reich
ADVANCED TECHNOLOGY TOOLS
Ihr persönlicher Werkzeugspezialist vor Ort.

Miniature Machining

Miniature Machining - Content structure

- Products are listed by application.
- In the same application, products are listed by cutting edge shape.
- The same cutting edge shape are sorted by insert.
- Items are listed by product series.
- Toolholders in the catalog are our standard stock items.

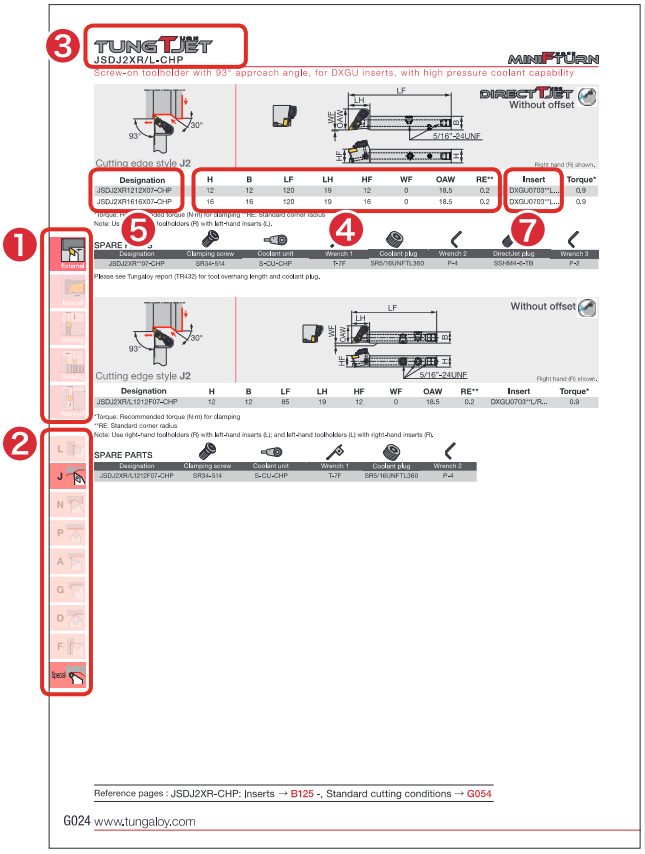
How to use the page

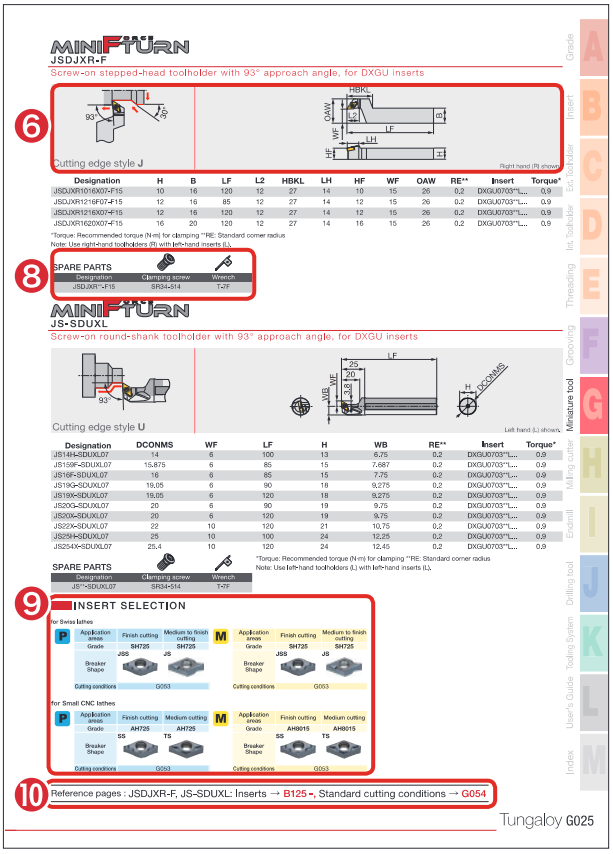
Method ① Select the application and the cutting edge shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (❺) in the dimension table (❹). Applicable inserts are shown in (❼) and (❾).

Method ② Select the cutting edge on G003 and check the details on the product page.

Method ③ Select the series name on G003 and check the details on each page.

Method ④ Select an item from Quick Guide on G004 - G013.





❶ : Application
❷ : Cutting edge shape
❸ : Tool series name
❹ : Dimension table
❺ : Toolholder designation
e.g. right-hand, 25x25 square shank

→ **JSDJ2XR 1212 X07-CHP**

❻ : Dimension drawing (conforming to ISO13399)
❼ : Applicable insert
❽ : Spare parts
❾ : Insert selection
❿ : Reference page

When ordering
- Please specify the designation and quantity.

e.g. **JSWL2XR1212X04-CHP** ... 1 (one toolholder per package)
* Inserts are not included. Please order those separately.

Main products

L 95° G017
J 93° G023
N 63° G036
P 62.5° G038
A 91° G039
G 91° G041
D 45° G042
F 91° G043
Special G043

MINIFORCETURN

Economical double-sided inserts with excellent sharpness

G016 - G019
G023 - G025
G030 - G032, G054

J-SERIES

Toolholders for small-part machining

G004 - G006, G009 - G010
G011, G019 - G022, G026 - G029
G033 - G043, G045, G047 - G054
G082 - G084, G090 - G092, F084 - F091

TETRAMINICUT

Unique insert pocket geometry for grooving with high quality and precision

CW = 0.33 - 3.0 mm

G009, G011, G064 - G073
F006 - F007, F035 - F045

TETRAFORCECUT

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

CW = 0.5 - 3.18 mm

G009, G074 - G079
F006 - F007, F046 - F053

DUOJUSTCUT

Innovative clamping system for high rigidity in parting

CW = 1.0 - 2.0 mm

G010, G011, G093 - G100

TUNGCUT

Multi-functional tool series for various grooving operations

CW = 1.4 - 4.0 mm

G010, G101 - G110, F006 - F034
F096 - F113, F137 - F157

TINYMINITURN

Solid boring bar for turning small diameters with high precision

G013, G055 - G063

TUNGHEAVYGROOVE

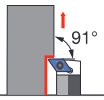
Highly rigid clamping for wide grooving and profiling in one pass

CW = 10 - 25 mm

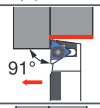
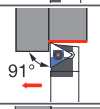
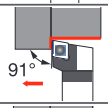
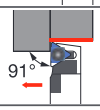
G009, G084 - G086
F006 - F007, F072 - F075

Miniature External Turning - Quick Guide

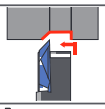
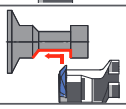
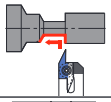
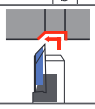
Facing

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JSDFCR/L** Cutting edge angle 91° Insert: DC□□	✓		12 – 16	Screw-on clamping with offset	G043

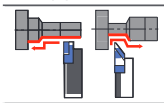
External Turning

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JTTACR/L** Cutting edge angle 91° Insert: TC□□	✓		8 – 16	Back side clamping without offset	G039
	**JSTACR/L** Cutting edge angle 91° Insert: TC□□	✓		8 – 16	Screw-on clamping without offset	G039
	**JSCGCR/L** Cutting edge angle 91° Insert: CC□□	✓		12 – 16	Screw-on clamping with offset	G041
	**JTTANR/L** Cutting edge angle 91° Insert: TN□□		✓	12 – 16	Back side clamping without offset	G047

Back Turning

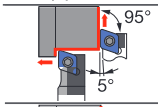
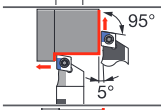
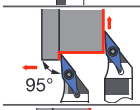
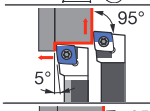
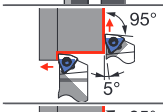
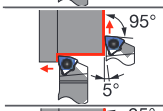
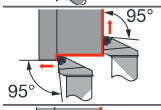
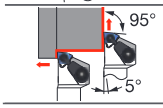
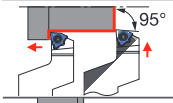
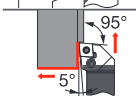
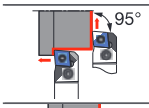
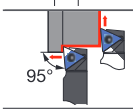
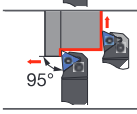
Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JSTBR/L** Insert: JTBR/L3□□	✓		10 – 16	Screw-on clamping	G048
	**JS-TBL3** Insert: JTBR3□□	✓		ø19.05 – ø25.4	Screw-on clamping	G048
	**JSEGR/L** Insert: J10ER/L□□	✓		10 – 16	Screw-on clamping	G050
	**JSXBR/L** Insert: JXBR/L8□□	✓		10 – 25	Screw-on clamping	G052

Front & Reverse Turning

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JSXGR/L** Insert: JXFR/L8 JXRR/L8	✓		10 – 25	Screw-on clamping	G043

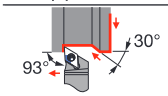
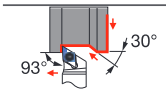
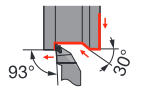
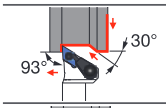
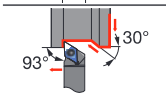
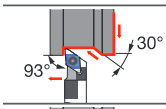
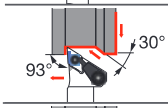
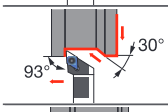
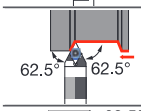
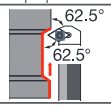
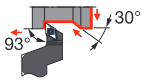
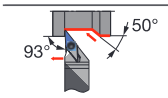
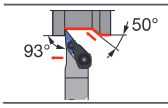
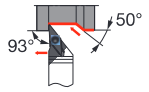
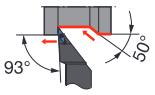
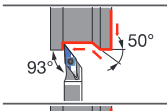
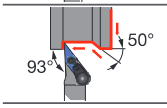
Miniature External Turning - Quick Guide

External Turning & Facing

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JTCL2CR/L** Cutting edge angle 95° Insert: CC□□	✓		8 – 16	Back side clamping without offset	G020
	**JSCL2CR/L** Cutting edge angle 95° Insert: CC□□	✓		10 – 16	Screw-on clamping without offset	G019
	**JSVL2PR/L** Cutting edge angle 95° Insert: VP□□	✓		10 – 16	Screw-on clamping without offset	G022
	**JSCLCR/L** Cutting edge angle 95° Insert: CC□□	✓		8 – 16	Screw-on clamping with offset	G021
	**JPWL2XR/L** Cutting edge angle 95° Insert: WXGU	✓		10 – 16	Side clamping without offset	G017
	**JSWL2XR/L** Cutting edge angle 95° Insert: WXGU	✓		10 – 20	Screw-on clamping without offset	G017
	**JSWLXR/L** Cutting edge angle 95° Insert: WXGU	✓		20 – 25	Screw-on clamping with offset	C031
	**JSWL2XR/L-CHP** Cutting edge angle 95° Insert: WXGU	✓		12 – 16	Screw-on clamping without offset	G018
	**JSWLXR-F** Cutting edge angle 95° Insert: WXGU	✓		10 – 16	Screw-on clamping with offset	G018
	**PCLNR** Cutting edge angle 95° Insert: CN□□		✓	20	Lever-lock clamping with offset	G044
	**PCL2NR** Cutting edge angle 95° Insert: CN□□		✓	20	Lever-lock clamping without offset	G044
	**JTTLNR/L** Cutting edge angle 95° Insert: TN□□		✓	12 – 16	Back side clamping without offset	G045
	**PTL2NR/L** Cutting edge angle 95° Insert: TN□□		✓	20	Lever-lock clamping without offset	G045

Miniature External Turning - Quick Guide

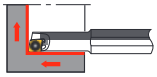
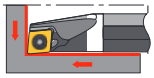
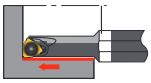
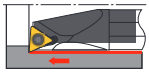
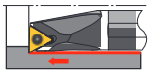
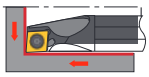
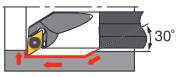
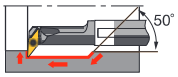
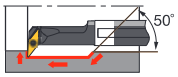
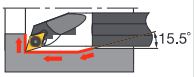
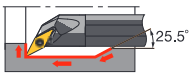
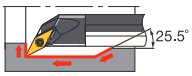
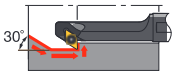
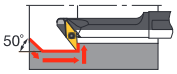
External Turning & Profiling

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JPDJ2XR/L** Cutting edge angle 93° Insert: DXGU	✓		10 – 16	Side clamping without offset	G023
	**JSDJ2XR/L** Cutting edge angle 93° Insert: DXGU	✓		10 – 20	Screw-on clamping without offset	G023
	**JSDJXR/L** Cutting edge angle 93° Insert: DXGU	✓		20 – 25	Screw-on clamping with offset	C037
	**JSDJ2XR/L-CHP** Cutting edge angle 93° Insert: DXGU	✓		12 – 16	Screw-on clamping without offset	G024
	**JTDJ2CR/L** Cutting edge angle 93° Insert: DC□□	✓		10 – 16	Back side clamping without offset	G026
	**JSDJ2CR/L** Cutting edge angle 93° Insert: DC□□	✓		8 – 16	Screw-on clamping without offset	G026
	**JSDJ2CR/L-CHP** Cutting edge angle 93° Insert: DC□□	✓		12 – 16	Screw-on clamping without offset	G027
	**JSDJCR/L** Cutting edge angle 93° Insert: DC□□	✓		8 – 16	Screw-on clamping with offset	G028
	**JSDNCN** Cutting edge angle 62.5° Insert: DC□□	✓		10 – 16	Screw-on clamping with offset	G036
	**JSDN3CR/L** Cutting edge angle 62.5° Insert: DC□□	✓		12 – 16	Screw-on clamping with offset	G036
	**JSDJXR-F** Cutting edge angle 93° Insert: DXGU	✓		10 – 16	Screw-on clamping with offset	G025
	**JPVJ2XR/L** Cutting edge angle 93° Insert: VXGU	✓		10 – 16	Side clamping without offset	G030
	**JSVJ2XR/L-CHP** Cutting edge angle 93° Insert: VXGU	✓		12 – 16	Screw-on clamping without offset	G031
	**JSVJ2XR/L** Cutting edge angle 93° Insert: VXGU	✓		10 – 20	Screw-on clamping without offset	G030
	**JSVJXR/L** Cutting edge angle 93° Insert: VXGU	✓		20 – 25	Screw-on clamping with offset	C056
	**JSVJ2BR/L** Cutting edge angle 93° Insert: VB□□	✓		10 – 16	Screw-on clamping without offset	G033
	**JSVJ2BR/L-CHP** Cutting edge angle 93° Insert: VB□□	✓		12	Screw-on clamping without offset	G034

Miniature Internal Turning - Quick Guide

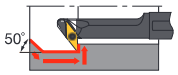
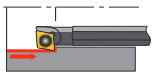
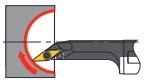
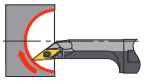
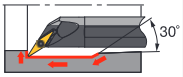
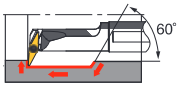
Positive type

StreamJet-Bar

Application	Description & Application	ISO insert	Y-Pro	Shank Material	Shank Size	Min. bore diameter DMIN (mm)	Page
	**SEXPR/L** Boring & Internal facing Insert: EP□□	✓		Steel Uncoated	ø4 - ø8 ø4 - ø8	ø4.5 – ø7 ø4.5 – ø7	D033 D034
	**SCLCR/L** Boring & Internal facing Insert: CC□□	✓		Steel Uncoated	ø4 - ø25 ø4 - ø25	ø5 – ø27 ø5 – ø27	D016 D018
	**SWUBR/L** Boring Insert: WB□□	✓		Steel Uncoated	ø5 - ø8 ø5 - ø8	ø6 – ø8 ø6 – ø8	D075
	**STUPR/L** Boring Insert: TP□□	✓		Steel Uncoated	ø7 - ø32 ø7 - ø25	ø8 – ø34 ø8 – ø27	D058 D060
	**STFPR/L** Blind hole boring Insert: TP□□	✓		Steel Uncoated	ø8 - ø25 ø8 - ø20	ø10 – ø27 ø10 – ø22	D043
	**SCLPR/L** Boring & Internal facing Insert: CP□□	✓		Steel Uncoated	ø8 - ø25 ø8 - ø16	ø10 – ø27 ø10 – ø20	D019 D020
	STFCR/L Blind hole boring Insert: TC□□	✓		Steel Uncoated	ø10 - ø16 ø10 - ø16	ø12 – ø18 ø12 – ø18	D042
	**SDUCR/L** Boring & Internal profiling Insert: DC□□	✓		Steel Uncoated	ø10 - ø25 ø10 - ø20	ø13 – ø32 ø13 – ø27	D050
	**SVUCR/L** Boring & Internal profiling Insert: VC□□	✓		Steel Uncoated	ø12 - ø25 ø12 - ø25	ø16 – ø32 ø18 – ø32	D068 D069
	**SVUBR/L** Boring & Internal profiling Insert: VB□□	✓		Steel Uncoated	ø16 - ø25 ø16 - ø25	ø20 – ø32 ø24.5 – ø34	D064 D065
	**SDQCR/L** Boring & Internal profiling Insert: DC□□	✓		Steel Uncoated	ø10 - ø25 ø10 - ø20	ø13 – ø30 ø13 – ø25	D077 D078
	**SVQCR/L** Boring & Internal profiling Insert: VC□□	✓		Steel Uncoated	ø10 - ø16 ø10 - ø16	ø13.5 – ø21.5 ø13.5 – ø21.5	D082 D083
	**SVQBR/L** Boring & Internal profiling Insert: VB□□	✓		Steel Uncoated	ø12 - ø25 ø12 - ø25	ø17 – ø30.5 ø17 – ø30.5	D080 D081
	**SDZCR/L** Internal retracting Insert: DC□□	✓		Steel Uncoated	ø12 - ø25 ø12 - ø16	ø14 – ø25 ø18 – ø22	D086
	**SVZCR/L** Internal retracting Insert: VC□□	✓		Steel	ø12	ø16	D090

Miniature Internal Turning - Quick Guide

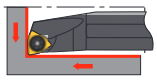
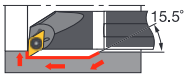
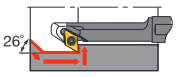
StreamJet-Bar

Application	Description & Application	ISO insert	Y-Pro	Shank Material	Shank Size	Min. bore diameter DMIN (mm) (0 10 20 30 40 50)	Page
	**SVZBR/L** Internal retracting Insert: VB□□	✓		Steel	ø16 - ø32	ø20 – ø40	D089
	**SEZPR/L** Internal retracting Insert: EP□□	✓		Steel Uncoated	ø4 - ø5 ø4 - ø5	ø5.5 – ø6.5 ø5.5 – ø6.5	D088
	**SVJCR/L** Internal sphere cutting Insert: VC□□	✓		Steel	ø12 - ø16	ø16 – ø20	D037
	**SVJBR/L** Internal sphere cutting Insert: VB□□	✓		Steel	ø20 - ø25	ø25 – ø30	D036
	**SYQBR/L** Internal undercut & profiling Insert: YW□□		✓	Steel Uncoated	ø12 - ø16 ø12 - ø16	ø17 – ø21.5 ø17 – ø21.5	D084
	**SYUBR/L** Boring & Internal profiling Insert: YW□□		✓	Steel Uncoated	ø16 ø12 - ø16	ø20 ø20 – ø24.5	D076

Miniature Internal Turning - Quick Guide

Double-sided insert with positive cutting edges

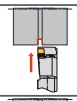
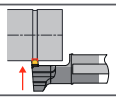
MiniForce-Turn

Application	Description & Application	MiniForce-Turn	Shank Material	Shank Size	Min. bore diameter DMIN (mm) (0 10 20 30 40 50)	Page
	**SWLXR/L** Boring & Internal facing Insert: WXGU	✓	Steel Uncoated	ø10 - ø20 ø10 - ø20	ø12 – ø22 ø12 – ø22	D028
	**SDXXR/L** Boring & Internal profiling Insert: DXGU	✓	Steel Uncoated	ø10 - ø20 ø10 - ø20	ø13 – ø24 ø13 – ø24	D035
	**SDZXR/L** Internal retracting Insert: DXGU	✓	Steel Uncoated	ø12 - ø20 ø12 - ø16	ø14 – ø20 ø18 – ø22	D085

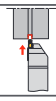
Miniature Grooving - Quick Guide

External Grooving

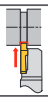
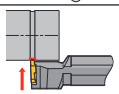
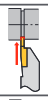
TetraMini-Cut

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Page
	**STCR/L-18-CHP**	TC*18R/L...	12 16	0.33 - 3.0	0.8 - 3.5	G065
	STCR/L-18	TC*18R/L...	10 25	0.33 - 3.0	0.8 - 3.5	G064
	**JS-STCL18**	TC*18R...	ø14 ø25.4	0.33 - 3.0	0.8 - 3.5	G065

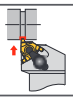
TetraForce-Cut

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Page
	**STCR/L-27**	TC*27...	10 25	0.5 - 3.18	1.0 - 6.4	G074

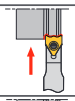
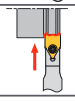
J-series

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Page
	**JSTGR/L**	JTGR/L3...	10 16	0.33 - 3.0	0.7 - 2.6	G079
	**JS-TGL3**	JTGR3...	ø19.05 ø25.4	0.33 - 3.0	0.7 - 2.6	G079
	**JSVGR/L**	JVGR/L...	10 16	0.33 - 2.0	0.7 - 5.5	G083
	JSXGR/L	JXGR/L8...	10 25	0.7 - 2.0	4.5 - 6.0	G082

GTGN

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Page
	**CER/L**	GTGN-16E...	12 20	1.0 - 2.25	1.0 - 6.4	F070

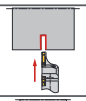
TungHeavyGroove

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Page
	**FPGN**	PSGB...	12 25	10 - 25	Wide grooving and profiling	G084
	**SPGN**	PSGB...	12 25	10 - 25	Wide grooving and profiling	G085

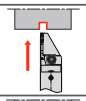
Miniature Parting - Quick Guide

Parting

DuoJustCut

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. parting diameter (mm)	Page
	**JSXXR/L-X-CHP**	JXPG...	12 16	1.0 - 2.0	ø20	G094
	JSXXR/L-X-S-CHP **JSXXR/L-F-S-CHP**	JXPG...	12 16	1.0 - 2.0	ø20	G094
	JSXXR/L	JXPG...	10 20	1.0 - 2.0	ø20	G093
	JSXXR/L-S	JXPG...	10 16	1.0 - 2.0	ø20	G093

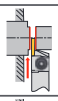
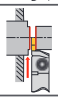
TungCut

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. parting diameter (mm)	Page
	**JCTER/L-CHP**	DG.../SG...	12 20	1.4 - 3.0	ø32	G102
	JCTER/L	DG.../SG...	10 20	1.4 - 3.0	ø32	G101
	CGER/L	DG.../SG...	10 20	1.4 - 3.0	ø55	G101

My-T

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. parting diameter (mm)	Page
	JCGSSR/L	GE20...	10 25	2.0	ø32	F058

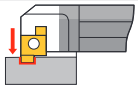
J-series

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. parting diameter (mm)	Page
	**JCCWSR/L**	JCC*200F...	10 25	2.0	ø20	F086
	**JCGWSR/L**	JCGN200F...	10 16	2.0	ø20	F087

Miniature Grooving - Quick Guide

Internal Grooving

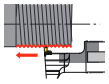
SNG

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Min. bore diameter (mm)	Page
	**SNGR/L**	*GR/L...	ø8.0 ø20.0	1.0 - 3.5	1.5 - 3.0	8.0 - 24.0	F127

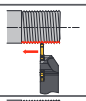
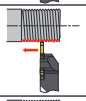
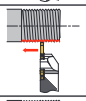
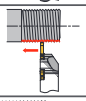
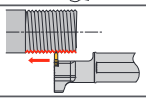
Miniature Threading - Quick Guide

External Threading

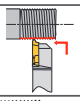
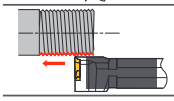
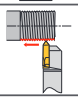
TetraMini-Cut

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	STCR/L-18-CHP	TCT18R/L...	12 16	0.05 - 0.2	0.4 - 3.0	G065
	STCR/L-18	TCT18R/L...	10 25	0.05 - 0.2	0.4 - 3.0	G064
	**JS-STCL18**	TCT18R...	ø14 ø25.4	0.05 - 0.2	0.4 - 3.0	G065

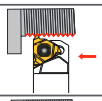
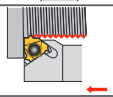
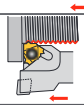
DuoJust-Cut

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	**JSXXR/L-CHP**	JXTG12...	12 16	0.05Max. - 0.1	0.2 - 1.5	G094
	**JSXXR/L-X-S-CHP** **JSXXR/L-F-S-CHP**	JXTG12...	12 16	0.05Max. - 0.1	0.2 - 1.5	G093
	**JSXXR/L**	JXTG12...	10 20	0.05Max. - 0.1	0.2 - 1.5	G094 G095
	**JSXXR/L-S**	JXTG12...	10 16	0.05Max. - 0.1	0.2 - 1.5	G093
	**JS-SXXL09**	JXTG12R...	ø19.05 ø25.4	0.05Max. - 0.1	0.2 - 1.5	G097

J-series

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	**JSTTR/L**	JTTR/L3...	10 16	0.05 - 0.1	0.5 - 1.0	G091
	**JS-TTL3**	JTTR3...	ø19.05 ø25.4	0.05 - 0.1	0.5 - 1.0	G091
	**JSXBR/L**	JXT*R6000F	10 25	0.03	0.5 - 1.0	G090

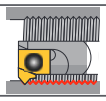
TungThread

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	**JSE2R16-CHP**	16ER/L...	12 16	0.05 - 0.22	0.5 - 3.0	G087
	CER/L	16ER/L...	12 25	0.05 - 0.22	0.5 - 3.0	F070
	**B-S/CER/L**	16ER/L...	-	0.05 - 0.22	0.5 - 3.0	G088
	**BC-SER/L**	16ER/L...	-	0.05 - 0.22	0.5 - 3.0	G089

Miniature Threading - Quick Guide

Internal Threading

TungThread

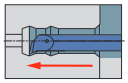
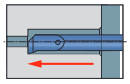
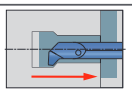
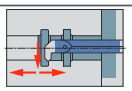
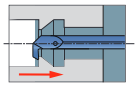
Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Min. bore diameter (mm)	Page
	**SNR/L**	6IR/L...	8	-	0.5 - 2.0	8.0 - 10.0	E036

Miniature Internal Turning - Quick Guide

TinyMini-Turn - Solid carbide tools for small diameters turning

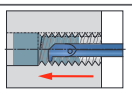
Boring, profiling & chamfering

TinyMini-Turn

Application	Description & Application	Shank Size	Min. bore diameter DMIN (mm) (0 – 2 – 4 – 6 – 8 – 10)	Page
	**JBT** Boring, profiling & chamfering	ø4 & ø7	ø0.6 – ø7	G055
	**JBP** Face grooving	ø4 & ø7	ø2.8 – ø5	G056
	**JBU** Back boring & chamfering	ø7	ø5	G056
	**JBC** Boring & 45°chamfering	ø7	ø5 – ø6.8	G056
	**JBB** Back boring	ø4 & ø7	ø3 – ø7	G057

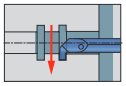
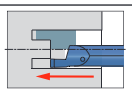
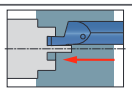
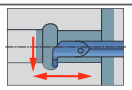
Threading

TinyMini-Turn

Application	Description & Application	Shank Size	Min. bore diameter DMIN (mm) (0 – 2 – 4 – 6 – 8 – 10)	Page
	**JBI** Threading (Metric thread)	ø4 & ø7	ø4 – ø7	G057

Internal Grooving

TinyMini-Turn

Application	Description & Application	Shank Size	Groove width	Min. bore diameter DMIN (mm) (0 – 2 – 4 – 6 – 8 – 10 – 12 – 14 – 15)	Page
	**JBG** Internal Grooving	ø4 & ø7	0.5 - 2	ø2 – ø6.8	G058
	**JBF** Face grooving	ø7	1 - 3	ø6 – ø15	G059
	**JBS** Face grooving (for shaft)	ø7	2	ø6	G059
	**JBR** Boring & profiling (full radius type)	ø7	1	ø5 – ø6.8	G059

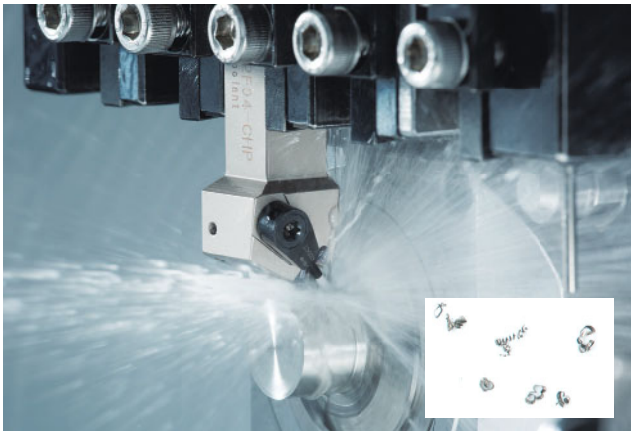
TUNGTURN JET

Thru-coolant holder system

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

External coolant supply at normal pressure

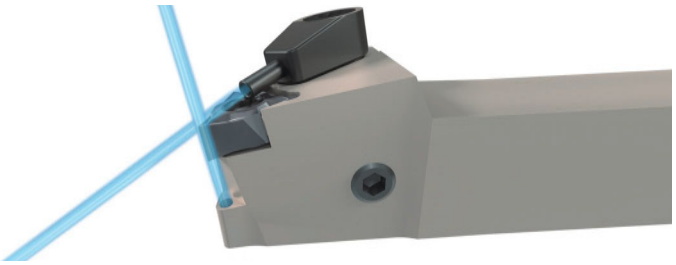
High pressure coolant (7 MPa)

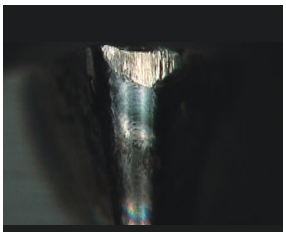


Coolant jets from two outlets ensure high cutting efficiency and extended tool life

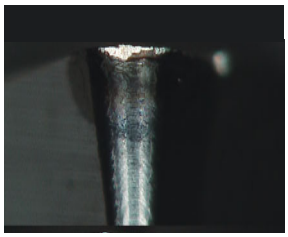
Directly to the cutting edge

Reliable chip control
Reduces crater and notch wears

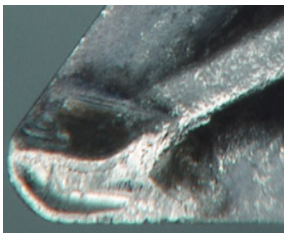




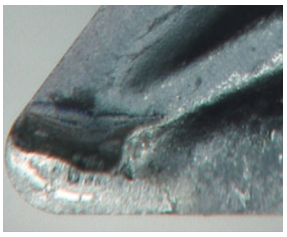
Excessive wear with external coolant supply (at normal pressure)



High pressure coolant (7 MPa)



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

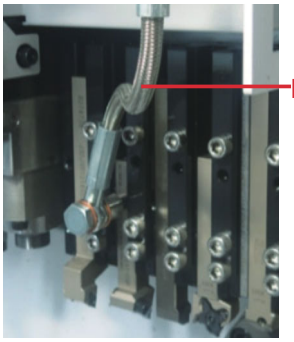


High pressure coolant (7 MPa)

Reference pages: G018, G020, G024, G027, G031, G034, G065, G087, G095, G102

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

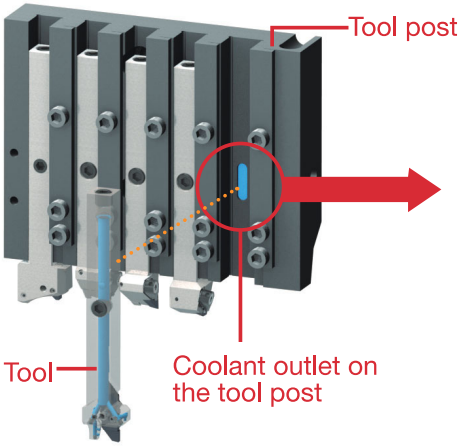
Conventional

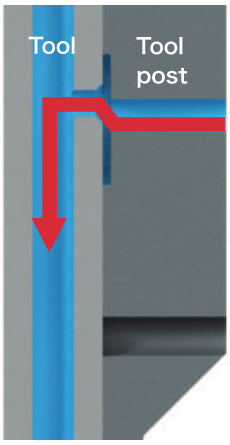


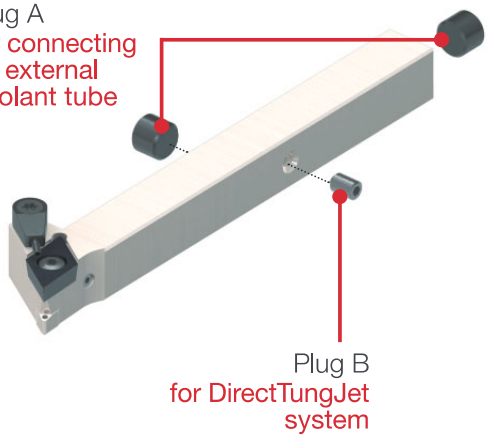
DirectTung-Jet system

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

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



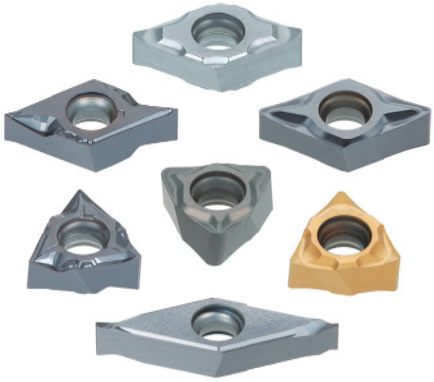




Use a non-coolant-through tool when a coolant supply is not needed through the tool.

Nozzle tube delivers coolant directly to the cutting edge

Reference pages : G018, G020, G024, G027, G031, G034, G065, G080, G087, G094 - G095, G102

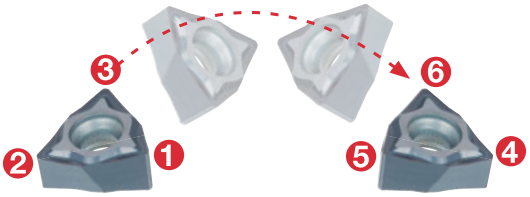


Economical double-sided positive insert

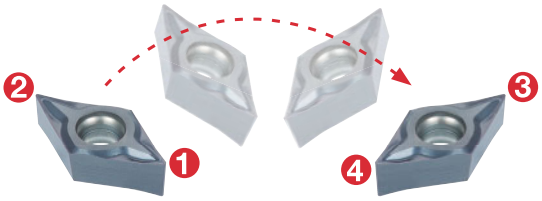
Innovative geometry and seat interface ensures stability and high performance.

Insert

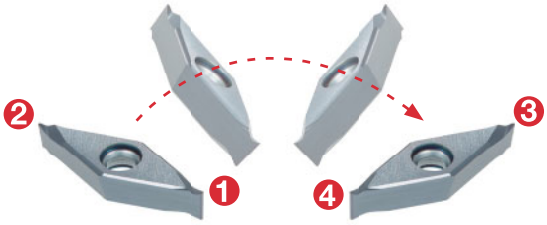
WXGU0403·· 6 positive cutting edges



DXGU0703·· 4 positive cutting edges

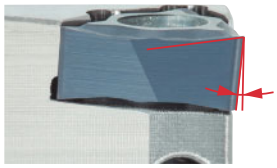


VXGU09T2·· 4 positive cutting edges

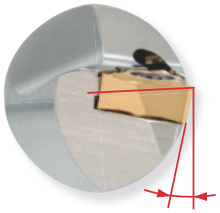


High rake angle

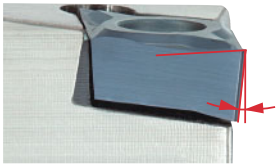
External turning



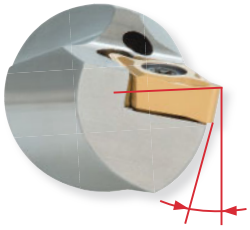
Internal turning



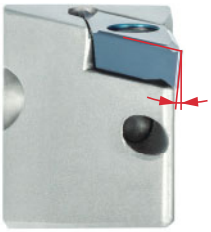
External turning



Internal turning



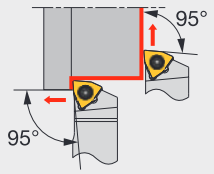
External turning



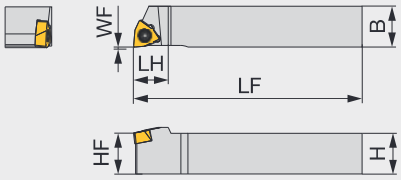
Reference pages : G017 - G019, G023, G025, G030, G032, G054

MINIFORCE TURN
JSWL2XR/L

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	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

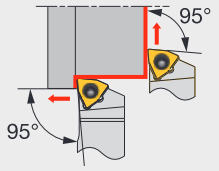
*Torque: Recommended torque (N·m) for clamping **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

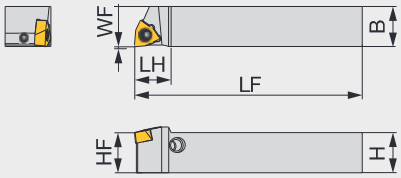
Designation	Clamping screw	Wrench
JSWL2XR/L...	SR34-514	T-7F

MINIFORCE TURN
JPWL2XR/L

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	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 torque (N·m) for clamping **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Lever	Pin	Clamping screw	Wrench
JPWL2XR/L...	SLLV-2	SL-PI-2	SR10400611	HW2.0/5RED

INSERT SELECTION

For Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G053	

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G053	

For Small CNC lathes

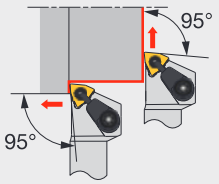
P	Application areas	Finish cutting	Medium cutting
	Grade	AH725	AH725
	Breaker Shape	SS	TS
	Cutting conditions	G053	

M	Application areas	Finish cutting	Medium cutting
	Grade	AH8015	AH8015
	Breaker Shape	SS	TS
	Cutting conditions	G053	

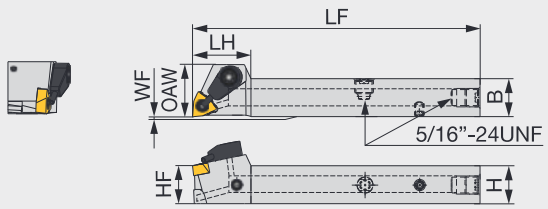
Reference pages : JSWL2XR/L, JPWL2XR/L: Inserts → B158 -, Standard cutting conditions → G054

JSWL2XR/L-CHP

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



Cutting edge style **L2**



DIRECTTURN JET
Without offset

Right hand (R) shown.

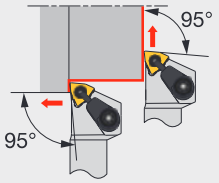
Designation	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSWL2XR1212X04-CHP	12	12	120	18.5	12	0	16.5	0.2	WXGU0403**L...	0.9
JSWL2XR1616X04-CHP	16	16	120	18.5	16	0	16.5	0.2	WXGU0403**L...	0.9

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

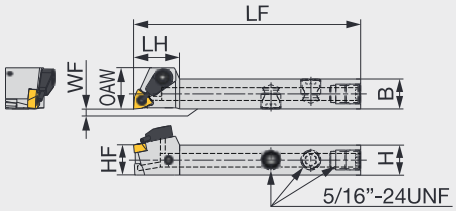
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench
JSWL2XR**04-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Please see Tungaloy report (TR432) for tool overhang length and coolant plug.



Cutting edge style **L2**



Without offset

Right hand (R) shown.

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

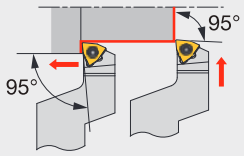
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

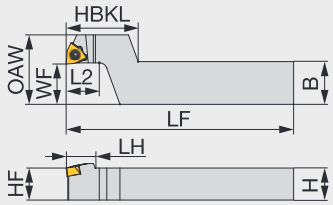
Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSWL2XR/L1212F04-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4

JSWLXR-F

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



Cutting edge style **L**



Right hand (R) shown.

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

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

SPARE PARTS

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

Reference pages : JSWL2XR/L-CHP, JSWLXR-F: Inserts → B158 -, Standard cutting conditions → G054

INSERT SELECTION

For Swiss lathes

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G053	

M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JSS	JS
Cutting conditions	G053	

For Small CNC lathes

P

Application areas	Finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	SS	TS
Cutting conditions	G053	

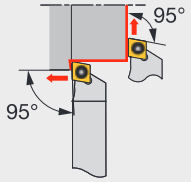
M

Application areas	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	G053	

J-SERIES

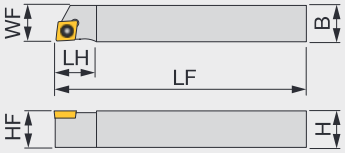
JSCL2CR/L

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



Cutting edge style **L2**

Without offset



Right hand (R) shown.

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

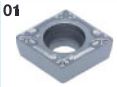
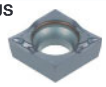
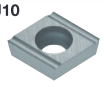
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

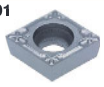
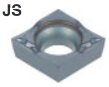
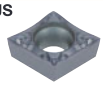
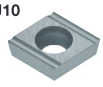
Designation	Clamping screw	Wrench
JSCL2CR/L**06	CSTB-2.5	T-8F
JSCL2CR/L**09	CSTB-4SD	T-8F

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS	J10 
Cutting conditions	G053			

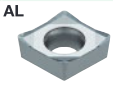
M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS 	J10 
Cutting conditions	G053			

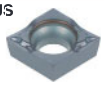
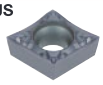
K

Application areas	medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	TH10	KS05F
Breaker Shape	T-DIA with rake	W20	AL 
Cutting conditions	B024		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053	

H

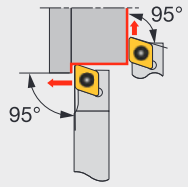
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages : JSCL2CR/L: Inserts → B109 -, CBN → B180, PCD → B194 -

J-SERIES

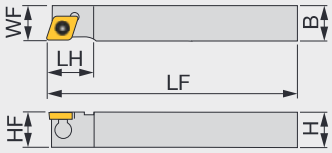
JTCL2CR/L

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



Cutting edge style **L2**

Without offset



Right hand (R) shown.

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

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

SPARE PARTS

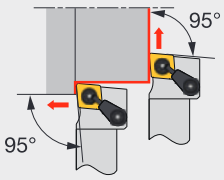
Designation	Clamp	Clamping screw	Wrench
JTCL2CR/L**06	JCP-2	JDS-3525	P-2F
JTCL2CR/L**09	JCP-3	JDS-5040	P-2.5F

TUNGTURN JET

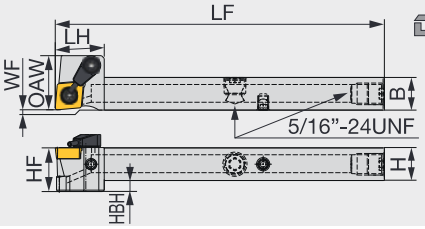
JSCL2CR-CHP

J-SERIES

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



Cutting edge style **L2**



DIRECT TUNGTURN JET
Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	HBH	WF	OAW	RE**	Insert	Torque*
JSCL2CR1212X09-CHP***	12	12	120	18	12	4	0	20	0.2	CC**09T3	1.2
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 torque (N·m) for clamping **RE : Standard corner radius
*** : This item will be replaced with a new product in the future.

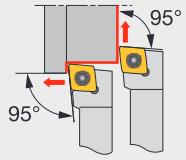
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
JSCL2CR**-CHP	CSTB-4SD	S-CU-CHP	T-8F

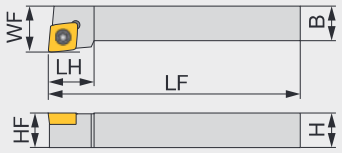
Reference pages : JTCL2CR/L, JSCL2CR-CHP: Inserts → B109 -, CBN → B180, PCD → B194 -

J-SERIES
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

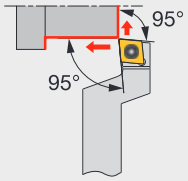
**RE: Standard corner radius

SPARE PARTS

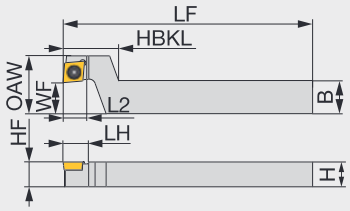
Designation	Clamping screw	Wrench
JSCLCR/L**H06	CSTB-2.5	T-8F
JSCLCR/L**H09	CSTB-4SD	T-8F

J-SERIES
JSCLCR-F

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



Cutting edge style **L**



Right hand (R) shown.

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

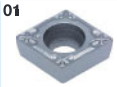
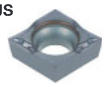
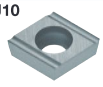
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

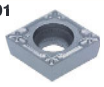
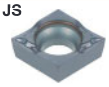
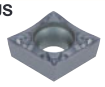
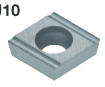
Designation	Clamping screw	Wrench
JSCLCR**F15	CSTB-4SD	T-8F

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS	J10 
Cutting conditions	G053			

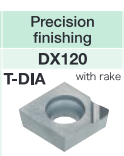
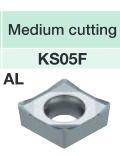
M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS 	J10 
Cutting conditions	G053			

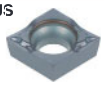
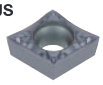
K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	TH10	KS05F
Breaker Shape	T-DIA  with rake	W20	AL 
Cutting conditions	B024		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053	

H

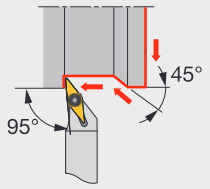
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages : JSCLCR/L, JSCLCR-F: Inserts → B109 -, CBN → B180, PCD → B194 -

J-SERIES

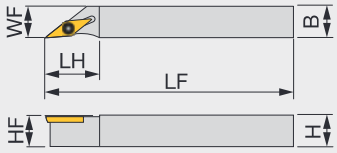
JSVL2PR/L

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



Cutting edge style **L2**

Without offset



Right hand (R) shown.

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

SPARE PARTS

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

INSERT SELECTION

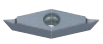
P

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G053	

M

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP
Cutting conditions	G053	

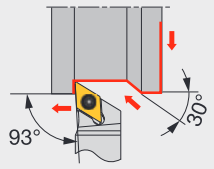
S

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP 
Cutting conditions	G053	

Reference pages : JSVL2PR/L: Inserts → B155 -

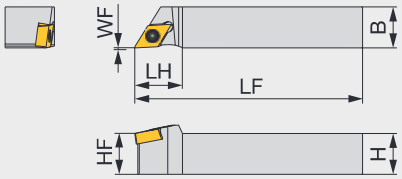
MINIFORCE TURN
JSDJ2XR/L

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



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DXGU0703**L/R...	0.9
JSDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DXGU0703**L/R...	0.9
JSDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DXGU0703**L/R...	0.9
JSDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DXGU0703**L/R...	0.9
JSDJ2XR/L2020H07	20	20	100	18	20	0	0.2	DXGU0703**L/R...	0.9

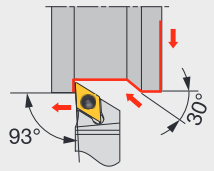
*Torque: Recommended torque (N·m) for clamping **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
JSDJ2XR/L...	SR34-514	T-7F

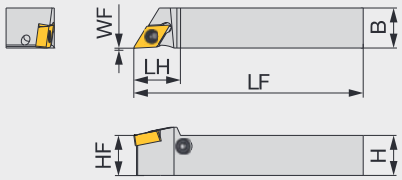
MINIFORCE TURN
JPDJ2XR/L

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



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JPDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DXGU0703**L/R...	0.9
JPDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DXGU0703**L/R...	0.9
JPDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DXGU0703**L/R...	0.9
JPDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DXGU0703**L/R...	0.9

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

SPARE PARTS

Designation	Lever	Pin	Clamping screw	Wrench
JPDJ2XR/L...	SLLV-2	SL-PI-2	SR10400611	HW2.0/5RED

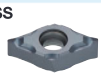
INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G053	

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G053	

for Small CNC lathes

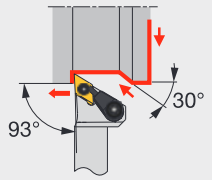
P	Application areas	Finish cutting	Medium cutting
	Grade	AH725	AH725
	Breaker Shape	SS 	TS
	Cutting conditions	G053	

M	Application areas	Finish cutting	Medium cutting
	Grade	AH8015	AH8015
	Breaker Shape	SS	TS
	Cutting conditions	G053	

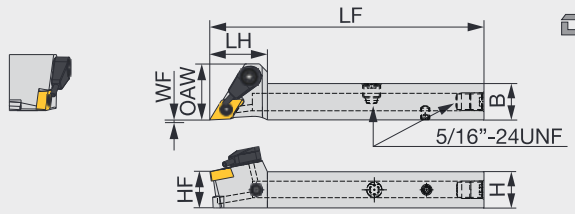
Reference pages : JSDJ2XR/L, JPDJ2XR/L: Inserts → B125 -, Standard cutting conditions → G054

JSDJ2XR/L-CHP

Screw-on toolholder with 93° approach angle, for DXGU inserts, with high pressure coolant capability



Cutting edge style **J2**



DIRECTTUNGJET Without offset

Right hand (R) shown.

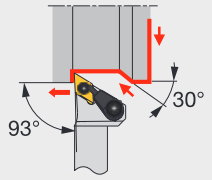
Designation	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJ2XR1212X07-CHP	12	12	120	19	12	0	18.5	0.2	DXGU0703**L...	0.9
JSDJ2XR1616X07-CHP	16	16	120	19	16	0	18.5	0.2	DXGU0703**L...	0.9

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

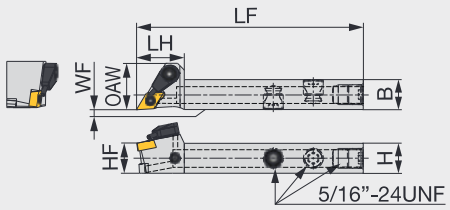
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSDJ2XR**07-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Please see Tungaloy report (TR432) for tool overhang length and coolant plug.



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJ2XR/L1212F07-CHP	12	12	85	19	12	0	18.5	0.2	DXGU0703**L/R...	0.9

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

SPARE PARTS

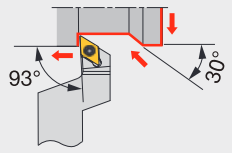
Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSDJ2XR/L1212F07-CHP	SR34-514	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4

External
Internal
Grooving
Threading
Parting-off
L
J
N
P
A
G
D
F
Special

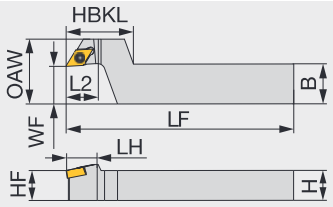
Reference pages : JSDJ2XR-CHP: Inserts → B125 -, Standard cutting conditions → G054

MINIFORCE TURN
JSDJXR-F

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



Cutting edge style **J**



Right hand (R) shown.

Designation	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJXR1016X07-F15	10	16	120	12	27	14	10	15	26	0.2	DXGU0703**L...	0.9
JSDJXR1216F07-F15	12	16	85	12	27	14	12	15	26	0.2	DXGU0703**L...	0.9
JSDJXR1216X07-F15	12	16	120	12	27	14	12	15	26	0.2	DXGU0703**L...	0.9
JSDJXR1620X07-F15	16	20	120	12	27	14	16	15	26	0.2	DXGU0703**L...	0.9

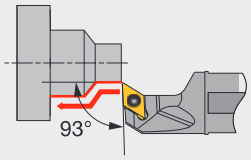
*Torque: Recommended torque (N·m) for clamping **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

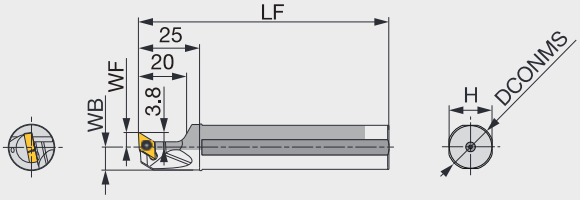
Designation	Clamping screw	Wrench
JSDJXR**-F15	SR34-514	T-7F

MINIFORCE TURN
JS-SDUXL

Screw-on round-shank toolholder with 93° approach angle, for DXGU inserts



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	WF	LF	H	WB	RE**	Insert	Torque*
JS14H-SDUXL07	14	6	100	13	6.75	0.2	DXGU0703**L...	0.9
JS159F-SDUXL07	15.875	6	85	15	7.687	0.2	DXGU0703**L...	0.9
JS16F-SDUXL07	16	6	85	15	7.75	0.2	DXGU0703**L...	0.9
JS19G-SDUXL07	19.05	6	90	18	9.275	0.2	DXGU0703**L...	0.9
JS19X-SDUXL07	19.05	6	120	18	9.275	0.2	DXGU0703**L...	0.9
JS20G-SDUXL07	20	6	90	19	9.75	0.2	DXGU0703**L...	0.9
JS20X-SDUXL07	20	6	120	19	9.75	0.2	DXGU0703**L...	0.9
JS22X-SDUXL07	22	10	120	21	10.75	0.2	DXGU0703**L...	0.9
JS25H-SDUXL07	25	10	100	24	12.25	0.2	DXGU0703**L...	0.9
JS254X-SDUXL07	25.4	10	120	24	12.45	0.2	DXGU0703**L...	0.9

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

SPARE PARTS

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

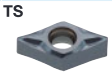
INSERT SELECTION

for Swiss lathes

P	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G053	

M	Application areas	Finish cutting	Medium to finish cutting
	Grade	SH725	SH725
	Breaker Shape	JSS	JS
	Cutting conditions	G053	

for Small CNC lathes

P	Application areas	Finish cutting	Medium cutting
	Grade	AH725	AH725
	Breaker Shape	SS	TS 
	Cutting conditions	G053	

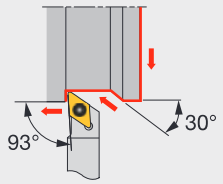
M	Application areas	Finish cutting	Medium cutting
	Grade	AH8015	AH8015
	Breaker Shape	SS	TS
	Cutting conditions	G053	

Reference pages : JSDJXR-F, JS-SDUXL: Inserts → B125 -, Standard cutting conditions → G054

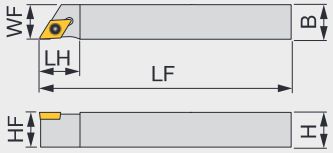
J-SERIES

JSDJ2CR/L

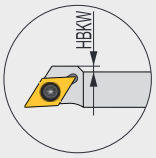
Screw-on toolholder with 93° approach angle, for positive 55° rhombic inserts, with high pressure coolant capability



Cutting edge style **J2**



Without offset



JSDJ2CR/L1010X11
JSDJ2CR/L1212F11
JSDJ2CR/L1212X11

Right hand (R) shown.

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

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

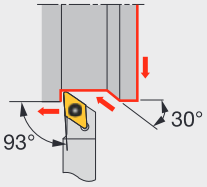
SPARE PARTS

Designation	Clamping screw	Wrench
JSDJ2CR/L**07	CSTB-2.5	T-8F
JSDJ2CR/L**11	CSTB-4SD	T-8F

J-SERIES

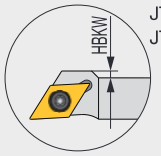
JTDJ2CR/L

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



Cutting edge style **J2**

Without offset



JTDJ2CR/L1212F11
JTDJ2CR/L1212X11

Right hand (R) shown.

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

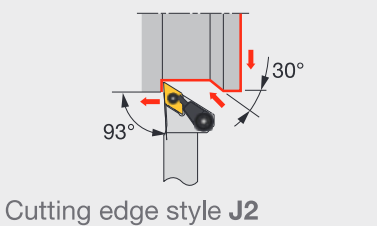
SPARE PARTS

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

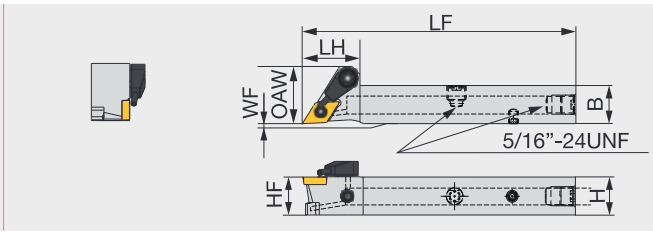
Reference pages : JSDJ2CR/L, JTDJ2CR/L: Inserts → B119 -, CBN → B182-, PCD → B194 -

JSDJ2CR/L-CHP

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



Cutting edge style **J2**



DIRECTTURNJET Without offset

Right hand (R) shown.

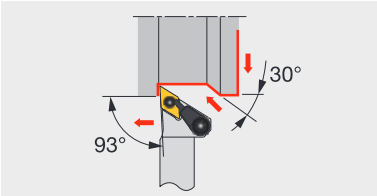
Designation	H	B	LF	LH	HF	WF	OAW	RE	Insert	Torque*
JSDJ2CR1212X11-CHP	12	12	120	19	12	0	20.5	0.2	DC**11T3...	1.2
JSDJ2CR1616X11-CHP	16	16	120	19	16	0	20.5	0.2	DC**11T3...	1.2

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

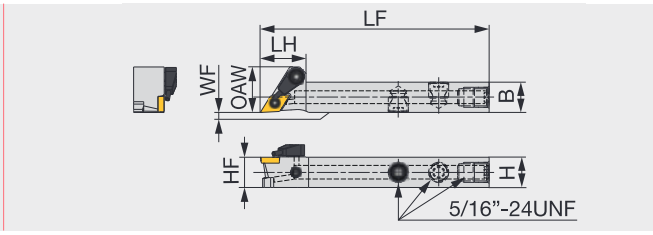
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSDJ2CR**11-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Please see Tungaloy report (TR432) for tool overhang length and coolant plug.



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJ2CR/L1212F07-CHP	12	12	85	18	12	0	18	0.2	DC**0702...	0.9
JSDJ2CR/L1212F11-CHP	12	12	85	19	12	0	20.5	0.2	DC**11T3...	0.9

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

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSDJ2CR**11-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS	JS	J10
Cutting conditions	G053			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS	JS	J10
Cutting conditions	G053			

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

N

Application areas	Precision finishing	Medium cutting
Grade	DX120	KS05F
Breaker Shape	T-DIA with rake	AL
Cutting conditions	B024	

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS	JS
Cutting conditions	G053	

H

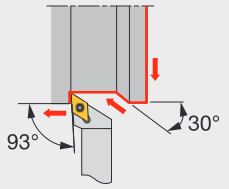
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages : JSDJ2CR/L-CHP: Inserts → B119 -, CBN → B182 -, PCD → B194 -

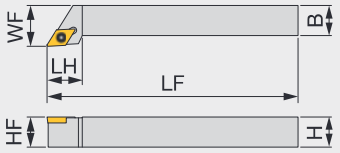
J-SERIES

JSDJCR/L

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



Cutting edge style **J**



Right hand (R) shown.

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

SPARE PARTS

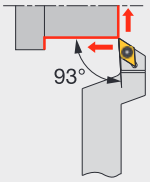
Designation	Clamping screw	Wrench
JSDJC**H07	CSTB-2.5	T-8F
JSDJC**H11	CSTB-4SD	T-8F

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

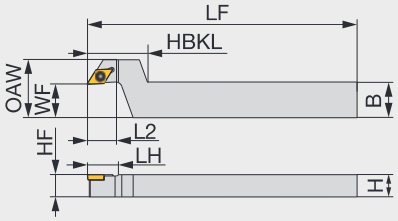
J-SERIES

JSDJCR-F

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



Cutting edge style **J**



Right hand (R) shown.

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

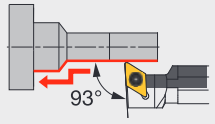
SPARE PARTS

Designation	Clamping screw	Wrench
JSDJCR**07-F15	CSTB-2.5	T-8F
JSDJCR**11-F15	CSTB-4SD	T-8F

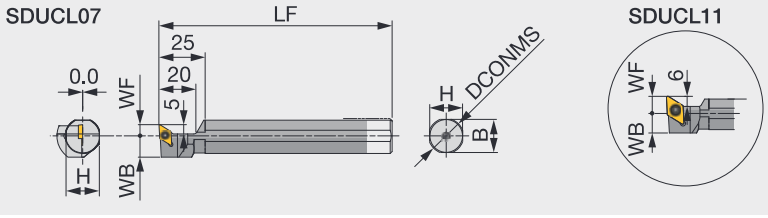
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

Reference pages : JSDJCR/L, JSDJCR-F: Inserts → B119 -, CBN → B182 -, PCD → B194 -

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



Cutting edge style **U**



Left hand (L) shown.

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

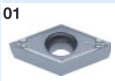
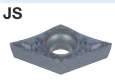
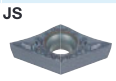
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

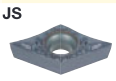
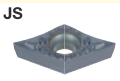
Designation	Clamping screw	Wrench
JS**K-SDUCL07	CSTB-2.5	T-8F
JS**K-SDUCL11	CSTB-4SD	T-8F

INSERT SELECTION

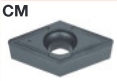
P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS 	J10
Cutting conditions	G053			

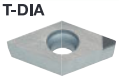
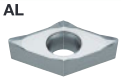
M

Application areas	Precision Finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS 	JS 	J10
Cutting conditions	G053			

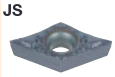
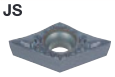
K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM 
Cutting conditions	B022

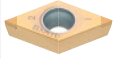
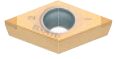
N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	T-DIA with rake	T-DIA 	AL 
Cutting conditions	B024		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053	

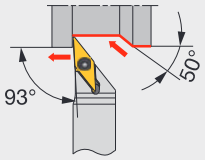
H

Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN 	T-CBN 
Cutting conditions	B028	

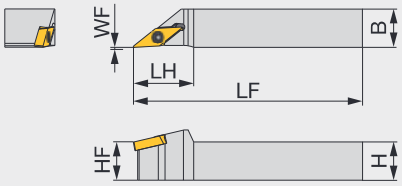
Reference pages : JS-SDUCL: Inserts → B119 -, CBN → B182 -, PCD → B194 -

MINIFORCE TURN
JSVJ2XR/L

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



Cutting edge style **J2**



Without offset

Right hand (R) shown.

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

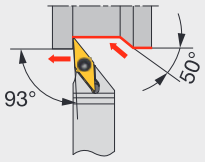
SPARE PARTS

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

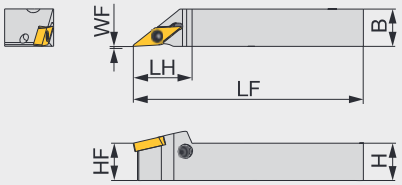
*Torque: Recommended torque (N·m) for clamping **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L).
Use left-hand toolholders (L) with right-hand inserts (R).

MINIFORCE TURN
JPVJ2XR/L

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



Cutting edge style **J2**



Without offset

Right hand (R) shown.

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

SPARE PARTS

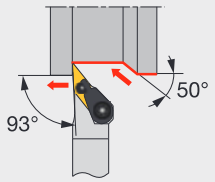
Designation	Lever	Pin	Clamping screw	Wrench
JPVJ2XR/L...	SLLV-1	SL-PI-2	SR10400611	HW2.0/5RED

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

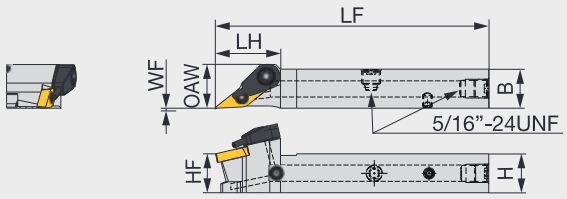
Reference pages : JSVJ2XR/L, JPVJ2XR/L: Inserts → B156, Standard cutting conditions → G054

JSVJ2XR/L-CHP

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



Cutting edge style **J2**



DIRECTTURN JET
Without offset

Right hand (R) shown.

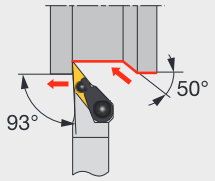
Designation	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSVJ2XR1212X09-CHP	12	12	120	19.5	12	0	13.4	0.2	VXGU09T2**L...	0.9
JSVJ2XR1616X09-CHP	16	16	120	19.5	16	0	16	0.2	VXGU09T2**L...	0.9

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

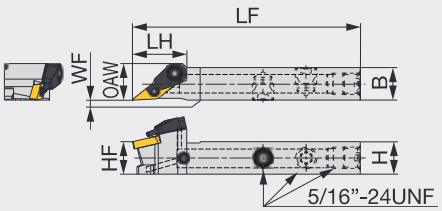
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSVJ2XR**F09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Please see Tungaloy report (TR432) for tool overhang length and coolant plug.



Cutting edge style **J2**



Without offset

Right hand (R) shown.

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

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

SPARE PARTS

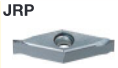
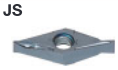
Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSVJ2XR**F09-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4

INSERT SELECTION

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JS
Cutting conditions	G053	

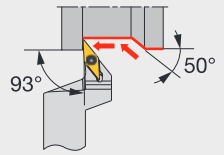
M

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JRP 	JS 
Cutting conditions	G053	

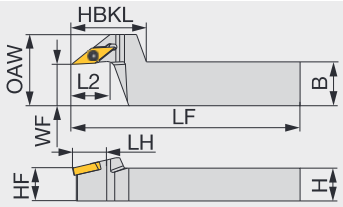
Reference pages : JSVJ2XR/L-CHP: Inserts → B156, Standard cutting conditions → G054

MINIFORCE TURN
JSVJXR-F

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



Cutting edge style **J**



Right hand (R) shown.

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

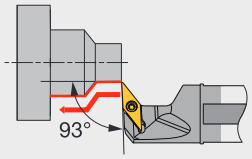
*Torque: Recommended torque (N·m) for clamping **RE: Standard corner radius
Note: Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

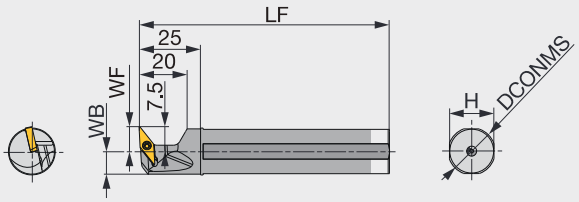
Designation	Clamping screw	Wrench
JSVJXR**-F15	SR34-508	T-7F

MINIFORCE TURN
JS-SVUXL

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



Cutting edge style **U**



Left hand (L) shown.

Designation	DCONMS	WF	LF	H	WB	RE**	Insert	Torque*
JS159F-SVUXL09	15.875	10	85	15	7.7	0.2	VXGU09T2**L...	0.9
JS16F-SVUXL09	16	10	85	15	7.7	0.2	VXGU09T2**L...	0.9
JS19G-SVUXL09	19.05	10	90	18	9.2	0.2	VXGU09T2**L...	0.9
JS19X-SVUXL09	19.05	10	120	18	9.2	0.2	VXGU09T2**L...	0.9
JS20G-SVUXL09	20	10	90	19	9.7	0.2	VXGU09T2**L...	0.9
JS20X-SVUXL09	20	10	120	19	9.7	0.2	VXGU09T2**L...	0.9
JS22X-SVUXL09	22	10	120	21	10.7	0.2	VXGU09T2**L...	0.9
JS25H-SVUXL09	25	10	100	24	12.2	0.2	VXGU09T2**L...	0.9
JS254X-SVUXL09	25.4	10	120	24	12.4	0.2	VXGU09T2**L...	0.9

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

SPARE PARTS

Designation	Clamping screw	Wrench
JS**-SVUXL09	SR34-508	T-7F

INSERT SELECTION

P

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JS
Cutting conditions	G053	

M

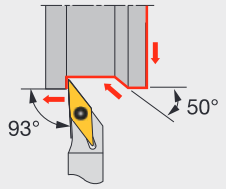
Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JS
Cutting conditions	G053	

Reference pages : JSVJXR-F, JS-SVUXL: Inserts → B156, Standard cutting conditions → G054

J-SERIES

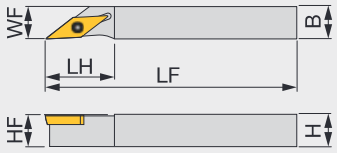
JSVJ2BR/L

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



Cutting edge style **J2**

Without offset



Right hand (R) shown.

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

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSVJ2BR/L...	CSTB-2.5	T-8F

INSERT SELECTION

P

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		

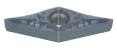
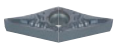
M

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053	

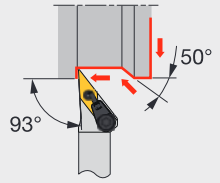
H

Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

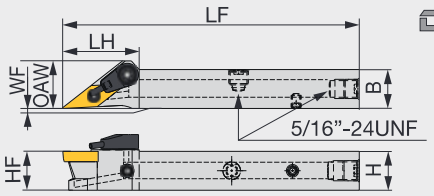
Reference pages : JSVJ2BR/L-CHP: Inserts → B150 -, CBN → B189 -

JSVJ2BR/L-CHP

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



Cutting edge style **J2**



DIRECTTURNJET
Without offset

Right hand (R) shown.

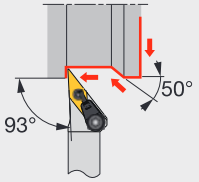
Designation	H	B	LF	LH	HF	WF	OAW	RE	Insert	Torque*
JSVJ2BR1212X11-CHP	12	12	120	23.6	12	0	14.7	0.2	VB**1103	1.2
JSVJ2BR1616X11-CHP	16	16	120	23.6	16	0	16	0.2	VB**1103	1.2

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

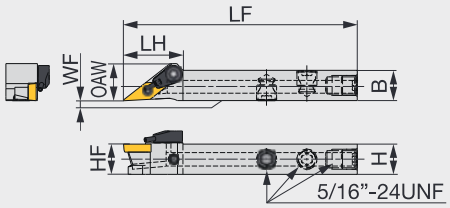
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSVJ2B**11-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Please see Tungaloy report (TR432) for tool overhang length and coolant plug.



Cutting edge style **J2**



Without offset

Right hand (R) shown.

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

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

SPARE PARTS

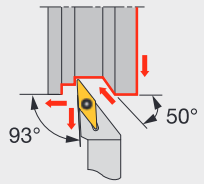
Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSVJ2B**11-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4

External
Internal
Grooving
Threading
Parting-off
L
J
N
P
A
G
D
F
Special

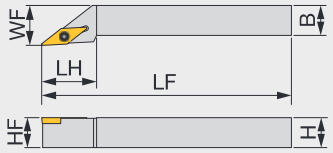
Reference pages : JSVJ2BR/L-CHP: Inserts → B150 -, CBN → B189 -

J-SERIES
JSVJBR/L

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



Cutting edge style **J**



Right hand (R) shown.

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

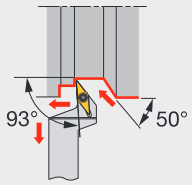
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

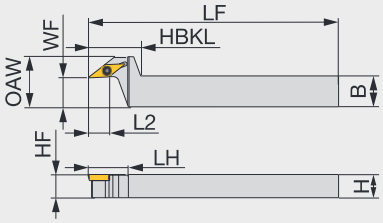
Designation	Clamping screw	Wrench
JSVJBR/L...	CSTB-2.5	T-8F

J-SERIES
JSVJBR-F

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



Cutting edge style **J**



Right hand (R) shown.

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSVJBR**-F15	CSTB-2.5	T-8F

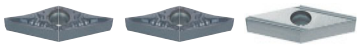
INSERT SELECTION

P

Application areas	Finish cutting	Medium to Finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		

M

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		



K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS	JS
Cutting conditions	G053	

H

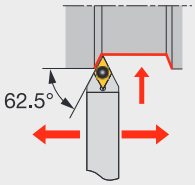
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages : JSVJBR/L, JSVJBR-F: Inserts → B150 -, CBN → B189 -

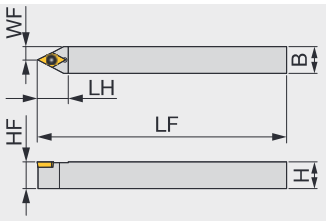
J-SERIES

JSDNCN

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



Cutting edge style **N**



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

SPARE PARTS

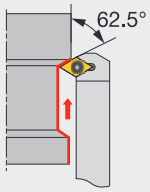
Designation	Clamping screw	Wrench
JSDNCN**07	CSTB-2.5	T-8F
JSDNCN**11	CSTB-4SD	T-8F

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

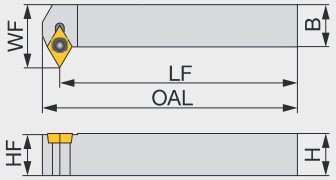
J-SERIES

JSDN3CR/L

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



Cutting edge style **N3**



Right hand (R) shown.

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

SPARE PARTS

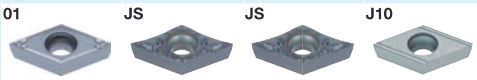
Designation	Clamping screw	Wrench
JSDN3CR1212H07	CSTB-2.5	T-8F
JSDN3CR1616H11	CSTB-4SD	T-8F

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

INSERT SELECTION

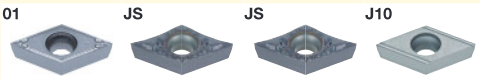
P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS	JS	J10
Cutting conditions	G053			



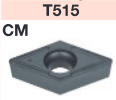
M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS	JS	J10
Cutting conditions	G053			



K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

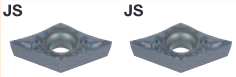


N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	T-DIA with rake	T-DIA	AL
Cutting conditions	B024		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS	JS
Cutting conditions	G053	



H

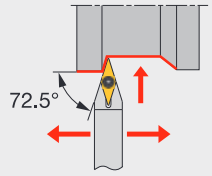
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages : JSDNCN, JSDN3CR/L: Inserts → B119 -, CBN → B182 - , PCD → B194 -

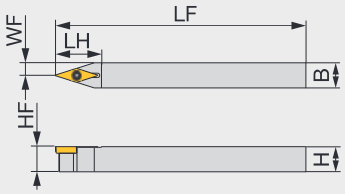
J-SERIES

JSVNBN

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



Cutting edge style **N**



Designation	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVNBN1010X11	10	10	120	22	10	5	0.2	VB**1103...	1.2
JSVNBN1212F11	12	12	85	22	12	6	0.2	VB**1103...	1.2
JSVNBN1212X11	12	12	120	22	12	6	0.2	VB**1103...	1.2
JSVNBN1616X11	16	16	120	22	16	8	0.2	VB**1103...	1.2

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSVNBN...	CSTB-2.5	T-8F

INSERT SELECTION

P

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		

M

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS	JS
Cutting conditions	G053	

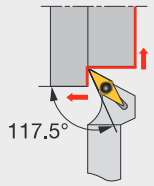
H

Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

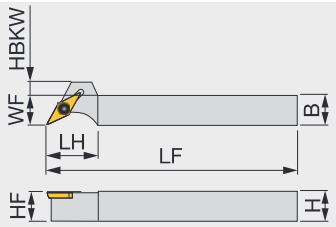
Reference pages : JSVNBN: Inserts → B150 -, CBN → B189 -

JSVP2PR/L

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



Cutting edge style **P2**



Without offset

Right hand (R) shown.

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

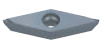
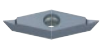
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

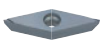
Designation	Clamping screw	Wrench
JSVP2PR/L**08	CSTB-2L	T-6F
JSVP2PR/L**11	CSTB-2.5	T-8F

INSERT SELECTION

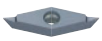
P

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP 	JSP 
Cutting conditions	G053	

M

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP 	JSP
Cutting conditions	G053	

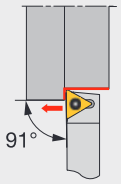
S

Application areas	Finish cutting	Finish cutting
Grade	SH725	SH725
Breaker Shape	JRP	JSP 
Cutting conditions	G053	

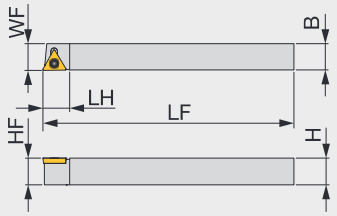
Reference pages : JSVP2PR/L: Inserts → B155 -

J-SERIES
JSTACR/L

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



Cutting edge style **A**



Without offset

Right hand (R) shown.

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

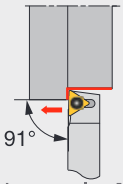
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

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

J-SERIES
JTTACR/L

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



Cutting edge style **A**

Without offset

Right hand (R) shown.

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

*Torque: Recommended torque (N·m) for clamping
**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	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS	JS	J10
Cutting conditions	G053			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01	JS	JS	J10
Cutting conditions	G053			

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

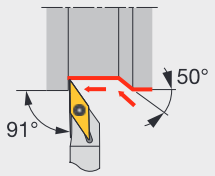
N

Application areas	Precision finishing	Medium cutting
Grade	DX120	KS05F
Breaker Shape	T-DIA with rake AL	
Cutting conditions	B024	

Reference pages : JSTACR/L, JTTACR/L: Inserts → B137 -, PCD → B194

JSVABR/L

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



Cutting edge style **A**

Without offset

Right hand (R) shown.

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

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

SPARE PARTS

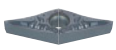
Designation	Clamping screw	Wrench
JSVABR/L...	CSTB-2.5	T-8F

INSERT SELECTION

P

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS	J10
Cutting conditions	G053		

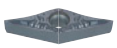
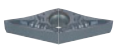
M

Application areas	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Breaker Shape	JS	JS 	J10
Cutting conditions	G053		

K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053	

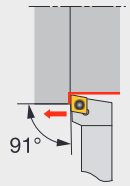
H

Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages : JSVABR/L: Inserts → B150 -, CBN → B189 -

J-SERIES
JSCGCR/L

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



Cutting edge style **G**

Right hand (R) shown.

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

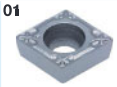
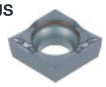
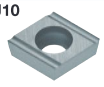
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

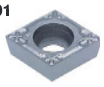
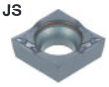
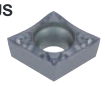
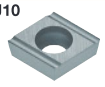
Designation	Clamping screw	Wrench
JSCGCR/L1212H06	CSTB-2.5	T-8F
JSCGCR/L1616H09	CSTB-4SD	T-8F

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS	J10 
Cutting conditions	G053			

M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS 	J10 
Cutting conditions	G053			

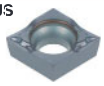
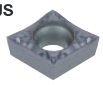
K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	TH10	KS05F
Breaker Shape	T-DIA with rake	W20	AL
Cutting conditions	B024		

S

Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053	

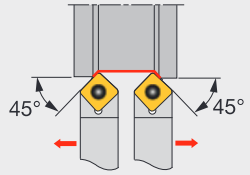
H

Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

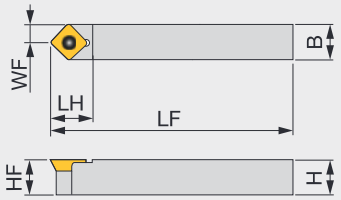
Reference pages : JSCGCR/L: Inserts → B109 -, CBN → B180, PCD → B194 -

SSDC/PN

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



Cutting edge style **D**



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

**RE: Standard corner radius

SPARE PARTS

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

INSERT SELECTION

P

Application areas	Medium to finish cutting	Medium cutting
Grade	AH725	AH725
Breaker Shape	PS	PM
Cutting conditions	B018	

M

Application areas	Medium cutting
Grade	AH725
Breaker Shape	PM
Cutting conditions	B020

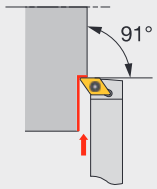
K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

Reference pages : SSDC/PN: Inserts → B133 -

J-SERIES
JSDFCR/L

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



Cutting edge style **F**

Right hand (R) shown.

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

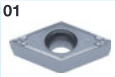
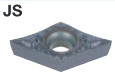
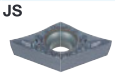
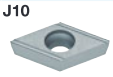
SPARE PARTS

Designation	Clamping screw	Wrench
JSDFCR/L1212H07	CSTB-2.5	T-8F
JSDFCR/L1616H11	CSTB-4SD	T-8F

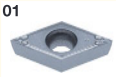
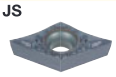
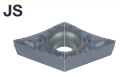
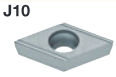
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

INSERT SELECTION

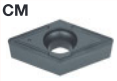
P

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS 	J10 
Cutting conditions	G053			

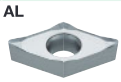
M

Application areas	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Breaker Shape	01 	JS 	JS 	J10 
Cutting conditions	G053			

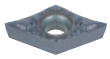
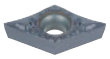
K

Application areas	Medium to finish cutting
Grade	T515
Breaker Shape	CM 
Cutting conditions	B022

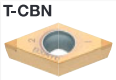
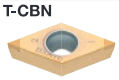
N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Breaker Shape	T-DIA with rake	T-DIA	AL 
Cutting conditions	B024		

S

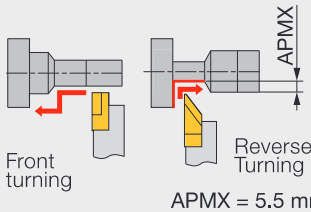
Application areas	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Breaker Shape	JS 	JS 
Cutting conditions	G053		

H

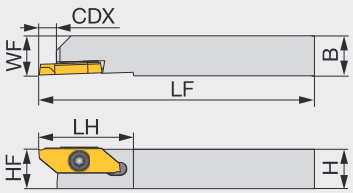
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN 	T-CBN 
Cutting conditions	B028	

J-SERIES
JSXGR/L

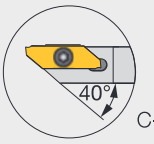
Screw-on toolholder for front/reverse turning and external grooving



APMX = 5.5 mm



Without offset



C-type

Right hand (R) shown.

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

SPARE PARTS

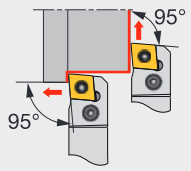
Designation	Clamping screw	Wrench 1	Wrench 2 *Optional
JSXGR/L...	CSTB-4SD	T-8F	(T-8L)

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

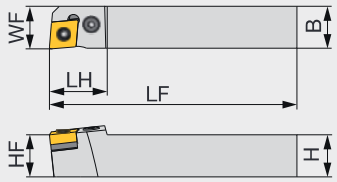
Reference pages : JSDFCR/L: Inserts → B119 -, CBN → B182 -, PCD → B194 -, JSXGR/L: Inserts → B160

PCL2NR

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

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

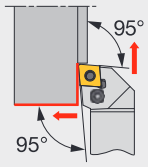
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

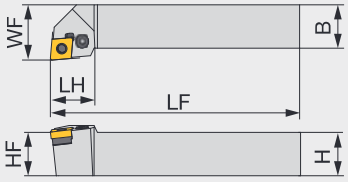
Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCL2NR2020H12	LSC42	LCS4	LCL4	LSP4	P-3

PCLNR

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



Cutting edge style **L**



Right hand (R) shown.

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

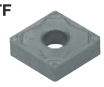
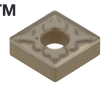
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

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

INSERT SELECTION

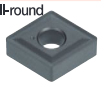
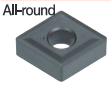
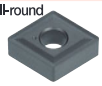
P

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	B006			

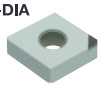
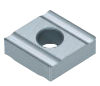
M

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T6120	T6130	T6130
Breaker Shape	SF	SM	SH
Cutting conditions	B008		

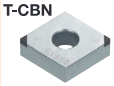
K

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round 	All-round 	All-round 
Cutting conditions	B010		

N

Application areas	Finish cutting	Medium cutting
Grade	DX140	TH10
Breaker Shape	T-DIA 	P 
Cutting conditions	B012	

S

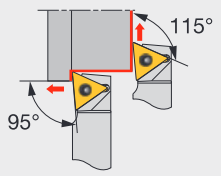
Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	T-CBN 	HRF	HRM
Cutting conditions	B014		

Reference pages : PCL2NR, PCLNR: Inserts → B054 -, CBN → B170 -, PCD → B192 -

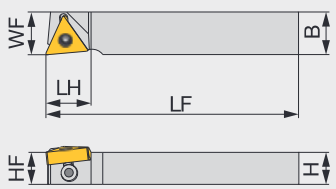
J-SERIES

JTTLNR/L

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



Cutting edge style **L**



Without offset

Right hand (R) shown.

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

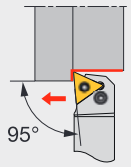
*Torque: Recommended torque (N·m) for clamping
**RE: Standard corner radius

SPARE PARTS

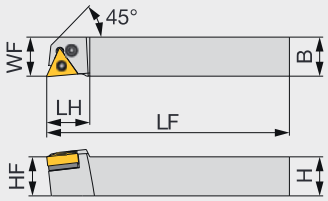
Designation	Clamp	Clamping screw	Wrench
JTTLNR/L...	JCP-3N	JDS-5040	P-2.5F

PTL2NR/L

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



Cutting edge style **L2**



Right hand (R) shown.

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

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

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PTL2NR/L...	LST317 D30	LCS3	P-2.5	LSP3	LCL3

INSERT SELECTION

P

Application areas	Precision finishing	Finish cutting		Medium cutting	Medium to heavy cutting
Grade	SH725	SH725	GT9530	T9215	T9215
Breaker Shape	01	JRP	TSF	TM	TH
Cutting conditions	G053		B006		

M

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	SH725	SH725	T6130
Breaker Shape	01	JRP	SM
Cutting conditions	G053		B008

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	B010		

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	T-DIA	with rake T-DIA	P
Cutting conditions	B012		

S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

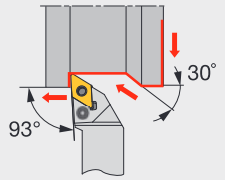
H

Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

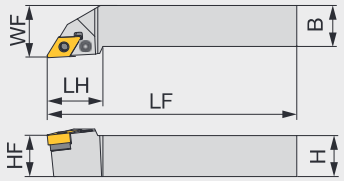
Reference pages : JTTLNR/L, PTL2NR/L: Inserts → B084 -, CBN → B176 -, PCD → B192 -

PDJNR

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



Cutting edge style **J**



Right hand (R) shown.

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

*Torque: Recommended torque (N·m) for clamping
**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	B006			

M

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T6120	T6130	T6130
Breaker Shape	SF	SM	SH
Cutting conditions	B008		

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	B010		

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	T-DIA with rake	T-DIA	P
Cutting conditions	B012		

S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

H

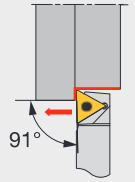
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

Reference pages : PDJNR: Inserts → B065 -, CBN → B172 -, PCD → B192 -

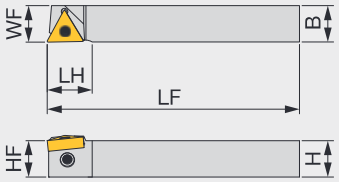
J-SERIES

JTTANR/L

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



Cutting edge style **A**



Without offset

Right hand (R) shown.

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

*Torque: Recommended torque (N·m) for clamping
**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	Medium to heavy cutting
Grade	SH725	SH725	GT9530	T9215	T9215
Breaker Shape	01	JRP	TSF	TM	TH
Cutting conditions	G053		B006		

M

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	SH725	SH725	T6130
Breaker Shape	01	JRP	SM
Cutting conditions	G053		B008

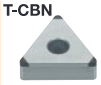
K

Application areas	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B010		

N

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	TH10
Breaker Shape	T-DIA with rake	T-DIA	P
Cutting conditions	B012		

S

Application areas	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Breaker Shape	T-CBN 	HRF	HRM
Cutting conditions	B014		

H

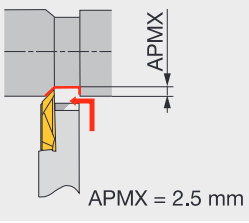
Application areas	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

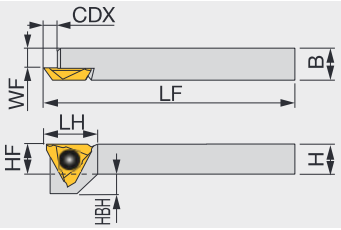
Reference pages : JTTLNR/L: Inserts → B084 -, CBN → B176 -, PCD → B192 -

J-SERIES

JSTBR/L

Screw-on toolholder for back turning





Right hand (R) shown.

Designation	H	B	LF	LH	CDX	HF	WF	HBH	Insert	Torque*
JSTBR/L1010X3	10	10	120	15	5	10	6	5	JTBR/L3...	1.2
JSTBL1010K3	10	10	125	15	5	10	6	5	JTBR/L3...	1.2
JSTBR/L1212F3	12	12	85	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1212X3	12	12	120	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1616X3	16	16	120	15	5	16	12	-	JTBR/L3...	1.2

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

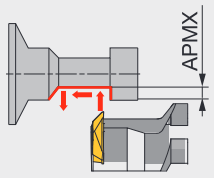
SPARE PARTS

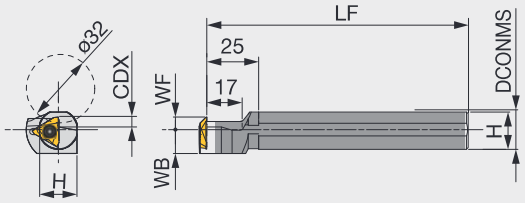
Designation	Clamping screw	Wrench
JSTBR/L...	CSTB-4SD	T-8F

J-SERIES

JS-TBL3

Screw-on toolholder for back turning





Right hand (R) shown.

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 torque (N·m) for clamping

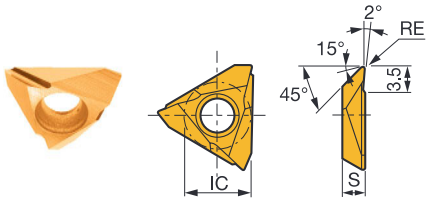
SPARE PARTS

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

Reference pages : JSTBR/L, JS-TBL3: Inserts, Standard cutting conditions → G049

INSERT

JTB (Sharp edge)



Right hand (R) shown.

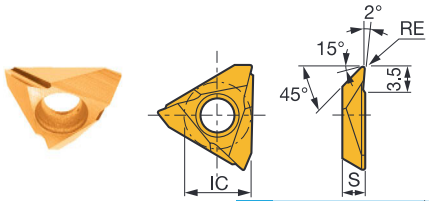
P	Steel	★	☆			★					
M	Stainless	★	☆								
K	Cast iron	★				☆			☆		
N	Non-ferrous								★		
S	Superalloys	☆	☆						★		
H	Hard materials								★		

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated				Cermet			Uncoated						IC	S	Max. depth of cut
			SH725	J740			NS9530			TH10								
JTBR3000F	R	0.03	●	●						●						9.438	3.18	2.5
JTBL3000F	L	0.03	●	●						●						9.438	3.18	2.5
JTBR3005F	R	0.05	●	●						●						9.438	3.18	2.5
JTBL3005F	L	0.05	●	●						●						9.438	3.18	2.5
JTBR3010F	R	0.1	●	●			●			●						9.438	3.18	2.5
JTBL3010F	L	0.1	●	●			●			●						9.438	3.18	2.5
JTBR3015F	R	0.15	●	●												9.438	3.18	2.5
JTBL3015F	L	0.15	●													9.438	3.18	2.5

● : Line up

JTBR/L (Honed edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated			Coated cermet										IC	S	Max. depth of cut
			J740			J9530												
JTBR3000F	R	0.05	●			●										9.438	3.18	2.5
JTBL3000F	L	0.05	●													9.438	3.18	2.5
JTBR3005F	R	0.1	●			●										9.438	3.18	2.5
JTBL3005F	L	0.1	●													9.438	3.18	2.5

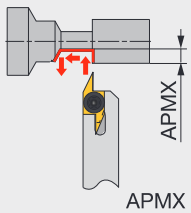
● : Line up

STANDARD CUTTING CONDITIONS (JTB type insert)

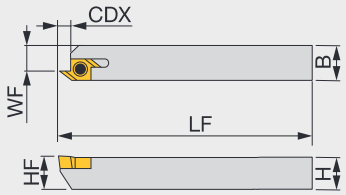
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel (S45C, etc. C45, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
		J9530	50 - 150	0.01 - 0.1
	Free-cutting steel (SUM22, etc. 11SMn28, etc.)	SH725	50 - 200	0.01 - 0.1
		J740	10 -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

JSEGR/L

Screw-on toolholder for back turning



APMX = 3 mm



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

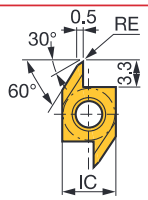
SPARE PARTS

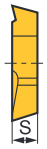
Designation	Clamping screw	Wrench
JSEGR/L...	CSTB-2.5	T-8F

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

INSERT

J10E (Sharp edge)





Right hand (R) shown.

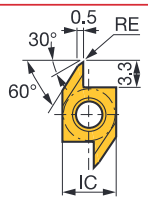
		Coated		Cermet	Uncoated
P	Steel	★	☆	★	
M	Stainless	★	☆		
K	Cast iron	★		☆	☆
N	Non-ferrous				★
S	Superalloys	☆			★
H	Hard materials				★

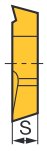
★ : First choice
☆ : Second choice

Designation	HAND	RE	SH725	J740	NS9530	TH10	IC	S	Max. depth of cut
J10ER/L005BF	R	0.05	●	●		●	6.35	3.18	3
J10ER/L005BF	L	0.05	●	●		●	6.35	3.18	3
J10ER/L010BF	R	0.1	●	●		●	6.35	3.18	3
J10ER/L010BF	L	0.1	●	●		●	6.35	3.18	3
J10ER/L015BF	R	0.15	●		●		6.35	3.18	3
J10ER/L015BF	L	0.15	●		●		6.35	3.18	3

● : Line up

J10E (Honed edge)





Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	RE	J740	J9530	IC	S	Max. depth of cut
J10ER005B	R	0.05	●	●	6.35	3.18	3
J10EL005B	L	0.05	●		6.35	3.18	3
J10ER010B	R	0.1	●	●	6.35	3.18	3
J10EL010B	L	0.1	●		6.35	3.18	3

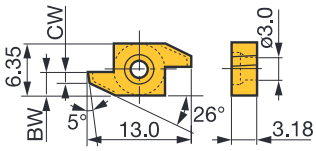
● : Line up

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)



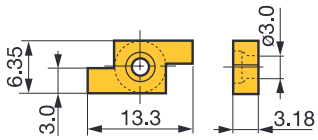
Right hand (R) shown.

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

● : Line up

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

10E (Insert blank)



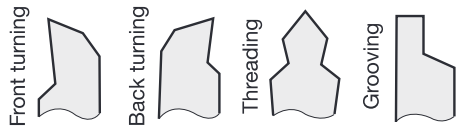
Right hand (R) shown.

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

● : Line up

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

Formed examples of insert blanks



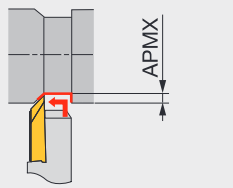
Notes:
- Front relief angle, side relief angle, edge width can be ground depending on the application.
- Insert blanks can be formed to a profiling tool which has a width up to 3 mm

Standard cutting conditions

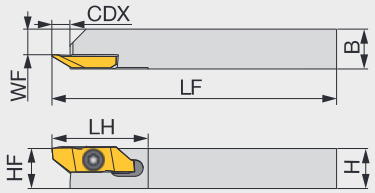
Operations \ Workpiece material			Carbon steels	Stainless steels	Brass
Lateral feed (external turning)	Cutting speed (m/min)		~ 100	~ 50	~ 200
	Feed (mm/rev)	Roughing	~ 0.06	~ 0.03	~ 0.1
		Medium	~ 0.03	~ 0.025	~ 0.06
		Finishing	~ 0.02	~ 0.015	~ 0.04
Parting-off Grooving Forming	Cutting speed (m/min)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

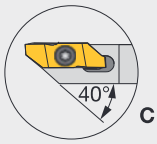
JSXBR/L

Screw-on toolholder for back turning and threading



APMX = 5.5 mm





C type

Right hand (R) shown.

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

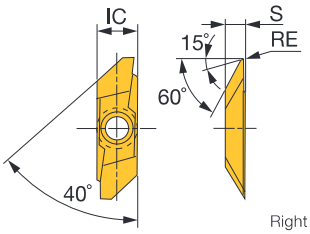
Can be used with JXT insert for threading.
Can be wrenched also from the back with a double-head screw.

SPARE PARTS

Designation	Clamping screw	Wrench
JSXBR/L...	CSTB-4SD	T-8F

INSERT

JXB (Sharp edge)



Right hand (R) shown.

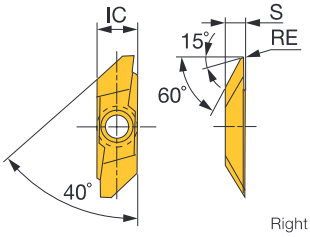
P	Steel	★						
M	Stainless	★						
K	Cast iron	★			☆			
N	Non-ferrous				★			
S	Superalloys	☆			★			
H	Hard materials				★			

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated			Uncoated								IC	S	Max. depth of cut
			J740			TH10										
JXBR8000F	R	0.03	●			●								8	3.97	5.5
JXBL8000F	L	0.03	●			●								8	3.97	5.5
JXBR8005F	R	0.05	●			●								8	3.97	5.5
JXBL8005F	L	0.05	●			●								8	3.97	5.5
JXBR8010F	R	0.1	●			●								8	3.97	5.5
JXBL8010F	L	0.1	●			●								8	3.97	5.5
JXBR8015F	R	0.15	●			●								8	3.97	5.5
JXBL8015F	L	0.15	●			●								8	3.97	5.5

● : Line up

JXB (Honed edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated J740	IC	S	Max. depth of cut
JXBR/L8005	R	0.05	●	8	3.97	5.5
JXBR/L8005	L	0.05	●	8	3.97	5.5
JXBR/L8010	R	0.1	●	8	3.97	5.5
JXBR/L8010	L	0.1	●	8	3.97	5.5
JXBR/L8015	R	0.15	●	8	3.97	5.5
JXBR/L8015	L	0.15	●	8	3.97	5.5

● : Line up

STANDARD CUTTING CONDITIONS (JXB type insert)

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) Grooving	Feed: *f* (mm/rev) 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

MINIFORCE TURN

STANDARD CUTTING CONDITIONS

FOR EXTERNAL TURNING

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

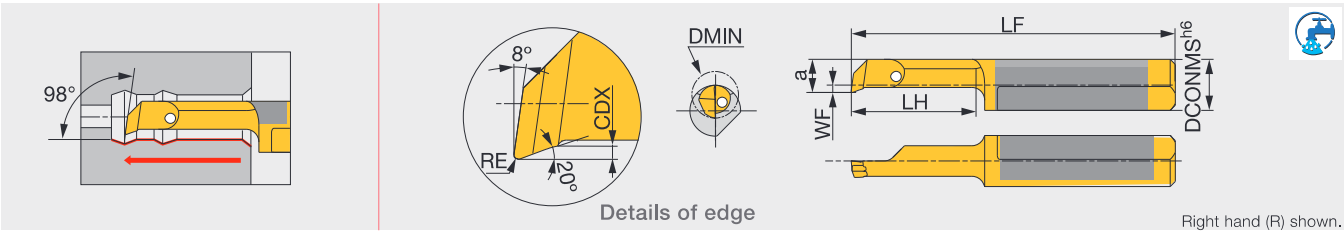
J-SERIES

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Chip breaker	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
K	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

JBT R/L

Solid boring bar for boring, profiling, and chamfering



Designation	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
JBTR04020004-D006	●	0.6	4	-	0.5	18.5	2	0.08	0.04
JBTR04030004-D006	●	0.6	4	-	0.5	19.5	3	0.08	0.04
JBTR04045005-D010	●	1	4	-	0.9	21	4.5	0.1	0.05
JBTR04065005-D010	●	1	4	-	0.9	23	6.5	0.1	0.05
JBTR04040005-D020	●	2	4	-	1.7	20.5	4	0.1	0.05
JBTR04090005-D020	●	2	4	-	1.7	25.5	9	0.1	0.05
JBTR04140005-D020	●	2	4	-	1.7	30.5	14	0.1	0.05
JBTR/L04090010-D028	●	2.8	4	0.6	2.6	25.5	9	0.2	0.1
JBTR/L04150010-D028	●	2.8	4	0.6	2.6	31.5	15	0.2	0.1
JBTR/L04190010-D028	●	2.8	4	0.6	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
JBTR/L07290015-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
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

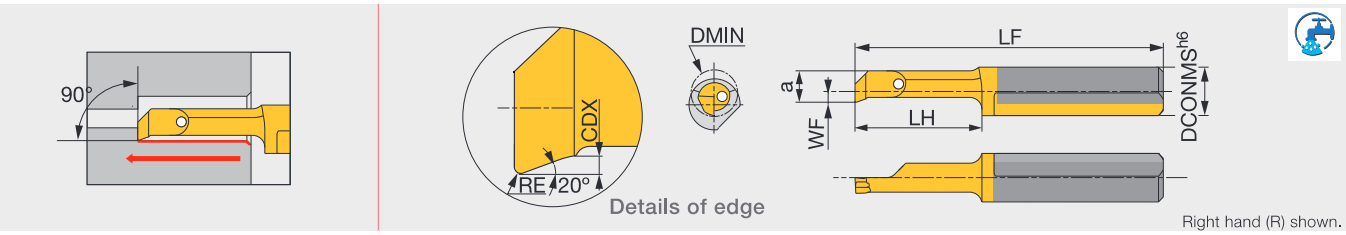
● : Line up

Reference pages : JBT R/L: Standard cutting conditions → G062

TINYMTURN

JBP R

Solid boring bar for boring and chamfering



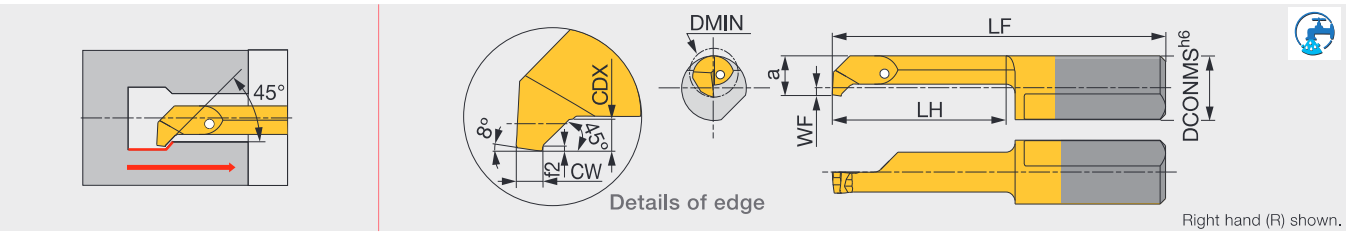
Designation	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
JBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBPR04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBPR04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
JBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
JBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15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

● : Line up

TINYMTURN

JBU R

Solid boring bar for back boring and chamfering



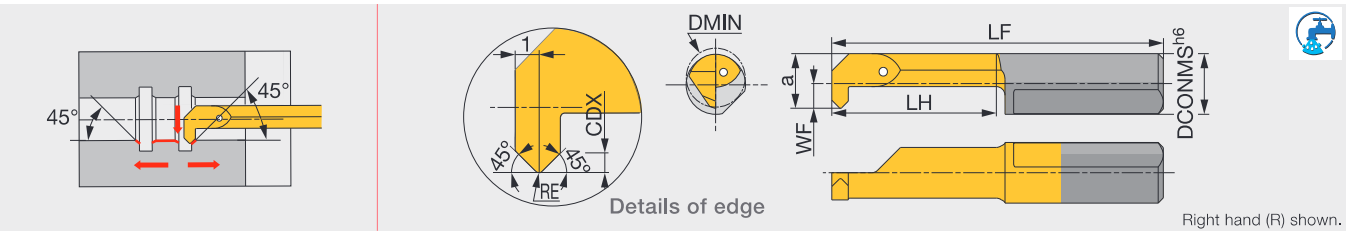
Designation	SH730	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW $^{+0.05}_{0}$
JBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1
JBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1

● : Line up

TINYMTURN

JBC R

Solid boring bar for boring and 45° chamfering

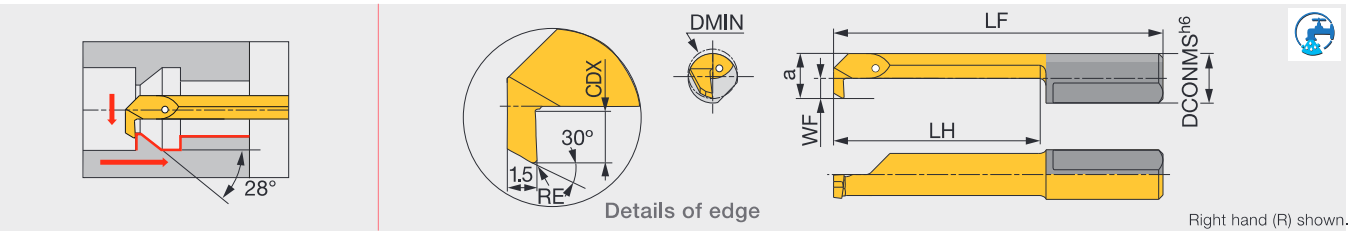


Designation	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{\pm 0.05}$
JBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
JBCR07190020-D050	●	5	7	0.9	4.4	35	19	0.7	0.2
JBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

● : Line up

Reference pages : JBP R, JBU R, JBC R: Standard cutting conditions → G062

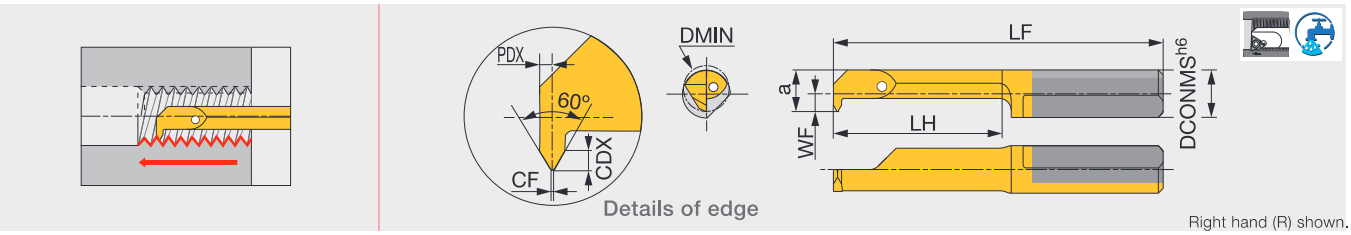
TINYMTURN
JBB R
Solid boring bar for back boring



Designation	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE+0.05
JBBR04140020-D030	●	3	4	0.6	2.6	30	14	0.5	0.2
JBBR04190020-D030	●	3	4	0.6	2.6	35	19	0.5	0.2
JBBR04140015-D040	●	4	4	1.5	3.5	30	14	0.8	0.15
JBBR04240015-D040	●	4	4	1.5	3.5	40	24	0.8	0.15
JBBR07190020-D050	●	5	7	0.9	4.4	35	19	1	0.2
JBBR07290020-D050	●	5	7	0.9	4.4	45	29	1	0.2
JBBR07190020-D060	●	6	7	1.8	5.3	35	19	1.8	0.2
JBBR07290020-D060	●	6	7	1.8	5.3	45	29	1.8	0.2
JBBR07190020-D070	●	7	7	2.8	6.3	35	19	2.5	0.2
JBBR07290020-D070	●	7	7	2.8	6.3	45	29	2.5	0.2

● : Line up

TINYMTURN
JBI R
Solid boring bar for threading (metric)

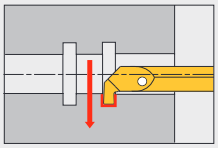


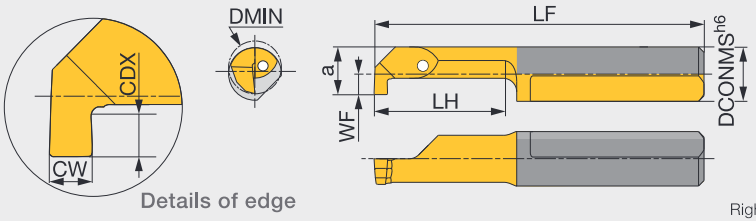
Designation	SH730	Pitch	DMIN	CF 0 -0.02	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
JBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
JBIR07140125-D060	●	1.25	6	0.15	7	1.8	5.3	30	14	0.7	0.65
JBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75
JBIR07140150-D070	●	1.5	7	0.18	7	2.8	6.3	30	14	0.8	0.75

● : Line up

Reference pages : JBB R, JBI R: Standard cutting conditions → G062 - G063

Solid boring bar for internal grooving





Right hand (R) shown.

Designation	SH730	CW $^{+0.05}_{0}$	DMIN	DCONMS	WF	a	LF	LH	CDX
JBGR04050050-D020	●	0.5	2	4	0.2	1.8	21	5	0.4
JBGR04100050-D020	●	0.5	2	4	0.2	1.8	26	10	0.4
JBGR04050070-D030	●	0.7	3	4	0.7	2.7	21	5	0.6
JBGR04100070-D030	●	0.7	3	4	0.7	2.7	26	10	0.6
JBGR04090100-D040	●	1	4	4	1.5	3.5	25.5	9	0.8
JBGR04150100-D040	●	1	4	4	1.5	3.5	31.5	15	0.8
JBGR07090100-D050	●	1	5	7	0.9	4.4	25	9	1
JBGR07140100-D050	●	1	5	7	0.9	4.4	30	14	1
JBGR07090150-D050	●	1.5	5	7	0.9	4.4	25	9	1
JBGR07140150-D050	●	1.5	5	7	0.9	4.4	30	14	1
JBGR07090200-D050	●	2	5	7	0.9	4.4	25	9	1
JBGR07190200-D050	●	2	5	7	0.9	4.4	35	19	1
JBGR/L07090100-D060	●	1	6	7	1.8	5.3	25	9	1.8
JBGR07140100-D060	●	1	6	7	1.8	5.3	30	14	1.8
JBGR07210100-D060	●	1	6	7	1.8	5.3	37	21	1.8
JBGR07290100-D060	●	1	6	7	1.8	5.3	45	29	1.8
JBGR/L07090150-D060	●	1.5	6	7	1.8	5.3	25	9	1.8
JBGR07140150-D060	●	1.5	6	7	1.8	5.3	30	14	1.8
JBGR07210150-D060	●	1.5	6	7	1.8	5.3	37	21	1.8
JBGR07240150-D060	●	1.5	6	7	1.8	5.3	40	24	1.8
JBGR07290150-D060	●	1.5	6	7	1.8	5.3	45	29	1.8
JBGR07090200-D060	●	2	6	7	1.8	5.3	25	9	1.8
JBGR07140200-D060	●	2	6	7	1.8	5.3	30	14	1.8
JBGR07210200-D060	●	2	6	7	1.8	5.3	37	21	1.8
JBGR07240200-D060	●	2	6	7	1.8	5.3	40	24	1.8
JBGR07290200-D060	●	2	6	7	1.8	5.3	45	29	1.8
JBGR07090100-D068	●	1	6.8	7	2.7	6.2	25	9	2.5
JBGR07140100-D068	●	1	6.8	7	2.7	6.2	30	14	2.5
JBGR07210100-D068	●	1	6.8	7	2.7	6.2	37	21	2.5
JBGR07090150-D068	●	1.5	6.8	7	2.7	6.2	25	9	2.5
JBGR07140150-D068	●	1.5	6.8	7	2.7	6.2	30	14	2.5
JBGR07210150-D068	●	1.5	6.8	7	2.7	6.2	37	21	2.5
JBGR07290150-D068	●	1.5	6.8	7	2.7	6.2	45	29	2.5
JBGR07090200-D068	●	2	6.8	7	2.7	6.2	25	9	2.5
JBGR/L07140200-D068	●	2	6.8	7	2.7	6.2	30	14	2.5
JBGR07210200-D068	●	2	6.8	7	2.7	6.2	37	21	2.5
JBGR07250200-D068	●	2	6.8	7	2.7	6.2	40	25	2.5
JBGR07290200-D068	●	2	6.8	7	2.7	6.2	45	29	2.5

* Corner radius: less than 0.1 mm

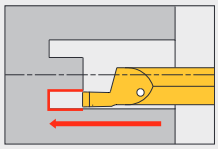
● : Line up

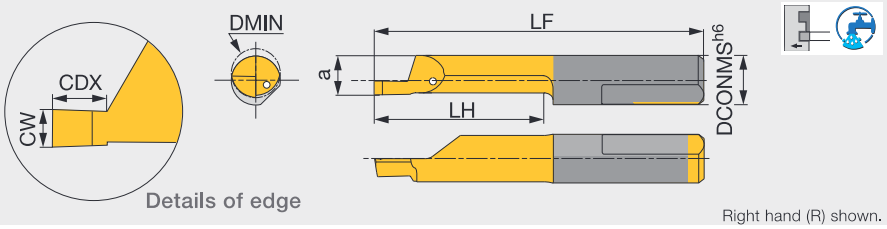
External
Internal
Grooving
Threading
Parting-off

Reference pages : JBG R/L: Standard cutting conditions → G063

TINYMTURN
JBF R/L

Solid boring bar for face grooving





Right hand (R) shown.

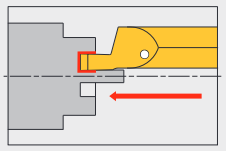
Designation	SH730	CW +0.05 0	DMIN	DCONMS	a	LF	LH	CDX
JBFR07110100-D060	●	1	6	7	5.2	26	10	1.5
JBFR07110150-D060	●	1.5	6	7	5.2	26	10	2
JBFR07110200-D060	●	2	6	7	5.2	26	10	3
JBFR07110100-D080	●	1	8	7	5.9	27	11	1.5
JBFR07110150-D080	●	1.5	8	7	5.9	27	11	2.5
JBFR07110200-D080	●	2	8	7	5.9	27	11	3
JBFR07110250-D080	●	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

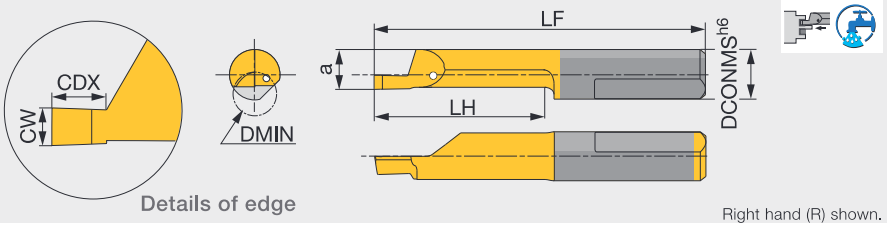
* Corner radius: less than 0.1 mm

● : Line up

TINYMTURN
JBS R

Solid boring bar for face grooving (for shaft)





Right hand (R) shown.

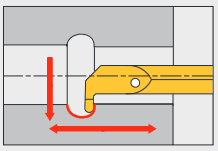
Designation	SH730	CW +0.05 0	DMIN	DCONMS	a	LF	LH	CDX
JBSR07200200-D060	●	2	6	7	5.2	36	20	4

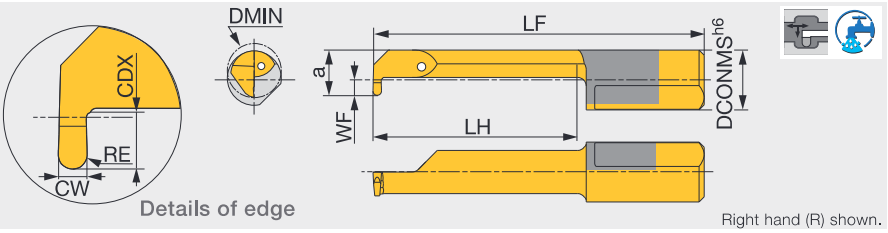
* Corner radius: less than 0.1 mm

● : Line up

TINYMTURN
JBR R

Solid boring bar for boring and profiling





Right hand (R) shown.

Designation	SH730	CW +0.05 0	DMIN	DCONMS	WF	a	LF	LH	CDX	RE
JBRR07190050-D050	●	1	5	7	0.9	4.4	35	19	1	0.5
JBRR07240050-D060	●	1	6	7	1.8	5.3	40	24	1.8	0.5
JBRR07290050-D068	●	1	6.8	7	2.8	6.3	45	29	2.5	0.5

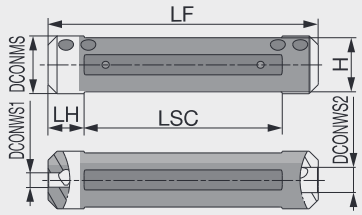
● : Line up

Reference pages : JBF R/L, JBS R: Standard cutting condition → G063, JBR R: Standard cutting conditions → G062

TINYMTURN

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
JBBS12-4-4	SSHM5-4PF-S	P-2.5
JBBS127-4-4	SSHM5-6PF-S	P-2.5
JBBS14-4-4	SSHM5-4PF-S	P-2.5
JBBS**-4-7	SSHM5-6PF-S	P-2.5

TINYMTURN

JBBS-C

Sleeve for internal coolant supply

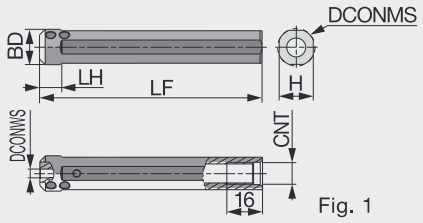


Fig. 1

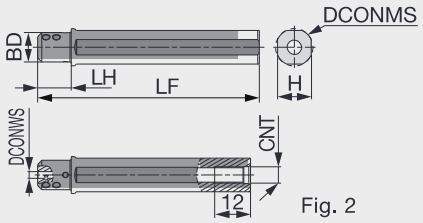


Fig. 2

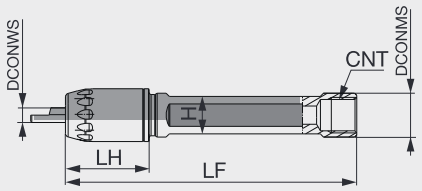
Designation	DCONMS	BD	DCONWS	LF	LH	H	CNT	Fig.
JBBS159-4-L100C	15.875	15.875	4	100	10	14.58	R1/8	1
JBBS159-7-L100C	15.875	15.875	7	100	10	14.58	R1/8	1
JBBS16-4-L100C	16	16	4	100	10	15	R1/8	1
JBBS16-7-L100C	16	16	7	100	10	15	R1/8	1
JBBS19-4-L100C	19.05	17.5	4	100	20	17.2	R1/8	2
JBBS19-7-L100C	19.05	17.5	7	100	20	17.2	R1/8	2
JBBS20-4-L100C	20	17.5	4	100	20	18	R1/8	2
JBBS20-7-L100C	20	17.5	7	100	20	18	R1/8	2
JBBS22-4-L100C	22	17.5	4	100	20	20	R1/8	2
JBBS22-7-L100C	22	17.5	7	100	20	20	R1/8	2
JBBS25-4-L100C	25	18	4	100	23	23	R1/8	2
JBBS25-7-L100C	25	18	7	100	23	23	R1/8	2
JBBS254-4-L100C	25.4	18	4	100	23	23.4	R1/8	2
JBBS254-7-L100C	25.4	18	7	100	23	23.4	R1/8	2

SPARE PARTS

Designation	Clamping screw	Wrench
JBBS**-4-L100C	SSHM5-6PF-S	P-2.5
JBBS**-7-L100C	SSHM5-4PF-S	P-2.5

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	18	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	Cap	Wrench
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. C15, C20, etc.	SH730	40 - 140	0.01 - 0.08 *
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMoS4 etc.	SH730	40 - 140	0.01 - 0.08 *
	Prehardened steels NAK80, PX5, etc.	SH730	40 - 140	0.01 - 0.08 *
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH730	40 - 140	0.01 - 0.08 *
K	Grey cast irons FC250, FCD300, etc. 250, 300, etc.	SH730	30 - 100	0.01 - 0.08 *
	Ductile cast irons FC450, FCD600, etc. 400-15, 600-3, etc.	SH730	30 - 100	0.01 - 0.08 *
N	Aluminium alloys, Copper alloys Si < 12%	SH730	90 - 200	0.01 - 0.08 *
S	Titanium alloys Ti-6Al-4V, etc.	SH730	30 - 100	0.01 - 0.08 *
	Superalloys Inconel718, etc.	SH730	30 - 100	0.01 - 0.08 *

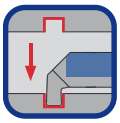
* JBTR/L04020004-D006,
JBTR/L04030004-D006

Max. *f* = 0.01 mm/rev

Threading (metric thread)

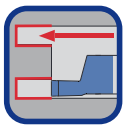
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Number of passes Pitch (mm) 0.5	0.75	1	1.25	1.5
P	Low carbon steels S15C, S25C, etc. C15, C20, etc.	SH730	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMoS4, etc.	SH730	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
	Prehardened steels NAK80, PX5, etc.	SH730	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH730	40 - 140	8	10	12	15	18
K	Grey cast irons FC250, FCD300, etc. 250, 300, etc.	SH730	30 - 100	7	9	12	14	17
	Ductile cast irons FC450, FCD600, etc. 400-15, 600-3, etc.	SH730	30 - 100	7	9	12	14	17
N	Aluminium alloys, Copper alloys Si < 12%	SH730	90 - 200	6	8	10	12	15

STANDARD CUTTING CONDITIONS



Internal grooving

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, S25C, etc. C15, C20, etc.	SH730	40 - 140	0.01 - 0.03
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMoS4 etc.	SH730	40 - 140	0.01 - 0.03
	Prehardened steels NAK80, PX5, etc.	SH730	40 - 140	0.01 - 0.03
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH730	40 - 140	0.01 - 0.03
K	Grey cast irons FC250, FCD300, etc. 250, 300, etc.	SH730	30 - 100	0.01 - 0.03
	Ductile cast irons FC450, FCD600, etc. 400-15, 600-3, etc.	SH730	30 - 100	0.01 - 0.03
N	Aluminium alloys, Copper alloys Si < 12%	SH730	90 - 200	0.01 - 0.03
S	Titanium alloys Ti-6Al-4V, etc.	SH730	30 - 100	0.01 - 0.03
	Superalloys Inconel718, etc.	SH730	30 - 100	0.01 - 0.03

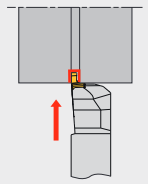


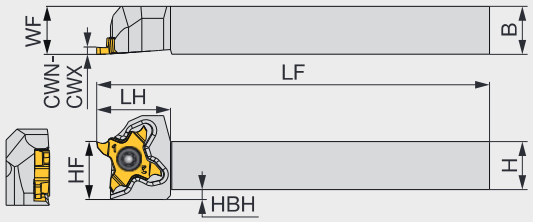
Face grooving

ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, S25C, etc. C15, C20, etc.	SH730	40 - 140	0.01 - 0.05
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMoS4 etc.	SH730	40 - 140	0.01 - 0.05
	Prehardened steels NAK80, PX5, etc.	SH730	40 - 140	0.01 - 0.05
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	SH730	40 - 140	0.01 - 0.05
K	Grey cast irons FC250, FCD300, etc. 250, 300, etc.	SH730	30 - 100	0.01 - 0.05
	Ductile cast irons FC450, FCD600, etc. 400-15, 600-3, etc.	SH730	30 - 100	0.01 - 0.05
N	Aluminium alloys, Copper alloys Si < 12%	SH730	90 - 200	0.01 - 0.05
S	Titanium alloys Ti-6Al-4V, etc.	SH730	30 - 100	0.01 - 0.05
	Superalloys Inconel718, etc.	SH730	30 - 100	0.01 - 0.05

STCR/L-18

External grooving and threading toolholder





Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
STCR/L1010X18	0.33	3	10	10	120	18.5	10	10	4.5	TC*18...	1.2
STCR/L1212F18	0.33	3	12	12	85	18.5	12	12	2.5	TC*18...	1.2
STCR/L1212X18	0.33	3	12	12	120	18.5	12	12	2.5	TC*18...	1.2
STCR/L1616X18	0.33	3	16	16	120	18.5	16	16	-	TC*18...	1.2
STCR/L2020H18	0.33	3	20	20	100	18.5	20	20	-	TC*18...	1.2
STCR/L2020X18	0.33	3	20	20	120	23.0	20	25	-	TC*18...	1.2
STCR/L2525Z18	0.33	3	25	25	135	23.0	25	30	-	TC*18...	1.2

- 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 torque (N·m) for clamping

Left-Hand Insert

TCP18**L**...

Right-Hand Insert

TCP18**R**...

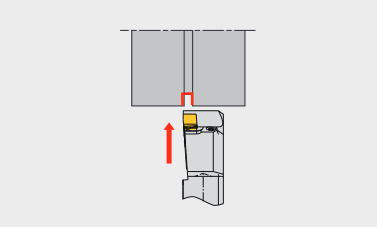
SPARE PARTS

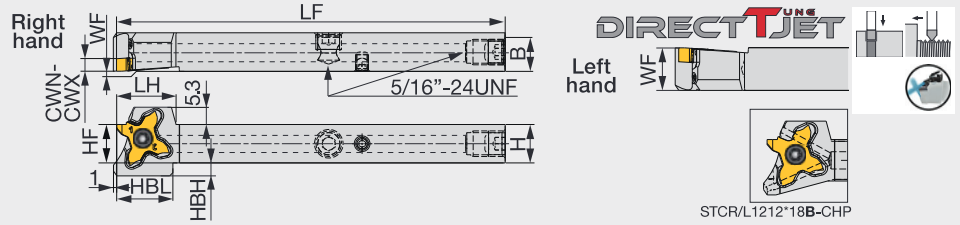
Designation	Clamping screw	Wrench
STCR...18	CSTC-4L100DL	T-1008/5
STCL...18	CSTC-4L100DR	T-1008/5

Reference pages : STCR/L-18: Inserts → G067 - G072, Standard cutting conditions → G072 - G073

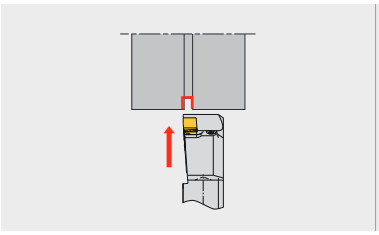
STCR/L-18-CHP

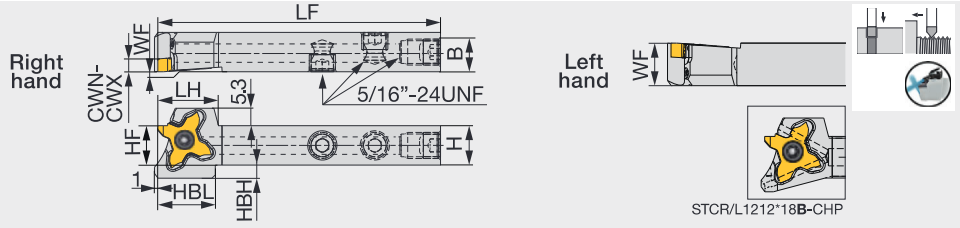
External grooving and threading toolholder, with high pressure coolant capability





Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBL	HBH	Insert	Torque*
STCR/L1212X18-CHP***(1)	0.33	3	12	12	120	18.5	12	0/12	17.5	4	TC*18...	1.2
STCR/L1212X18B-CHP (1)	0.33	3	12	12	120	18.5	12	0/12	17.5	4	TC*18...	1.2
STCR/L1616X18-CHP (1)	0.33	3	16	16	120	18.5	16	0/16	-	-	TC*18...	1.2





Designation	CWN	CWX	H	B	LF	LH	HF	WF	HBL	HBH	Insert	Torque*
STCR/L1212F18-CHP***	0.33	3	12	12	85	18.5	12	0/12	17.5	4	TC*18...	1.2
STCR/L1212F18B-CHP	0.33	3	12	12	85	18.5	12	0/12	17.5	4	TC*18...	1.2

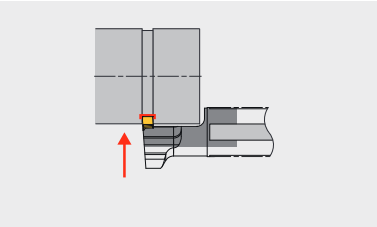
SPARE PARTS

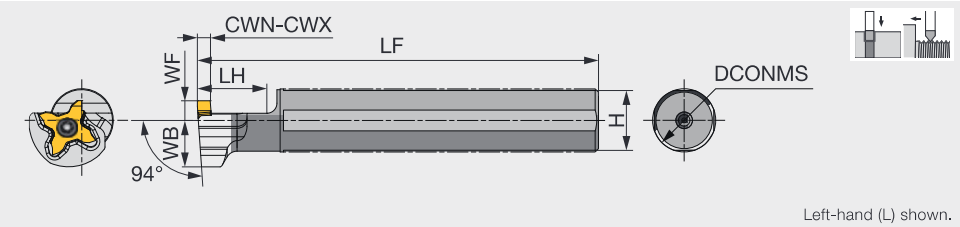
Designation	Clamping screw	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR**18-CHP	CSTC-4L100DL	T-1008/5

(1) Compatible to DirectTungJet system
- Use the right hand insert (TC*18R...) with the right hand toolholders (STCR...). Use the left hand insert (TC*18...) with the left hand holder (STCL...).
***: To be replaced with the new design

TETRAMINI CUT
JS-STCL18

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





Designation	CWN	CWX	DCONMS	H	LF	LH	WB	WF	Insert	Torque*
JS14H-STCL18	0.33	3	14	13	100	20	14	6	TC*18R...	1.2
JS159F-STCL18	0.33	3	15.875	15	85	20	14	6	TC*18R...	1.2
JS16F-STCL18	0.33	3	16	15	85	20	14	6	TC*18R...	1.2
JS19G-STCL18	0.33	3	19.05	18	90	20	14	6	TC*18R...	1.2
JS19X-STCL18	0.33	3	19.05	18	120	20	14	6	TC*18R...	1.2
JS20G-STCL18	0.33	3	20	19	90	20	14	6	TC*18R...	1.2
JS20X-STCL18	0.33	3	20	19	120	20	14	6	TC*18R...	1.2
JS22X-STCL18	0.33	3	22	21	120	20	12.25	10	TC*18R...	1.2
JS25H-STCL18	0.33	3	25	24	100	20	12.25	10	TC*18R...	1.2
JS254X-STCL18	0.33	3	25.4	24	120	20	12.25	10	TC*18R...	1.2

SPARE PARTS

Designation	Clamping screw	Wrench
JS...STCL18	CSTC-4L100DL	T-1008/5

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

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

Reference pages : STCR/L-18-CHP: Inserts → G067 - G072, Standard cutting conditions → G072 - G073

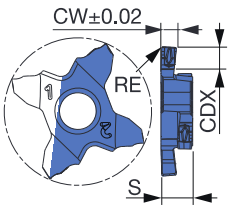
Selection guide for TetraMini-Cut inserts

Groove width CW (mm)	Corner rad. RE (mm)	TCS18R (G067)	TCG18R/L (G068)	TCP18R/L (G070)	TCP18R/L-F (G071)
		AH7025	AH7025	AH725	SH725
		Honed edge	Honed edge	Lightly honed edge	Sharp edge
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	●	●	●	●
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	●	●		
1.60	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	●	●		
2.25	0.2	●	●		
2.30	0.2	●	●		
2.50	0.1	●	●	●	●
	0.2	●	●		
	0.3	●	●		
2.65	0.3	●	●		
2.80	0.3	●	●		
3.00	0.1	●	●	●	●
	0.2	●	●		
	0.3	●	●		

● : Line up

INSERT

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



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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.02	RE	Coated AH7025	CDX	S
TCS18R100-010	R	1	0.1	●	2	4
TCS18R120-010	R	1.2	0.1	●	2	4
TCS18R125-010	R	1.25	0.1	●	2	4
TCS18R125-020	R	1.25	0.2	●	2	4
TCS18R130-020	R	1.3	0.2	●	3.5	4
TCS18R140-010	R	1.4	0.1	●	3.5	4
TCS18R140-020	R	1.4	0.2	●	3.5	4
TCS18R145-010	R	1.45	0.1	●	3.5	4
TCS18R150-010	R	1.5	0.1	●	3.5	4
TCS18R150-020	R	1.5	0.2	●	3.5	4
TCS18R160-020	R	1.6	0.2	●	3.5	4
TCS18R170-020	R	1.7	0.2	●	3.5	4
TCS18R175-010	R	1.75	0.1	●	3.5	4
TCS18R175-020	R	1.75	0.2	●	3.5	4
TCS18R185-020	R	1.85	0.2	●	3.5	4
TCS18R195-020	R	1.95	0.2	●	3.5	4
TCS18R200-010	R	2	0.1	●	3.5	4
TCS18R200-020	R	2	0.2	●	3.5	4
TCS18R225-020	R	2.25	0.2	●	3.5	4
TCS18R230-020	R	2.3	0.2	●	3.5	4
TCS18R250-010	R	2.5	0.2	●	3.5	4
TCS18R250-020	R	2.5	0.2	●	3.5	4
TCS18R250-030	R	2.5	0.3	●	3.5	4
TCS18R265-030	R	2.65	0.3	●	3.5	4
TCS18R280-030	R	2.8	0.3	●	3.5	4
TCS18R300-010	R	3	0.1	●	3.5	4
TCS18R300-020	R	3	0.2	●	3.5	4
TCS18R300-030	R	3	0.3	●	3.5	4

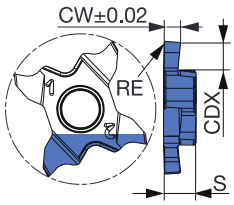
Please see the page G073 for precautions of processing.

5 pieces per package
● : Line up

Reference pages : Toolholders → G064 - G065, Standard cutting conditions → G072

INSERT

TCG18R/L (with edge preparation)



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	S
TCG18R100-010	R	1	0.1	●	2	4
TCG18L100-010	L	1	0.1	●	2	4
TCG18R120-010	R	1.2	0.1	●	2	4
TCG18L120-010	L	1.2	0.1	●	2	4
TCG18R125-010	R	1.25	0.1	●	2	4
TCG18L125-010	L	1.25	0.1	●	2	4
TCG18R125-020	R	1.25	0.2	●	2	4
TCG18L125-020	L	1.25	0.2	●	2	4
TCG18R130-020	R	1.3	0.2	●	2	4
TCG18L130-020	L	1.3	0.2	●	2	4
TCG18R140-010	R	1.4	0.1	●	3.5	4
TCG18L140-010	L	1.4	0.1	●	3.5	4
TCG18R140-020	R	1.4	0.2	●	3.5	4
TCG18L140-020	L	1.4	0.2	●	3.5	4
TCG18R145-010	R	1.45	0.1	●	3.5	4
TCG18L145-010	L	1.45	0.1	●	3.5	4
TCG18R145-020	R	1.45	0.2	●	3.5	4
TCG18L145-020	L	1.45	0.2	●	3.5	4
TCG18R150-010	R	1.5	0.1	●	3.5	4
TCG18L150-010	L	1.5	0.1	●	3.5	4
TCG18R150-020	R	1.5	0.2	●	3.5	4
TCG18L150-020	L	1.5	0.2	●	3.5	4
TCG18R160-020	R	1.6	0.2	●	3.5	4
TCG18L160-020	L	1.6	0.2	●	3.5	4
TCG18R170-020	R	1.7	0.2	●	3.5	4
TCG18L170-020	L	1.7	0.2	●	3.5	4
TCG18R175-010	R	1.75	0.1	●	3.5	4
TCG18L175-010	L	1.75	0.1	●	3.5	4
TCG18R175-020	R	1.75	0.2	●	3.5	4
TCG18L175-020	L	1.75	0.2	●	3.5	4
TCG18R185-020	R	1.85	0.2	●	3.5	4
TCG18L185-020	L	1.85	0.2	●	3.5	4
TCG18R195-020	R	1.95	0.2	●	3.5	4
TCG18L195-020	L	1.95	0.2	●	3.5	4

Please see the page G073 for precautions of processing.

5 pieces per package
● : Line up

External
Internal
Grooving
Threading
Parting-off

Reference pages : Toolholders → G064 - G065, Standard cutting conditions → G072

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	S
				AH7025		
TCG18R200-010	R	2	0.1	●	3.5	4
TCG18L200-010	L	2	0.1	●	3.5	4
TCG18R200-020	R	2	0.2	●	3.5	4
TCG18L200-020	L	2	0.2	●	3.5	4
TCG18R225-020	R	2.25	0.2	●	3.5	4
TCG18L225-020	L	2.25	0.2	●	3.5	4
TCG18R230-020	R	2.3	0.2	●	3.5	4
TCG18L230-020	L	2.3	0.2	●	3.5	4
TCG18R250-010	R	2.5	0.1	●	3.5	4
TCG18L250-010	L	2.5	0.1	●	3.5	4
TCG18R250-020	R	2.5	0.2	●	3.5	4
TCG18L250-020	L	2.5	0.2	●	3.5	4
TCG18R250-030	R	2.5	0.3	●	3.5	4
TCG18L250-030	L	2.5	0.3	●	3.5	4
TCG18R265-030	R	2.65	0.3	●	3.5	4
TCG18L265-030	L	2.65	0.3	●	3.5	4
TCG18R280-030	R	2.8	0.3	●	3.5	4
TCG18L280-030	L	2.8	0.3	●	3.5	4
TCG18R300-010	R	3	0.1	●	3.5	4
TCG18L300-010	L	3	0.1	●	3.5	4
TCG18R300-020	R	3	0.2	●	3.5	4
TCG18L300-020	L	3	0.2	●	3.5	4
TCG18R300-030	R	3	0.3	●	3.5	4
TCG18L300-030	L	3	0.3	●	3.5	4

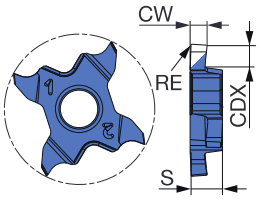
Please see the page G073 for precautions of processing.

5 pieces per package
● : Line up

Reference pages : Toolholders → G064 - G065, Standard cutting conditions → G072

INSERT

TCP18R/L (lightly honed edge)



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

★ : First choice
☆ : Second choice

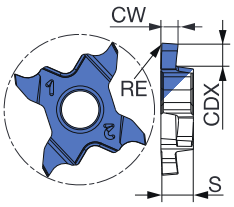
Designation	HAND	CW±0.02	RE	AH725			NS9530										CDX	S
TCP18R033-005	R	0.33	0.05	●			●										0.8	4
TCP18L033-005	L	0.33	0.05	●			●										0.8	4
TCP18R043-005	R	0.43	0.05	●			●										1.2	4
TCP18L043-005	L	0.43	0.05	●			●										1.2	4
TCP18R050-005	R	0.50	0.05	●			●										1.2	4
TCP18L050-005	L	0.50	0.05	●			●										1.2	4
TCP18R075-005	R	0.75	0.05	●			●										2	4
TCP18L075-005	L	0.75	0.05	●			●										2	4
TCP18R095-005	R	0.95	0.05	●			●										2	4
TCP18L095-005	L	0.95	0.05	●			●										2	4
TCP18R100-010	R	1	0.1	●			●										2	4
TCP18L100-010	L	1	0.1	●			●										2	4
TCP18R120-010	R	1.2	0.1	●			●										2	4
TCP18L120-010	L	1.2	0.1	●			●										2	4
TCP18R125-010	R	1.25	0.1	●			●										2	4
TCP18L125-010	L	1.25	0.1	●			●										2	4
TCP18R140-010-35	R	1.4	0.1	●													3.5	4
TCP18L140-010-35	L	1.4	0.1	●													3.5	4
TCP18R145-010	R	1.45	0.1	●			●										2	4
TCP18L145-010	L	1.45	0.1	●			●										2	4
TCP18R145-010-35	R	1.45	0.1	●													3.5	4
TCP18L145-010-35	L	1.45	0.1	●													3.5	4
TCP18R150-010	R	1.5	0.1	●			●										2	4
TCP18L150-010	L	1.5	0.1	●			●										2	4
TCP18R150-010-35	R	1.5	0.1	●													3.5	4
TCP18L150-010-35	L	1.5	0.1	●													3.5	4
TCP18R175-010	R	1.75	0.1	●			●										2	4
TCP18L175-010	L	1.75	0.1	●			●										2	4
TCP18R175-010-35	R	1.75	0.1	●													3.5	4
TCP18L175-010-35	L	1.75	0.1	●													3.5	4
TCP18R200-010	R	2	0.1	●			●										2.5	4
TCP18L200-010	L	2	0.1	●			●										2.5	4
TCP18R200-010-35	R	2	0.1	●													3.5	4
TCP18L200-010-35	L	2	0.1	●													3.5	4
TCP18R250-010	R	2.5	0.1	●			●										2.5	4
TCP18L250-010	L	2.5	0.1	●			●										2.5	4
TCP18R250-010-35	R	2.5	0.1	●													3.5	4
TCP18L250-010-35	L	2.5	0.1	●													3.5	4
TCP18R300-010	R	3	0.1	●			●										2.5	4
TCP18L300-010	L	3	0.1	●			●										2.5	4
TCP18R300-010-35	R	3	0.1	●													3.5	4
TCP18L300-010-35	L	3	0.1	●													3.5	4

Please see the page G073 for precautions of processing.

5 pieces per package
● : Line up

Reference pages: Toolholders → G064 - G065, Standard cutting conditions → G073

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 SH725	CDX	S
TCP18R033F-005	R	0.33	0.05	●	0.8	4
TCP18L033F-005	L	0.33	0.05	●	0.8	4
TCP18R043F-005	R	0.43	0.05	●	1.2	4
TCP18L043F-005	L	0.43	0.05	●	1.2	4
TCP18R050F-005	R	0.5	0.05	●	1.2	4
TCP18L050F-005	L	0.5	0.05	●	1.2	4
TCP18R075F-005	R	0.75	0.05	●	2	4
TCP18L075F-005	L	0.75	0.05	●	2	4
TCP18R095F-005	R	0.95	0.05	●	2	4
TCP18L095F-005	L	0.95	0.05	●	2	4
TCP18R100F-005	R	1	0.05	●	2	4
TCP18R100F-010	R	1	0.1	●	2	4
TCP18L100F-010	L	1	0.1	●	2	4
TCP18R120F-005	R	1.2	0.05	●	2	4
TCP18R120F-010	R	1.2	0.1	●	2	4
TCP18L120F-010	L	1.2	0.1	●	2	4
TCP18R125F-005	R	1.25	0.05	●	2	4
TCP18R125F-010	R	1.25	0.1	●	2	4
TCP18L125F-010	L	1.25	0.1	●	2	4
TCP18R140F-010-35	R	1.4	0.1	●	3.5	4
TCP18R145F-005-35	R	1.45	0.05	●	3.5	4
TCP18R145F-010	R	1.45	0.1	●	2	4
TCP18L145F-010	L	1.45	0.1	●	2	4
TCP18R145F-010-35	R	1.45	0.1	●	3.5	4
TCP18L145F-010-35	L	1.45	0.1	●	3.5	4
TCP18R150F-005-35	R	1.5	0.05	●	3.5	4
TCP18R150F-010	R	1.5	0.1	●	2	4
TCP18L150F-010	L	1.5	0.1	●	2	4
TCP18R150F-010-35	R	1.5	0.1	●	3.5	4
TCP18L150F-010-35	L	1.5	0.1	●	3.5	4
TCP18R175F-005-35	R	1.75	0.05	●	3.5	4
TCP18R175F-010	R	1.75	0.1	●	2	4
TCP18L175F-010	L	1.75	0.1	●	2	4
TCP18R175F-010-35	R	1.75	0.1	●	3.5	4
TCP18L175F-010-35	L	1.75	0.1	●	3.5	4
TCP18R200F-005-35	R	2	0.05	●	3.5	4
TCP18R200F-010	R	2	0.1	●	2.5	4
TCP18L200F-010	L	2	0.1	●	2.5	4
TCP18R200F-010-35	R	2	0.1	●	3.5	4
TCP18L200F-010-35	L	2	0.1	●	3.5	4
TCP18R250F-010	R	2.5	0.1	●	2.5	4
TCP18L250F-010	L	2.5	0.1	●	2.5	4
TCP18R250F-010-35	R	2.5	0.1	●	3.5	4
TCP18L250F-010-35	L	2.5	0.1	●	3.5	4
TCP18R300F-010	R	3	0.1	●	2.5	4
TCP18L300F-010	L	3	0.1	●	2.5	4
TCP18R300F-010-35	R	3	0.1	●	3.5	4
TCP18L300F-010-35	L	3	0.1	●	3.5	4

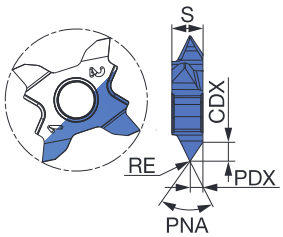
Please see the page G073 for precautions of processing.

Reference pages: Toolholders → G064 - G065, Standard cutting conditions → G073

5 pieces per package
● : Line up

INSERT

TCT18R/L (for threading)



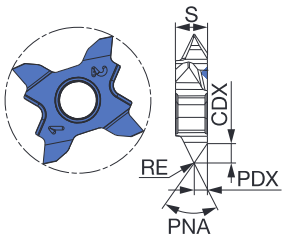
P	Steel	★			
M	Stainless	★			
K	Cast iron	★			
N	Non-ferrous				
S	Superalloys	★			
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated AH725	Pitch min	Pitch max	PDX	CDX	PNA	S
TCT18R-60N-010	R	0.1	●	0.8	3	1.6	2.67	60°	4
TCT18L-60N-010	L	0.1	●	0.8	3	1.6	2.67	60°	4
TCT18R-60N-020	R	0.2	●	0.8	3	1.6	2.57	60°	4
TCT18L-60N-020	L	0.2	●	0.8	3	1.6	2.57	60°	4

● : Line up

TCT18FR (sharp edge for threading)



Right-hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated SH725	Pitch min	Pitch max	PDX	CDX	PNA	S
TCT18FR-60A-005	R	0.1	●	0.4	1	0.6	0.99	60°	4
TCT18FR-60A-010	L	0.1	●	1	2	1	1.63	60°	4

● : Line up

STANDARD CUTTING CONDITIONS

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

ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed: *f* (mm/rev) TCG	Feed: *f* (mm/rev) 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

STANDARD CUTTING CONDITIONS

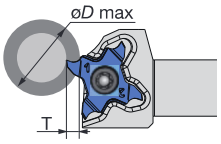
TCP18R/L (lightly honed edge) / TCP18R/L-F (sharp edge)

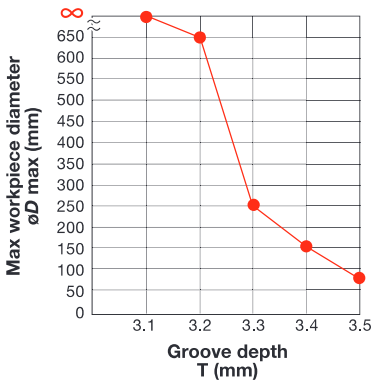
ISO	Workpiece materials	Priority	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	First choice	SH725	80 - 180	0.03 - 0.1
		Toughness	AH725	80 - 180	0.03 - 0.1
	Carbon steels, Alloy steel S55C, SCM440, etc. C55, 42CrMoS4, etc.	First choice	SH725	80 - 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

TCT18R/L (for threading / lightly honed edge) / TCT18FR (for threading / sharp edge)

ISO	Workpiece material	Priority	Grades	Cutting speed *Vc* (m/min)	Pitch (mm)	TPI
P	Low carbon steel S15C, S20C, etc. C15, C20, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 12
		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 - 12
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	60 - 150	0.4 - 2.0	64 - 12
		Toughness	AH725	60 - 150	0.8 - 3.0	32 - 8
M	Stainless steel SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	First choice	SH725	50 - 80	0.4 - 2.0	64 - 12
		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 - 12
	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 - 12
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	30 - 100	0.4 - 2.0	64 - 12
		Toughness	AH725	30 - 100	0.8 - 3.0	32 - 8
	Superalloys Inconel718, etc.	First choice	SH725	30 - 100	0.4 - 2.0	64 - 12
		Toughness	AH725	30 - 100	0.8 - 3.0	32 - 8

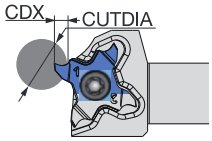
PRECAUTIONS OF PROCESSING





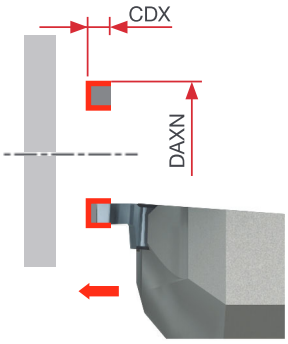
*Groove depth and max workpiece diameter (øDmax)

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



Max workpiece diameter CUTDIA (mm)
7

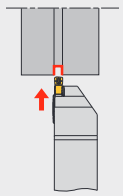
Minimum diameter for face grooving

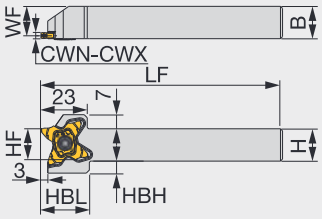


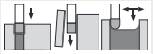
Minimum face diameter DAXN (mm)	Maximum groove depth CDX (mm)
65	3

STCR/L-27

External grooving toolholder







Right-hand (R) shown.

Designation	CWN	CWX	H	B	LF	HF	WF	HBH	HBL	Insert	Torque*
STCR/L1010-27	0.5	3.18	10	10	120	10	8.5	9.5	24	TC*27...	2.5
STCR/L1212-27	0.5	3.18	12	12	120	12	10.5	8	24	TC*27...	2.5
STCR/L1616-27	0.5	3.18	16	16	120	16	14.5	6	24	TC*27...	2.5
STCR/L2020-27	0.5	3.18	20	20	120	20	18.5	2	24	TC*27...	2.5
STCR/L2525-27	0.5	3.18	25	25	135	25	23.5	-	-	TC*27...	2.5

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

SPARE PARTS

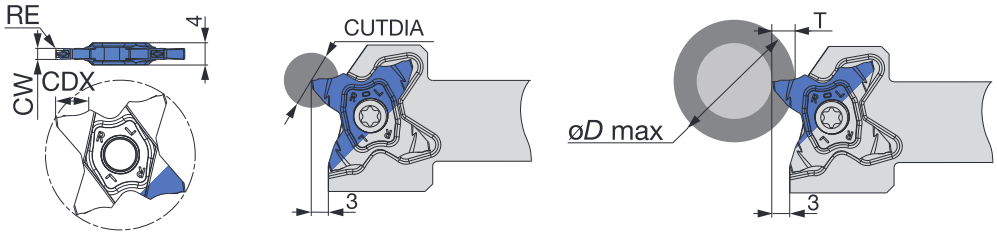
Designation	Screw	Wrench
STCR****-27	SR16-212-01397L	T-2010/5
STCL****-27	SR16-212-01397	T-2010/5

External
Internal
Grooving
Threading
Parting-off

Reference pages : STCR/L-27: Inserts → G075 - G078, Standard cutting conditions → G079

INSERT (for grooving and parting)

TCS27



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

★ : First choice
☆ : Second choice

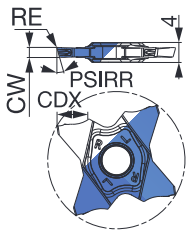
Designation	HAND	CW±0.02	RE	Coated AH725			CDX	CUTDIA	S1	Relation of groove depth (T) and Max. diameter (øD max)											
										T≤1	T≤2	T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCS27-050-000	0.5	0.02	0	●			1	2	4	∞	-	-	-	-	-	-	-	-	-	-	-
TCS27-050-004	0.5	0.02	0.04	●			2.5	5	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-075-010	0.75	0.02	0.1	●			2.5	5	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-080-000	0.8	0.02	0	●			1.6	3.2	4	∞	-	-	-	-	-	-	-	-	-	-	-
TCS27-100-006	1	0.02	0.06	●			3.5	7	4	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-100-010	1	0.02	0.1	●			3.5	7	4	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-104-000	1.04	0.02	0	●			2	4	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-120-000	1.2	0.02	0	●			2	4	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-125-010	1.25	0.02	0.1	●			3.5	7	4	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-125-020	1.25	0.02	0.2	●			3.5	7	4	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-140-000	1.4	0.02	0	●			2	4	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-147-000	1.47	0.02	0	●			2.5	5	4	∞	∞	-	-	-	-	-	-	-	-	-	-
TCS27-150-010	1.5	0.02	0.1	●			5.7	11.4	4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-150-020	1.5	0.02	0.2	●			5.7	11.4	4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-157-015	1.57	0.02	0.15	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-170-010	1.7	0.02	0.1	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-175-010	1.75	0.02	0.1	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-175-020	1.75	0.02	0.2	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-178-018	1.78	0.02	0.18	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-185-020	1.85	0.02	0.2	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-196-015	1.96	0.02	0.15	●			3	6	4	∞	∞	∞	-	-	-	-	-	-	-	-	-
TCS27-200-010	2	0.02	0.1	●			6.4	12.8	4	∞	∞	∞	600	280	180	130	105	85	60	50	30
TCS27-200-020	2	0.02	0.2	●			6.4	12.8	4	∞	∞	∞	600	280	180	130	105	85	60	50	30
TCS27-222-015	2.22	0.02	0.15	●			3.5	7	4	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-230-020	2.3	0.02	0.2	●			3.5	7	4	∞	∞	∞	600	-	-	-	-	-	-	-	-
TCS27-239-015	2.39	0.02	0.15	●			5.7	11.4	4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-247-020	2.47	0.02	0.2	●			5.7	11.4	4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-250-010	2.5	0.02	0.1	●			5.7	11.4	4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-250-030	2.5	0.02	0.3	●			5.7	11.4	4	∞	∞	∞	600	280	180	130	50	35	-	-	-
TCS27-270-010	2.7	0.02	0.1	●			6.2	12.4	4	∞	∞	∞	600	280	180	135	105	95	85	78	-
TCS27-287-020	2.87	0.02	0.2	●			6.2	12.4	4	∞	∞	∞	600	280	180	135	105	95	85	78	-
TCS27-300-000	3	0.02	0	●			6.4	12.8	4	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-300-020	3	0.02	0.2	●			6.4	12.8	4	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-300-030	3	0.02	0.3	●			6.4	12.8	4	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-300-040	3	0.02	0.4	●			6.4	12.8	4	∞	∞	∞	600	280	180	135	105	95	85	78	55
TCS27-315-015	3.15	0.02	0.15	●			6.4	12.8	4	∞	∞	∞	600	280	180	135	105	95	85	78	68
TCS27-318-020	3.18	0.02	0.2	●			6.4	12.8	4	∞	∞	∞	600	280	180	135	105	95	85	78	68

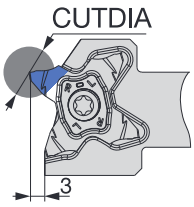
5 pieces per package
● : Line up

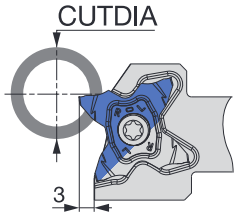
Reference pages : Toolholders → G074, Standard cutting conditions → G079

INSERT- FOR PARTING OFF

TCS27-R/L







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

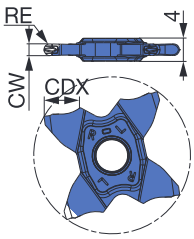
★ : First choice
☆ : Second choice

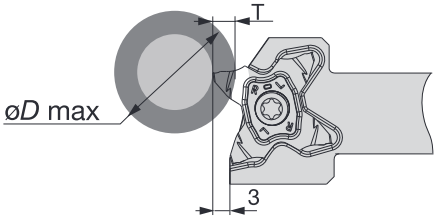
Designation	HAND	CW±0.02	RE	Coated AH725	CDX	PSIRL	PSIRR	Max. parting off dia. CUTDIA Solid bar	Max. parting off dia. CUTDIA Tube
TCS27-100-15R	R	1	0.06	●	3.5	0°	15°	7	600
TCS27-100-15L	L	1	0.06	●	3.5	15°	0°	7	600
TCS27-150-6R	R	1.5	0.06	●	5.7	0°	6°	11.4	35
TCS27-150-6L	L	1.5	0.06	●	5.7	6°	0°	11.4	35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

5 pieces per package
● : Line up

INSERT- FOR GROOVING AND PROFILING

TCS27 (Full R)





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

★ : First choice
☆ : Second choice

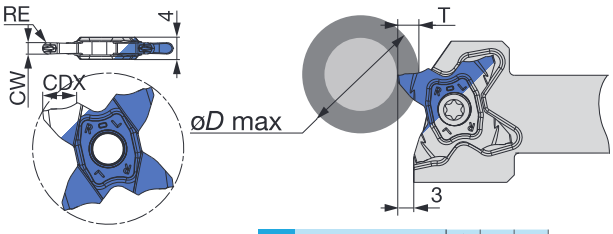
Designation	CW±0.02	RE	Coated AH725	CDX	Relation of groove depth (T) and Max. diameter (øD max) T≤1 T≤2 T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCS27-157-079	1.57	0.79	●	3	∞	-	-	-	-	-	-	-	-	-
TCS27-200-100	2	1	●	3	∞	-	-	-	-	-	-	-	-	-
TCS27-239-120	2.39	1.2	●	5.7	∞	600	280	180	130	50	35	-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

5 pieces per package
● : Line up

Reference pages : Toolholders → G074, Standard cutting conditions → G079

INSERT - FOR GROOVING AND PROFILING

TCM27 (Full R)



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

★ : First choice
☆ : Second choice

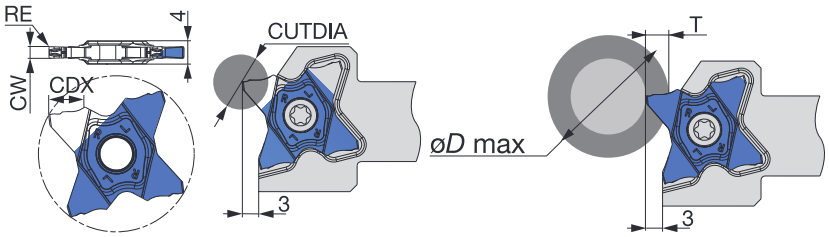
Designation	CW±0.02	RE	Coated AH725			CDX	CUTDIA	S1	Relation of groove depth (T) and Max. diameter (øD max)									
									T≤1 T≤2 T≤3	T≤3.5	T≤4	T≤4.5	T≤5	T≤5.5	T≤5.7	T≤6	T≤6.2	T≤6.4
TCM27-157-079	1.57	0.79	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-200-100	2	1	●			3	6	4	∞	600	-	-	-	-	-	-	-	-
TCM27-239-120	2.39	1.2	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-300-150	3	0.02	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	55

5 pieces per package
● : Line up

Reference pages : Toolholders → G074, Standard cutting conditions → G079

INSERT- FOR GROOVING AND PARTING OFF

TCM27



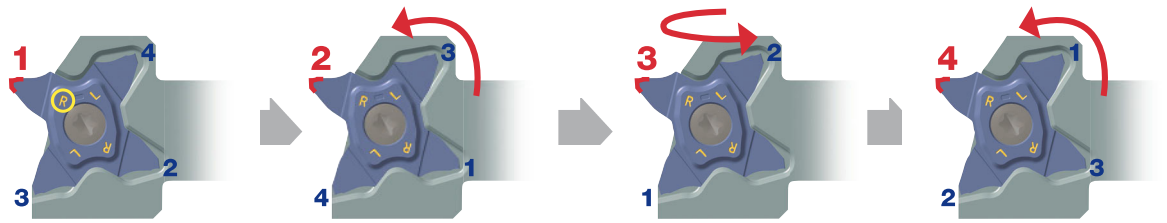
P	Steel	★		
M	Stainless	★		
K	Cast iron	★		
N	Non-ferrous			
S	Superalloys	★		
H	Hard materials			

★ : First choice
☆ : Second choice

Designation	CW±0.02	RE	Coated AH725			CDX	CUTDIA	S1	Relation of groove depth (T) and Max. diameter (øD max) 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
TCM27-150-010	1.5	0.1	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-150-020	1.5	0.2	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-157-015	1.57	0.15	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-170-010	1.7	0.1	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-175-010	1.75	0.1	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-175-020	1.75	0.2	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-178-018	1.78	0.18	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-185-020	1.85	0.2	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-196-015	1.96	0.15	●			3	6	4	∞	-	-	-	-	-	-	-	-	-
TCM27-200-010	2	0.1	●			6.4	12.8	4	∞	600	280	180	130	105	85	60	50	30
TCM27-200-020	2	0.2	●			6.4	12.8	4	∞	600	280	180	130	105	85	60	50	30
TCM27-222-015	2.22	0.15	●			3.5	7	4	∞	600	-	-	-	-	-	-	-	-
TCM27-230-020	2.3	0.2	●			3.5	7	4	∞	600	-	-	-	-	-	-	-	-
TCM27-239-015	2.39	0.15	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-247-020	2.47	0.2	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-010	2.5	0.1	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-250-030	2.5	0.3	●			5.7	11.4	4	∞	600	280	180	130	50	35	-	-	-
TCM27-270-010	2.7	0.1	●			6.2	12.4	4	∞	600	280	180	135	105	95	85	78	-
TCM27-287-020	2.87	0.2	●			6.2	12.4	4	∞	600	280	180	135	105	95	85	78	-
TCM27-300-000	3	0	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	55
TCM27-300-020	3	0.2	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	55
TCM27-300-030	3	0.3	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	55
TCM27-300-040	3	0.4	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	55
TCM27-315-015	3.15	0.15	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	68
TCM27-318-020	3.18	0.02	●			6.4	12.8	4	∞	600	280	180	135	105	95	85	78	68

5 pieces per package
● : Line up

HOW TO INDEX INSERTS



1. Right-hand edge (R) is used for the right-hand toolholders.
2. Rotate the insert
3. Flip over the insert
4. Rotate the insert

Reference pages : Toolholders → G074, Standard cutting conditions → G079

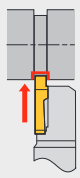
STANDARD CUTTING CONDITIONS

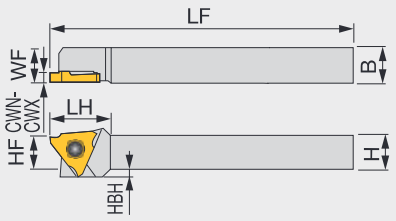
ISO	Workpiece material	Grades	Cutting speed Vc (m/min)	Feed: f (mm/rev) Grooving, parting-off TCS	Grooving, parting-off TCM	Parting-off (with hand) TCS	Profiling (with full radius insert) TCS	Profiling (with full radius insert) TCM	Depth of cut for profiling (with full radius insert)
P	Carbon steel S45C, etc. C45, etc.	AH725	100 - 200	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
P	Alloy steel SCM435, etc. 34CrMo4, etc.	AH725	50 -180	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	0.05 - 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	0.05 - 0.15	0.05 - 0.25	0.04 - 0.12	0.05 - 0.10	0.05 - 0.15	0.5
K	Ductile cast iron FCD400, etc. 400-15, etc.	AH725	50 - 120	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	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.10	0.05 - 0.10	0.5
S	Superalloys Inconel718, etc.	AH725	20 - 50	0.05 - 0.15	0.05 - 0.15	0.04 - 0.12	0.05 - 0.10	0.05 - 0.10	0.5

J-SERIES

JSTGR/L

Screw-on external grooving toolholder, for Swiss lathes





Without offset

Right-hand (R) shown.

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

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

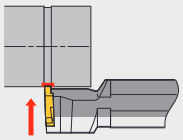
SPARE PARTS

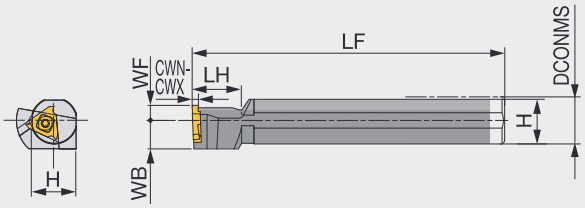
Designation	Clamping screw	Wrench 1	Wrench 2 (optional)
JSTGR/L...	CSTB-4SD	T-8F	(T-8L)

J-SERIES

JS-TGL3

Screw-on external grooving toolholder, for Swiss lathes





Left-hand (L) shown.

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

Note: Use left-hand toolholders (L) with right-hand inserts (R). *Torque: Recommended torque (N·m) for clamping

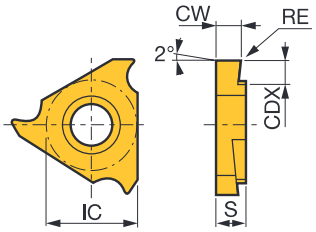
SPARE PARTS

Designation	Clamping screw	Wrench
JS**-TGL3	CSTB-4S	T-15F

Reference pages :JSTGR/L, JS-TGL3: Inserts → G080 - G081,
Standard cutting conditions → G081

INSERT

JTG (Sharp edge)



		SH725	J740	NS9530	TH10
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	S	Max. groove depth
				SH725	J740	NS9530	TH10				
JTGR3033F	R	0.33	0.03	●	●			0.7	9.53	3.18	0.7
JTGR3033F-005	R	0.33	0.05	●			●	0.7	9.53	3.18	0.7
JTGL3033F	L	0.33	0.03		●			0.7	9.53	3.18	0.7
JTGR3043F	R	0.43	0.03		●		●	1.1	9.53	3.18	0.7
JTGR3050F	R	0.5	0.03	●	●			1.1	9.53	3.18	1.1
JTGR3050F-005	R	0.5	0.05	●		●	●	1.1	9.53	3.18	1.1
JTGL3050F	L	0.5	0.03	●	●			1.1	9.53	3.18	1.1
JTGL3050F-005	L	0.5	0.05	●			●	1.1	9.53	3.18	1.1
JTGR3065F	R	0.65	0.03	●	●			1.9	9.53	3.18	1.1
JTGR3065F-010	R	0.65	0.1	●				1.9	9.53	3.18	1.1
JTGR3075F	R	0.75	0.03	●	●			1.9	9.53	3.18	1.9
JTGR3075F-010	R	0.75	0.1	●		●	●	1.9	9.53	3.18	1.9
JTGL3075F	L	0.75	0.03	●	●			1.9	9.53	3.18	1.9
JTGL3075F-010	L	0.75	0.1	●		●	●	1.9	9.53	3.18	1.9
JTGR3080F	R	0.8	0.03	●	●			1.9	9.53	3.18	1.9
JTGR3080F-010	R	0.8	0.1	●				1.9	9.53	3.18	1.9
JTGR3085F	R	0.85	0.03	●	●			1.9	9.53	3.18	1.9
JTGR3095F	R	0.95	0.03	●	●			1.9	9.53	3.18	1.9
JTGR3095F-010	R	0.95	0.1	●		●	●	1.9	9.53	3.18	1.9
JTGL3095F	L	0.95	0.03	●	●			1.9	9.53	3.18	1.9
JTGL3095F-010	L	0.95	0.1	●			●	1.9	9.53	3.18	1.9
JTGR3100F	R	1	0.05	●	●			2.1	9.53	3.18	1.9
JTGR3100F-010	R	1	0.1	●		●	●	2.1	9.53	3.18	1.9
JTGL3100F	L	1	0.05	●	●			2.1	9.53	3.18	1.9
JTGL3100F-010	L	1	0.1	●			●	2.1	9.53	3.18	1.9
JTGR3110F	R	1.1	0.05	●	●			2.1	9.53	3.18	1.9
JTGR3120F	R	1.2	0.05	●	●			2.1	9.53	3.18	1.9
JTGR3120F-010	R	1.2	0.1	●				2.1	9.53	3.18	1.9
JTGR3125F	R	1.25	0.05	●	●			2.1	9.53	3.18	2.1
JTGR3125F-010	R	1.25	0.1	●		●	●	2.1	9.53	3.18	2.1
JTGL3125F	L	1.25	0.05	●	●			2.1	9.53	3.18	2.1
JTGL3125F-010	L	1.25	0.1	●			●	2.1	9.53	3.18	2.1
JTGR3130F	R	1.3	0.05	●	●			2.1	9.53	3.18	2.1
JTGR3140F	R	1.4	0.05	●	●			2.1	9.53	3.18	2.1
JTGR3140F-010	R	1.4	0.1	●				2.1	9.53	3.18	2.1
JTGR3145F	R	1.45	0.05	●	●			2.1	9.53	3.18	2.1
JTGR3145F-010	R	1.45	0.1	●		●	●	2.1	9.53	3.18	2.1
JTGL3145F	L	1.45	0.05		●			2.1	9.53	3.18	2.1
JTGR3150F	R	1.5	0.05	●	●		●	2.1	9.53	3.18	2.1
JTGR3150F-010	R	1.5	0.1	●		●	●	2.1	9.53	3.18	2.1
JTGL3150F	L	1.5	0.05	●	●			2.1	9.53	3.18	2.1
JTGL3150F-010	L	1.5	0.1	●			●	2.1	9.53	3.18	2.1
JTGR3175F	R	1.75	0.05	●	●			2.1	9.53	3.18	2.1
JTGR3175F-010	R	1.75	0.1	●		●	●	2.1	9.53	3.18	2.1
JTGL3175F	L	1.75	0.05		●			2.1	9.53	3.18	2.1

●: Line up

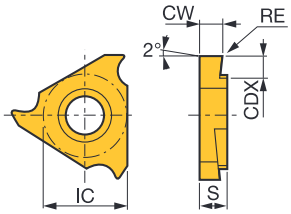
P	Steel	★	★			★			☆										
M	Stainless	★	★																
K	Cast iron					☆			★										
N	Non-ferrous								★										
S	Superalloys	☆							★										
H	Hard materials																		

★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$	RE	Coated				Cermet			Uncoated							CDX	IC	S	Max. groove depth
				SH725	J740			NS9530			TH10										
JTGR3180F	R	1.8	0.05	●	●			●			●							2.1	9.53	3.18	2.1
JTGR3200F	R	2	0.05	●	●													2.6	9.53	3.18	2.6
JTGR3200F-010	R	2	0.1	●				●			●							2.6	9.53	3.18	2.6
JTGL3200F	L	2	0.05	●	●													2.6	9.53	3.18	2.6
JTGL3200F-010	L	2	0.1	●							●							2.6	9.53	3.18	2.6
JTGR3225F	R	2.25	0.05	●	●													2.6	9.53	3.18	2.6
JTGR3250F	R	2.5	0.05	●	●													2.6	9.53	3.18	2.6
JTGR3250F-010	R	2.5	0.1	●				●			●							2.6	9.53	3.18	2.6
JTGL3250F-010	L	2.5	0.1	●														2.6	9.53	3.18	2.6
JTGL3250F	L	2.5	0.05	●	●													2.6	9.53	3.18	2.6
JTGR3275F	R	2.75	0.05		●						●							2.6	9.53	3.18	2.6
JTGR3300F	R	3	0.05	●	●													2.6	9.53	3.18	2.6
JTGR3300F-010	R	3	0.1	●														2.6	9.53	3.18	2.6

●: Line up

JTG (honed edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$	RE	Coated														CDX	IC	S	Max. groove depth
				J9530																	
JTGR3100	R	1	0.05	●														2.2	9.525	3.18	2.1
JTGL3100	L	1	0.05	●														2.2	9.525	3.18	2.1
JTGR3125	R	1.25	0.05	●														2.2	9.525	3.18	2.1
JTGL3125	L	1.25	0.05	●														2.2	9.525	3.18	2.1
JTGR3150	R	1.5	0.05	●														2.2	9.525	3.18	2.1
JTGL3150	L	1.5	0.05	●														2.2	9.525	3.18	2.1
JTGR3200	R	2	0.05	●														2.7	9.525	3.18	2.6
JTGL3200	L	2	0.05	●														2.7	9.525	3.18	2.6

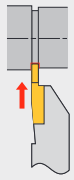
●: Line up

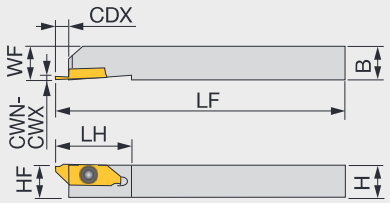
STANDARD CUTTING CONDITIONS (J-Series grooving tool)

ISO	Workpiece material	Grade	Cutting Speed *Vc* (m/min)	Feed *f* (mm/rev)
P	General steels 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 steels SUM22, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steels SUS303, SUS304, 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, copper alloys Si < 12%, C3604B, etc.	TH10	10 - 200	0.01 - 0.1
S	Difficult-to-cut materials, titanium alloys Ti-6Al-4V, etc.	TH10	10 - 30	0.01 - 0.1

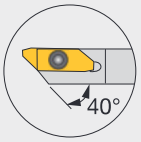
JSXGR/L

Screw-on toolholder without offset for front / reverse turning & external grooving





Without offset



C-type

Right hand (R) shown.

Designation	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert
JSXGR/L1010K8-C	0.7	2	6.7	10	10	125	29	10	10	JX*R/L8...
JSXGR/L1212K8-C	0.7	2	6.7	12	12	125	29	12	12	JX*R/L8...
JSXGR/L1616K8	0.7	2	6.5	16	16	125	29	16	16	JX*R/L8...
JSXGR/L2020K8	0.7	2	6.5	20	20	125	29	20	20	JX*R/L8...
JSXGR/L2525K8	0.7	2	6.5	25	25	125	29	25	25	JX*R/L8...

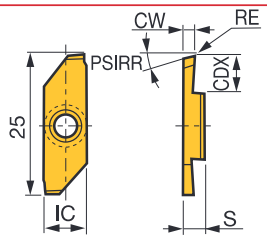
• Can be wrenched also from the back with a double-head screw. • This toolholders can be used for JXG insert (grooving), JFX insert (front-turning), JXK insert (reverse-turning)

SPARE PARTS

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

INSERT

JXG (handed insert with sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.025	RE	Coated J740			Uncoated TH10			CDX	IC	PSIRR	S
JXGR8070FA	R	0.7	0	●						4.5	8	15	3.97
JXGL8070FA	L	0.7	0	●			●			4.5	8	15	3.97
JXGR8070FA-005	R	0.7	0.05	●			●			4.5	8	15	3.97
JXGR8100FA	R	1	0	●						6	8	15	3.97
JXGL8100FA	L	1	0	●			●			6	8	15	3.97
JXGR8100FA-005	R	1	0.05	●			●			6	8	15	3.97
JXGR8100FA45	R	1	0	●						4.5	8	15	3.97
JXGR8100FA45-005	R	1	0.05	●			●			4.5	8	15	3.97
JXGR8150FA	R	1.5	0	●						6	8	15	3.97
JXGL8150FA	L	1.5	0	●			●			6	8	15	3.97
JXGR8150FA-005	R	1.5	0.05	●			●			6	8	15	3.97
JXGR8150FA50	R	1.5	0	●						5	8	15	3.97
JXGR8150FA50-005	R	1.5	0.05	●			●			5	8	15	3.97
JXGR8180FA	R	1.8	0	●						6	8	15	3.97
JXGR8180FA-005	R	1.8	0.05	●			●			6	8	15	3.97
JXGR8200FA	R	2	0	●						6	8	15	3.97
JXGL8200FA	L	2	0	●			●			6	8	15	3.97
JXGR8200FA-005	R	2	0.05	●			●			6	8	0	3.97
JXGR8200FN	R	2	0	●						6	8	0	3.97
JXGL8200FN	L	2	0	●			●			6	8	0	3.97
JXGR8200FN-005	R	2	0.05	●			●			6	8	0	3.97

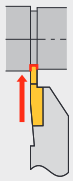
●: Line up

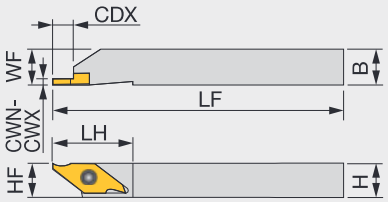
Referent pages : JSXGR/L: Standard cutting conditions → G084

J-SERIES

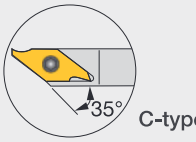
JSVGR/L

Screw-on external grooving toolholder, for Swiss lathes





Without offset



C-type

Right hand (R) shown.

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

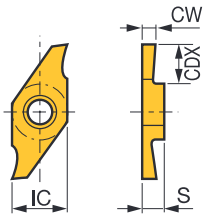
• [illegible]

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JSVGR/L	CSTB-3S	T-9F	(T-8L)

INSERT

JVG (with hand, sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	$CW^{+0.05}_{0}$	RE	Coated			Cermet			Uncoated						CDX	IC	S
				SH725	J740		NS9530			TH10								
JVGR033F	R	0.33	0	●	●											0.7	7.94	3.18
JVGL033F	L	0.33	0	●						●						0.7	7.94	3.18
JVGR050F	R	0.5	0	●	●											1.1	7.94	3.18
JVGL050F	L	0.5	0	●						●						1.1	7.94	3.18
JVGR075F	R	0.75	0	●	●											1.9	7.94	3.18
JVGL075F	L	0.75	0	●						●						1.9	7.94	3.18
JVGR095F	R	0.95	0	●	●											1.9	7.94	3.18
JVGL095F	L	0.95	0	●						●						1.9	7.94	3.18
JVGR100F	R	1	0	●	●		●									5.5	7.94	3.18
JVGL100F	L	1	0	●			●			●						5.5	7.94	3.18
JVGR125F	R	1.25	0	●	●					●						5	7.94	3.18
JVGL125F	L	1.25	0	●						●						5	7.94	3.18
JVGR150F	R	1.5	0	●	●		●									5.5	7.94	3.18
JVGL150F	L	1.5	0	●			●			●						5.5	7.94	3.18
JVGR200F	R	2	0	●	●		●			●						5.5	7.94	3.18
JVGL200F	L	2	0	●						●						5.5	7.94	3.18

●: Line up

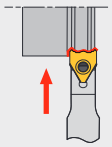
STANDARD CUTTING CONDITIONS (JXG and JVG inserts)

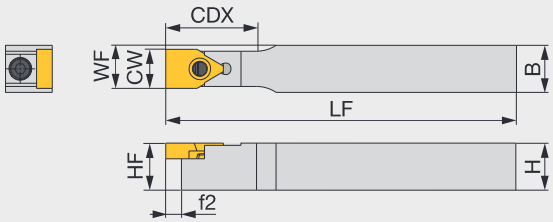
ISO	Workpiece material	Grade	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Steel S45C, etc. C45, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
		NS9530	50 - 150	0.01 - 0.1
	Free-cutting steel SUM22, etc. 11SMn28, etc.	SH725	50 - 200	0.01 - 0.1
		J740	10 - 100	0.01 - 0.1
M	Stainless steel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

TUNGHEAVY GROOVE

FPGN

Lever-lock toolholder for external wide grooving and profiling





Designation	CW	CDX	H	B	LF	HF	WF	f2	Insert
FPGN1212X-10T20	10	25	12	12	125	12	11	5.5	PSGB10...
FPGN1616X-10T20	10	25	16	16	125	16	13	5.5	PSGB10...
FPGN2020K-10T20	10	25	20	20	130	20	15	5.5	PSGB10...
FPGN1616X-15T25	15	30	16	16	125	16	15.5	5.5	PSGB15...
FPGN2020K-15T25	15	30	20	20	130	20	17.5	5.5	PSGB15...
FPGN2020K-20T32	20	37	20	20	130	20	20	5.5	PSGB20...
FPGN2525M-20T32	20	37	25	25	155	25	22.5	5.5	PSGB20...
FPGN2525M-25T36	25	41	25	25	155	25	25	5.5	PSGB25...

*PSGB insert blank is available for tailored inserts.

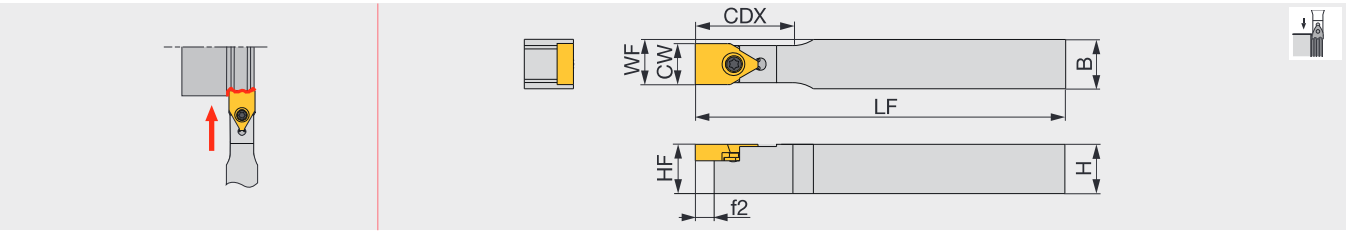
SPARE PARTS

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

Referent pages : FPGN: Inserts → G085, Standard cutting conditions → G086

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
SPGN2525M-20T32	20	37	25	25	155	25	22.5	5.5	PSGB20
SPGN2525M-25T36	25	41	25	25	155	25	25	5.5	PSGB25

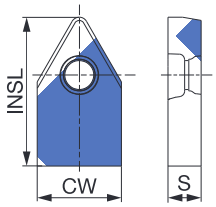
*PSGB insert blank is available for tailored inserts. Can be used with profile grooving inserts, only

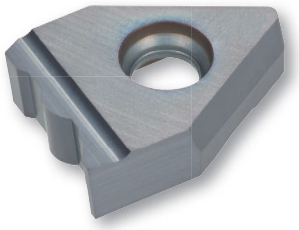
SPARE PARTS

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

		Uncoated	
		TH10	UX30
P	Steel	☆	★
M	Stainless		★
K	Cast iron	★	
N	Non-ferrous	★	
S	Superalloys	☆	
H	Hard materials		

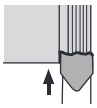
★ : First choice
☆ : Second choice

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

Package quantity = 5pcs.
● : Line up
*These are blanks (semi-finished products) for wide profile grooving inserts that can be tailored.

Referent pages : SPGN: Standard cutting conditions → G086

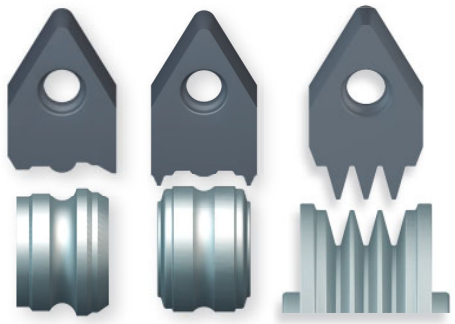
STANDARD CUTTING CONDITIONS



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.



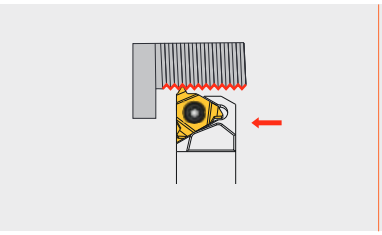
External
Internal
Grooving
Threading
Parting-off

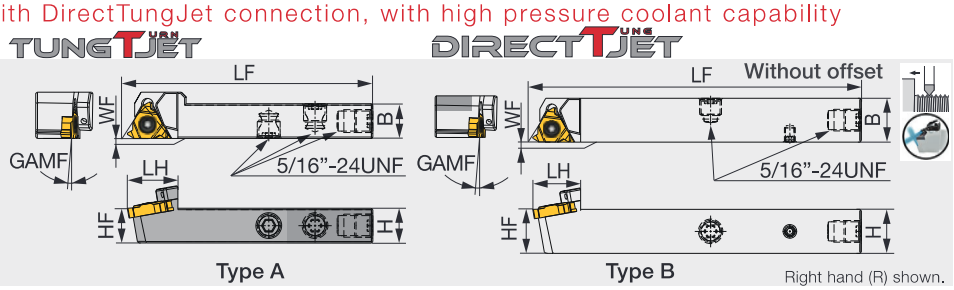
Referent pages : Toolholders → G084 - G085

TUNGTHREAD

JSE2R16-CHP

External threading toolholder with DirectTungJet connection, with high pressure coolant capability





Designation	H	B	LF	LH	HF	WF	GAMF	Type	Insert
JSE2R1212F16-CHP	12	12	85	19	12	0	1°	A	16ER...
JSE2R1212X16-CHP ※	12	12	120	19	12	0	1°	B	16ER...
JSE2R1616X16-CHP ※	16	16	120	19	16	0	1°	B	16ER...

※ DirectTungJet specification

SPARE PARTS

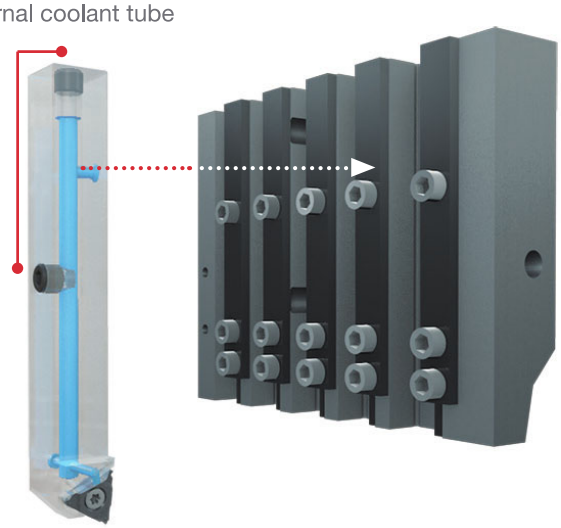
Designation	Clamping screw	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F

DIRECTTJET system

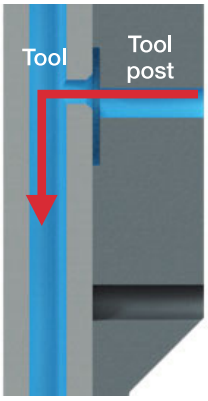
No need for coolant tube setup. Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools

Optional connection with external coolant tube



Detailed view of the coolant flow after connection

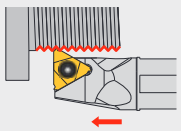


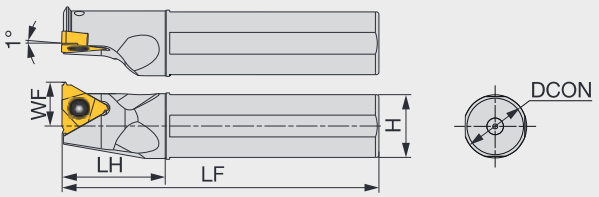
Referent pages : JSE2R16-CHP: Inserts → E010 -, Standard cutting conditions → E050

TUNGTHREAD

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...
JS25HSEL16	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).

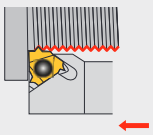
SPARE PARTS

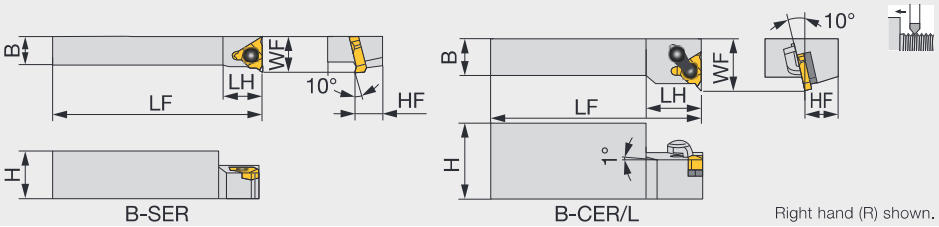
Designation	Clamping screw	Wrench
JS***-SEL16	CSTB-3.5	T-15F

TUNGTHREAD

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...

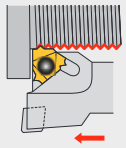
SPARE PARTS

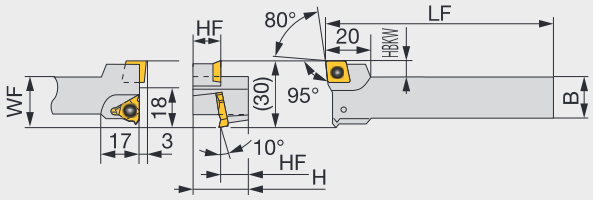
Designation	Clamp set	Shim set	Clamping screw	Wrench
B-SER**16	-	-	CSTB-3.5	T-15F
B-CER/L16M16	CSP16	A16-1	-	T-15F

Referent pages : JS-SEL16, B-S/CER/L: Inserts → E010 -, Standard cutting conditions → E050

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...

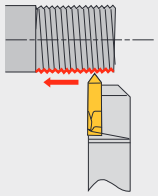
SPARE PARTS

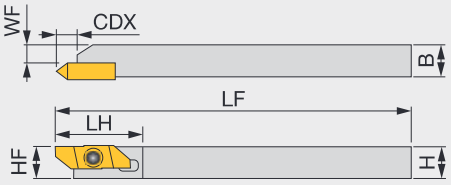
Designation	Clamping screw	Wrench
BC-SER12K16	CSTB-3.5	T-15F

Referent pages : BC-SER/L: Inserts → B109 - (CC*T09T3...), E010 - (16ER...), Standard cutting conditions → E050

JSXBR/L

Screw-on external threading toolholder, for Swiss lathes





C-type

Right hand (R) shown.

Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR1010K8-C	10	10	125	29	6.4	10	5.7	JXT*R...
JSXBR1212K8-C	12	12	125	29	6.4	12	7.7	JXT*R...
JSXBR1616K8	16	16	125	29	6.4	16	11.7	JXT*R...
JSXBR2020K8	20	20	125	29	6.4	20	15.7	JXT*R...
JSXBR2525K8	25	25	125	29	6.4	25	20.7	JXT*R...

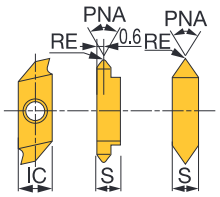
- Can be wrenched from back side with both end torx screw.
- This toolholder is compatible with JXB-type inserts and JXT-type inserts.

SPARE PARTS

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

INSERT

JXT (sharp edge)



1-Type JXT1R 2-Type JXT2R

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

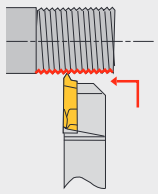
★ : First choice
☆ : Second choice

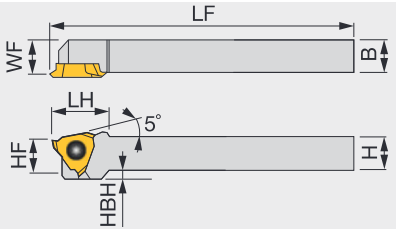
Designation	RE	Coated			Uncoated									PNA	IC	S
		J740			TH10											
JXT1R6000F	0.03	●			●									60°	8	3.97
JXT2R6000F	0.03	●			●									60°	8	3.97

● : Line up

J-SERIES
JSTTR/L

Screw-on external threading toolholder, for Swiss lathes





Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L3...
JSTTR/L1212F3	12	12	85	18.5	12	11.5	-	JTTR/L3...
JSTTR/L1212X3	12	12	120	18.5	12	11.5	-	JTTR/L3...
JSTTR/L1616X3	16	16	120	18.5	16	15.5	-	JTTR/L3...

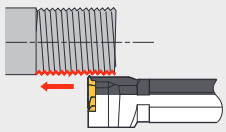
*Recommended clamping torque: 1.2 N·m

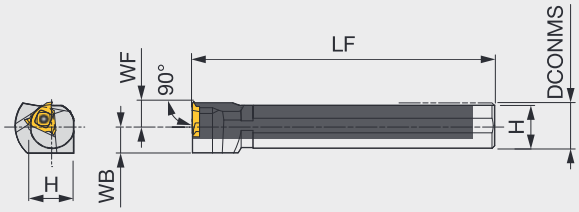
SPARE PARTS

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

J-SERIES
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

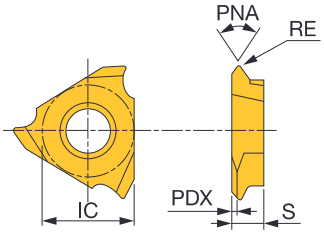
SPARE PARTS

Designation	Clamping screw	Wrench
JS**-TTL3	CSTB-4S	T-15F

Referent pages : JSTTR/L, JS-TTL3: Inserts, Standard cutting conditions → G092

INSERT

JTT (sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	RE	Coated SH725	Coated J740	Cermet NS9530	Uncoated TH10	PNA	IC	S	PDX
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

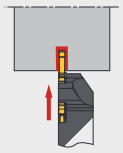
External
Internal
Grooving
Threading
Parting-off

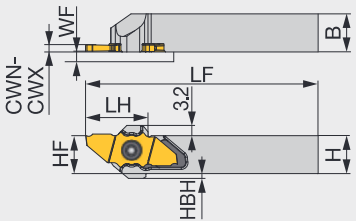
STANDARD CUTTING CONDITIONS

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

JSXXR/L

Parting toolholder, for Swiss lathes





Right hand (R) shown.

Designation	CWN	CWX	H	B	LF**	LH**	HF	WF	HBL**	HBH	Insert	Torque*
JSXXR/L1010X09	1	2	10	10	120	19.65	10	0.2	19	3	JX*G06...,12...,16...,20...	1.2
JSXXR/L1212F09	1	2	12	12	85	19.65	12	0.2	19	1.5	JX*G06...,12...,16...,20...	1.2
JSXXR/L1212X09	1	2	12	12	120	19.65	12	0.2	19	1.5	JX*G06...,12...,16...,20...	1.2
JSXXR/L1616X09	1	2	16	16	120	19.65	16	0.2	-	-	JX*G06...,12...,16...,20...	1.2
JSXXR/L2020H09	1	2	20	20	100	22.5	20	0.2	-	-	JX*G06...,12...,16...,20...	1.2

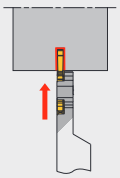
*Torque: Recommended torque (N·m) for clamping
**LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 2 mm shorter than the above values with JX*G12... and JXPG20...inserts, and 4 mm shorter for JXPG06... insert.
Note: Use the right-hand insert (JX*G**R...) for a right-hand holder (JSXXR...); the left-hand insert (JX*G**L...) for a left-hand holder (JSXXL...).

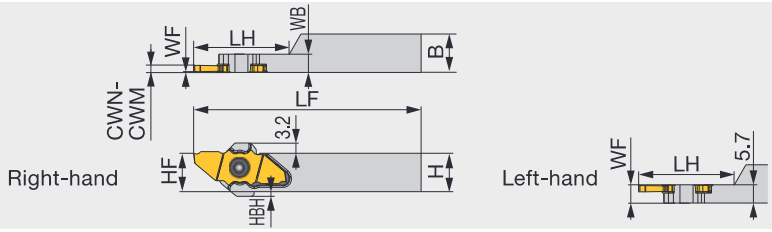
SPARE PARTS

Designation	Clamping screw	Wrench
JSXXR...	CSTC-4L100DL	T-1008/5
JSXXL...	CSTC-4L100DR	T-1008/5

JSXXR/L-S

Parting toolholder, for Swiss lathes (for sub spindle)





Designation	CWN	CWM	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque*
JSXXR/L1010X09-S	1	2	10	10	120	26	10	0.2/5.5	3	JXPG06...,12...,16...	1.2
JSXXR/L1212F09-S	1	2	12	12	85	26	12	0.2/5.5	1.5	JXPG06...,12...,16...	1.2
JSXXR/L1212X09-S	1	2	12	12	120	30	12	0.2/5.5	1.5	JXPG06...,12...,16...	1.2
JSXXR/L1616X09-S	1	2	16	16	120	30	16	0.2/5.5	-	JX*G06...,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*G**R...) for a right-hand holder (JSXXR...); the left-hand insert (JX*G**L...) for a left-hand holder (JSXXL...).

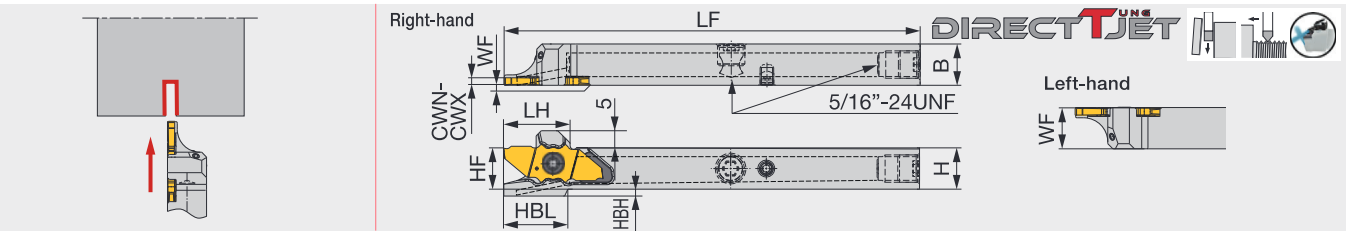
SPARE PARTS

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

Referent pages : JSXXR/L, JSXXR/L-S: Inserts → G098 - G099, Standard cutting conditions → G100

JSXXR/L-X-CHP

Parting-off tool for swiss lathes for DirectTungJet system



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF	HBL**	HBH	Insert	Torque*
JSXXR/L1212X09-CHP	1	2	12	12	0.2/11.8	120	12	2	19.4	18.8	JX*G06...,12...,16..., 20...	1.2
JSXXR/L1616X09-CHP***	1	2	16	16	0.2/15.8	120	16	2.5	19.4	18.7	JX*G06...,12...,16..., 20...	1.2
JSXXR/L1616X09B-CHP	1	2	16	16	0.2/15.8	120	16	-	19.4	18.7	JX*G06...,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.
***To be replaced with the new design
Note: Use the right-hand insert (JX*G**R...) for a right-hand holder (JSXXR...); the left-hand insert (JX*G**L...) for a left-hand holder (JSXXL...).

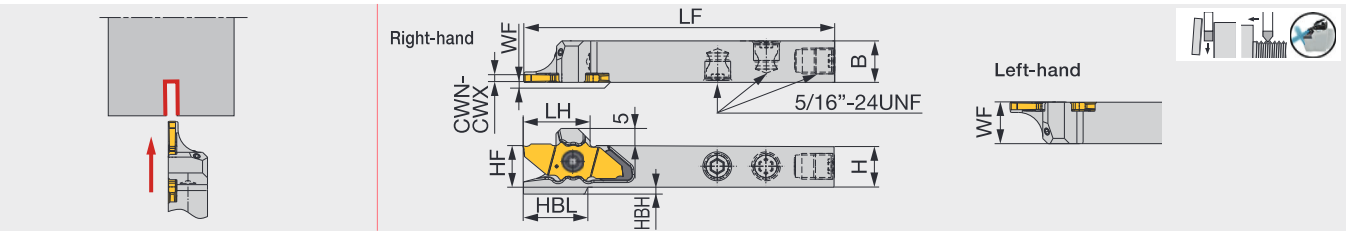
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectTungJet plug	Wrench 3
JSXXR...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Parting-off widths : 1.0 mm and 1.5 mm (for a max parting diameter of ø6 mm)
: 1.5 mm and 2.0 mm (for max parting diameters of ø12 mm, ø16 mm and ø20 mm)
Threading pitch range : 0.2 - 1.5 mm

JSXXR/L-F-CHP

Parting-off tool for swiss lathes



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF	HBL**	HBH	Insert	Torque*
JSXXR/L1212F09-CHP	1	2	12	12	85	≤19.4	12	0.2/11.8	-	2	JX*G06...,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*G**R...) for a right-hand holder (JSXXR...); the left-hand insert (JX*G**L...) for a left-hand holder (JSXXL...).

SPARE PARTS

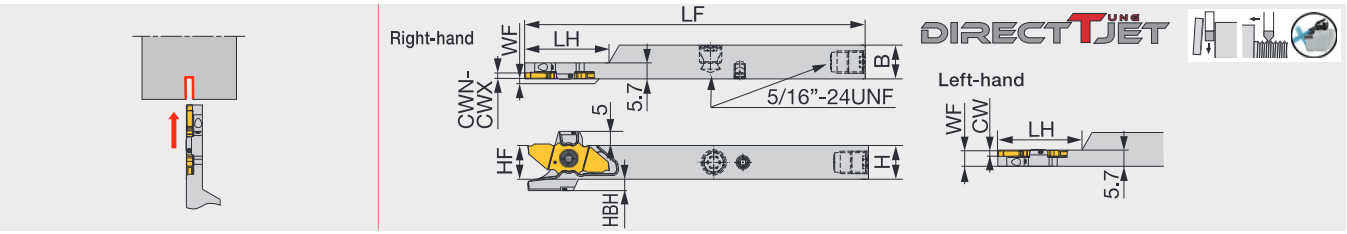
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2
JSXXR...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
JSXXL...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4

Parting-off widths : 1.0 mm and 1.5 mm (for a max parting diameter of ø6 mm)
: 1.5 mm and 2.0 mm (for max parting diameters of ø12 mm, ø16 mm and ø20 mm)
Threading pitch range : 0.2 - 1.5 mm

Referent pages : JSXXR/L-CHP, JSXXR/L-F-CHP: Inserts → G098 - G099, Standard cutting conditions → G100

JSXXR/L-X-S-CHP

Parting toolholder with DirectTungJet connection, for Swiss lathes (for sub spindle)



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque*
JSXXR/L1212X09-S-CHP***	1	2	12	12	120	30	12	0.2/5.5	4	JX*G06...,12...,16..., 20...	1.2
JSXXR/L1212X09B-S-CHP	1	2	12	12	120	30	12	0.2/5.5	2	JX*G06...,12...,16..., 20...	1.2
JSXXR/L1616X09-S-CHP***	1	2	16	16	120	30	16	0.2/5.5	1.5	JX*G06...,12...,16..., 20...	1.2
JSXXR/L1616X09B-S-CHP	1	2	16	16	120	30	16	0.2/5.5	-	JX*G06...,12...,16..., 20...	1.2

*Torque: Recommended torque (N·m) for clamping
**LF (Overall Tool Length) and LH (Head Length) values shown above are true with JXPG16... insert. Both LF and LH will be 2 mm shorter than the above value with JX*G12... and JXPG20... inserts; 4 mm shorter with JXPG06... insert.
***To be replaced with the new design
Note: Use the right-hand insert (JX*G**R...) for a right-hand holder (JSXXR...); the left-hand insert (JX*G**L...) for a left-hand holder (JSXXL...).

SPARE PARTS

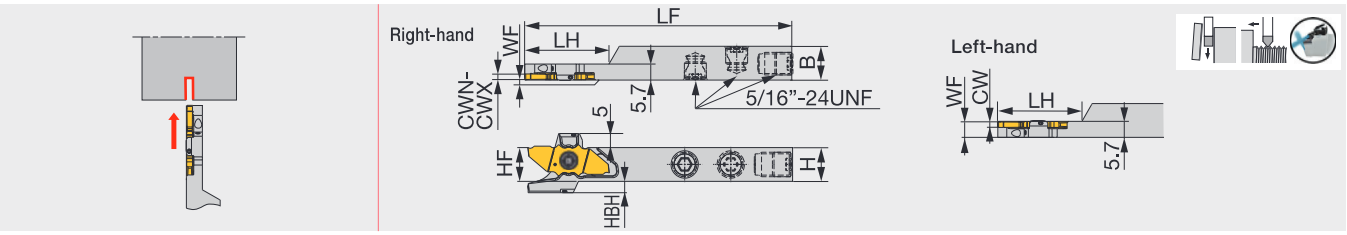
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectTungJet plug	Wrench 3
JSXXR***-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL***-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Parting-off widths : 1.0 mm and 1.5 mm (for a max parting diameter of ø6 mm)
: 1.5 mm and 2.0 mm (for max parting diameters of ø12 mm, ø16 mm and ø20 mm)

TUNGTURN TJET
DUOJUST CUT

JSXXR/L-F-S-CHP

Parting toolholder, with high pressure coolant capability, for Swiss lathes (for sub spindle)



Designation	CWN	CWX	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque*
JSXXR/L1212F09-S-CHP***	1	2	12	12	85	26	12	0.2/5.5	4	JX*G06...,12...,16..., 20...	1.2
JSXXR/L1212F09B-S-CHP	1	2	12	12	85	30	12	0.2/5.5	2	JX*G06...,12...,16..., 20...	1.2

*Torque: Recommended torque (N·m) for clamping
**LF (Overall Tool Length) and LH (Head Length) values shown above are true with JXPG16... insert. Both LF and LH will be 2 mm shorter than the above value with JX*G12... and JXPG20... inserts; 4 mm shorter with JXPG06... insert.
***To be replaced with the new design
Note: Use the right-hand insert (JX*G**R...) for a right-hand holder (JSXXR...); the left-hand insert (JX*G**L...) for a left-hand holder (JSXXL...).

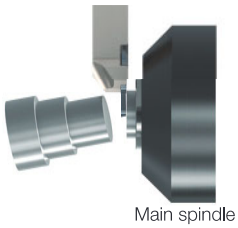
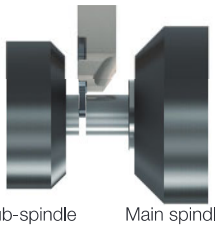
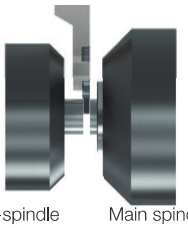
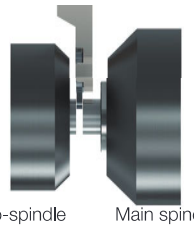
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2
JSXXR***-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4
JSXXL***-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4

Parting-off widths : 1.0 mm and 1.5 mm (for a max parting diameter of ø6 mm)
: 1.5 mm and 2.0 mm (for max parting diameters of ø12 mm, ø16 mm and ø20 mm)

Referent pages : JSXXR/L-X-S-CHP, JSXXR/L-F-S-CHP: Inserts → G098 - G099, Standard cutting conditions → G100

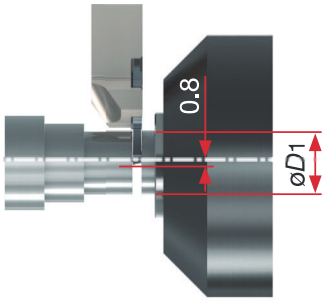
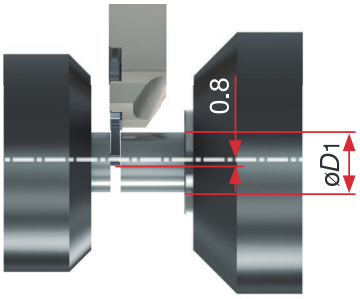
HOW TO SELECT TOOLS

Application	Large-diameter machining of workpiece with rigidity		Small-diameter machining of workpiece with short overhang	
			Sub-spindle tooling	
	Main-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

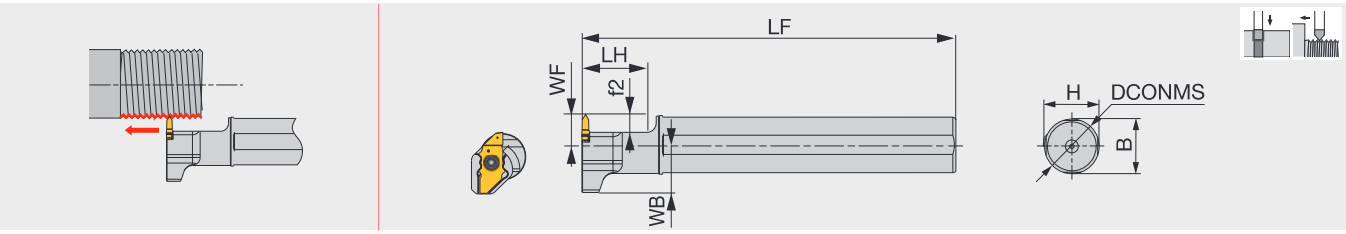
MAX. PARTING-OFF DIA. & DEPTH

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 8 mm or more.

JS-SXXL09

Threading toolholder with round shank



Designation	DCONMS	H	B	LF	LH	WB	WF	f2	Insert	Torque*
JS19G-SXXL09	19.05	18	18	90	21	15.43	10	6	JX*G06,12*R	1.2
JS19X-SXXL09	19.05	18	18	120	21	15.43	10	6	JX*G06,12*R	1.2
JS20G-SXXL09	20	19	19	90	21	15.4	10	6	JX*G06,12*R	1.2
JS20X-SXXL09	20	19	19	120	21	15.4	10	6	JX*G06,12*R	1.2
JS22X-SXXL09	22	21	21	120	21	15.4	10	6	JX*G06,12*R	1.2
JS25H-SXXL09	25	24	24	100	21	15.4	10	6	JX*G06,12*R	1.2
JS254X-SXXL09	25.4	24	24	120	21	15.4	10	6	JX*G06,12*R	1.2

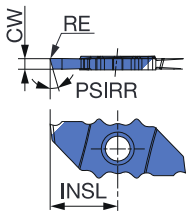
* Torque: Recommended torque (N·m) for clamping
Threading insert (JXTG12FR) and parting-off inserts (JXPG06R ,12R) fit this holder.

SPARE PARTS

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

Referent pages : JS-SXXL09: Inserts → G098 - G099, Standard cutting conditions → G100

JXPG**R/L-F (sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

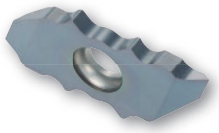
Designation	HAND	CW±0.025	RE	Coated SH725	CUTDIA	INSL	PSIRR/L
JXPG06R10F	R	1	0.05	●	6	10.5	0°
JXPG06L10F	L	1	0.05	●	6	10.5	0°
JXPG06R15F	R	1.5	0.05	●	6	10.5	0°
JXPG06L15F	L	1.5	0.05	●	6	10.5	0°
JXPG06R10F-15	R	1	0.05	●	6	10.5	15°
JXPG06L10F-15	L	1	0.05	●	6	10.5	15°
JXPG06R15F-15	R	1.5	0.05	●	6	10.5	15°
JXPG06L15F-15	L	1.5	0.05	●	6	10.5	15°
JXPG12R15F	R	1.5	0.05	●	12	12.5	0°
JXPG12L15F	L	1.5	0.05	●	12	12.5	0°
JXPG12R20F	R	2	0.05	●	12	12.5	0°
JXPG12L20F	L	2	0.05	●	12	12.5	0°
JXPG12R15F-15	R	1.5	0.05	●	12	12.5	15°
JXPG12L15F-15	L	1.5	0.05	●	12	12.5	15°
JXPG12R20F-15	R	2	0.05	●	12	12.5	15°
JXPG12L20F-15	L	2	0.05	●	12	12.5	15°
JXPG16R15F	R	1.5	0.05	●	16	14.5	0°
JXPG16L15F	L	1.5	0.05	●	16	14.5	0°
JXPG16R20F	R	2	0.05	●	16	14.5	0°
JXPG16L20F	L	2	0.05	●	16	14.5	0°
JXPG16R15F-15	R	1.5	0.05	●	16	14.5	15°
JXPG16L15F-15	L	1.5	0.05	●	16	14.5	15°
JXPG16R20F-15	R	2	0.05	●	16	14.5	15°
JXPG16L20F-15	L	2	0.05	●	16	14.5	15°
JXPG20R15F	R	1.5	0.05	●	20	16.5	0°
JXPG20L15F	L	1.5	0.05	●	20	16.5	0°
JXPG20R20F	R	2	0.05	●	20	16.5	0°
JXPG20L20F	L	2	0.05	●	20	16.5	0°
JXPG20R15F-15	R	1.5	0.05	●	20	16.5	15°
JXPG20L15F-15	L	1.5	0.05	●	20	16.5	15°
JXPG20R20F-15	R	2	0.05	●	20	16.5	15°
JXPG20L20F-15	L	2	0.05	●	20	16.5	15°

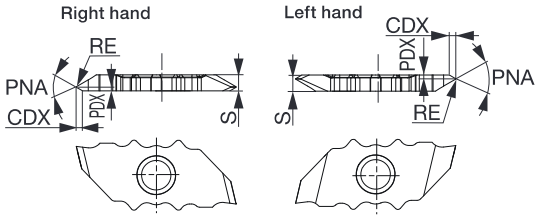
● : Line-up
CUTDIA: Max. parting-off dia.
Packing quantity = 5 pcs.

External
Internal
Grooving
Threading
Parting-off

Referent pages : Toolholders → G093 - G097, Standard cutting conditions → G100

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 SH725	Pitches	PDX	CDX	S	PNA
JXTG12FR-60A-000	R	Flat (0.05 max)	●	0.2 - 0.4	0.25	0.4	2.5	60°
JXTG12FL-60A-000	L	Flat (0.05 max)	●	0.2 - 0.4	0.25	0.4	2.5	60°
JXTG12FR-60B-000	R	Flat (0.05 max)	●	0.2 - 0.4	0.25	0.4	2.5	60°
JXTG12FL-60B-000	L	Flat (0.05 max)	●	0.2 - 0.4	0.25	0.4	2.5	60°
JXTG12FR-60A-005	R	0.05	●	0.4 - 1	0.6	0.99	2.5	60°
JXTG12FL-60A-005	L	0.05	●	0.4 - 1	0.6	0.99	2.5	60°
JXTG12FR-60B-005	R	0.05	●	0.4 - 1	1.9	0.99	2.5	60°
JXTG12FL-60B-005	L	0.05	●	0.4 - 1	1.9	0.99	2.5	60°
JXTG12FR-60N-010	R	0.1	●	1 - 1.5	1.25	2.07	2.5	60°
JXTG12FL-60N-010	L	0.1	●	1 - 1.5	1.25	2.07	2.5	60°

● : Line-up
Packing quantity = 5 pcs.

EDGE ORIENTATION AND DESCRIPTION OF THREADING INSERTS

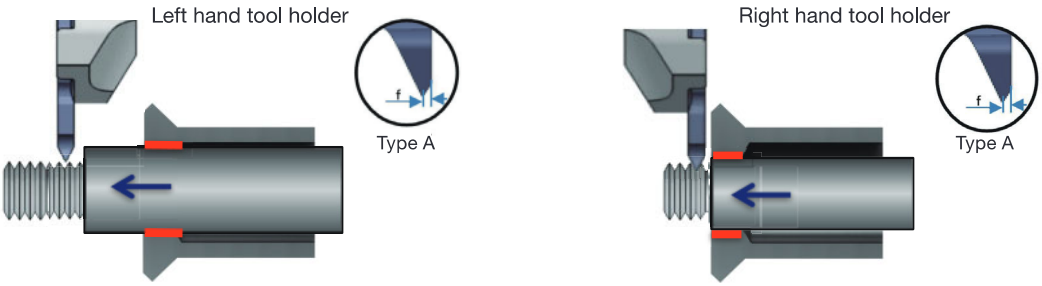
	Type A	Type B	Type N
Right hand	a > b	a < b	a = b
Left hand	a > b	a < b	a = b

JXTG 12 F R - 60 A - 005

- JXTG: Insert shape
- 12: Insert size
- F: F: sharp edge
- R: Hand
- 60: Thread angle
- A: Edge orientation
- 005: Corner radius

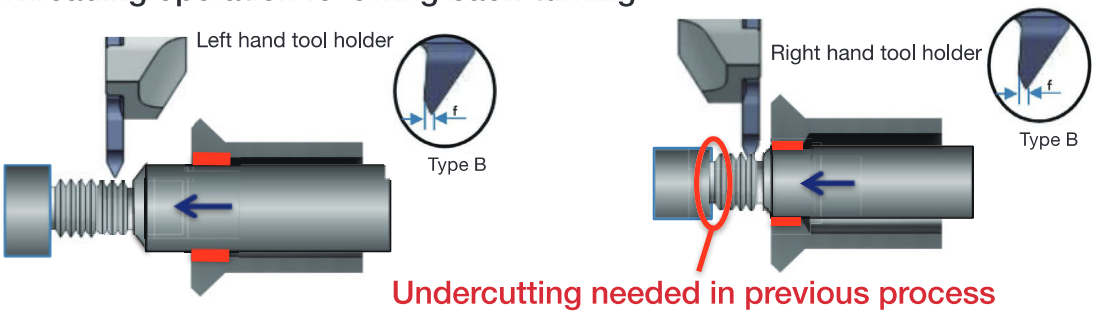
Referent pages : Toolhoders → G093 - G097, Standard cutting conditions → G100

WHEN TO USE TYPE A AND TYPE B INSERT



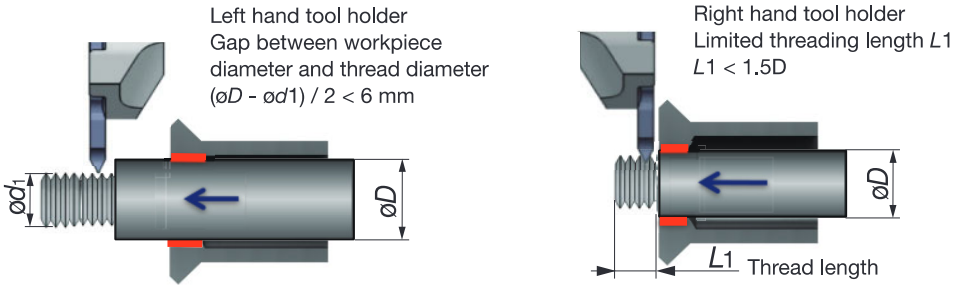
Threading close to the wall

Threading operation following back-turning

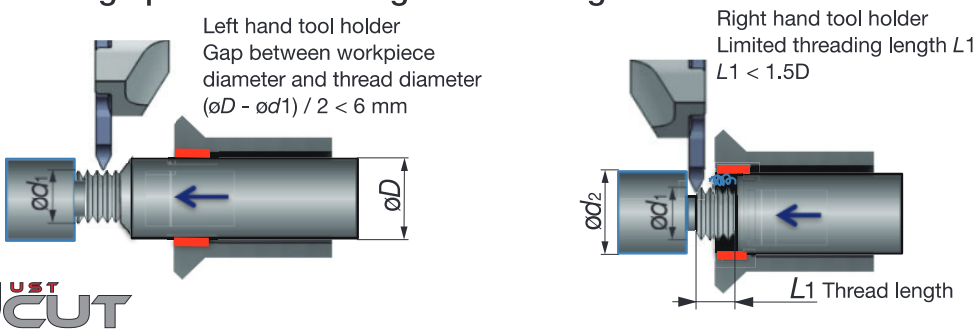


Undercutting needed in previous process

THREADING WORKPIECE IN MAIN SPINDLE



Threading operation following back-turning

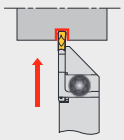


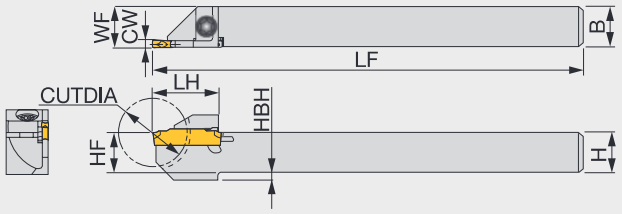
STANDARD CUTTING CONDITIONS (Parting-off)

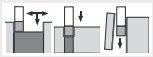
ISO	Workpiece materials	Grades	Cutting speed *Vc* (m/min)	Feed *f* (mm/rev)
P	Low carbon steels S15C, SS400, etc. C15, C20, etc.	SH725	50 - 200	0.01 - 0.05
	Carbon steels, Alloy steels S55C, SCM440, etc. C55, 42CrMo4, etc.	SH725	50 - 200	0.01 - 0.05
	Free cutting steels SUH22, SUH23, etc	SH725	50 - 200	0.01 - 0.05
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, 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

TUNGCUT
JCTER/L

External grooving and parting toolholder, for Swiss lathes







Insert:
Seat size 1 = DGS1.4-016
Seat size 2, 3, = DGM, SGM, DGS, SGS, DGE, DTE, DGG, DGL

Right hand (R) shown.

Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF(1)	HBH	Torque*
JCTER/L1010X1.4T10	1.4	1	20	10	10	120	18	10	10.2	-	3
JCTER/L1212F1.4T12	1.4	1	24	12	12	85	19.5	12	12.2	-	3
JCTER/L1212X1.4T12	1.4	1	24	12	12	120	19.5	12	12.2	-	3
JCTER/L1414-1.4T12	1.4	1	24	14	14	125	19.5	14	14.2	-	3
JCTER/L1616X1.4T16	1.4	1	32	16	16	120	24	16	16.2	-	3
JCTER/L1010X2T10	2	2	20	10	10	120	19	10	10.1	2	3
JCTER/L1212F2T12	2	2	24	12	12	85	19	12	12.1	2	3
JCTER/L1212X2T12	2	2	24	12	12	120	19	12	12.1	2	3
JCTER/L1414-2T12	2	2	24	14	14	125	19	14	14.1	-	3
JCTER/L1616X2T16	2	2	32	16	16	120	24	16	16.1	-	3
JCTER/L1212F3T12	3	3	24	12	12	85	19	12	12.3	2	3
JCTER/L1212X3T12	3	3	24	12	12	120	19	12	12.3	2	3
JCTER/L1616X3T16	3	3	32	16	16	120	24	16	16.3	-	3
JCTER/L2020H3T16	3	3	32	20	20	100	24	20	20.3	-	3

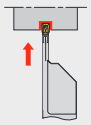
(1) The value for "WF" is true when the insert with the width, indicated in "CW" in the table is mounted. • CUTDIA: Maximum parting-off diameter
*Torque: Recommended torque (N·m) for clamping

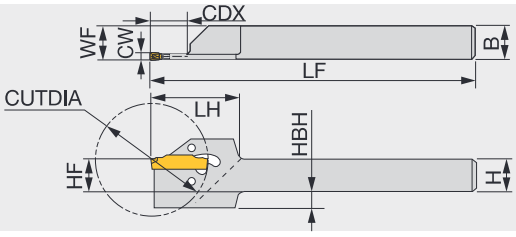
SPARE PARTS

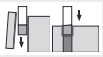
Designation	Clamping screw	Wrench
JCTER/L...	CSHB-4-A	T-15F

TUNGCUT
CGER/L

External deep grooving and parting toolholder, for Swiss lathes







Insert:
Seat size 1 = DGS1.4-016
Seat size 2, 3, 4, = DGM, SGM, DGS, SGS, SGN, DGG, DTM, DGL

Right hand (R) shown.

Designation	CW	Seat size	CUTDIA(1)	CDX	H	B	LF	LH	HF	WF (2)	HBH
CGER/L2020-1.4T14	1.4	1	29/29	9.7	20	20	125	31	20	20.2	-
CGER/L1212-2T17	2	2	35/35	11.8	12	12	150	31	12	12.1	6
CGER/L1616-2T17	2	2	35/35	11.8	16	16	150	31	16	16.1	2
CGER/L2020-2T17	2	2	35/35	9.8	20	20	125	31	20	20.1	-
CGER/L1212-3T19	3	3	38/40	12	12	12	150	31	12	12.3	6
CGER/L1616-3T19	3	3	38/45	14.9	16	16	150	31	16	16.3	2
CGER/L2020-3T19	3	3	38/45	13.2	20	20	125	31	20	20.3	-
CGER/L2020-4T19	4	4	38/55	20.3	20	20	125	33	20	20.4	-

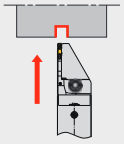
• Wrench, CRW**, should be ordered separately. Insert is clamped by the elastic deformation of upper jaw.
(1) DG*/SG* Maximum diameter of parting off Dmax, can be increased by using SG* insert for some toolholders. (2) "WF" value is calculated with groove width "CW" shown in the table.

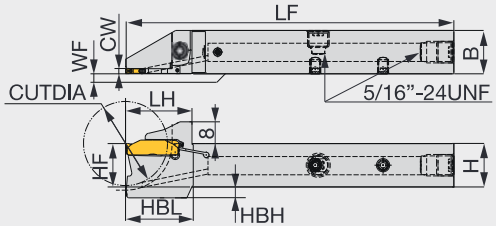
SPARE PARTS

Designation	Wrench (Option)
CGER/L2020-1.4T14	CRW23
CGER/L****-2T17 - 4T19	CRW33

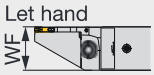
Referent pages : JCTER/L, CGER/L: Inserts → G104 - G109, Standard cutting conditions → G110

External grooving and parting toolholder with DirectTungJet connection





DIRECTTUNGJET



Insert:
Seat size 2 = DGM, SGM, DGS, SGS, DGE, DGG, SGN

Right hand (R) shown.

Designation	CW	Seat size	CUTDIA	H	B	LF	LH	HF	WF (1)	HBH	HBL	Torque*
JCTER/L1212X2T12-CHP	2	2	25	12	12	120	24.7	12	0/12	5	24.7	3
JCTER/L1616X2T12-CHP	2	2	25	16	16	120	24.7	16	0/16	1	24.5	3
JCTER/L1616X2T16-CHP	2	2	32	16	16	120	24.7	16	0/16	4	24.7	3
JCTER/L2020X2T16-CHP	2	2	32	20	20	120	24.7	20	0/20	-	-	3

(1) "WF" value is calculated with groove width "CW" shown in the table. • CUTDIA: Max. parting off dia.
*Torque: Recommended torque (N·m) for clamping
• Please see the page G015 for DirectTungJet system.

External
Internal
Grooving
Threading
Parting-off

SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JCTER/L...	CSHB-4-A	T-15F	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Parting-off width : 2.0 mm

Referent pages : JCTER/L-CHP: Inserts → G104 - G109, Standard cutting conditions → G110

TUNGCUT FEATURES OF INSERTS

EXTERNAL GROOVING AND PARTING

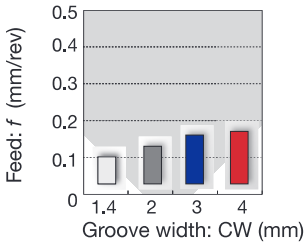
DGS type (2 corners)
SGS type (1 corner)

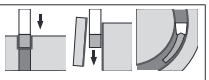
Page G104, G107

For Swiss lathes

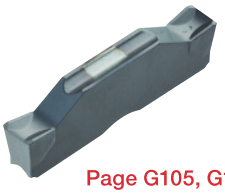
Unique-designed edge and chipbreaker
Handed insert available
CW = 1.4 - 3 mm

■ Standard feed





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

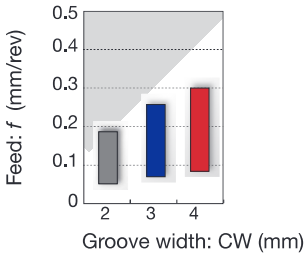


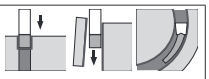
Page G105, G106

High fracture resistance

Smooth chip evacuation
Well-designed edge with high strength
Handed insert available
CW = 2 - 3 mm

■ Standard feed





DGL type (2 corners)

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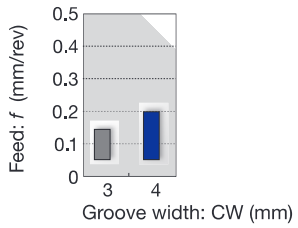
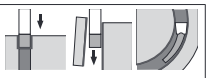
1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often has difficulties in chip control

■ Standard feed





EXTERNAL GROOVING

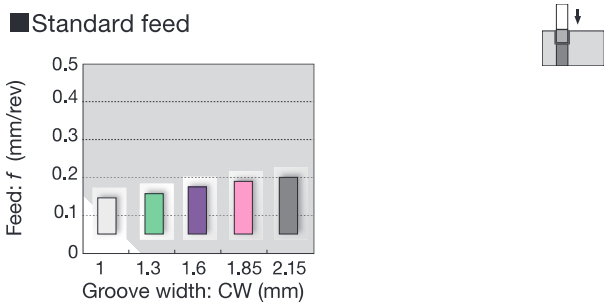
DGE type (2 corners)

Page G108

For shallow grooves with high accuracy

Excellent chip control

CW = 1 - 2.15 mm



DGG type (2 corners)

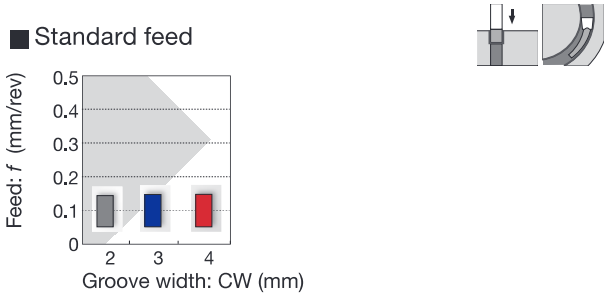
Page G108

For non-ferrous materials and titanium alloys

Chipbreaker with low cutting force

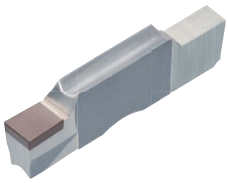
Sharp cutting edge that prevents vibration and delivers fine surface finish

CW = 2 - 3 mm



EXTERNAL GROOVING OF HARDENED STEELS

SGN-CBN type (1 corner)



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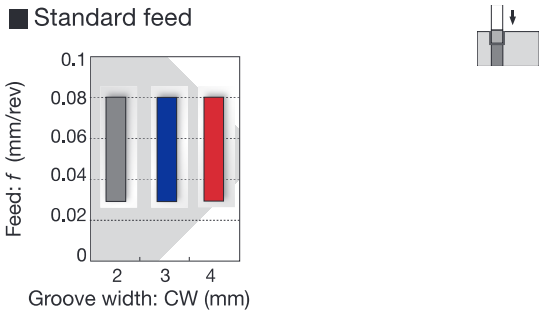
For hardened steel cutting

Optimum cutting edge shape for grooving of hardened steels

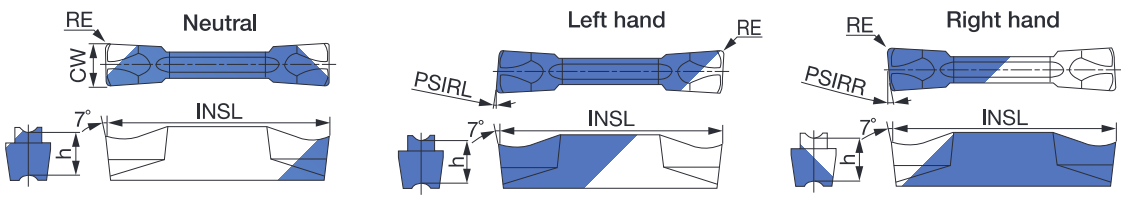
Close tolerance width for finishing (W = ±0.025 mm)

CW = 2 - 3 mm



DGS

External grooving and parting off, 2 cornered



		T9225	T9125	AH7025	AH725	GH130			NS9530
P	Steel	★	★	★	☆	☆			★
M	Stainless	★		★	☆	★			
K	Cast iron	☆		★		☆			☆
N	Non-ferrous								
S	Superalloys			★	☆				
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	HAND	CW±0.05	RE	Coated							Cermet							INSL	h	PSIRL	PSIRR
				T9225	T9125	AH7025	AH725	GH130			NS9530										
DGS1.4-016	N	1.4	0.16			●	●	●										16	4.3	0°	0°
DGS2-020	N	2	0.2	●	●	●	●	●	●		●							20	5	0°	0°
DGS2-020-6R	R	2	0.2			●	●	●										19.95	5	0°	6°
DGS2-020-6L	L	2	0.2			●	●	●										19.95	5	6°	0°
DGS2-002-6R	R	2	0.02				●	●										19.5	5	0°	6°
DGS2-002-6L	L	2	0.02				●	●										19.5	5	6°	0°
DGS2-020-15R	R	2	0.2			●	●	●										19.95	5	0°	15°
DGS2-020-15L	L	2	0.2			●	●	●										19.95	5	15°	0°
DGS2-002-15R	R	2	0.02				●	●										19.5	5	0°	15°
DGS2-002-15L	L	2	0.02				●	●										19.5	5	15°	0°
DGS3-020	N	3	0.2	●	●	●	●	●	●		●							20	5	0°	0°
DGS3-020-6R	R	3	0.2			●	●	●										19.9	5	0°	6°
DGS3-020-6L	L	3	0.2			●	●	●										19.9	5	6°	0°
DGS3-002-6R	R	3	0.02				●	●										19.45	5	0°	6°
DGS3-002-6L	L	3	0.02				●	●										19.45	5	6°	0°
DGS3-020-15R	R	3	0.2			●	●	●										19.9	5	0°	15°
DGS3-020-15L	L	3	0.2			●	●	●										19.9	5	15°	0°
DGS3-002-15R	R	3	0.02				●	●										19.45	5	0°	15°
DGS3-002-15L	L	3	0.02				●	●										19.45	5	15°	0°
DGS4-030	N	4	0.3	●	●	●	●	●	●		●							20	5	0°	0°
DGS4-030-4R	R	4	0.3			●	●	●										19.8	5	0°	4°
DGS4-030-4L	L	4	0.3			●	●	●										19.85	5	4°	0°
DGS5-030	N	5	0.3	●	●	●	●	●	●		●							25	5.5	0°	0°
DGS6-030	N	6	0.3	●	●	●	●	●										25	5.5	0°	0°

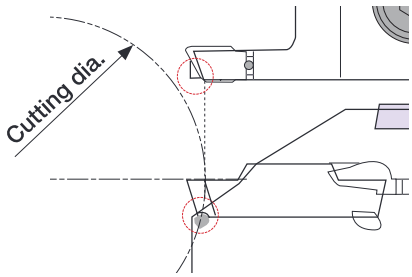
●: Line up

Caution

The tool will interfere with the workpiece when grooving larger diameter than øDmax.

Designation	Cutting dia.
DGM2-002-15R/L	28
DGM3-002-15R/L	29
DGM4-030-15R/L	30
SGM3-020-15R/L	103

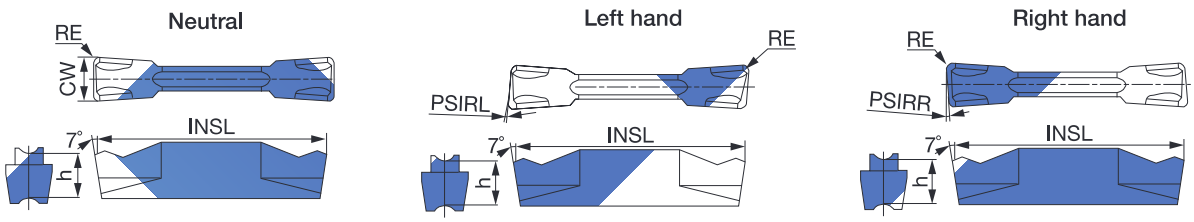
Designation	Cutting dia.
DGS2-002-15R/L	28
DGS3-002-15R/L	29
SGS3-020-15R/L	103
SGS3-002-15R/L	34



Referent pages : Toolhoders → G101 - G102, Standard cutting conditions → G110

DGM

External grooving and parting off, 2 cornered



		T9225	T9125	AH7025	AH725	AH905	GH130			NS9530					
		Coated								Cermet					
P	Steel	★	★	★	☆		☆			★					
M	Stainless	★		★	☆		★								
K	Cast iron	☆		★		☆	☆			☆					
N	Non-ferrous														
S	Superalloys			★	☆	★									
H	Hard materials														

★ : First choice
☆ : Second choice

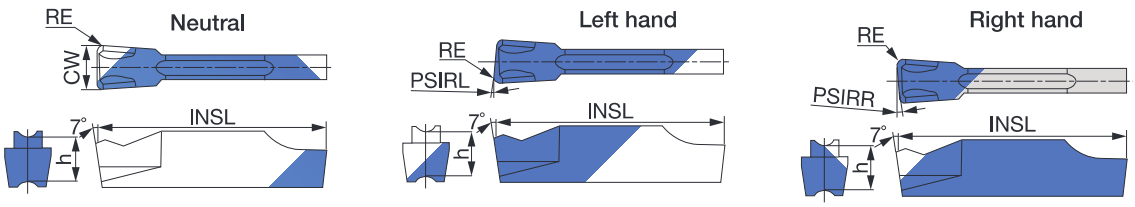
Designation	HAND	CW±0.05	RE	T9225	T9125	AH7025	AH725	AH905	GH130	NS9530	INSL	h	PSIRL	PSIRR
DGM2-020	N	2	0.2	●	●	●	●		●	●	20	5	0°	0°
DGM2-020-6R	R	2	0.2			●	●		●		19.8	5	0°	6°
DGM2-020-6L	L	2	0.2			●	●		●		19.8	5	6°	0°
DGM2-020-8R	R	2	0.2			●	●		●		19.8	5	0°	8°
DGM2-020-8L	L	2	0.2			●	●		●		19.8	5	8	0°
DGM2-020-15R	R	2	0.2			●	●		●		19.8	5	0°	15°
DGM2-020-15L	L	2	0.2			●	●		●		19.8	5	15°	0°
DGM2-002-15R	R	2	0.02				●		●		19.35	5	0°	15°
DGM2-002-15L	L	2	0.02				●		●		19.35	5	15°	0°
DGM3-020	N	3	0.2	●	●	●	●	●	●	●	20	5	0°	0°
DGM3-020-6R	R	3	0.2			●	●		●		19.9	5	0°	6°
DGM3-020-6L	L	3	0.2			●	●		●		19.9	5	6°	0°
DGM3-002-6R	R	3	0.02				●		●		19.45	5	0°	6°
DGM3-002-6L	L	3	0.02				●		●		19.45	5	6°	0°
DGM3-020-15R	R	3	0.2			●	●		●		19.9	5	0°	15°
DGM3-020-15L	L	3	0.2			●	●		●		19.9	5	15°	0°
DGM4-030	N	4	0.3	●	●	●	●	●	●	●	20	5	0°	0°
DGM4-030-4R	R	4	0.3			●	●		●		19.8	5	0°	4°
DGM4-030-4L	L	4	0.3			●	●		●		19.8	5	4°	0°
DGM4-030-15R	R	4	0.3			●	●		●		19.8	5	0°	15°
DGM4-030-15L	L	4	0.3			●	●		●		19.8	5	15°	0°
DGM5-030	N	5	0.3	●	●	●	●	●	●	●	25	5.5	0°	0°
DGM5-030-4R	R	5	0.3			●	●		●		24.9	5.5	0°	4°
DGM6-030	N	6	0.3	●	●	●	●	●	●		25	5.5	0°	0°
DGM8-040	N	8	0.4	●	●	●	●		●		30	6.7	0°	0°

●: Line up

Referent pages : Toolhoders → G101 - G102, Standard cutting conditions → G110

SGM

External deep grooving and parting off, single-cornered



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

★ : First choice
☆ : Second choice

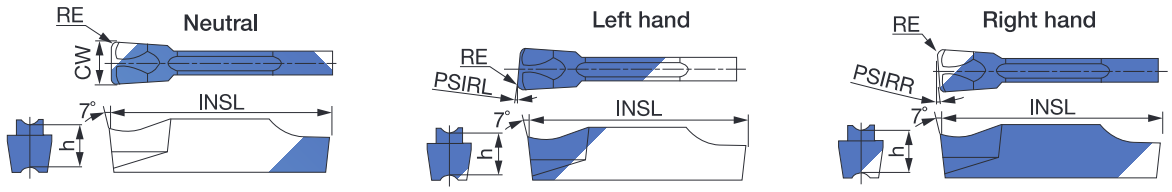
Designation	HAND	CW±0.05	RE	Coated AH7025	Coated AH725	Coated GH130	INSL	h	PSIRL	PSIRR
SGM2-020	N	2	0.2	●	●		20	5	0°	0°
SGM2-020-6R	R	2	0.2	●	●	●	20	5	0°	6°
SGM2-020-6L	L	2	0.2	●	●	●	20	5	6°	0°
SGM3-020	N	3	0.2	●	●	●	20	5	0°	0°
SGM3-020-6R	R	3	0.2	●	●	●	20	5	0°	6°
SGM3-020-6L	L	3	0.2	●	●	●	20	5	6°	0°
SGM3-020-15R	R	3	0.2	●	●	●	20	5	0°	15°
SGM3-020-15L	L	3	0.2	●	●	●	20	5	15°	0°
SGM4-030	N	4	0.3	●	●	●	20	5	0°	0°
SGM4-030-4R	R	4	0.3	●	●	●	20	5	0°	4°
SGM4-030-4L	L	4	0.3	●	●	●	20	5	4°	0°
SGM5-030	N	5	0.3	●	●	●	25	5.5	0°	0°
SGM6-030	N	6	0.3	●	●	●	25	5.5	0°	0°

●: Line up

Referent pages : Toolhoders → G101 - G102, Standard cutting conditions → G110

SGS

External deep grooving and parting off, single-cornered



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

★ : First choice
☆ : Second choice

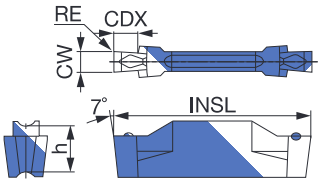
Designation	HAND	CW±0.05	RE	Coated			INSL	h	PSIRL	PSIRR
				AH7025	AH725	GH130				
SGS2-020	N	2	0.2	●	●		20	5	0°	0°
SGS2-020-6R	R	2	0.2	●	●	●	20	5	0°	6°
SGS2-020-6L	L	2	0.2	●	●	●	20	5	6°	0°
SGS2-020-15R	R	2	0.2	●	●	●	20	5	0°	15°
SGS2-020-15L	L	2	0.2	●	●	●	20	5	15°	0°
SGS3-020	N	3	0.2	●	●	●	20	5	0°	0°
SGS3-020-6R	R	3	0.2	●	●	●	20	5	0°	6°
SGS3-020-6L	L	3	0.2	●	●	●	20	5	6°	0°
SGS3-002-6R	R	3	0.02		●	●	19.8	5	0°	6°
SGS3-002-6L	L	3	0.02		●	●	19.8	5	6°	0°
SGS3-020-15R	R	3	0.2	●	●	●	20	5	0°	15°
SGS3-020-15L	L	3	0.2	●	●	●	20	5	15°	0°
SGS3-002-15R	R	3	0.02		●	●	19.8	5	0°	15°
SGS3-002-15L	L	3	0.02		●	●	19.8	5	15°	0°
SGS4-030	N	4	0.3	●	●	●	20	5	0°	0°
SGS5-030	N	5	0.3	●	●	●	25	5.5	0°	0°
SGS6-030	N	6	0.3	●	●	●	25	5.5	0°	0°

●: Line up

Referent pages : Toolhoders → G101 - G102, Standard cutting conditions → G110

DGE

External grooving (for high-precision machining)



		AH7025	AH725	GH130	NS9530
P	Steel	★	☆	☆	★
M	Stainless	★	☆	★	
K	Cast iron	★		☆	☆
N	Non-ferrous				
S	Superalloys	★	☆		
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	CW±0.05	RE	Coated			Cermet	CDX	INSL	h
			AH7025	AH725	GH130	NS9530			
DGE100-000	1	0		●	●	●	2.5	20	5
DGE130-000	1.3	0		●	●	●	2.5	20	5
DGE160-010	1.6	0.1	●	●	●	●	2.5	20	5
DGE185-010	1.85	0.1	●	●	●	●	3.5	20	5
DGE215-015	2.15	0.15	●	●	●	●	3.5	20	5

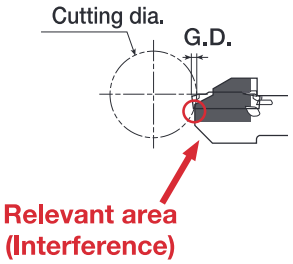
●: Line up

DGE Caution

CDX is limited as shown in the picture to the right according to the groove depth, G.D. Please refer to the following table.

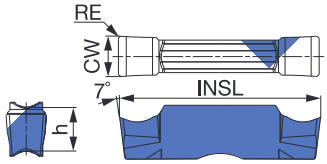
G.D = Groove depth

Designation	Max. groove depth (mm)	Cutting dia. 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 and face grooving (for high-precision machining)



		AH7025	NS9530	KS05F
P	Steel	★	★	
M	Stainless	★		
K	Cast iron	★	☆	☆
N	Non-ferrous			★
S	Superalloys	★		☆
H	Hard materials			

★ : First choice
☆ : Second choice

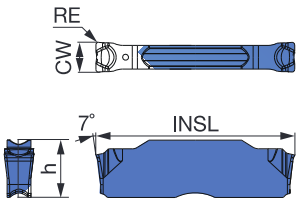
Designation	CW±0.02	RE	Coated	Cermet	Uncoated	INSL	h
			AH7025	NS9530	KS05F		
DGG200-020	2	0.2	●	●		20	5
DGG300-020	3	0.2	●	●	●	20	5
DGG400-040	4	0.4	●	●	●	20	5

●: Line up

Referent pages : Toolhoders → G101 - G102, Standard cutting conditions → G110

DGL

External, Parting-off



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

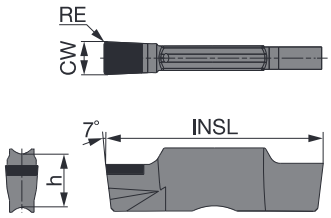
★ : First choice
☆ : Second choice

Designation	CW±0.05	RE	Coated	INSL	h
			AH7025		
DGL3-025	3	0.25	●	20	5
DGL4-030	4	0.3	●	20	5

●: Line up

SGN

External grooving of hardened steels



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

★ : First choice
☆ : Second choice

Designation	CW±0.025	RE	CBN	INSL	h
			BX360		
SGN200-020	2	0.2	●	20	5
SGN300-020	3	0.2	●	20	5
SGN400-020	4	0.2	●	20	5

●: Line up

Referent pages : Toolhoders → G101 - G102, Standard cutting conditions → G110

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Chipbreaker	Priority	Recomended grade	Cutting speed *Vc* (m/min)
P	Steels S45C, SCM435, etc. C45, 34CrMo4, etc.	< 300 HB	DGS	First choice	AH7025, AH725	50 - 180
		< 300 HB	DGM	Priority for wear resistance	T9125	80 - 200
		< 300 HB	DGS	Priority for fracture resistance	GH130	50 - 120
		< 300 HB	DGS	Priority for surface finish	NS9530	80 - 220
		< 300 HB	DGL	For mild steel Chip control	AH7025	50 - 180
M	Stainless steels SUS303, etc. X10CrNiS18-9, etc.	< 200 HB	DGS	First choice	GH130	50 - 120
		< 200 HB	DGM	Priority for impact resistance	AH7025, AH725	50 - 120
K	Grey cast irons FC250, etc. 250, etc.	-	DGM	First choice	GH130	50 - 180
	Ductile cast irons FC250, etc. 450-10S, etc.	-	DGM	First choice	GH130	50 - 120
N	Aluminium alloys Si < 12%	-	DGG	First choice	TH10	100 - 500
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	DGM	First choice	AH905	20 - 80
		< HRC 40	DGS	Priority for fracture resistance	AH7025, AH725	20 - 80
H	Hardened steels SCM435, etc. 34CrMo4, etc.	> HRC 50	DGN	First choice	BX360	80 - 150

Referent pages : Toolhoders → G101 - G102

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