stainless steel SUS304, X5CrNi18-9, etc.	AH7025	50 - 120	0.03 - 0.12	-
		UX30	40 - 100	-	0.03 - 0.10
K	Grey cast irons F250, GG25, 250, etc.	AH7025	50 - 220	0.03 - 0.12	-
		TH10	60 - 200	-	0.05 - 0.15
	Ductile cast irons FCD400, etc.	AH7025	50 - 180	0.03 - 0.12	-
		TH10	40 - 160	-	0.05 - 0.15
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	30 - 80	0.03 - 0.12	-
		TH10	20 - 50	-	0.05 - 0.08
	Superalloys Inconel718, etc.	AH7025	20 - 60	0.03 - 0.12	-
		TH10	10 - 30	-	0.03 - 0.08





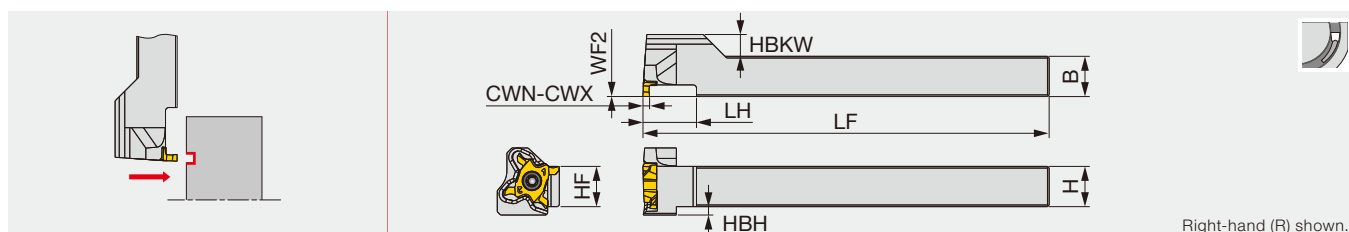
Designation	CWN	CWX	DCONMS	LF	LH	H	WF	Insert	Torque*
JS16F-STCFL18	0.5	2.5	16	85	20	15	6	TCF18L...	1.2
JS19G-STCFL18	0.5	2.5	19.05	90	20	18	6	TCF18L...	1.2
JS19X-STCFL18	0.5	2.5	19.05	120	20	18	6	TCF18L...	1.2
JS20G-STCFL18	0.5	2.5	20	90	20	19	6	TCF18L...	1.2
JS20X-STCFL18	0.5	2.5	20	120	20	19	6	TCF18L...	1.2
JS22X-STCFL18	0.5	2.5	22	120	20	21	6	TCF18L...	1.2
JS25H-STCFL18	0.5	2.5	25	100	20	24	6	TCF18L...	1.2
JS254X-STCFL18	0.5	2.5	25.4	120	20	24.5	6	TCF18L...	1.2

Note: The left hand insert (L) is used for the left hand toolholders (L).

Torque*: Recommended clamping torque: N·m

STCFVR-18

Face grooving toolholder with square shank, for Swiss lathes



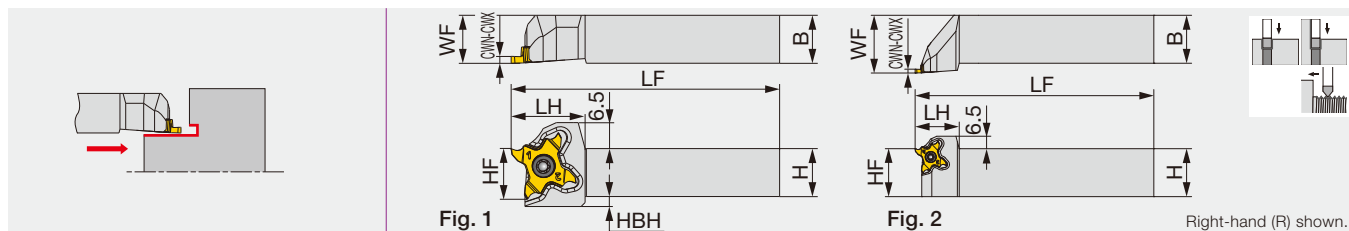
Designation	CWN	CWX	H	B	LF	LH	HF	WF2	HBKW	HBH	Insert	Torque*
STCFVR1010H18	0.5	2.5	10	10	100	12	10	0	8.5	4.5	TCF18L...	1.2
STCFVR1212F18	0.5	2.5	12	12	85	16	12	0	6.5	2.5	TCF18L...	1.2
STCFVR1212X18	0.5	2.5	12	12	120	16	12	0	6.5	2.5	TCF18L...	1.2
STCFVR1616X18	0.5	2.5	16	16	120	20	16	0	2.5	0	TCF18L...	1.2

Note: The left hand insert (L) is used for the right hand toolholders (R).

Torque*: Recommended clamping torque: N·m

STCR/L-18

Precision grooving tools with uniquely shaped insert for swiss type machine and general lathes



Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*	Fig.
STCR/L1010X18	0.33	3.18	10	10	120	18.5	10	10	4.5	TC*18...	1.2	1
STCR/L1212F18	0.33	3.18	12	12	85	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1212X18	0.33	3.18	12	12	120	18.5	12	12	2.5	TC*18...	1.2	1
STCR/L1616X18	0.33	3.18	16	16	120	18.5	16	16	-	TC*18...	1.2	1
STCR/L2020H18	0.33	3.18	20	20	100	18.5	20	20	-	TC*18...	1.2	1
STCR/L2020X18	0.33	3.18	20	20	120	23	20	25	-	TC*18...	1.2	2

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert is used for the left hand toolholders

*Torque: Recommended clamping torque: N·m

SPARE PARTS

Designation	Clamping screw	Wrench
JS*-STCFL18, STCFVR**18, STCL**18	CSTC-4L100DR	T-1008/5
STCR**18	CSTC-4L100DL	T-1008/5

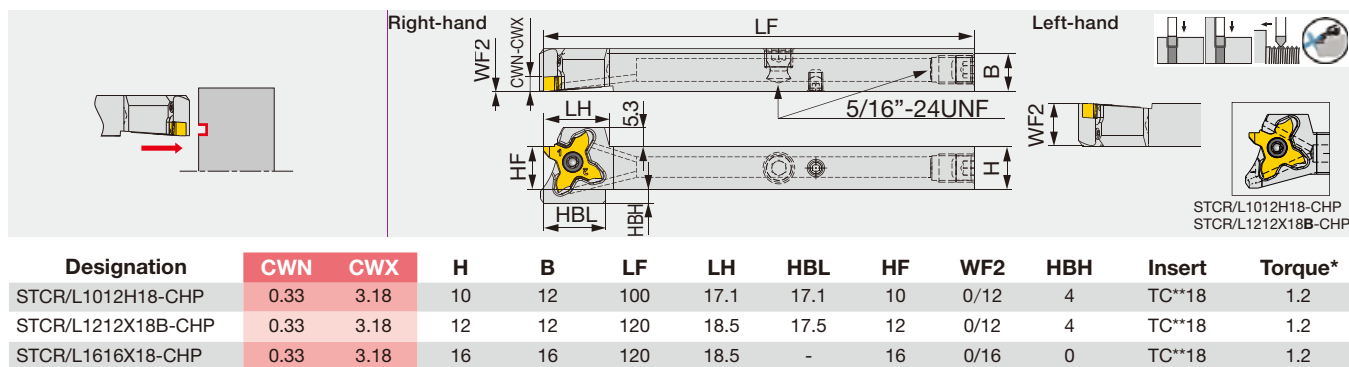
Threading pitch range: 0.8 - 3 mm

Reference pages :

JS-STCFL18, STCFVR-18, STCR/L-18:

Inserts, Standard cutting conditions → G149

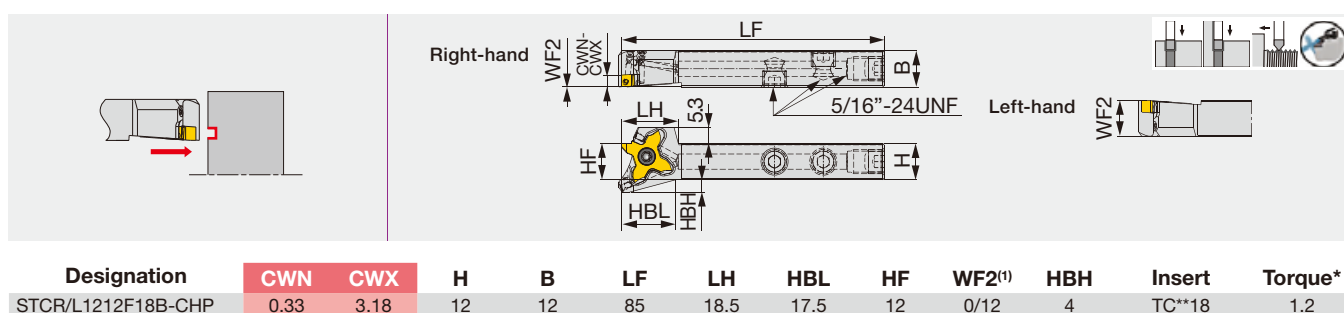
External grooving and threading toolholder, high pressure coolant compatible



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***).

(1) "0/12" for the WF dimension indicates WF = 0 for the right handed tool, WF = 12 for the left handed tool.

*Torque: Recommended torque (N·m) for clamping

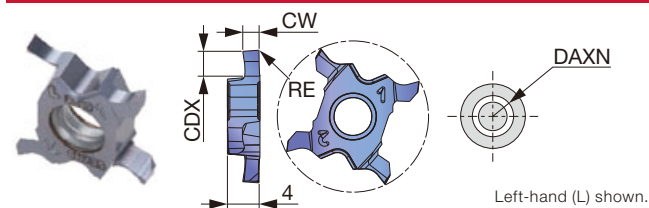
SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
STCL**F18B-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
STCR**F18B-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-

Threading pitch range: 0.8 ~ 3.0 mm

■ INSERT

TCF18L (Face grooving)



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

★: First choice

Designation	HAND	CW±0.02	RE	Coated								CDX	DAXN
				SH725									
TCF18L050F-005	L	0.5	0.05	●								1	6
TCF18L100F-005	L	1	0.05	●								2.5	6
TCF18L150F-005	L	1.5	0.05	●								2.5	6
TCF18L200F-005	L	2	0.05	●								3	6
TCF18L250F-005	L	2.5	0.05	●								3	6

5 pieces per package
● : Line up

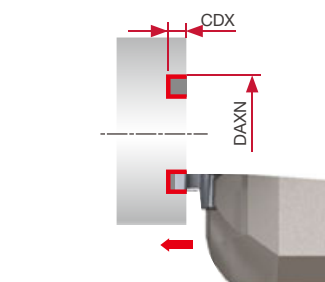
STANDARD CUTTING CONDITIONS

TCF18L (Face grooving)

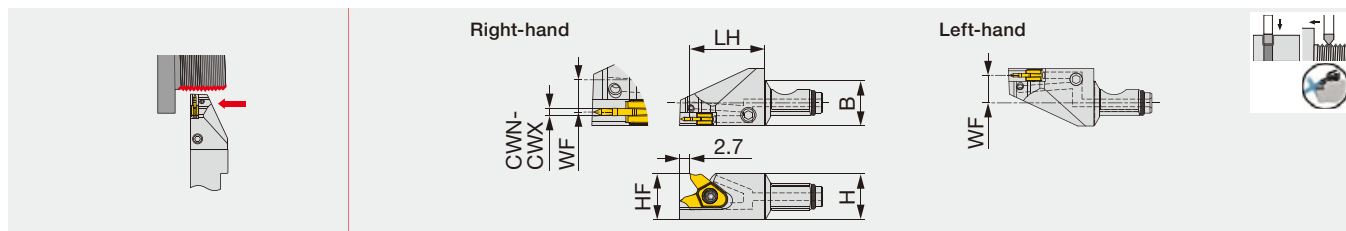
ISO	Workpiece materials	Grades	Cutting speed Vc (m/min)	Feed f (mm/rev)
P	Low carbon steel S15C, C15E, C15E4, S20C, C20, etc.	SH725	30 - 100	0.01 - 0.04
	Carbon steels, Alloy steel S55C, C55, SCM440, 42CrMoS4, etc.	SH725	30 - 100	0.01 - 0.04
	Prehardened steel NAK80, PX5, etc.	SH725	30 - 100	0.01 - 0.04
M	Stainless steel SUS304, X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH725	30 - 100	0.01 - 0.04
K	Grey cast iron FC250, GG25, 250, FC300, GG30, 300, etc.	SH725	30 - 100	0.01 - 0.04
	Ductile cast iron FCD400, 400-15, FCD600, GGG60, 600-3, etc.	SH725	30 - 100	0.01 - 0.04
S	Titanium alloys Ti-6Al-4V, etc.	SH725	20 - 40	0.01 - 0.04
	Superalloys Inconel718, etc.	SH725	10 - 30	0.01 - 0.04

■ PRECAUTIONS OF PROCESSING

Minimum diameter for face grooving



Minimum face diameter DAXN (mm)	Maximum groove depth CDX (mm)
65	3



Designation	Pitch	TPI	H	B	LH	HF	WF ⁽¹⁾	Insert	Torque*
QC12-SVER/L10-CHP	0.4 - 1.5	64 - 12	12	12	19.5	12	4.19/7.19	VG*10...	1.3

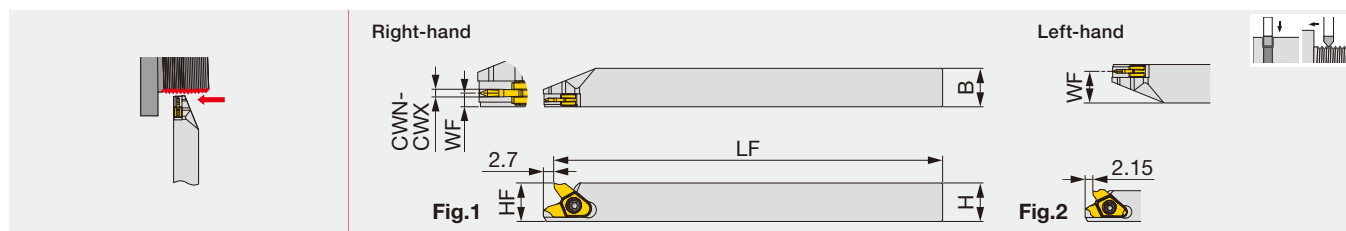
Torque*: Recommended clamping torque (N-m)

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

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

SVER/L

External grooving and threading toolholder



Designation	Pitch	TPI	H	B	LF	HF	WF ⁽¹⁾	Insert	Torque*	Fig.
SVER/L1010H10	0.4 - 1.5	64 - 12	10	10	100	10	1.78/8.23	VG*10...	1.3	1
SVER/L1212X10	0.4 - 1.5	64 - 12	12	12	120	12	1.78/10.23	VG*10...	1.3	1

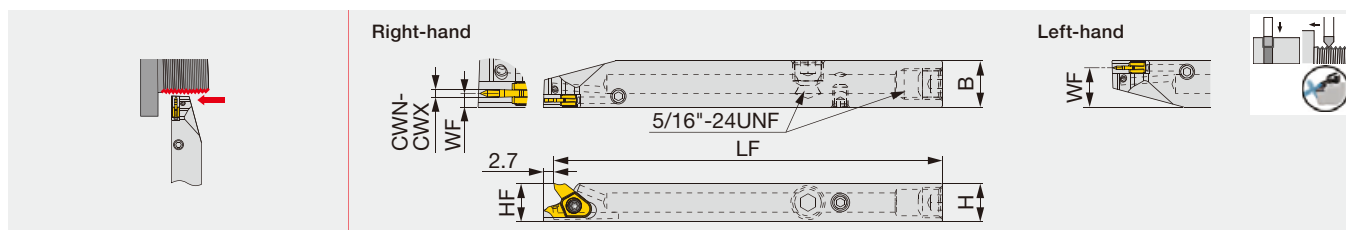
Torque*: Recommended clamping torque (N-m)

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

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

SVER/L-CHP

External grooving and threading toolholder, with high pressure coolant capability



Designation	Pitch	TPI	H	B	LF	HF	WF ⁽¹⁾	Insert	Torque*
SVER/L1012H10-CHP	0.4 - 1.5	64 - 12	10	12	100	10	1.78/10.23	VG*10...	1.3
SVER/L1212X10-CHP	0.4 - 1.5	64 - 12	12	12	120	12	1.78/10.23	VG*10...	1.3

Compatible to the direct internal coolant supply system without the use of external coolant hose.

Torque*: Recommended clamping torque (N-m)

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

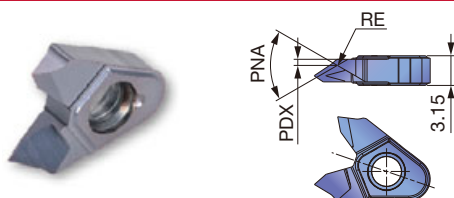
SPARE PARTS

Designation	Clamping screw	Wrench 1	O-ring	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
QC12-SVER...	CSTB-2.5L054DL	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-
QC12-SVEL...	CSTB-2.5L054DR	T-7F	ORSS-0454.5X1.0NBR70	-	-	-	-
SVER1012/1212...	CSTB-2.5L054DL	T-7F	-	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
SVEL1012/1212...	CSTB-2.5L054DR	T-7F	-	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
SVER0808...	CSTB-2.2L053DL	T-7F	-	-	-	-	-
SVEL0808...	CSTB-2.2L053DR	T-7F	-	-	-	-	-
SVER1010/1212...	CSTB-2.5L054DL	T-7F	-	-	-	-	-
SVEL1010/1212...	CSTB-2.5L054DR	T-7F	-	-	-	-	-

Reference pages: QC12-SVER/L-CHP, SVER/L, SVER/L-CHP: Shank, Accessory → **G095, G096**

INSERT

VGT10 (For threading / sharp edge)



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

★ : First choice

Designation	RE	Coated					Pitch	TPI	PDX	PNA
		SH725								
VGT10F-60A-005	0.05	●					0.4 - 1	64 - 25	0.66	60°
VGT10F-60A-010	0.1	●					1 - 2	25 - 12	0.96	60°
VGT10F-55A-005	0.05	●					0.6 - 1.5	40 - 16	0.85	55°

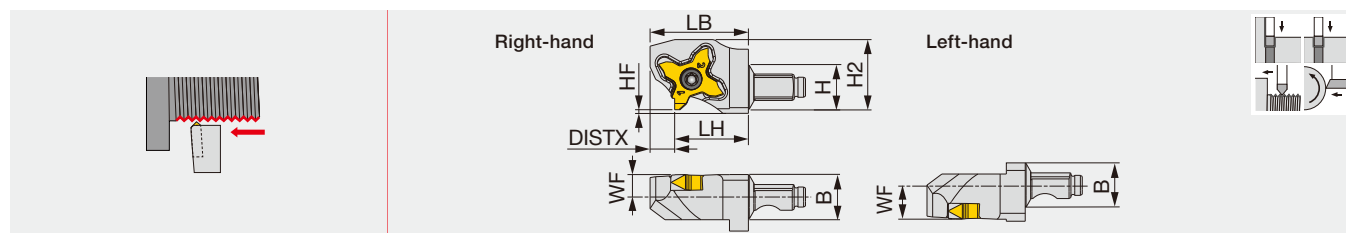
● : Line up

STANDARD CUTTING CONDITIONS

Threading

ISO	Workpiece materials	Grade	Cutting speed Vc (m/min)	Pitch (mm)	TPI
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 150	0.4 - 2	64 - 12
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 150	0.4 - 2	64 - 12
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 150	0.4 - 2	64 - 12
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 100	0.4 - 2	64 - 12
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.4 - 2	64 - 12
	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.4 - 2	64 - 12
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.4 - 2	64 - 12
	Superalloys Inconel718, etc.	SH725	30 - 80	0.4 - 2	64 - 12

Y-axis turning modular head for external grooving and threading



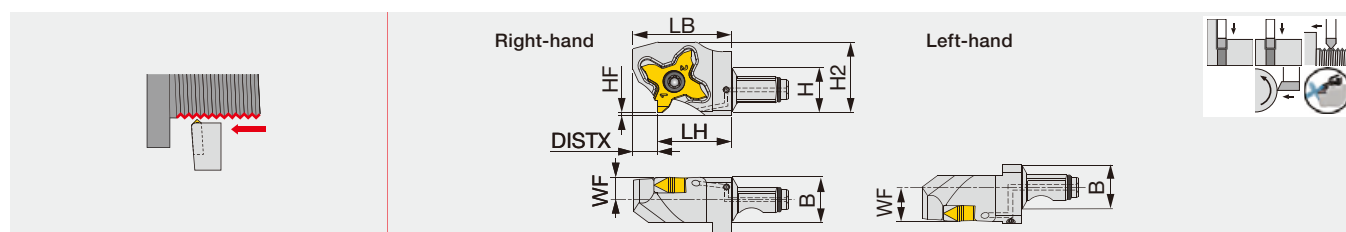
Designation	Pitch	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	0.4 - 3	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N-m)

The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

QC12-STCR/L-Y-CHP

Y-axis turning modular head for external grooving and threading, with high pressure coolant capability



Designation	Pitch	H	B	LH	HF	WF	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	0.4 - 3	12	12	19.5	0	6	26	18.6	6.5	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N-m)

The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

Through-coolant head

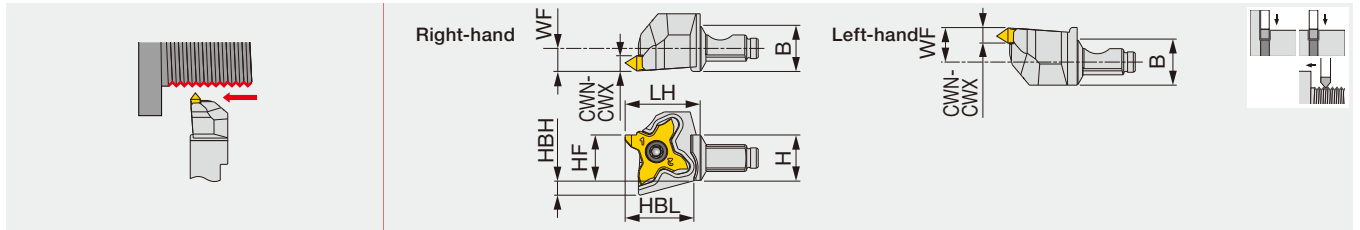
SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y	CSTC-4L100DL	T-1008/5	-
QC12-STCL18-Y	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-Y-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-Y-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

Reference pages: QC12-STC/LR-Y, QC12-STCR/L-Y-CHP: Inserts → [G156](#), [G157](#)
Shank, Accessory → [G095](#), [G096](#), Standard cutting conditions → [G157](#)

QC12-STCR/L

Modular head for external grooving and threading



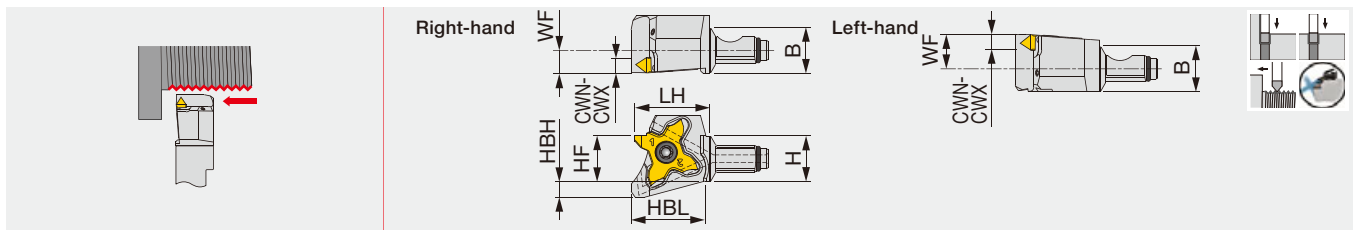
Designation	Pitch	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR/L18	0.4 - 3	12	12	21	12	3.9	18.3	9	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N-m)

The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

QC12-STCR/L-CHP

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



Designation	Pitch	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR/L18-CHP	0.4 - 3	12	12	21	12	4.2	19.3	9	TC*18R/L...	1.2

Torque*: Recommended clamping torque (N-m)

The right hand insert (R) is used for the right hand toolholders (R), and the left hand insert (L) is used for the left hand toolholders (L).

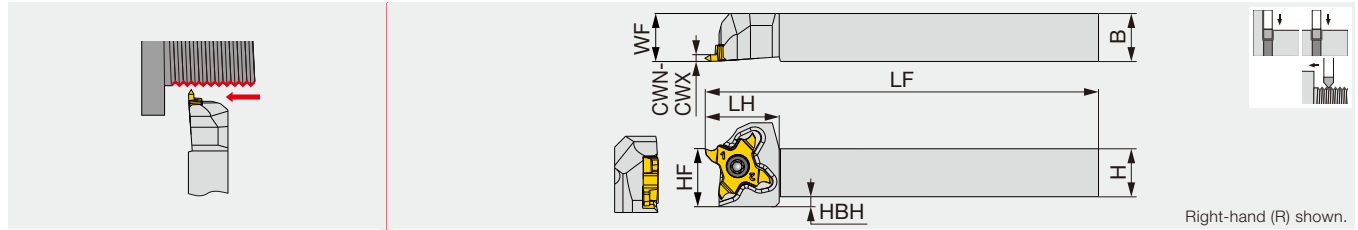
Through-coolant head

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18	CSTC-4L100DR	T-1008/5	-

Reference pages: QC12-STCR/L, QC12-STCR/L-CHP: Inserts → [G156](#), [G157](#)
Shank, Accessory → [G095](#), [G096](#), Standard cutting conditions → [G157](#)

External grooving and threading toolholder



Right-hand (R) shown.

Designation	Pitch	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
STCR/L1010X18	0.4 - 3	10	10	120	18.5	10	10	4.5	TC*18...	1.2
STCR/L1212F18	0.4 - 3	12	12	85	18.5	12	12	2.5	TC*18...	1.2
STCR/L1212X18	0.4 - 3	12	12	120	18.5	12	12	2.5	TC*18...	1.2
STCR/L1616X18	0.4 - 3	16	16	120	18.5	16	16	-	TC*18...	1.2
STCR/L2020H18	0.4 - 3	20	20	100	18.5	20	20	-	TC*18...	1.2
STCR/L2020X18	0.4 - 3	20	20	120	23.0	20	25	-	TC*18...	1.2

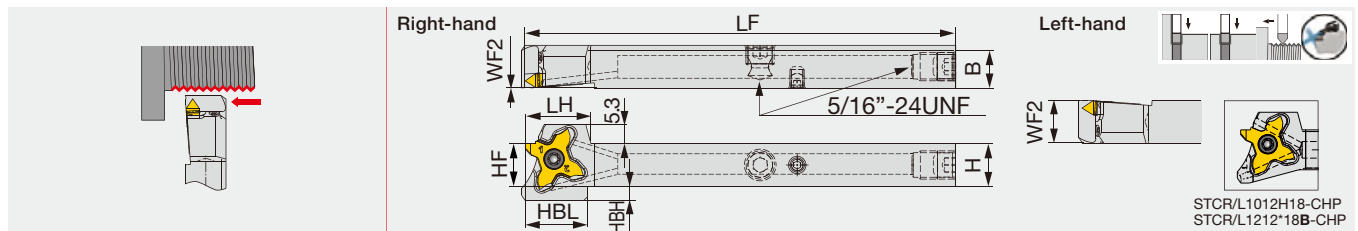
Torque*: Recommended torque (N-m) for clamping

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).

STCR/L-H/X18-CHP

Direct connection

External grooving and threading toolholder, high pressure coolant compatible



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

Designation	Pitch	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L1012H18-CHP	0.4 - 3	10	12	100	17.1	17.1	10	0/12	4	TC**18	1.2
STCR/L1212X18B-CHP	0.4 - 3	12	12	120	18.5	17.5	12	0/12	4	TC**18	1.2
STCR/L1616X18-CHP	0.4 - 3	16	16	120	18.5	-	16	0/16	0	TC**18	1.2

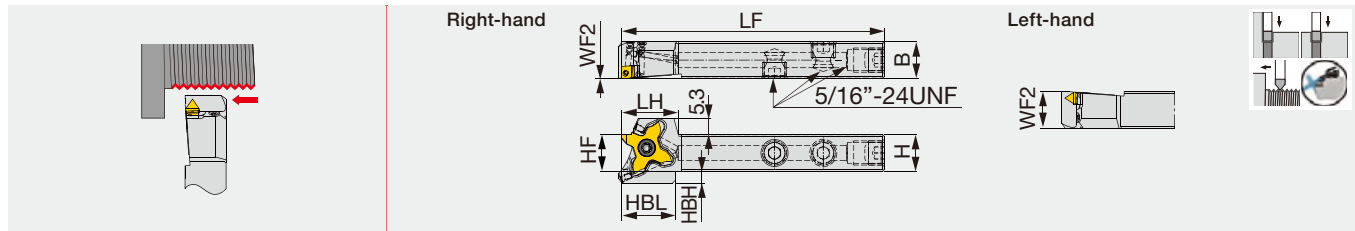
Torque*: Recommended torque (N-m) for clamping

The right hand insert (TC*18R...) is used for the right hand toolholders (STCR...), and the left hand insert (TC*18L...) is used for the left hand toolholders (STCL...).

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench
STCR...18	CSTC-4L100DL	T-1008/5	-	-	-	-
STCL...18	CSTC-4L100DR	T-1008/5	-	-	-	-
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2

External grooving and threading toolholder. High pressure coolant capability.

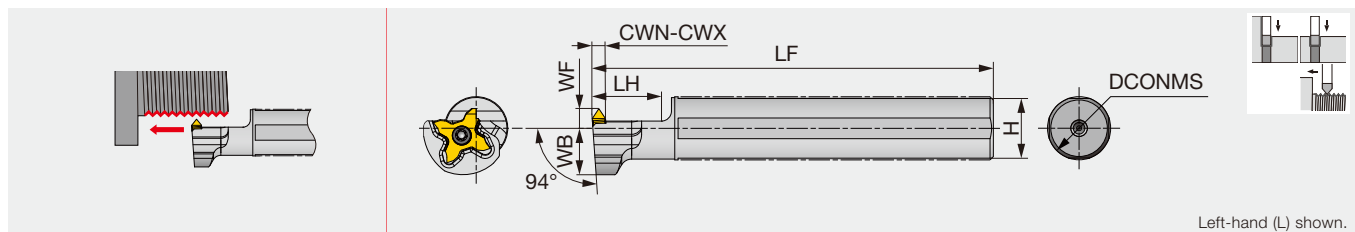


Designation	Pitch	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L1212F18B-CHP	0.4 - 3	12	12	85	18.5	17.5	12	0/12	4	TC**18	1.2

• The right hand insert (TC*18R**) is used for the right hand toolholders (STCR**), and the left hand insert (TC*18L**) is used for the left hand toolholders (STCL**).
 (1) *0/12" for the WF dimension indicates WF = 0 for the right handed tool, WF = 12 for the left handed tool.
 Torque*: Recommended torque (N-m) for clamping
 **: To be replaced with the new design

JS-STCL18

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



Designation	Pitch	DCONMS	H	LF	LH	WB	WF	Insert	Torque*
JS14H-STCL18	0.4 - 3	14	13	100	20	14	6	TC*18R...	1.2
JS159F-STCL18	0.4 - 3	15.875	15	85	20	14	6	TC*18R...	1.2
JS16F-STCL18	0.4 - 3	16	15	85	20	14	6	TC*18R...	1.2
JS19G-STCL18	0.4 - 3	19.05	18	90	20	14	6	TC*18R...	1.2
JS19X-STCL18	0.4 - 3	19.05	18	120	20	14	6	TC*18R...	1.2
JS20G-STCL18	0.4 - 3	20	19	90	20	14	6	TC*18R...	1.2
JS20X-STCL18	0.4 - 3	20	19	120	20	14	6	TC*18R...	1.2
JS22X-STCL18	0.4 - 3	22	21	120	20	12.25	10	TC*18R...	1.2
JS25H-STCL18	0.4 - 3	25	24	100	20	12.25	10	TC*18R...	1.2
JS254X-STCL18	0.4 - 3	25.4	24	120	20	12.25	10	TC*18R...	1.2

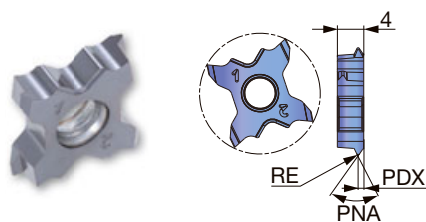
- The left hand toolholder (STCL...) is used with the right hand inserts (TC*18R...)
 Torque*: Recommended torque (N-m) for clamping

SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4
STCR**18-CHP	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
JS...STCL18	CSTC-4L100DL	T-1008/5	-	-

INSERT

TCT18FR/R-ISO (Full profile threading insert)



Right-hand (R) shown.

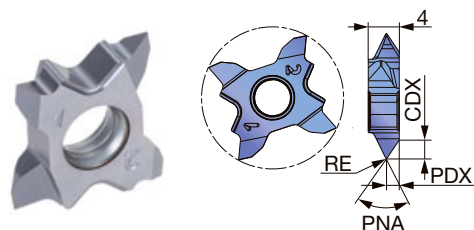
P	Steel	★	★	
M	Stainless	★	★	
K	Cast iron	★	★	
N	Non-ferrous			
S	Superalloys	★	★	
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated		Pitch min	Pitch max	PDX	PNA
			SH725	AH725				
TCT18FR-05ISO	R	0.06	●			0.5	0.35	60°
TCT18FR-07ISO	R	0.09	●			0.7	0.45	60°
TCT18FR-075ISO	R	0.09	●			0.75	0.5	60°
TCT18FR-08ISO	R	0.1	●			0.8	0.5	60°
TCT18R-10ISO	R	0.13		●		1	0.6	60°
TCT18R-125ISO	R	0.17		●		1.25	0.7	60°
TCT18R-15ISO	R	0.2		●		1.5	0.8	60°

● : Line up

TCT18R/L (for threading)



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

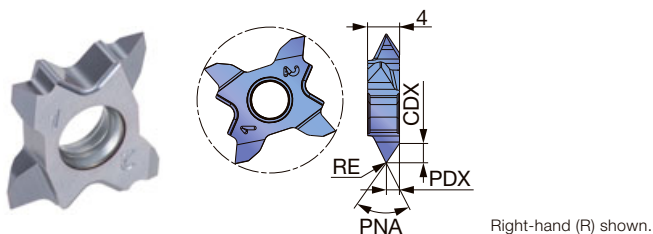
★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated		Pitch min	Pitch max	PDX	CDX	PNA
			SH725	AH725					
TCT18R-60N-010	R	0.1	●		0.8	3	1.6	2.67	60°
TCT18L-60N-010	L	0.1	●		0.8	3	1.6	2.67	60°
TCT18R-60N-020	R	0.2	●		1.5	3	1.6	2.57	60°
TCT18L-60N-020	L	0.2	●		1.5	3	1.6	2.57	60°

● : Line up

Reference pages: Toolholder → **G152 - G155**

TCT18FR (sharp edge for threading)



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

★ : First choice
☆ : Second choice

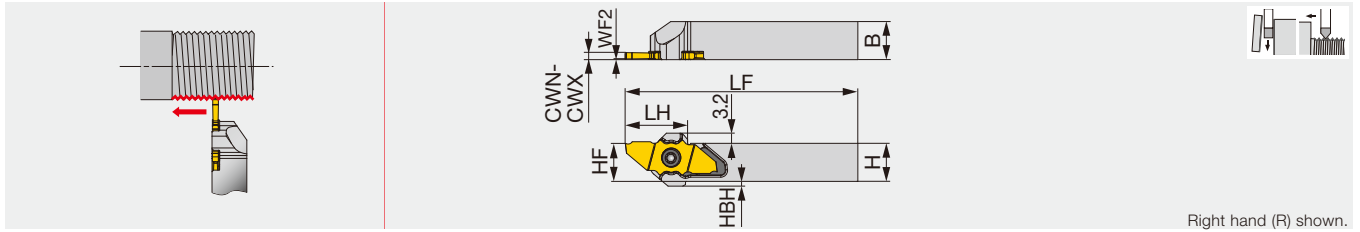
Designation	HAND	RE	Coated						Pitch min	Pitch max	PDX	CDX	PNA
			SH725										
TCT18FR-60A-005	R	0.05	●						0.4	1	0.6	0.99	60°
TCT18FR-60A-010	R	0.1	●						1	2	1	1.63	60°

● : Line up

STANDARD CUTTING CONDITIONS

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

ISO	Workpiece materials	Priority	Grades	Cutting speed V _c (m/min)	Pitch (mm)	TPI
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 18
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 18
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
M	Prehardened steel NAK80, PX5, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 18
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
	Stainless steel SUS304, etc. X5CrNi18-9, etc.	First choice	SH725	50 - 80	0.4 - 2.0	64 - 18
		Toughness	AH725	50 - 80	0.8 - 3.0	32 - 8
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	First choice	AH725	50 - 100	0.8 - 3.0	32 - 8
		Sharpness	SH725	50 - 100	0.4 - 2.0	64 - 18
	Ductile cast iron FCD400, FCD600, etc. 400-15, 600-3, etc.	First choice	AH725	50 - 100	0.8 - 3.0	32 - 8
		Sharpness	SH725	50 - 100	0.4 - 2.0	64 - 18
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 100	0.4 - 2.0	64 - 18
		Toughness	AH725	30 - 100	0.8 - 3.0	32 - 8
	Superalloys Inconel718, etc.	First choice	SH725	30 - 100	0.4 - 2.0	64 - 18
		Toughness	AH725	30 - 100	0.8 - 3.0	32 - 8



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBL**	HBH	Insert	Torque*
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2	19	3	JX**06...,12...,16...,20...	1.2
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2	-	-	JX**06...,12...,16...,20...	1.2
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2	-	-	JX**06...,12...,16...,20...	1.2

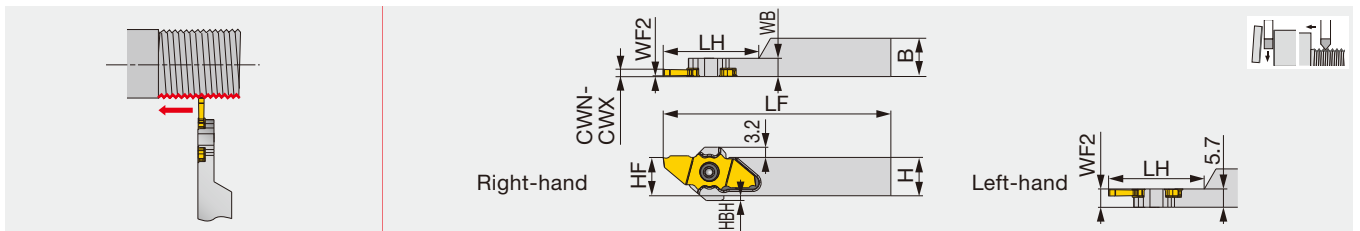
Torque*: Recommended torque (N-m) for clamping

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

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

JSXXR/L-S

Parting toolholder, for Swiss lathes (for sub spindle)



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBH	Insert	Torque*
JSXXR/L1010X09-S	0.6	2.5	10	10	120	26	10	0.2/5.5	3	JX**06...,12...,16...	1.2
JSXXR/L1212F09-S	0.6	2.5	12	12	85	26	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1212X09-S	0.6	2.5	12	12	120	30	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1616X09-S	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16...,20...	1.2

Torque*: Recommended torque (N-m) for clamping

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

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

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR..., JSXXR*****09-S	CSTC-4L055DL	T-1008/5
JSXXL..., JSXXL*****09-S	CSTC-4L055DR	T-1008/5

JSXXR/L-F/H/X-CHP

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

Designation	Direct connection		Tube connection		Right-hand		Left-hand		Insert		Torque*		Fig.
	CWN	CWX	H	B	LF ⁽¹⁾	LH ⁽¹⁾	HF	WF2 ⁽²⁾	HBL ⁽¹⁾	HBH			
JSXXR/L1012H09-CHP ⁽³⁾	0.6	2.5	10	12	102	19.2	10	0.2/11.8	18.7	3	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1212F09-CHP	0.6	2.5	12	12	85	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	2
JSXXR/L1212X09-CHP ⁽³⁾	0.6	2.5	12	12	120	19.4	12	0.2/11.8	18.8	2	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-CHP ⁽³⁾	0.6	2.5	16	16	120	19.4	16	0.2/15.8	18.7	-	JX**06...,12...,16..., 20...	1.2	1

Torque*: Recommended clamping torque (N·m)

(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20... inserts, and 4 mm shorter for JX**06... insert.

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

(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.

(4) To be replaced with the new design

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

JSXXR/L-F/X-S-CHP

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

Direct connection

Fig. 1

Tube connection

Fig. 2

Left-hand

Designation	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
JSXXR1616X09-S-CHP ^{(3),(4)}	0.6	2.5	16	16	120	30	16	0.2	1.5	JX**06...,12...,16..., 20...	1.2	1
JSXXR/L1616X09B-S-CHP ⁽³⁾	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16..., 20...	1.2	1

Torque*: Recommended clamping torque (N·m)

(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.

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

(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.

(4) To be replaced with the new design

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

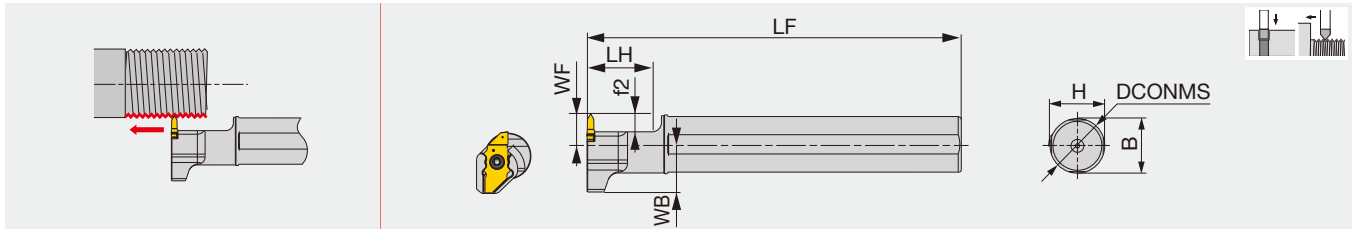
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**F...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2
JSXXL**H/X...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSH4-6-TB	P-2

Reference pages: JSXXR/L-F/H/X-CHP, JSXXR/L-F/X-S-CHP:

Inserts → **G160**, Standard cutting conditions → **G161**

Round shanks, for threading



Designation	DCONMS	H	B	LF	LH	WB	WF ⁽¹⁾	f2 ⁽¹⁾	Insert	Torque*
JS19G-SXXL09	19.05	18	18	90	21	15.43	10	6	JX**06,12*R	1.2
JS19X-SXXL09	19.05	18	18	120	21	15.43	10	6	JX**06,12*R	1.2
JS20G-SXXL09	20	19	19	90	21	15.4	10	6	JX**06,12*R	1.2
JS20X-SXXL09	20	19	19	120	21	15.4	10	6	JX**06,12*R	1.2
JS22X-SXXL09	22	21	21	120	21	15.4	10	6	JX**06,12*R	1.2
JS25H-SXXL09	25	24	24	100	21	15.4	10	6	JX**06,12*R	1.2
JS254X-SXXL09	25.4	24	24	120	21	15.4	10	6	JX**06,12*R	1.2

Torque*: Recommended clamping torque (N·m)

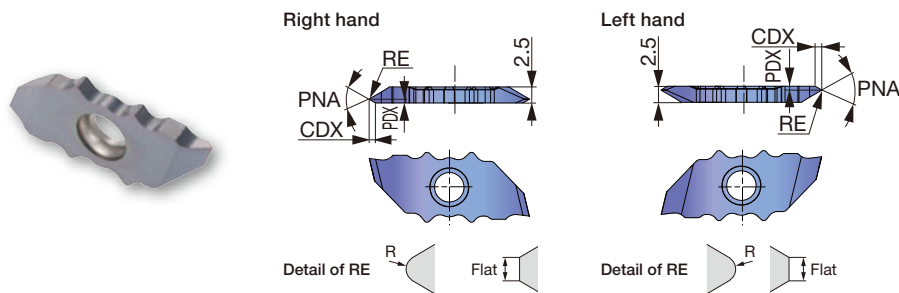
(1) When using JX..06... insert, both WF and f2 sizes will be 2 mm shorter than the values provided above.

SPARE PARTS

Designation	Clamping screw	Wrench
JS***-SXXL09	CSTC-4L100DL	T-1008/5

INSERT

JXTG12FR/L-60 (For Threading / Sharp edge)



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

★ : First choice

Designation	HAND	RE	Coated				Pitches	PDX	CDX	PNA
			SH725							
JXTG12FR-60A-000	R	Flat 0.05 max	●				0.2 - 0.4	0.25	0.4	60°
JXTG12FL-60A-000	L	Flat 0.05 max	●				0.2 - 0.4	0.25	0.4	60°
JXTG12FR-60B-000	R	Flat 0.05 max	●				0.2 - 0.4	0.25	0.4	60°
JXTG12FL-60B-000	L	Flat 0.05 max	●				0.2 - 0.4	0.25	0.4	60°
JXTG12FR-60A-005	R	R 0.05	●				0.4 - 1	0.6	0.99	60°
JXTG12FL-60A-005	L	R 0.05	●				0.4 - 1	0.6	0.99	60°
JXTG12FR-60B-005	R	R 0.05	●				0.4 - 1	1.9	0.99	60°
JXTG12FL-60B-005	L	R 0.05	●				0.4 - 1	1.9	0.99	60°
JXTG12FR-60N-010	R	R 0.1	●				1 - 1.5	1.25	2.07	60°
JXTG12FL-60N-010	L	R 0.1	●				1 - 1.5	1.25	2.07	60°

● : Line-up

Reference pages: Toolholder → **G158 - G160**

STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Grades	Cutting speed Vc (m/min)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 200
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 200
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 200
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200
	Copper alloy C2600, C280C, etc.	SH725	100 - 200
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80
	Superalloys Inconel718, etc.	SH725	30 - 80

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

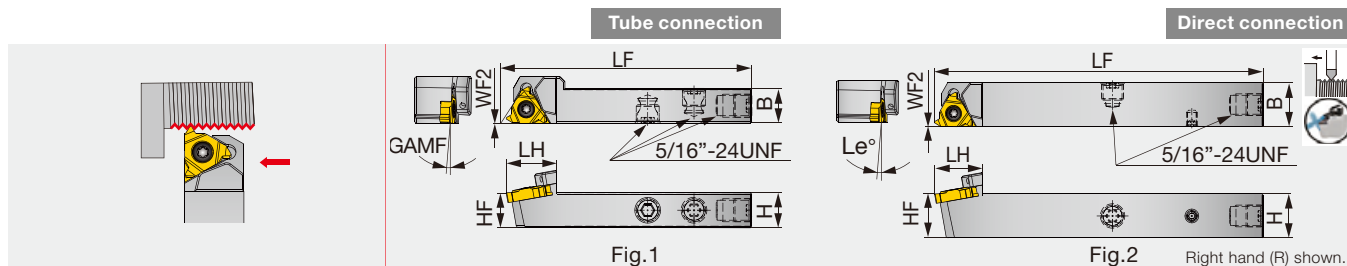
Drilling tool

Tooling System

User's Guide

Index

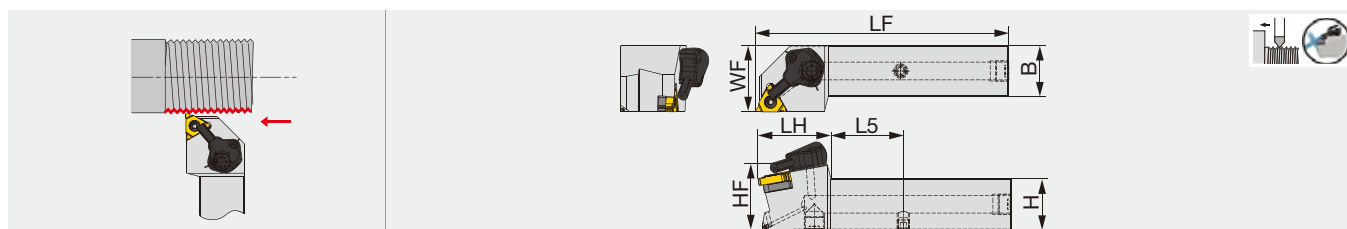
Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection



Designation	H	B	LF	LH	HF	WF2	GAMF	Insert	Fig.
JSE2R1212F16-CHP	12	12	85	19	12	0	1°	16ER...	1
JSE2R1212X16-CHP	12	12	120	19	12	0	1°	16ER...	2
JSE2R1616X16-CHP	16	16	120	19	16	0	1°	16ER...	2

SER-X-CHP-MC

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



Designation	H	B	LF	LH	HF	WF	L5	Insert
SER2020X16-CHP-MC	20	20	107	36	20	25	27.9	16ER...

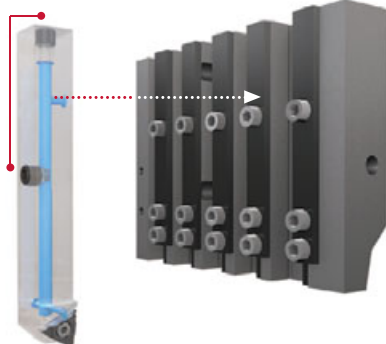
SPARE PARTS

Designation	Clamping screw	Wrench	Shim screw	Shim	Coolant unit	Coolant plug	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F	-	-	-	SR5/16UNFTL360	P-4
SER**X16-CHP-MC	CSTB-3.5ST	T-15F	DTS5-3.5	A16-1DT	CU-V-CHP	PLUGG1/8-6.5TL360	P-3.5
SER**X22-CHP-MC	CSTB-4ST	T-15F	DTS6-4	GX22-1DT	CU-CW-CHP	PLUGG1/8-6.5TL360	P-4

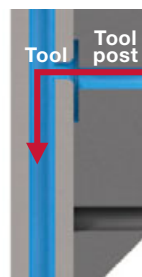
No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools

Internal thread
 Optional connection with
 external coolant tube

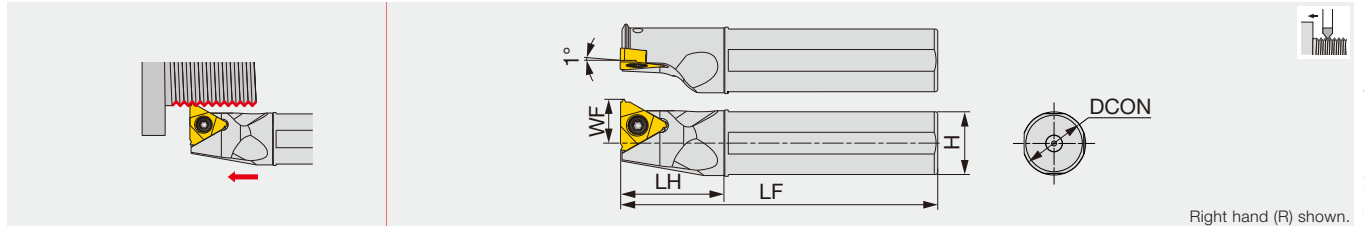


Detailed view of the coolant
 flow after connection



JS-SEL16

External threading toolholder, for Swiss lathes



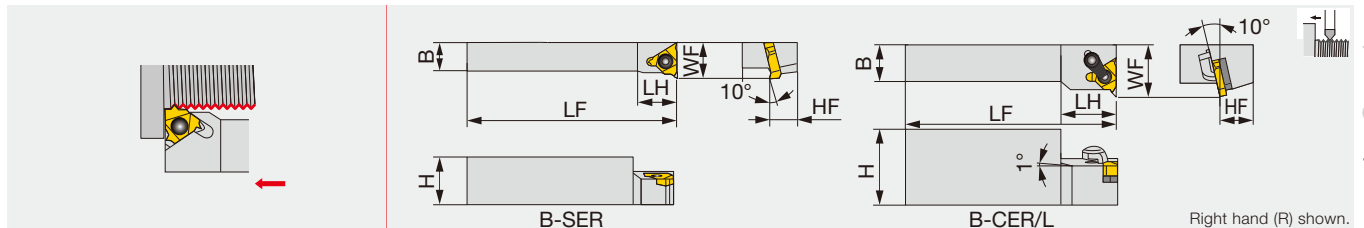
Right hand (R) shown.

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

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

B-S/CER/L

External threading toolholder, for Swiss lathes

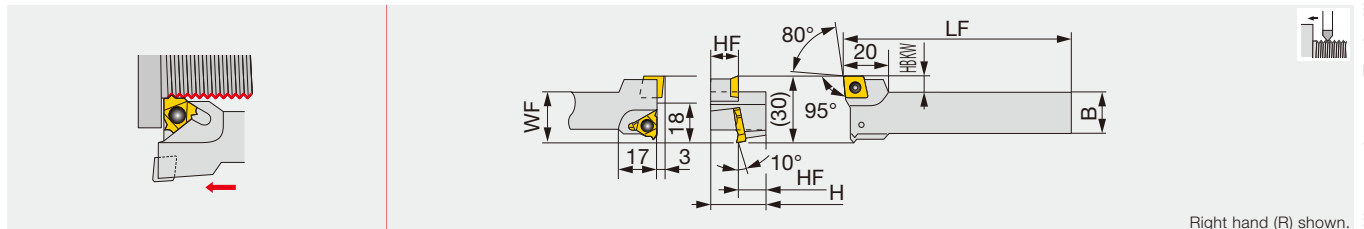


Right hand (R) shown.

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

BC-SER/L

External threading toolholder, for multi-functional Swiss lathes



Right hand (R) shown.

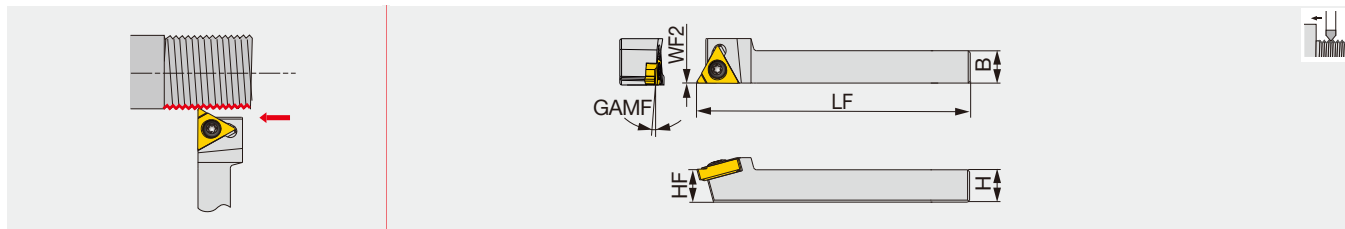
Designation	H	B	LF	HF	WF	HBKW	Insert
BC-SER12K16	24	16	125	12	23	7	16ER..., CC*T09T3...

SPARE PARTS

Designation	Clamp set	Shim set	Clamping screw	Wrench
JS***-SEL16, B-SER***16, BC-SER12K16	-	-	CSTB-3.5	T-15F
B-CER/L16M16	CSP16	A16-1	-	T-15F

Reference pages: JS-SEL16, B-S/CER/L: Inserts → **E010** -, Standard cutting conditions → **E067**
 BC-SER/L: Inserts → **B112** - (CC*T09T3...), **E010** - (16ER...),
 Standard cutting conditions → **E067**

Screw-on external threading toolholders

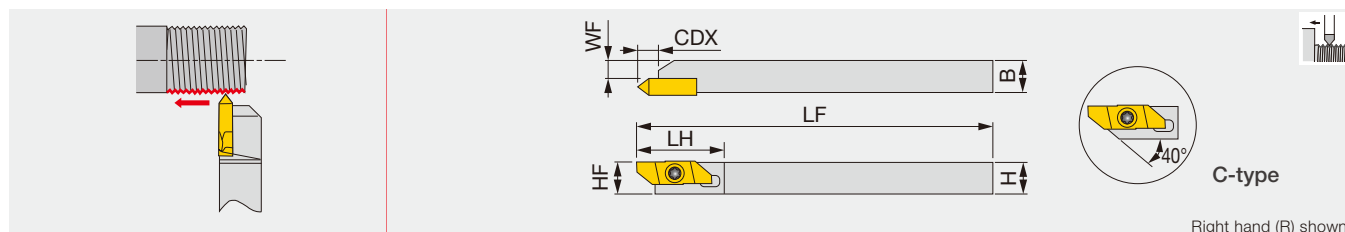


Designation	H	B	LF	HF	WF2	GAMF	Insert
SER0808H11	8	8	100	8	0	1.5°	11ER...
SER1010H11	10	10	100	10	0	1.5°	11ER...

J-SERIES

JSXBR/L

Screw-on external threading toolholder, for Swiss lathes



Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR/L1010K8-C	10	10	125	29	6.7	10	5.7	JXT*R...
JSXBR/L1212K8-C	12	12	125	29	6.7	12	7.7	JXT*R...
JSXBR/L1616K8	16	16	125	29	6.4	16	11.7	JXT*R...
JSXBR/L2020K8	20	20	125	29	6.4	20	15.7	JXT*R...
JSXBR/L2525K8	25	25	125	29	6.4	25	20.7	JXT*R...

Can be wrenched from back side with both end torx screw.

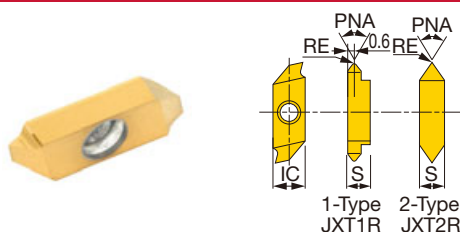
This toolholder is compatible with JXB-type inserts and JXT-type inserts.

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
SER**H11	SR M2.6-L6.7-S11	T-8/5	-
JSXBR...	CSTB-4SD	T-8F	(T-8L)

INSERT

JXT (sharp edge)



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

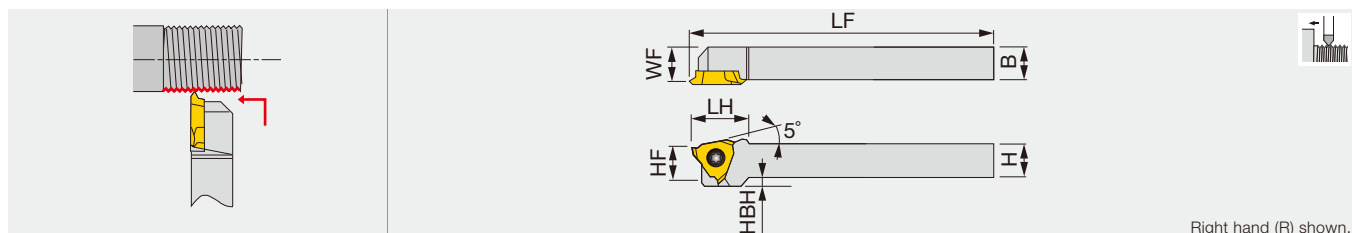
★ : First choice
☆ : Second choice

Designation	RE	Coated		Uncoated		PNA	IC	S
		J740	TH10					
JXT1R6000F	0.03	●	●			60°	8	3.97
JXT2R6000F	0.03	●	●			60°	8	3.97

Machinable pitch range: 0.5 to 1 mm

● : Line up

Reference pages: SER: Inserts → **E010** -, Standard cutting conditions → **E067**



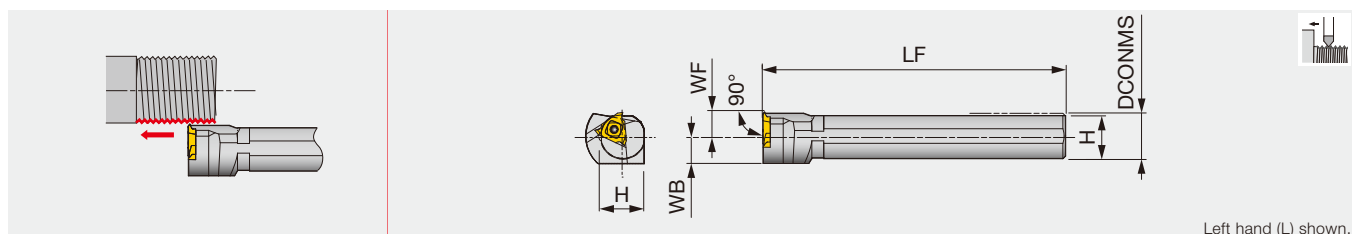
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L3...
JSTTR/L1212F3	12	12	85	18.5	12	11.5	-	JTTR/L3...
JSTTR/L1212X3	12	12	120	18.5	12	11.5	-	JTTR/L3...
JSTTR/L1616X3	16	16	120	18.5	16	15.5	-	JTTR/L3...

Recommended clamping torque: 1.2 N·m

JS-TTL3

Screw-on external threading toolholder, for Swiss lathes



Left hand (L) shown.

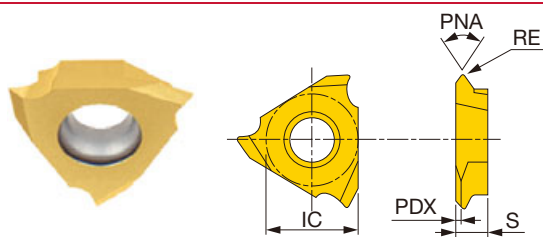
Designation	DCONMS	WF	LF	H	WB	Insert
JS19K-TTL3	19.05	10	125	18	11.5	JTTR30...
JS20K-TTL3	20	10	125	19	11.5	JTTR30...
JS22K-TTL3	22	10	125	21	11.5	JTTR30...
JS25K-TTL3	25.4	10	125	24	12.7	JTTR30...

Recommended clamping torque: 3.5 N·m

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSTTR/L...	CSTB-4SD	T-8F	(T-8L)
JS**-TTL3	CSTB-4S	T-15F	-

JTT (sharp edge)



Right hand (R) shown.

[illegible]

Designation	RE	Coated		Permet	Uncoated		PNA	IC	S	PDX	
		SH725 J740		NS9530		TH10					
JTTR3005F-55	0.05	●	●					55°	9.525	3.18	0.6
JTTL3005F-55	0.05							55°	9.525	3.18	0.6
JTTR3005F	0.05	●	●	●		●		60°	9.525	3.18	0.9
JTTL3005F	0.05	●						60°	9.525	3.18	0.9
JTTR3010F	0.1	●	●	●		●		60°	9.525	3.18	0.9
JTTL3010F	0.1	●						60°	9.525	3.18	0.9

Machinable pitch range: 0.5 to 1 mm

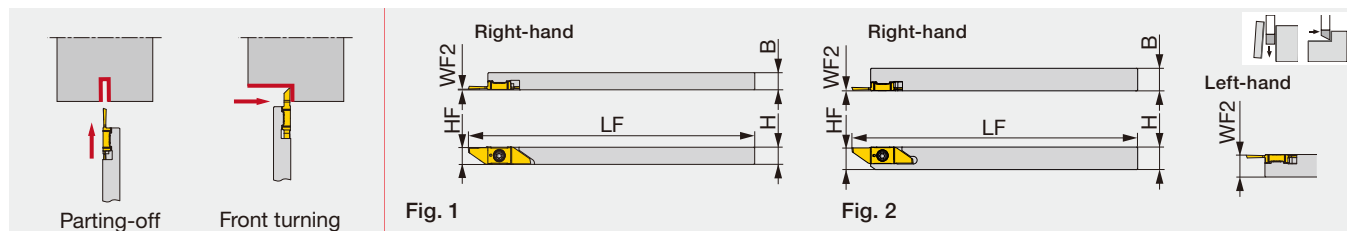
● : Line up



STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Pitch (mm)	TPI
P	Low carbon steel S15C, S25C, etc. C15, C25, etc.	SH725	60 - 150	0.5 - 1	50 - 25
	Carbon steel, Alloy steel S55C, SCM440 etc. C55, 42CrMoS4, etc.	SH725	60 - 150	0.5 - 1	50 - 25
	Pre-hardened steel NAK80, PX5 etc.	SH725	60 - 150	0.5 - 1	50 - 25
M	Stainless steel SUS304, SUS316 etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH725	50 - 80	0.5 - 1	50 - 25
K	Grey cast iron FC250, FC300, etc. 250, 300, etc.	TH10	50 - 100	0.5 - 1	50 - 25
	Ductile cast iron FCD400, etc. 400-15S, etc.	TH10	50 - 100	0.5 - 1	50 - 25
S	Titanium alloy Ti-6Al-4V, etc.	SH725	30 - 100	0.5 - 1	50 - 25
	Heat resistant alloy Inconel 718, etc.	SH725	30 - 100	0.5 - 1	50 - 25

Reference pages: Toolholder → **G165**



Designation	H	B	LF	HF	WF2 ⁽¹⁾	Insert	Torque*	Fig.
JSXXL0606X05	6	6	120	5.6	5.8	JV*N..., JVN...	1.3	1
JSXXR/L0707X05	7	7	120	6.6	0.2/6.8	JV*N..., JVN...	1.3	1
JSXXR/L0808F05	8	8	85	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L0808H05	8	8	100	7.7	0.2/7.8	JV*N..., JVN...	1.3	2
JSXXR/L1010H05	10	10	100	9.7	0.2/9.8	JV*N..., JVN...	1.3	2

Torque*: Recommended clamping torque (N·m)

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

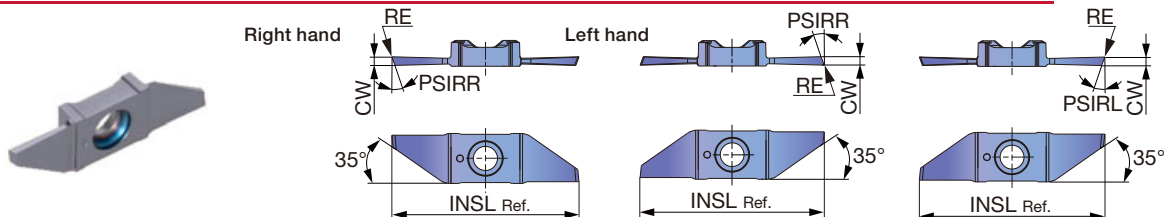
Use the right-hand insert (JV***R...) for a right-hand holder (JSXXR...); the left-hand insert (JV***L...) for a left-hand holder (JSXXL...).

SPARE PARTS

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

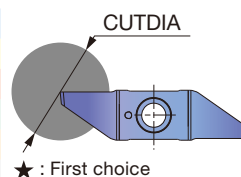
INSERTS

JVPN**R/L (For parting-off)



JVPN12L10F000-20L

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



★ : First choice

Designation	HAND	CW±0.025	RE	Coated				CUTDIA	INSL	PSIRR	PSIRL
				SH725							
JVPN04R05F000-20	R	0.5	0	●				4	42.8	20°	-
JVPN04L05F000-20	L	0.5	0	●				4	42.8	20°	-
JVPN04R05F005-20	R	0.5	0.05	●				4	42.6	20°	-
JVPN04L05F005-20	L	0.5	0.05	●				4	42.6	20°	-
JVPN07R06F000-20	R	0.6	0	●				7	42.8	20°	-
JVPN07L06F000-20	L	0.6	0	●				7	42.8	20°	-
JVPN07R06F005-20	R	0.6	0.05	●				7	42.8	20°	-
JVPN07L06F005-20	L	0.6	0.05	●				7	42.8	20°	-
JVPN12R08F000-20	R	0.8	0	●				12	43.2	20°	-
JVPN12L08F000-20	L	0.8	0	●				12	43.2	20°	-
JVPN12R08F005-20	R	0.8	0.05	●				12	43	20°	-
JVPN12L08F005-20	L	0.8	0.05	●				12	43	20°	-
JVPN12R10F000-20	R	1	0	●				12	43.4	20°	-
JVPN12L10F000-20	L	1	0	●				12	43.4	20°	-
JVPN12R10F005-20	R	1	0.05	●				12	43.4	20°	-
JVPN12L10F005-20	L	1	0.05	●				12	43.4	20°	-
JVPN12L10F000-20L	L	1	0	●				12	43.4	-	20°

● : Line up

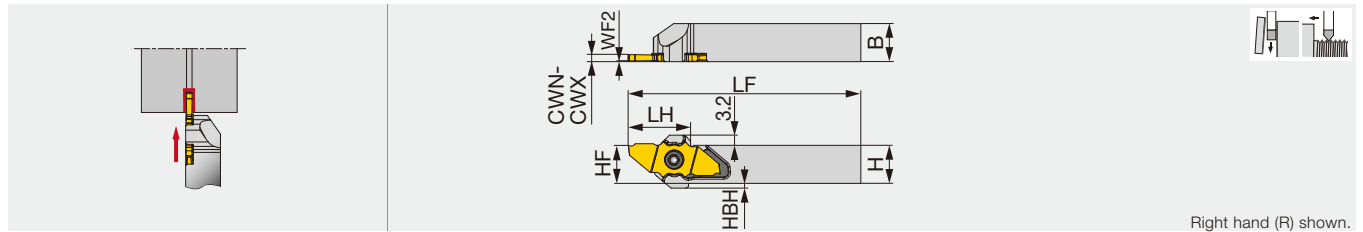
Reference pages: JSXXR/L: Standard cutting conditions → G168

STANDARD CUTTING CONDITIONS

Parting-off

ISO	Workpiece materials	Grade	Cutting speed V _c (m/min)	Feed f (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 180	0.01 - 0.05
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 180	0.01 - 0.05
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 180	0.01 - 0.05
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 120	0.01 - 0.05
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.05
	Copper alloys C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.05
	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.05





Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBL**	HBH	Insert	Torque*
JSXXR/L1010X09	0.6	2.5	10	10	120	19.65	10	0.2	19	3	JX**06...,12...,16...,20...	1.2
JSXXR/L1212F09	0.6	2.5	12	12	85	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1212X09	0.6	2.5	12	12	120	19.65	12	0.2	19	1.5	JX**06...,12...,16...,20...	1.2
JSXXR/L1616X09	0.6	2.5	16	16	120	19.65	16	0.2	-	-	JX**06...,12...,16...,20...	1.2
JSXXR/L2020H09	0.6	2.5	20	20	100	22.5	20	0.2	-	-	JX**06...,12...,16...,20...	1.2

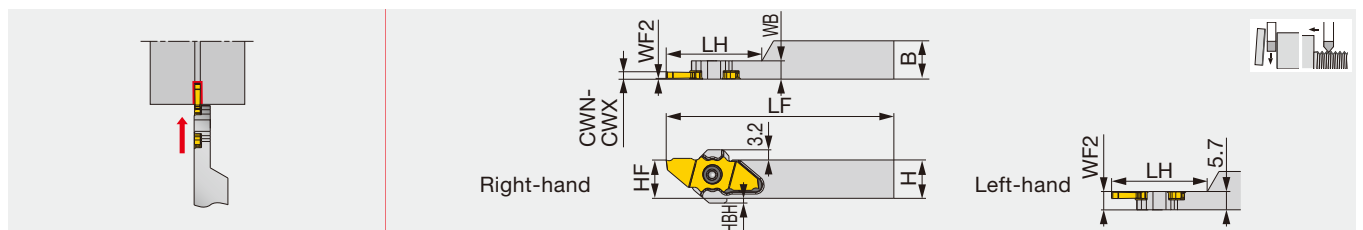
Torque*: Recommended torque (N-m) for clamping

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

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

JSXXR/L-S

Parting toolholder, for Swiss lathes (for sub spindle)



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF2	HBH	Insert	Torque*
JSXXR/L1010X09-S	0.6	2.5	10	10	120	26	10	0.2/5.5	3	JX**06...,12...,16...	1.2
JSXXR/L1212F09-S	0.6	2.5	12	12	85	26	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1212X09-S	0.6	2.5	12	12	120	30	12	0.2/5.5	1.5	JX**06...,12...,16...	1.2
JSXXR/L1616X09-S	0.6	2.5	16	16	120	30	16	0.2/5.5	-	JX**06...,12...,16...,20...	1.2

Torque*: Recommended torque (N-m) for clamping

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

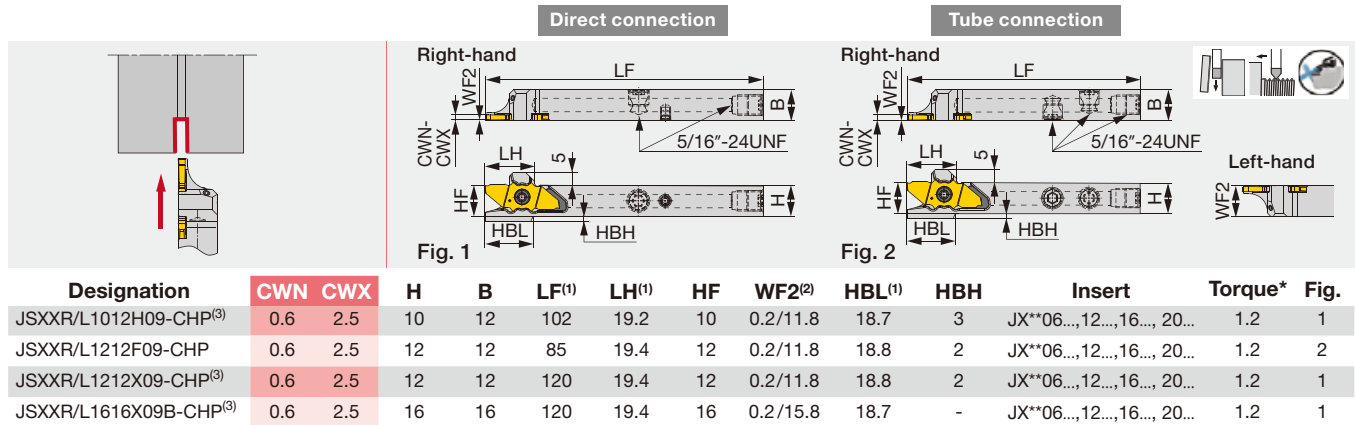
***JXPG20... Insert will not fit.

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR..., JSXXR*****09-S	CSTC-4L055DL	T-1008/5
JSXXL..., JSXXL*****09-S	CSTC-4L055DR	T-1008/5

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



Torque*: Recommended clamping torque (N·m)

(1) LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JX**16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX**12... and JX**20... inserts, and 4 mm shorter for JX**06... insert.

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

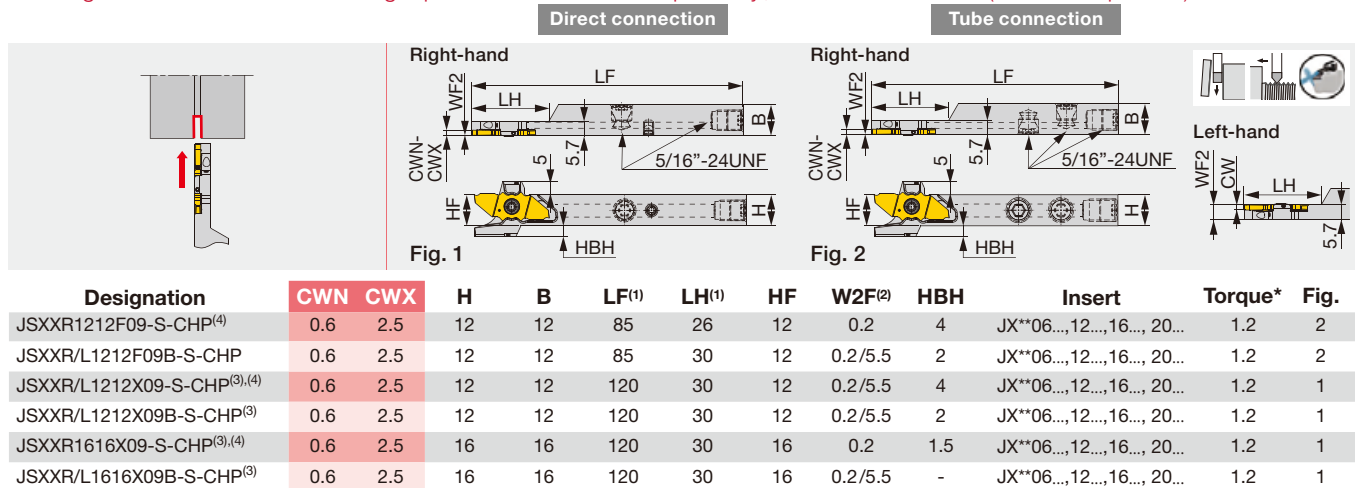
(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.

(4) To be replaced with the new design

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

JSXXR/L-F/X-S-CHP

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



Torque*: Recommended clamping torque (N·m)

(1) LF (Functional Length) and LH (Head Length) values shown above are true with JX**16... insert. Both LF and LH will be 2 mm shorter than the above value with JX**12... and JX**20... inserts; 4 mm shorter with JX**06... insert.

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

(3) Compatible to the direct internal coolant supply system without the use of external coolant hose.

(4) To be replaced with the new design

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

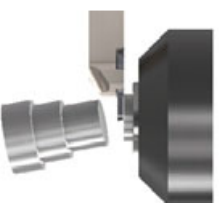
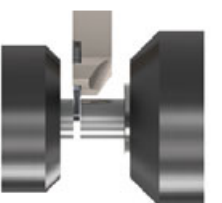
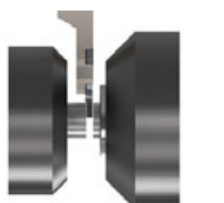
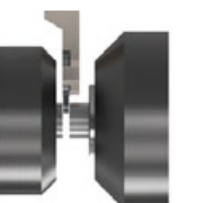
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR**F...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Reference pages: JSXXR/L-F/H/X-CHP, JSXXR/L-F/X-S-CHP:

Inserts → **G173 - G175**, Standard cutting conditions → **G176**

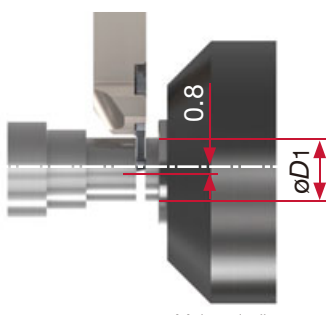
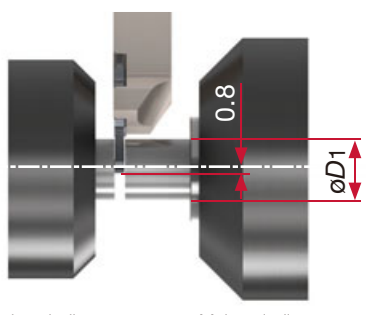
HOW TO SELECT TOOLS

Application	Large-diameter machining of workpiece with rigidity		Small-diameter machining of workpiece with short overhang	
	Main-spindle tooling	Sub-spindle tooling	Sub-spindle tooling	
			Workpiece with long overhang at the side of sub-spindle for the process after parting-off	Short workpiece with low rigidity
	 Main spindle 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)

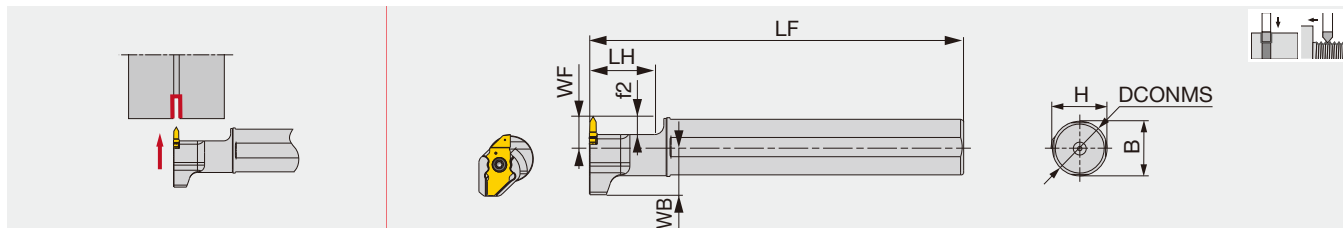
HOW TO SELECT TOOLHOLDERS FOR SUB-SPINDLE

Sub-spindle dia.	Parting-off dia.	B	LF	Insert	Toolholder
ø40	~ ø6	10	116	JXPG06*	JSXXR/L1010X09-S
ø40	~ ø6	12	81	JXPG06*	JSXXR/L1212F09-S
ø40	~ ø12	10	118	JXPG12*	JSXXR/L1010X09-S
ø40	~ ø12	12	83	JXPG12*	JSXXR/L1212F09-S
ø40	~ ø16	10	120	JXPG16*	JSXXR/L1010X09-S
ø40	~ ø16	12	85	JXPG16*	JSXXR/L1212F09-S
ø40	~ ø20	12	87	JXPG20*	JSXXR/L1212F09B-S-CHP
ø50	~ ø6	12	116	JXPG06*	JSXXR/L1212X09-S
ø50	~ ø6	16	116	JXPG06*	JSXXR/L1616X09-S
ø50	~ ø12	12	118	JXPG12*	JSXXR/L1212X09-S
ø50	~ ø12	16	118	JXPG12*	JSXXR/L1616X09-S
ø50	~ ø16	12	85	JXPG16*	JSXXR/L1212F09-S
ø50	~ ø16	12	120	JXPG16*	JSXXR/L1212X09-S
ø50	~ ø16	16	120	JXPG16*	JSXXR/L1616X09-S
ø50	~ ø20	12	87	JXPG20*	JSXXR/L1212F09B-S-CHP
ø50	~ ø20	12	122	JXPG20*	JSXXR/L1212X09B-S-CHP
ø50	~ ø20	16	122	JXPG20*	JSXXR/L1616X09-S

MAX. PARTING-OFF DIA. & DEPTH

Main-spindle tooling	Sub-spindle tooling
 Main spindle	 Sub-spindle Main spindle

There will be no tool-workpiece interference when parting off the workpiece with the cutting edge position apart from the workpiece center by 0.8 mm or more.



Designation	CWN	CWX	DCONMS	H	B	LF	LH	WB	WF	f2	Insert	Torque*
JS19G-SXXL09	0.6	2.5	19.05	18	18	90	21	15.43	10	6	JX**06,12*R	1.2
JS19X-SXXL09	0.6	2.5	19.05	18	18	120	21	15.43	10	6	JX**06,12*R	1.2
JS20G-SXXL09	0.6	2.5	20	19	19	90	21	15.4	10	6	JX**06,12*R	1.2
JS20X-SXXL09	0.6	2.5	20	19	19	120	21	15.4	10	6	JX**06,12*R	1.2
JS22X-SXXL09	0.6	2.5	22	21	21	120	21	15.4	10	6	JX**06,12*R	1.2
JS25H-SXXL09	0.6	2.5	25	24	24	100	21	15.4	10	6	JX**06,12*R	1.2
JS254X-SXXL09	0.6	2.5	25.4	24	24	120	21	15.4	10	6	JX**06,12*R	1.2

* Torque: Recommended torque (N-m) for clamping

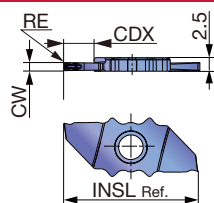
Threading insert (JXTG12FR) and parting-off inserts (JXPG06R ,12R) fit this holder.

SPARE PARTS

Designation	Clamping screw	Wrench
JS***-SXXL09	CSTC-4L100DL	T-1008/5

INSERT

JXPS**R/L-F (with 3D chipbreaker, sharp edge)



Right-hand (R) shown.

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

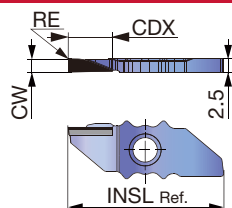
★ : First choice

Designation	HAND	CW±0.025	RE	Coated				CUTDIA	CDX*	INSL
				SH725						
JXPS06R06F	R	0.6	0.05	●				6	3.5	21
JXPS06L06F	L	0.6	0.05	●				6	3.5	21
JXPS12R08F	R	0.8	0.05	●				12	6.5	25
JXPS12L08F	L	0.8	0.05	●				12	6.5	25
JXPS12R10F	R	1	0.05	●				12	6.5	25
JXPS12L10F	L	1	0.05	●				12	6.5	25
JXPS12R15F	R	1.5	0.05	●				12	6.5	25
JXPS12L15F	L	1.5	0.05	●				12	6.5	25
JXPS16R15F	R	1.5	0.05	●				16	8.5	29
JXPS16L15F	L	1.5	0.05	●				16	8.5	29
JXPS20R20F	R	2	0.05	●				20	10.5	33
JXPS20L20F	L	2	0.05	●				20	10.5	33

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

● : Line up

JXDX**R-F (PCD insert)



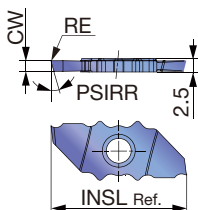
P	Steel								
M	Stainless								
K	Cast iron								
N	Non-ferrous	★							
S	Superalloys								
H	Hard materials								

★ : First choice

Designation	HAND	CW±0.05	RE	PCD				CDX	INSL
				DX110					
JXDX12R20F	R	2	< 0.1	●				6	25
JXDX12R25F	R	2.5	< 0.1	●				6.5	25
JXDX16R25F	R	2.5	< 0.1	●				7	29

● : Line up

JXPG**R/L-F (sharp edge)

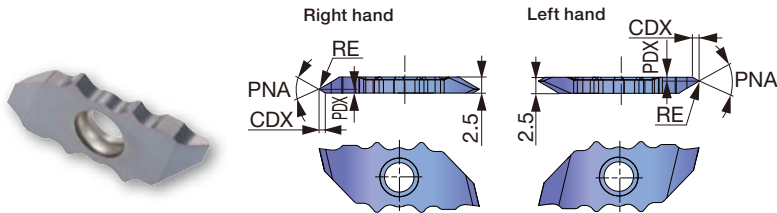


Right hand (R) shown.

★ : First choice
☆ : Second choice

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

JXTG12FR/L-60 (For Threading / Sharp edge)



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

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated						Pitches	PDX	CDX	PNA
			SH725									
JXTG12FR-60A-000	R	Flat (0.05 max)	●						0.2 - 0.4	0.25	0.4	60°
JXTG12FL-60A-000	L	Flat (0.05 max)	●						0.2 - 0.4	0.25	0.4	60°
JXTG12FR-60B-000	R	Flat (0.05 max)	●						0.2 - 0.4	2.25	0.4	60°
JXTG12FL-60B-000	L	Flat (0.05 max)	●						0.2 - 0.4	2.25	0.4	60°
JXTG12FR-60A-005	R	0.05	●						0.4 - 1	0.6	0.99	60°
JXTG12FL-60A-005	L	0.05	●						0.4 - 1	0.6	0.99	60°
JXTG12FR-60B-005	R	0.05	●						0.4 - 1	1.9	0.99	60°
JXTG12FL-60B-005	L	0.05	●						0.4 - 1	1.9	0.99	60°
JXTG12FR-60N-010	R	0.1	●						1 - 1.5	1.25	2.07	60°
JXTG12FL-60N-010	L	0.1	●						1 - 1.5	1.25	2.07	60°

● : Line-up
Packing quantity = 5 pcs.

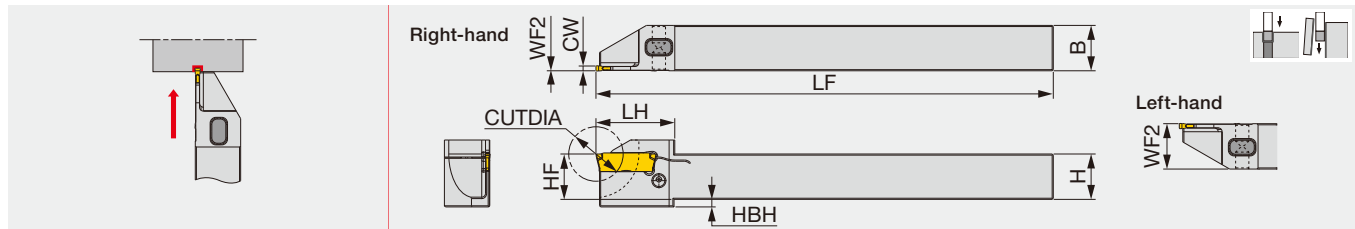
Parting, Grooving

ISO	Workpiece materials	Grades	Cutting speed V _c (m/min)	Feed f (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15E4, E275A, etc.	SH725	50 - 200	0.01 - 0.05
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200	0.01 - 0.05
	Free cutting steels SUH22, SUH23, etc.	SH725	50 - 200	0.01 - 0.05
M	Stainless steels SUS304, X5CrNi18-9, etc.	SH725	50 - 200	0.01 - 0.05
N	Aluminium alloys A5056, A6061, etc.	SH725	150 - 200	0.01 - 0.05
	Copper alloy C2600, C280C, etc.	SH725	100 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH725	30 - 80	0.01 - 0.05
	Superalloys Inconel718, etc.	SH725	30 - 80	0.01 - 0.05



For aluminium and non-ferrous metal PCD insert

ISO	Workpiece materials	Grades	Operation	Cutting speed V _c (m/min)	Feed f (mm/rev)	Depth of cut a _p (mm)
N	Aluminium alloys A5056, A6061, etc.	DX110	Grooving	100 - 300	0.03 - 0.15	-
		DX110	Turning	100 - 300	0.03 - 0.15	< 6



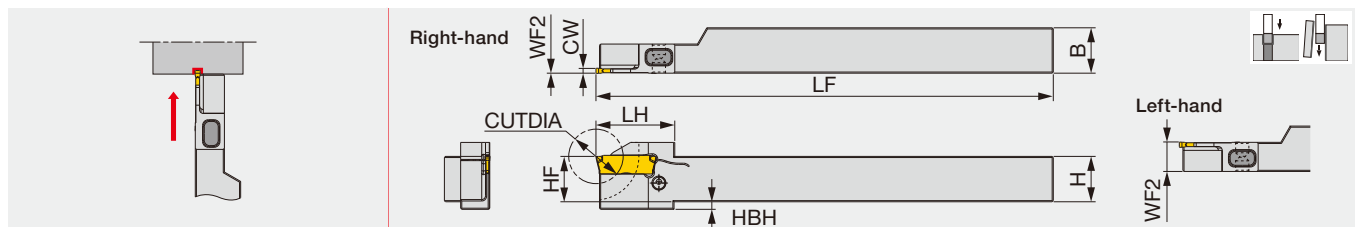
Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	Torque*
JTTER/L1010H1.2D12	1.2	0.9	12	10	10	100	17	10	0/10	-	1.5
JTTER/L1212F1.2D16	1.2	0.9	16	12	12	85	19	12	0/12	-	1.5
JTTER/L1212X1.2D16	1.2	0.9	16	12	12	120	19	12	0/12	-	1.5
JTTER/L1212X1.2D20	1.2	0.9	20	12	12	120	21	12	0/12	2	1.5
JTTER/L1616X1.2D20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

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

Torque*: Recommended clamping torque (N-m)

JTTER/L-S

External grooving and parting toolholder, for Swiss lathes (for sub spindle)



Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	Torque*
JTTER/L1010H1.2D12-S	1.2	0.9	12	10	10	100	17	10	0/7.7	-	1.5
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

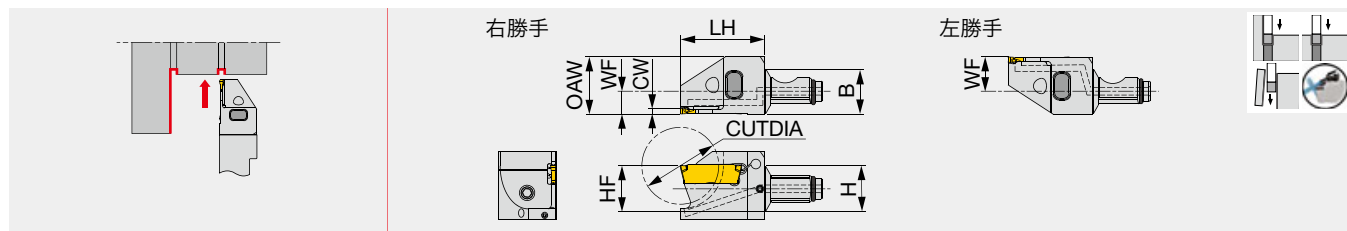
(1) "WF" value is calculated with groove width "CW" shown in the table. The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

(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

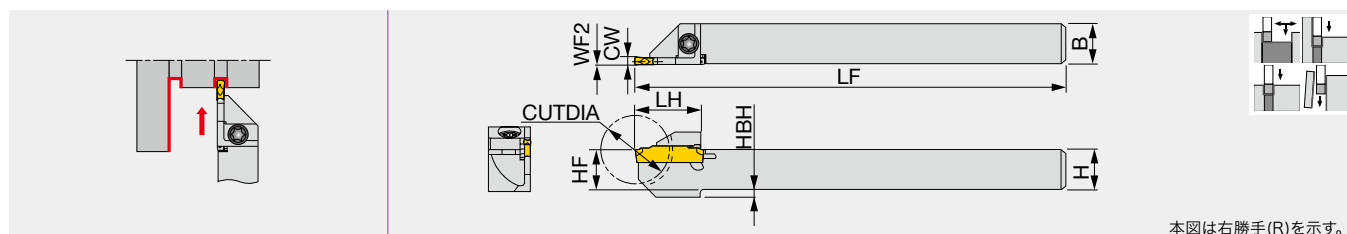


形番	CW	シートサイズ	CUTDIA	H	B	LH	HF	WF ⁽¹⁾	OAW	トルク*
QC12-JTTER/L1.2D20-CHP	1.2	0.9	20	12	12	22	12	6/9	15	1.5
QC12-JTTER/L1.4D20-CHP	1.4	1	20	12	12	22	12	6/9	15	1.5
QC12-JTTER/L2D20-CHP	2	2	20	12	12	22	12	6/9	15	1.5

(1) 上記中の "WF" 値は同表の溝幅 "CW" インサートを取付けた際の寸法です。右勝手/左勝手の順で "WF" 値を示します。
トルク*: 推奨締付けトルク (N・m)

JCTER/L

自動盤用外径溝入れ、突切りバイト



本図は右勝手(R)を示す。

形番	CW	シートサイズ	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBH	トルク*
JCTER/L1010X1.4T10	1.4	1	20	10	10	120	18	10	0.2/10.2	-	3
JCTER/L1212F1.4T12	1.4	1	24	12	12	85	19.5	12	0.2/12.2	-	3
JCTER/L1212X1.4T12	1.4	1	24	12	12	120	19.5	12	0.2/12.2	-	3
JCTER/L1414-1.4T12	1.4	1	24	14	14	125	19.5	14	0.2/14.2	-	3
JCTER/L1616X1.4T16	1.4	1	32	16	16	120	24	16	0.2/16.2	-	3
JCTER/L1010X2T10	2	2	20	10	10	120	19	10	0.1/10.1	2	3
JCTER/L1212F2T12	2	2	24	12	12	85	19	12	0.1/12.1	2	3
JCTER/L1212X2T12	2	2	24	12	12	120	19	12	0.1/12.1	2	3
JCTER/L1414-2T12	2	2	24	14	14	125	19	14	0.1/14.1	-	3
JCTER/L1616X2T16	2	2	32	16	16	120	24	16	0.1/16.1	-	3
JCTER/L1212F3T12	3	3	24	12	12	85	19	12	0.3/12.3	2	3
JCTER/L1212X3T12	3	3	24	12	12	120	19	12	0.3/12.3	2	3
JCTER/L1616X3T16	3	3	32	16	16	120	24	16	0.3/16.3	-	3
JCTER/L2020H3T16	3	3	32	20	20	100	24	20	0.3/20.3	-	3

(1) 上記中の "WF2" 値は同表の溝幅 "CW" インサートを取付けた際の寸法です。

CUTDIA: 最大突切り径

トルク*: 推奨締付けトルク (N・m)

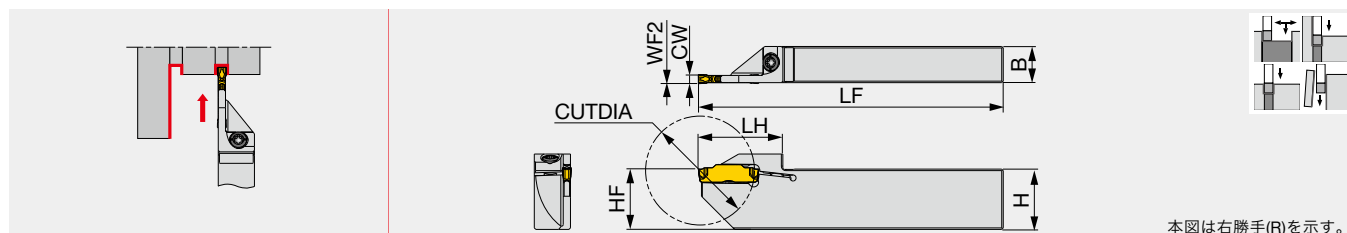
部品

形番	締付けねじ	締付けねじ 1	クランプピン	スパナ	スパナ 1	O リング
QC12-JTTER/L...	-	SSM3.5x0.35	PIN-SL-TC	-	P-2F	ORSS-0454.5X1.0NBR70
JCTER/L...	CSHB-4-A	-	-	T-15F	-	-

参照ページ: QC12-JTTER/L-CHP, JCTER/L: インサート → **G182 - G189**
シャンク, 関連部品 → **G095 - G096**, 標準切削条件 → **G190**

JCTER/L2012

自動盤用外径溝入れ、突切りバイト



本図は右勝手(R)を示す。

形番	CW	シートサイズ	CUTDIA	H	B	LF	LH	HF	WF2 ⁽¹⁾	トルク*
JCTER/L2012H2T18	2	2	36	20	12	100	25	20	0.1/12.1	3
JCTER/L2012H3T21	3	3	42	20	12	100	28	20	0.1/12.1	3

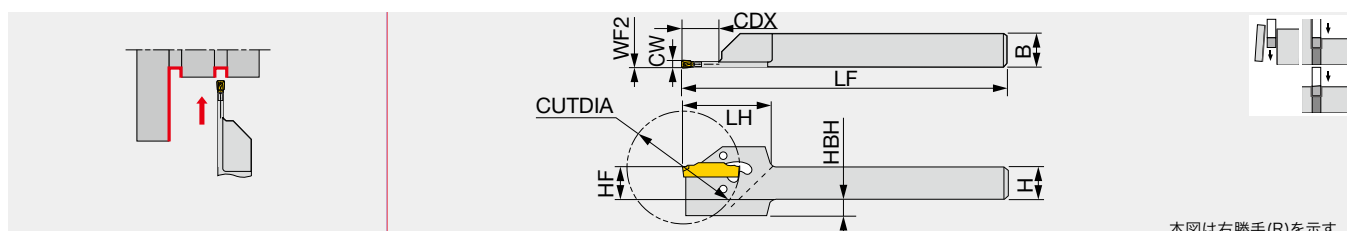
(1) 上記中の "WF2" 値は同表の溝幅 "CW" インサートを取り付けた際の寸法です。

CUTDIA: 最大突切り径

トルク*: 推奨締付けトルク(N・m)

CGER/L

自動盤用外径深溝入れ、突切りバイト



本図は右勝手(R)を示す。

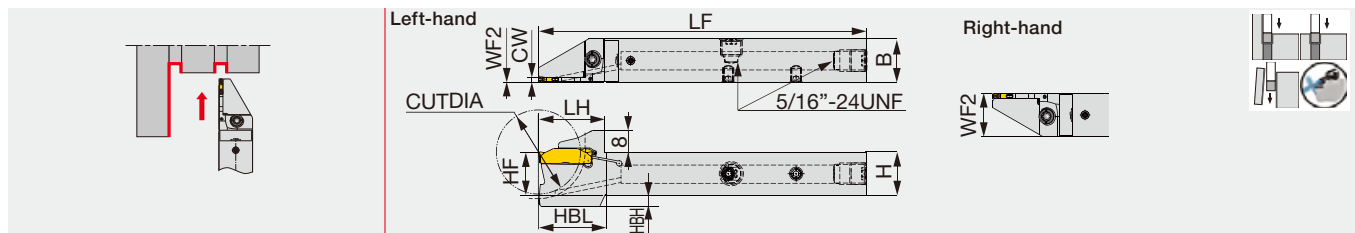
形番	CW	シートサイズ	CUTDIA ⁽¹⁾	CDX	H	B	LF	LH	HF	WF2 ⁽²⁾	HBH
CGER/L2020-1.4T14	1.4	1	29/29	9.7	20	20	125	31	20	0.2/20.2	-
CGER/L1212-2T17	2	2	35/35	11.8	12	12	150	31	12	0.1/12.1	6
CGER/L1616-2T17	2	2	35/35	11.8	16	16	150	31	16	0.1/16.1	2
CGER/L2020-2T17	2	2	35/35	9.8	20	20	125	31	20	0.1/20.1	-
CGER/L1212-3T19	3	3	38/40	12	12	12	150	31	12	0.3/12.3	6
CGER/L1616-3T19	3	3	38/45	14.9	16	16	150	31	16	0.3/16.3	2
CGER/L2020-3T19	3	3	38/45	13.2	20	20	125	31	20	0.3/20.3	-
CGER/L2020-4T19	4	4	38/55	20.3	20	20	125	33	20	0.4/20.4	-

(1) DG*/SG* 最大突切り径CUTDIAは、使用インサートにより異なります。(2) "WF2" の値は、同表の溝幅 "CW" のインサートを取り付けた際の寸法です。
CRWスパナは付属品でないため、別途購入をお願いします。インサートはCRWスパナで上あごを広げてクランプします。

部品

形番	締付けねじ	スパナ	スパナ (オプション)
JCTER/L2012...	CSHB-4-A	T-15F	-
CGER/L2020-1.4T14	-	-	CRW23
CGER/L****-2T17 - 4T19	-	-	CRW33

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



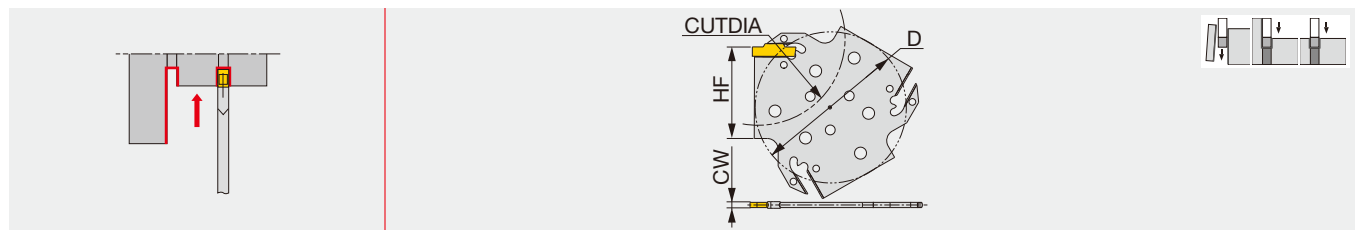
Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HBL	HF	WF2 ⁽¹⁾	HBH	Torque*
JCTER/L1212X2T12-CHP	2	2	25	12	12	120	24.7	24.7	12	0/12	5	3.0
JCTER/L1616X2T12-CHP	2	2	25	16	16	120	24.7	24.5	16	0/16	1	3.0
JCTER/L1616X2T16-CHP	2	2	32	16	16	120	24.7	24.7	16	0/16	4	3.0
JCTER/L2020X2T16-CHP	2	2	32	20	20	120	24.7	-	20	0/20	0	3.0

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



CHGP

Parting-off and external grooving blade



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

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

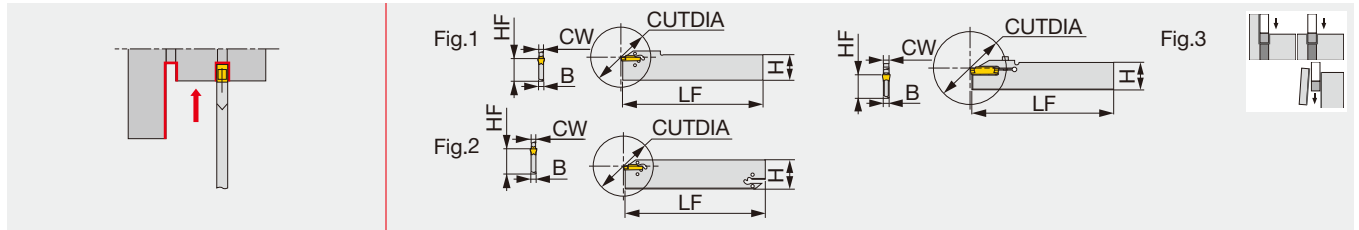
SPARE PARTS

Designation	Clamping screw	Wrench	Coolant plug	Wrench	DirectJet plug	Wrench	Wrench (Option)
JCTER/L...	CSHB-4-A	T-15F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2	-
CHGP...	-	-	-	-	-	-	CRW33

Reference pages: JCTER/L-CHP, CHGP: Inserts → **G182 - G189**, Toolblock → **G192**
Standard cutting conditions → **G190**

CGP

External deep grooving and parting blade



Designation	CW	Seat size	CUTDIA	H	B	LF	HF	Fig.	Torque*
CGP26-1.4S	1.4	1	26	26	1	150	21.4	1	-
CGP32-1.4D	1.4	1	26	32	1	150	24.8	2	-
CGP26-2S	2	2	40	26	1.8	150	21.4	1	-
CGP32-2D	2	2	50	32	1.8	150	24.8	2	-
CGP26-3S	3	3	50	26	2.4	150	21.4	1	-
CGP32-3D	3	3	100	32	2.4	150	24.8	2	-
CGP26-4S	4	4	80	26	3.2	150	21.4	1	-
CGP32-4D	4	4	100	32	3.2	150	24.9	2	-
CGP45-4D	4	4	120	45	3.2	150	38.1	2	-
CGP32-5D	5	5	120	32	4	150	24.9	2	-
CGP32-6D	6	6	120	32	5.2	150	24.9	2	-
CGP32-8S-CL	8	8	80	32	6.2	150	24.9	3	3

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

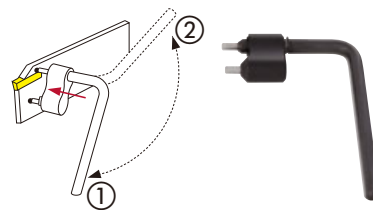
Wrench (CRW...) is not included. Please order it separately.

*Torque: Recommended clamping torque (N·m)

Caution

Newly developed clamp

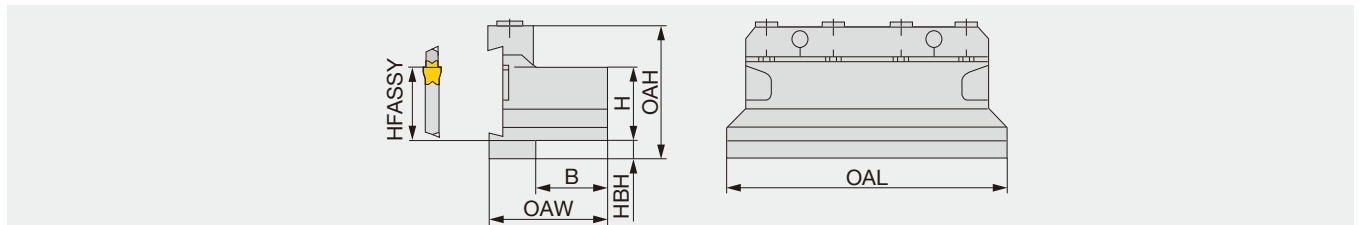
Insert is clamped by the elastic deformation of upper jaw.
Low clamping stress increases the stability and tool life



unclamp : ① → ②
clamp : ② → ①

CTBU

Tool blocks for CGP blade



Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU20-26	20	21	86	20	9	43	38	CGP26...
CTBU25-26	25	23	110	25	5	45	43	CGP26...
CTBU20-32	20	19	100	20	13	50	38	CGP32...
CTBU25-32	25	23	110	25	8	50	42	CGP32...
CTBU32-32	32	29	110	32	5	54	48	CGP32...

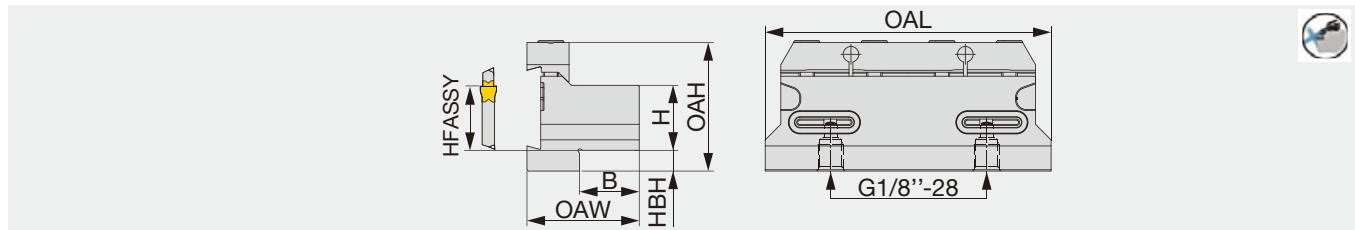
SPARE PARTS

Designation	Clamp	Clamping screw	Wrench	Wrench (Optional)
CGP**-1.4*	-	-	-	CRW23
CGP**-2/3/4/5/6	-	-	-	CRW33
CGP32-8S-CL	-	CM4X0.7X20-M0-A	P-3	-
CTBU20-26	CT-86	CM6X30-S	P-5	-
CTBU25-26	CT-105	CM6X30-S	P-5	-
CTBU20-32	CT-100	CM6X30-S	P-5	-
CTBU25-32, CTBU32-32	CT-110	CM6X30-S	P-5	-

Reference pages: CGP: Inserts → **G182 - G189**, Standard cutting conditions → **G190**

CTBU-CHP

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



Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU25-32-CHP	25	23	110	25	8	50	43.2	CGP32-"D-CHP

Applicable for 14 MPa coolant

SPARE PARTS				
Designation	Clamping screw	Clamp	Wrench	O-ring
CTBU25-32-CHP	12.9-SRM6X16DIN912	110-CT	5-P	OR14X2.5NN

TUNG

CHIPBREAKER GUIDE

External grooving and parting

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

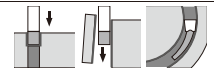
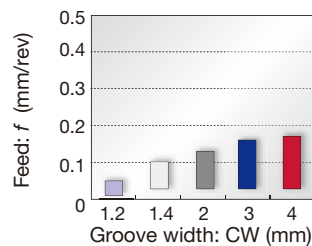


G184, G187

For Swiss lathes

Unique-designed edge and chipbreaker
Handed insert available
CW = 1.2 - 4 mm

Standard feed



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

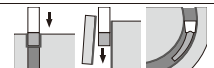
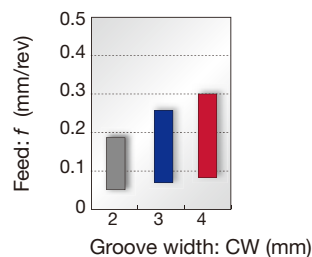


G185, G186

High fracture resistance

Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 2 - 4 mm

Standard feed



DGL type (2 corners)

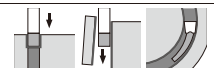
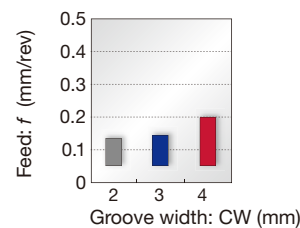


G189

1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often has difficulties in chip control
CW = 2 - 4 mm

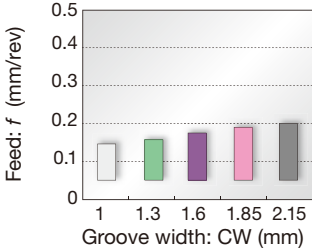
Standard feed

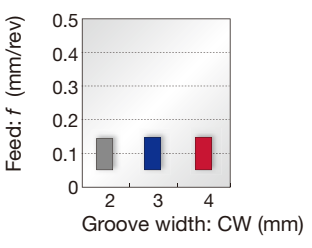
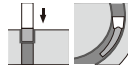


Please see page G*** for the product details.

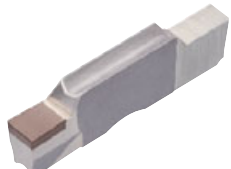
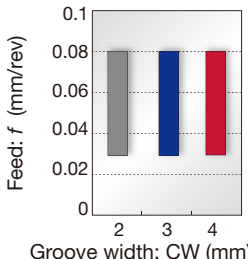
Reference pages: CTBU-CHP: Blade → **F231**

External grooving

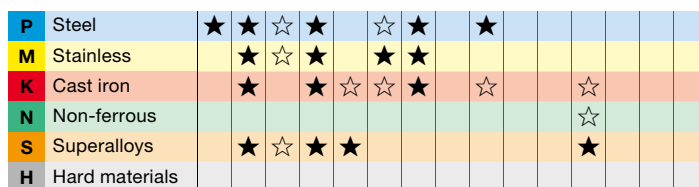
DGE type (2 corners)  G188	For shallow grooves with high accuracy Excellent chip control CW = 1 - 2.15 mm	■ Standard feed  
--	--	---

DGG type (2 corners)  G188	For non-ferrous materials and titanium alloys Chipbreaker with low cutting force Sharp cutting edge that prevents vibration and delivers fine surface finish CW = 2 - 4 mm	■ Standard feed  
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External grooving of hardened steels

SGN-CBN type (1 corner)  G189	For hardened steel cutting Optimum cutting edge shape for grooving of hardened steels Close tolerance width for finishing (W = ±0.025 mm) CW = 2 - 4 mm	■ Standard feed  
---	--	---

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



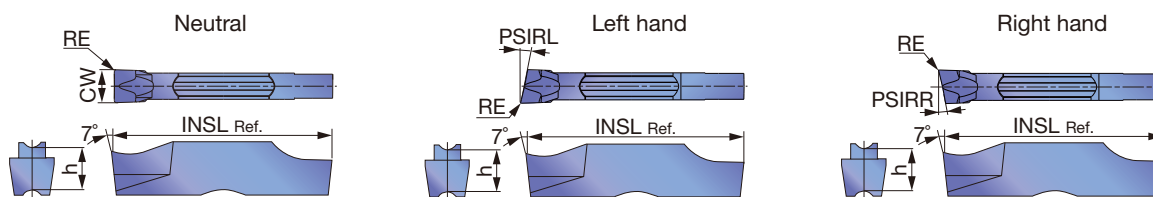
Designation	Seat size	HAND	CW±0.05	RE	Coated						Cermet		Uncoated		INSL	h	PSIRL	PSIRR
					T9225	AH7025	AH725	AH8005	AH905	GH130	AH6235	NS9530		KS05F				
DGM2-020	2	N	2	0.2	●	●	●	●		●	●	●	●		20	5	0°	0°
DGM2-020-6R	2	R	2	0.2		●	●								20	5	0°	6°
DGM2-020-6L	2	L	2	0.2		●	●								20	5	6°	0°
DGM2-020-8R	2	R	2	0.2		●	●				●				20	5	0°	8°
DGM2-020-8L	2	L	2	0.2		●	●				●				20	5	8°	0°
DGM2-020-15R	2	R	2	0.2		●	●				●				20	5	0°	15°
DGM2-020-15L	2	L	2	0.2		●	●				●				20	5	15°	0°
DGM2-002-15R	2	R	2	0.02			●				●				19.35	5	0°	15°
DGM2-002-15L	2	L	2	0.02			●				●				19.35	5	15°	0°
DGM2.39-020	2	N	2.39	0.2		●		●				●			20	5	0°	0°
DGM3-020	3	N	3	0.2	●	●	●	●	●	●	●	●	●		20	5	0°	0°
DGM3-020-6R	3	R	3	0.2		●	●				●				20	5	0°	6°
DGM3-020-6L	3	L	3	0.2		●	●				●				20	5	6°	0°
DGM3-002-6R	3	R	3	0.02			●				●				19.45	5	0°	6°
DGM3-002-6L	3	L	3	0.02			●				●				19.45	5	6°	0°
DGM3-020-15R	3	R	3	0.2		●	●				●				20	5	0°	15°
DGM3-020-15L	3	L	3	0.2		●	●				●				20	5	15°	0°
DGM3.18-020	3	N	3.18	0.2		●		●				●			20	5	0°	0°
DGM4-030	4	N	4	0.3	●	●	●	●	●	●	●	●	●		20	5	0°	0°
DGM4-030-4R	4	R	4	0.3		●	●				●				20	5	0°	4°
DGM4-030-4L	4	L	4	0.3		●	●				●				20	5	4°	0°
DGM4-030-15R	4	R	4	0.3		●	●				●				20	5	0°	15°
DGM4-030-15L	4	L	4	0.3		●	●				●				20	5	15°	0°
DGM4.76-040	5	N	4.76	0.4		●		●				●			25	5.5	0°	0°
DGM5-030	5	N	5	0.3	●	●	●	●	●	●	●	●	●		25	5.5	0°	0°
DGM5-030-4R	5	R	5	0.3		●	●				●				25	5.5	0°	4°
DGM6-030	6	N	6	0.3	●	●	●	●	●	●	●	●	●		25	5.5	0°	0°
DGM6.35-040	6	N	6.35	0.4		●		●				●			25	5.5	0°	0°
DGM8-040	8	N	8	0.4	●	●	●	●			●	●			30	6.7	0°	0°

● : Line up



Designation	Seat size	HAND	CW±0.05	RE	Coated					Uncoated						INSL	h	PSIRL	PSIRR
					AH7025	AH725	AH8005	GH130	AH6235	KS05F									
SGM2-020	2	N	2	0.2	●	●	●	●	●	●						20	5	0°	0°
SGM2-020-6R	2	R	2	0.2	●	●		●								20	5	0°	6°
SGM2-020-6L	2	L	2	0.2	●	●		●								20	5	6°	0°
SGM3-020	3	N	3	0.2	●	●	●	●	●	●						20	5	0°	0°
SGM3-020-6R	3	R	3	0.2	●	●		●								20	5	0°	6°
SGM3-020-6L	3	L	3	0.2	●	●		●								20	5	6°	0°
SGM3-020-15R	3	R	3	0.2	●	●		●								20	5	0°	15°
SGM3-020-15L	3	L	3	0.2	●	●		●								20	5	15°	0°
SGM4-030	4	N	4	0.3	●	●	●	●	●	●						20	5	0°	0°
SGM4-030-4R	4	R	4	0.3	●	●		●								20	5	0°	4°
SGM4-030-4L	4	L	4	0.3	●	●		●								20	5	4°	0°
SGM5-030	5	N	5	0.3	●	●	●	●	●	●						25	5.5	0°	0°
SGM6-030	6	N	6	0.3	●	●	●	●	●	●						25	5.5	0°	0°
SGM8-040	8	N	8	0.4	●		●		●	●						30	6.7	0°	0°

● : Line up

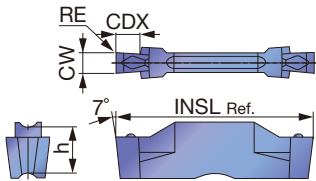
[illegible]

Designation	Seat size	HAND	CW±0.05	RE	Hard materials					Coated		Uncoated		INSL	h	PSIRL	PSIRR
					Hard materials					Coated		Uncoated					
					AH7025	AH725	AH8005	GH130	AH6235	KS05F							
SGS2-020	2	N	2	0.2	●	●	●	●	●	●				20	5	0°	0°
SGS2-020-6R	2	R	2	0.2	●	●		●						20	5	0°	6°
SGS2-020-6L	2	L	2	0.2	●	●		●						20	5	6°	0°
SGS2-020-15R	2	R	2	0.2	●	●		●						20	5	0°	15°
SGS2-020-15L	2	L	2	0.2	●	●		●						20	5	15°	0°
SGS3-020	3	N	3	0.2	●	●	●	●	●	●				20	5	0°	0°
SGS3-020-6R	3	R	3	0.2	●	●		●						20	5	0°	6°
SGS3-020-6L	3	L	3	0.2	●	●		●						20	5	6°	0°
SGS3-002-6R	3	R	3	0.02		●		●						19.8	5	0°	6°
SGS3-002-6L	3	L	3	0.02		●		●						19.8	5	6°	0°
SGS3-020-15R	3	R	3	0.2	●	●		●						20	5	0°	15°
SGS3-020-15L	3	L	3	0.2	●	●		●						20	5	15°	0°
SGS3-002-15R	3	R	3	0.02		●		●						19.8	5	0°	15°
SGS3-002-15L	3	L	3	0.02		●		●						19.8	5	15°	0°
SGS4-030	4	N	4	0.3	●	●	●	●	●	●				20	5	0°	0°
SGS5-030	5	N	5	0.3	●	●	●	●	●	●				25	5.5	0°	0°
SGS6-030	6	N	6	0.3	●	●	●	●	●	●				25	5.5	0°	0°
SGS8-040	8	N	8	0.4	●		●		●					30	6.7	0°	0°

● : Line up

DGE

External grooving (for high precision)



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

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated			Cermet			CDX	INSL	h
				AH7025	AH725	GH130	NS9530					
DGE100-000	2	1	0		●	●	●			2.5	20	5
DGE130-000	2	1.3	0		●	●	●			2.5	20	5
DGE160-010	2	1.6	0.1	●	●	●	●			2.5	20	5
DGE185-010	2	1.85	0.1	●	●	●	●			3.5	20	5
DGE215-015	2	2.15	0.15	●	●	●	●			3.5	20	5

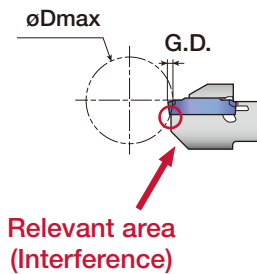
●: Line up

Caution

øDmax is limited as shown in the picture to the right according to the groove depth, G.D. Please refer to the following table.

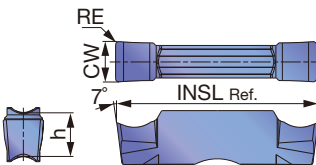
G.D = Groove depth

Designation	Max. groove depth (mm)	øDmax (mm)				
		G.D. = 1	G.D. = 1.5	G.D. = 2	G.D. = 2.5	G.D. = 3
DGE100-000	2	∞	18.6	11.5	-	-
DGE130-000						
DGE160-010						
DGE185-010	3				8.8	7
DGE215-015						



DGG

External grooving (for high precision)



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

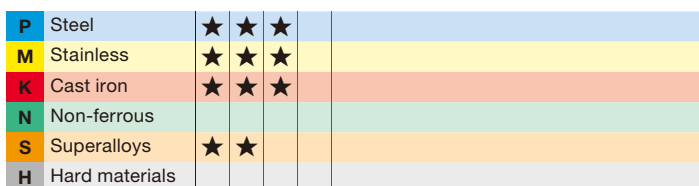
★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.02	RE	Coated		Cermet		Uncoated		INSL	h
				AH7025		NS9530		KS05F			
DGG200-020	2	2	0.2	●		●		●		20	5
DGG300-020	3	3	0.2	●		●		●		20	5
DGG400-040	4	4	0.4	●		●		●		20	5
DGG500-040	5	5	0.4	●		●		●		25	5.5
DGG600-040	6	6	0.4	●		●		●		25	5.5

●: Line up

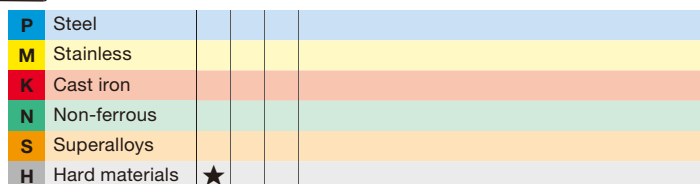
Reference pages: Toolholders → **G177 - G181**, Standard cutting conditions → **G190**

External grooving and parting



● : Line up

External grooving



●: Line up

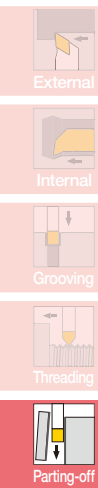
■ Edge preparations

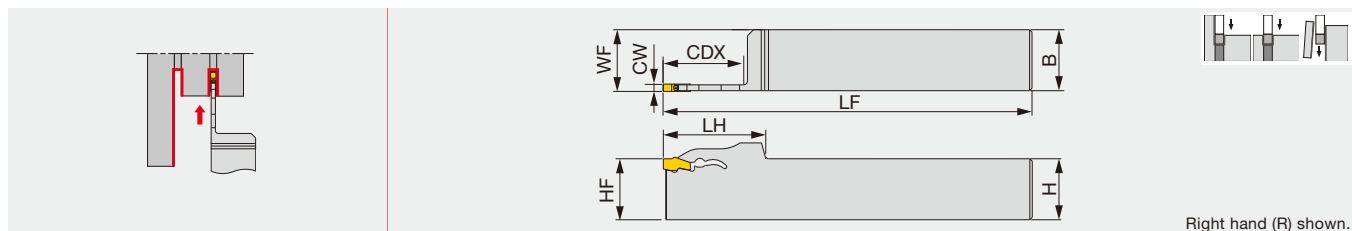


STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed V _c (m/min)
P	Steel S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	First choice	AH7025, AH725	50 - 180
		< 300 HB	Wear resistance	T9225, AH8005	80 - 300
		< 300 HB	Impact resistance	AH6235, GH130	50 - 120
		< 300 HB	Surface quality	NS9530	80 - 220
M	Stainless steel SUS303, SUS304, etc. X10CrNiS18-9, X5CrNi18-9, etc.	< 200 HB	First choice	AH7025, AH725	50 - 120
		< 200 HB	Wear resistance	AH8005	50 - 120
		< 200 HB	Impact resistance	AH6235, GH130	50 - 120
K	Grey cast iron FC250, etc. 250, etc.	-	First choice	T515	150 - 700
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 180
	Ductile cast iron FCD450, etc. 450-10S, etc.	-	First choice	T515	150 - 300
		-	Impact resistance	AH8005, AH7025, AH6235, GH130	50 - 120
N	Aluminium alloys Si < 12%	-	First choice	TH10	100 - 500
		-	First choice	KS05F	100 - 600
S	Superalloys Inconel718, etc.	< HRC 40	First choice	AH8005	20 - 60
		< HRC 40	Impact resistance	AH7025, AH725, AH6235	20 - 40
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	First choice	KS05F	20 - 100
		< HRC 40	Impact resistance	AH7025, AH725	20 - 80
H	Hardened steel SCM435, SUJ2, etc. 34CrMo4, B1, etc.	> HRC 50	First choice	BX360	80 - 150

Please see page **G182**, **G183** for feed: f (mm/rev).

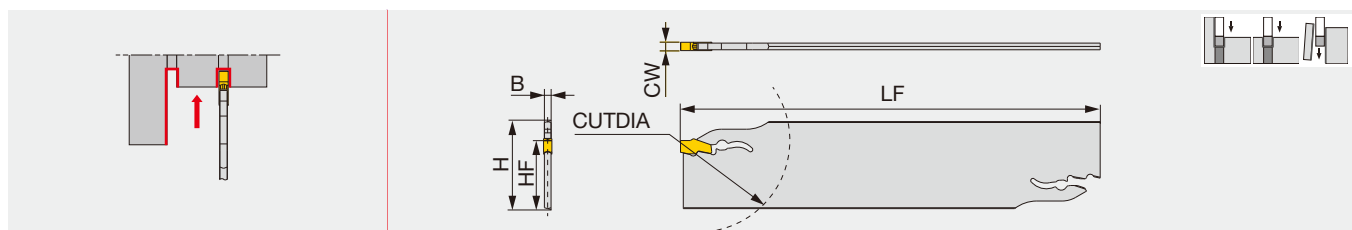




Designation	CW	CDX	Seat size	H	B	LF	LH	HF	WF
QSER/L2020-2T26	2	26	2	20	20	125	36	20	20.1
QSER/L2020-2T33	2	33	2	20	20	125	42	20	20.1
QSER/L2020-3T26	3	26	3	20	20	125	36	20	20.3
QSER/L2020-3T33	3	33	3	20	20	125	42	20	20.3
QSER/L2020-4T33	4	33	4	20	20	125	42	20	20.4

QSP

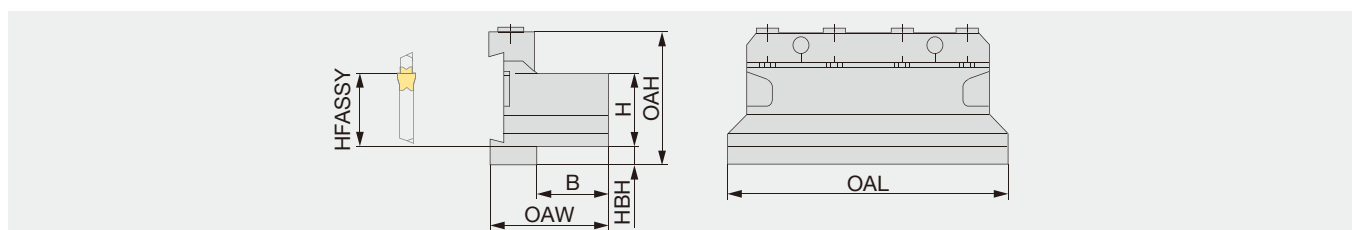
Blades for external deep grooving and parting



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

CTBU

Tool block for QSP blades

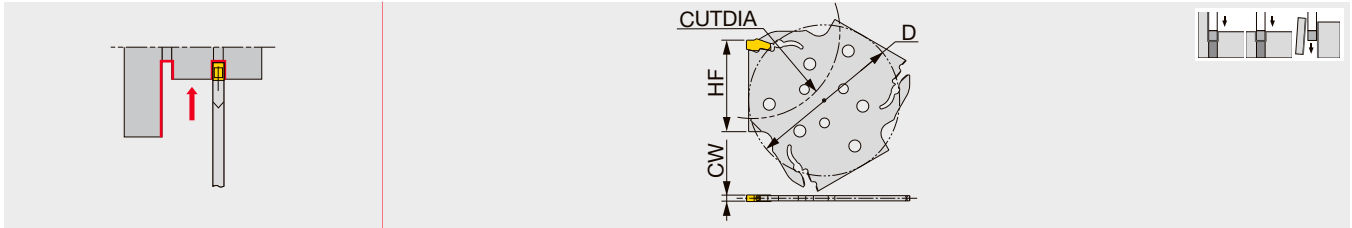


Designation	H	B	OAL	HFASSY	HBH	OAH	OAW	Blade (Optional)
CTBU20-26	20	21	86	20	9	43	38	QSP26...
CTBU20-32	20	19	100	20	13	50	38	QSP32...

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
QSER/L..., QSP...	-	-	QL-39
CTBU20-26	CT-86	CM6X30-S	P-5
CTBU25-26	CT-105	CM6X30-S	P-5
CTBU20-32	CT-100	CM6X30-S	P-5
CTBU25-32	CT-110	CM6X30-S	P-5
CTBU32-32	CT-110	CM6X30-S	P-5

Parting-off and external grooving blade

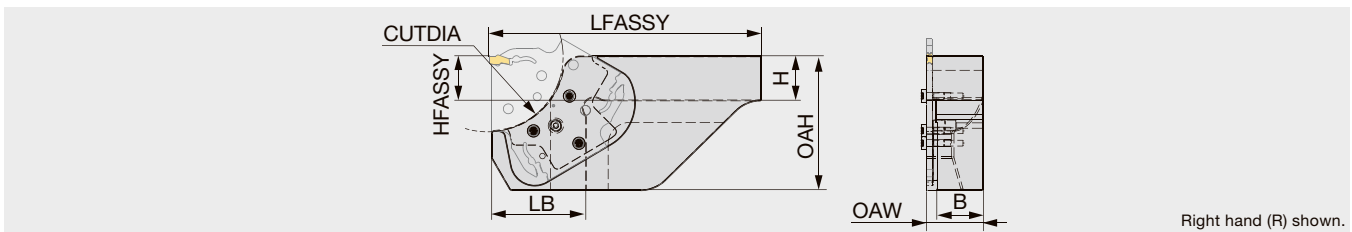


Designation	CW	Seat size	CUTDIA	HF	D
QSG52-2T	2	2	52	27	48.3
QSG82-2T	2	2	82	42	69.3
QSG52-3T	3	3	52	27	48.3
QSG82-3T	3	3	82	42	69.3
QSG52-4T	4	4	52	27	69.3
QSG82-4T	4	4	82	42	69.3



CHTBR/L

Tool block for QSG blade

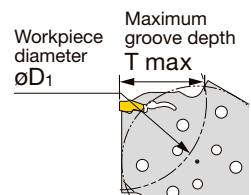


Designation	CUTDIA	H	B	LFASSY	HFASSY	OAH	OAW	LB
CHTBR/L2020-52	52	20	20.5	100	20	50	26.5	37
CHTBR/L2020-82	82	20	20.5	140	20	75	26.5	53

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

SPARE PARTS

Designation	Clamping screw	Grip	Torx bit	Wrench
QSG...	-	-	-	QL-39
CHTBR/L...	SR ISO 14580 M4X10	SW6-SD	BLDT20/S7	-



Maximum groove depth (T max) as function of workpiece diameter (øD1)

Designation	øD1																	
CHTBR/L****-D52	53	54	55	56	58	60	62	65	68	72	78	84	92	102	115	133	159	198
CHTBR/L****-D82	104	108	112	116	121	127	134	142	151	162	176	192	212	237	270	313	375	468
T max	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

Designation		øD ₁											
CHTBR/L****-D82	83	84	84	85	86	87	89	90	92	94	96	98	101
T max	34	33	32	31	30	29	28	27	26	25	24	23	22

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Grade	Cutting speed Vc (m/min)
P	Steels C45, 34CrMo4, etc.	< 300 HB	AH7025	50 - 180
M	Stainless steel X10CrNiS18-9, etc.	< 200 HB	AH7025	50 - 120
K	Gray cast iron GG25, 250, etc.	-	AH7025	50 - 180
	Ductile cast irons GGG45, 450-10S, etc.	-	AH7025	50 - 120
S	Superalloys Inconel718, etc.	< HRC 40	AH7025	20 - 60
	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	AH7025	20 - 80



G