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.

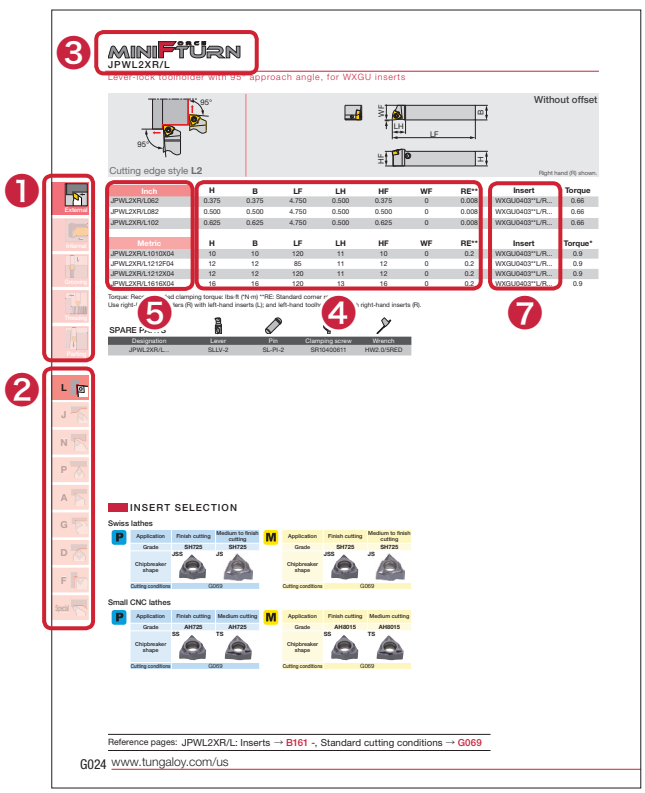
How to use the page

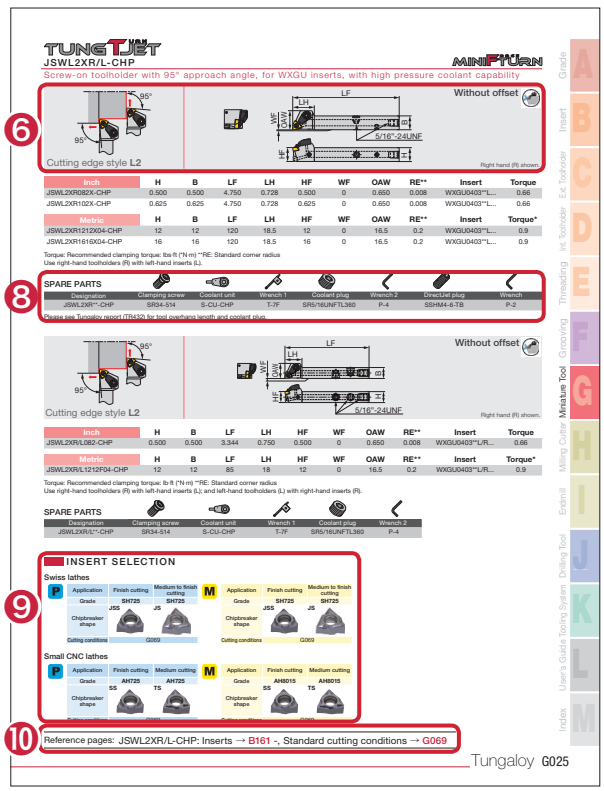
Method ① Select the application and the cutting edge shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (❺) in the dimension table (❹). Applicable inserts are shown in (❼) and (❾).

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 - G019.





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

→ **JSDJ2XR 082 X-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. **JSWL2XR082X-CHP** ... 1 (one toolholder per package)

* Inserts are not included. Please order those separately.

Main products

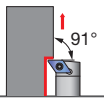
		Inch	Metric
	MINIFORCETURN Economical double-sided inserts with excellent sharpness G022 - G024, G026, G031 - G032 G035, G040, G042 - G043, G069	✓	✓
	J-SERIES Toolholders for small-part machining G004 - G008, G013, G015 G027 - G030, G036, G038 - G039 G044, G046 - G056, G058, G060 - G069, G096 - G102, G108 - G110, F103 - F110	✓	✓
	TETRAMINICUT Unique insert pocket geometry for grooving with high quality and precision CW = 0.013" - 0.118" (0.33 - 3.0 mm) G012 - G013, G016, G080 - G090 F006 - F007, F037 - F048	✓	✓
	TETRAFORCECUT 4-cornered insert with good clamping rigidity for highly precise grooving and parting CW = 0.020" - 0.125" (0.5 - 3.18 mm) G013, G091 - G095, F006 - F007, F049 - F057	✓	✓
	DUOJUSTCUT Innovative clamping system for high rigidity in parting CW = 0.039" - 0.079" (1.0 - 2.0 mm) G014, G016 G111 - G112, G114 - G119	✓	✓
	TUNGCUT Multi-functional tool series for various grooving operations CW = 0.055" - 0.157" (1.4 - 4.0 mm) G015, G102 - G130, F006 - F036 F116 - F136, F171 - F192	✓	✓
	TINYMINITURN Solid boring bar for turning small diameters with high precision G019, G070 - G079		✓
	TUNGHEAVYGROOVE Highly rigid clamping for wide grooving and profiling in one pass CW = 0.394" - 0.984" (10 - 25 mm) G014, G103 - G104 F006 - F007, F089 - F092	✓	

L 95° G023
J 93° G031
N 63° G047
P 62.5° G050
A 91° G051
G 91° G053
D 45° G054
F 91° G055
Special G056

Miniature External Turning - Quick Guide

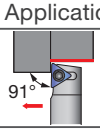
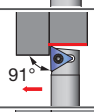
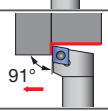
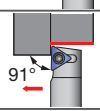
Facing

Metric

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JSDFCR/L** Cutting edge angle 91° Insert: DC□□	✓		0 10 **12** 16 20 30	Screw-on clamping with offset	G055

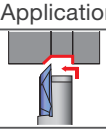
External Turning

Metric

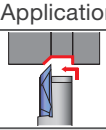
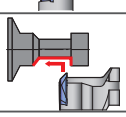
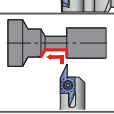
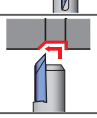
Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JTTACR/L** Cutting edge angle 91° Insert: TC□□	✓		0 **8** 10 16 20 30	Back side clamping without offset	G051
	**JSTACR/L** Cutting edge angle 91° Insert: TC□□	✓		0 **8** 10 16 20 30	Screw-on clamping without offset	G051
	**JSCGCR/L** Cutting edge angle 91° Insert: CC□□	✓		0 10 **12** 16 20 30	Screw-on clamping with offset	G053
	**JTTANR/L** Cutting edge angle 91° Insert: TN□□		✓	0 10 **12** 16 20 30	Back side clamping without offset	G060

Back Turning

Inch

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (in)	Clamping style	Page
	**JSTBR/L** Insert: JTBR/L3□□	✓		0 0.375 0.500 0.750 1.000 0.375" 0.625"	Screw-on clamping	G061

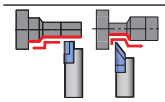
Metric

Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JSTBR/L** Insert: JTBR/L3□□	✓		0 **10** 16 20 30	Screw-on clamping	G061
	**JS-TBL3** Insert: JTBR3□□	✓		0 **ø19.05** ø25.4	Screw-on clamping	G061
	**JSEGR/L** Insert: J10ER/L□□	✓		0 **10** 16 20 30	Screw-on clamping	G064
	**JSXBR/L** Insert: JXBR/L8□□	✓		0 **10** 25	Screw-on clamping	G067

Miniature External Turning - Quick Guide

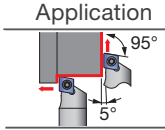
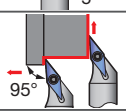
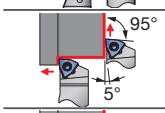
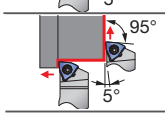
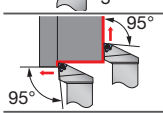
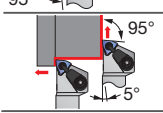
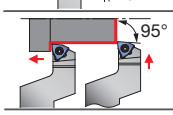
Front & Reverse Turning

Metric

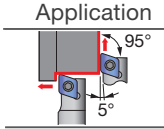
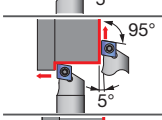
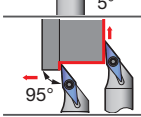
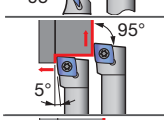
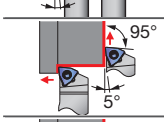
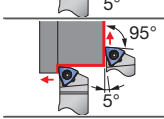
Application	Designation	Insert: Positive type	Insert: Negative type	Shank size (mm)	Clamping style	Page
	**JSXGR/L** Insert: JXFR/L8 JXRR/L8	✓		10 – 25	Screw-on clamping	G056

External Turning & Facing

Inch

Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (in)	Clamping style	Page
	**JSCL2CR/L** Cutting edge angle 95° Insert: CC□□		✓		0.375" – 0.625"	Screw-on clamping without offset	G027
	**JSVL2PR/L** Cutting edge angle 95° Insert: VP□□		✓		0.500" – 0.625"	Screw-on clamping without offset	G030
	**JPWL2XR/L** Cutting edge angle 95° Insert: WXGU	✓	✓		0.375" – 0.625"	Side clamping without offset	G024
	**JSWL2XR/L** Cutting edge angle 95° Insert: WXGU	✓	✓		0.375" – 0.625"	Screw-on clamping without offset	G023
	**JSWLXR/L** Cutting edge angle 95° Insert: WXGU	✓	✓		0.750" – 1.000"	Screw-on clamping with offset	C034
	**JSWL2XR/L-CHP** Cutting edge angle 95° Insert: WXGU	✓	✓		0.500" – 0.625"	Screw-on clamping without offset	G025
	**JSWLXR-F** Cutting edge angle 95° Insert: WXGU	✓	✓		0.500" – 0.625"	Screw-on clamping with offset	G026

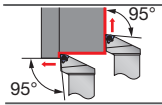
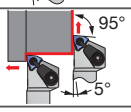
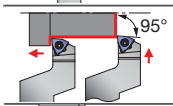
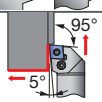
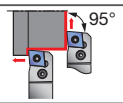
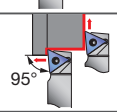
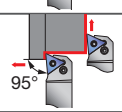
Metric

Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (mm)	Clamping style	Page
	**JTCL2CR/L** Cutting edge angle 95° Insert: CC□□		✓		8 – 16	Back side clamping without offset	G028
	**JSCL2CR/L** Cutting edge angle 95° Insert: CC□□		✓		10 – 16	Screw-on clamping without offset	G027
	**JSVL2PR/L** Cutting edge angle 95° Insert: VP□□		✓		10 – 16	Screw-on clamping without offset	G030
	**JSCLCR/L** Cutting edge angle 95° Insert: CC□□		✓		8 – 16	Screw-on clamping with offset	G029
	**JPWL2XR/L** Cutting edge angle 95° Insert: WXGU	✓	✓		10 – 16	Side clamping without offset	G024
	**JSWL2XR/L** Cutting edge angle 95° Insert: WXGU	✓	✓		10 – 20	Screw-on clamping without offset	G023

Miniature External Turning - Quick Guide

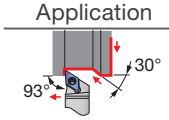
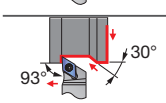
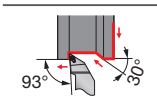
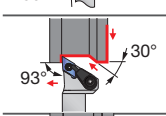
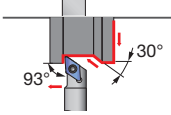
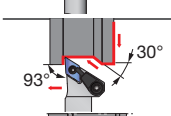
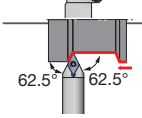
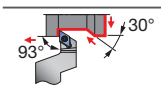
External Turning & Facing

Metric

Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (mm)	Clamping style	Page
	**JSWLXR/L** Cutting edge angle 95° Insert: WXGU	✓	✓		20 – 25	Screw-on clamping with offset	C034
	**JSWL2XR/L-CHP** Cutting edge angle 95° Insert: WXGU	✓	✓		12 – 16	Screw-on clamping without offset	G025
	**JSWLXR-F** Cutting edge angle 95° Insert: WXGU	✓	✓		10 – 16	Screw-on clamping with offset	G026
	**PCLNR** Cutting edge angle 95° Insert: CN□□			✓	20	Lever-lock clamping with offset	G057
	**PCL2NR** Cutting edge angle 95° Insert: CN□□			✓	20	Lever-lock clamping without offset	G057
	**JTTLNR/L** Cutting edge angle 95° Insert: TN□□			✓	12 – 16	Back side clamping without offset	G058
	**PTL2NR/L** Cutting edge angle 95° Insert: TN□□			✓	20	Lever-lock clamping without offset	G058

External Turning & Profiling

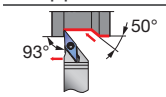
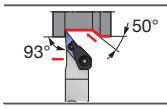
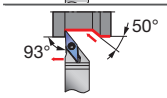
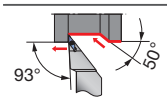
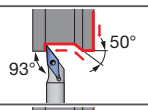
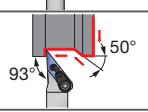
Inch

Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (in)	Clamping style	Page
	**JPDJ2XR/L** Cutting edge angle 93° Insert: DXGU	✓	✓		0.375" – 0.625"	Side clamping without offset	G032
	**JSDJ2XR/L** Cutting edge angle 93° Insert: DXGU	✓	✓		0.375" – 0.625"	Screw-on clamping without offset	G031
	**JSDJXR/L** Cutting edge angle 93° Insert: DXGU	✓	✓		0.750" – 1.000"	Screw-on clamping with offset	C042
	**JSDJ2XR/L-CHP** Cutting edge angle 93° Insert: DXGU	✓	✓		0.500" – 0.625"	Screw-on clamping without offset	G033
	**JSDJ2CR/L** Cutting edge angle 93° Insert: DC□□		✓		0.375" – 0.625"	Screw-on clamping without offset	G036
	**JSDJ2CR/L-CHP** Cutting edge angle 93° Insert: DC□□		✓		0.500"	Screw-on clamping without offset	G037
	**JSDNCN** Cutting edge angle 62.5° Insert: DC□□		✓		0.375" – 0.625"	Screw-on clamping with offset	G047
	**JSDJXR-F** Cutting edge angle 93° Insert: DXGU	✓	✓		0.500" – 0.625"	Screw-on clamping with offset	G034

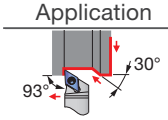
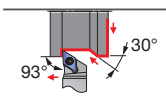
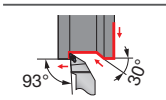
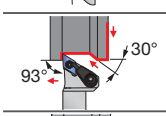
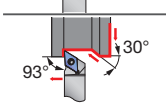
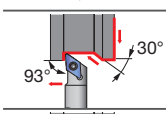
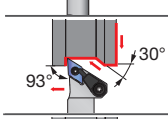
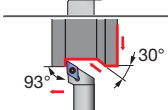
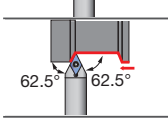
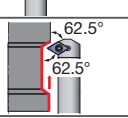
Miniature External Turning - Quick Guide

External Turning & Profiling

Inch

Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (in) 0 0.375 0.500 0.750 1.000	Clamping style	Page
	**JPVJ2XR/L** Cutting edge angle 93° Insert: VXGU	✓	✓		0.375" – 0.625"	Side clamping without offset	G040
	**JSVJ2XR/L-CHP** Cutting edge angle 93° Insert: VXGU	✓	✓		0.500" – 0.625"	Screw-on clamping without offset	G041
	**JSVJ2XR/L** Cutting edge angle 93° Insert: VXGU	✓	✓		0.375" – 0.625"	Screw-on clamping without offset	G040
	**JSVJXR/L** Cutting edge angle 93° Insert: VXGU	✓	✓		0.750" – 1.000"	Screw-on clamping with offset	C059
	**JSVJ2BR/L** Cutting edge angle 93° Insert: VB□□		✓		0.375" – 0.625"	Screw-on clamping without offset	G044
	**JSVJ2BR/L-CHP** Cutting edge angle 93° Insert: VB□□		✓		0.500"	Screw-on clamping without offset	G045

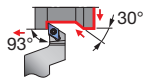
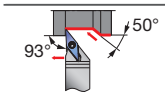
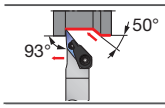
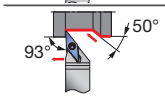
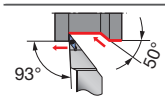
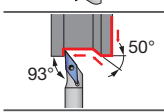
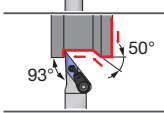
Metric

Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (mm) 0 10 20 30	Clamping style	Page
	**JPDJ2XR/L** Cutting edge angle 93° Insert: DXGU		✓		10 – 16	Side clamping without offset	G032
	**JSDJ2XR/L** Cutting edge angle 93° Insert: DXGU		✓		10 – 20	Screw-on clamping without offset	G031
	**JSDJXR/L** Cutting edge angle 93° Insert: DXGU		✓		20 – 25	Screw-on clamping with offset	C042
	**JSDJ2XR/L-CHP** Cutting edge angle 93° Insert: DXGU	✓	✓		12 – 16	Screw-on clamping without offset	G033
	**JTDJ2CR/L** Cutting edge angle 93° Insert: DC□□		✓		10 – 16	Back side clamping without offset	G036
	**JSDJ2CR/L** Cutting edge angle 93° Insert: DC□□		✓		8 – 16	Screw-on clamping without offset	G036
	**JSDJ2CR/L-CHP** Cutting edge angle 93° Insert: DC□□		✓		12 – 16	Screw-on clamping without offset	G037
	**JSDJCR/L** Cutting edge angle 93° Insert: DC□□		✓		8 – 16	Screw-on clamping with offset	G038
	**JSDNCN** Cutting edge angle 62.5° Insert: DC□□		✓		10 – 16	Screw-on clamping with offset	G047
	**JSDN3CR/L** Cutting edge angle 62.5° Insert: DC□□		✓		12 – 16	Screw-on clamping with offset	G048

Miniature External Turning - Quick Guide

External Turning & Profiling

Metric

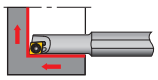
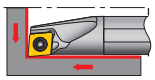
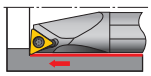
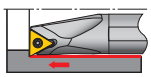
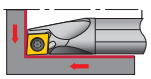
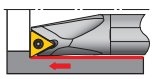
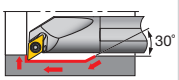
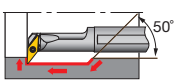
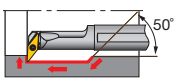
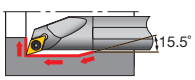
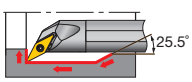
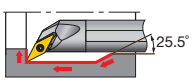
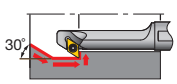
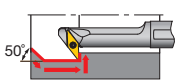
Application	Designation	Insert: MiniForce-Turn	Insert: ISO Positive type	Insert: ISO Negative type	Shank size (mm)	Clamping style	Page
	**JSDJXR-F** Cutting edge angle 93° Insert: DXGU	✓	✓		10 – 16	Screw-on clamping with offset	G034
	**JPVJ2XR/L** Cutting edge angle 93° Insert: VXGU	✓	✓		10 – 16	Side clamping without offset	G040
	**JSVJ2XR/L-CHP** Cutting edge angle 93° Insert: VXGU		✓		12 – 16	Screw-on clamping without offset	G041
	**JSVJ2XR/L** Cutting edge angle 93° Insert: VXGU	✓	✓		10 – 20	Screw-on clamping without offset	G040
	**JSVJXR/L** Cutting edge angle 93° Insert: VXGU	✓	✓		20 – 25	Screw-on clamping with offset	C059
	**JSVJ2BR/L** Cutting edge angle 93° Insert: VB□□		✓		10 – 16	Screw-on clamping without offset	G044
	**JSVJ2BR/L-CHP** Cutting edge angle 93° Insert: VB□□		✓		12	Screw-on clamping without offset	G045

Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

Inch

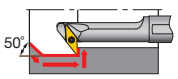
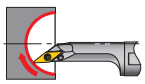
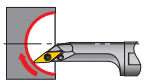
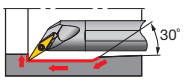
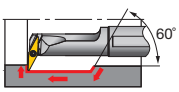
Application	Description & Application	ISO insert	Y-Pro	Shank material	Shank size (in)	Min. bore diameter: DMIN (in) (0 – 0.400 – 0.800 – 1.200 – 1.600 – 2.000)	Page
	**SEXPR/L** Boring & Internal facing Insert: EP□□	✓		Steel Carbide	ø0.313" ø0.313"	ø0.250" ø0.250"	D040 D041
	**SCLCR/L** Boring & Internal facing Insert: CC□□	✓		Steel Carbide	ø0.375"- ø1.000" ø0.375"- ø1.000"	ø0.500" – ø1.250" ø0.500" – ø1.250"	D022
	**STUPR/L** Boring Insert: TP□□	✓		Steel Carbide	ø0.313"- ø1.000" ø0.438"- ø1.000"	ø0.438" – ø1.250" ø0.438" – ø0.875"	D066
	**STFPR/L** Blind hole boring Insert: TP□□	✓		Carbide	ø0.375"- ø1.000"	ø0.500" – ø1.000"	D050
	**SCLPR/L** Boring & Internal facing Insert: CP□□	✓		Steel Carbide	ø0.375"- ø0.625" ø0.375"- ø0.625"	ø0.500" – ø0.875" ø0.500" – ø0.875"	D025
	**STFCR/L** Blind hole boring Insert: TC□□	✓		Carbide	ø0.375"- ø0.750"	ø0.500" – ø1.000"	D049
	**SDUCR/L** Boring & Internal profiling Insert: DC□□	✓		Steel Carbide	ø0.375"- ø0.750" ø0.375"- ø0.750"	ø0.625" – ø1.000" ø0.625" – ø1.000"	D058
	**SVUCR/L** Boring & Internal profiling Insert: VC□□	✓		Steel	ø0.625"- ø0.750"	ø0.875" – ø1.000"	D076
	**SVUBR/L** Boring & Internal profiling Insert: VB□□	✓		Steel	ø0.750"	ø1.000"	D072
	**SDQCR/L** Boring & Internal profiling Insert: DC□□	✓		Steel	ø0.375"- ø0.625"	ø0.625" – ø0.875"	D085
	**SVQCR/L** Boring & Internal profiling Insert: VC□□	✓		Steel	ø0.500"- ø0.625"	ø0.688" – ø1.000"	D090
	**SVQBR/L** Boring & Internal profiling Insert: VB□□	✓		Steel	ø0.625"	ø1.000"	D088
	**SDZCR/L** Internal retracting Insert: DC□□	✓		Steel	ø0.625"	ø0.875"	D094
	**SVZCR/L** Internal retracting Insert: VC□□	✓		Steel	ø0.500"- ø0.750"	ø0.750" – ø1.000"	D099

Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

Inch

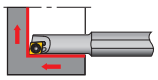
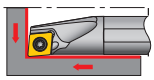
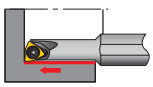
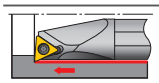
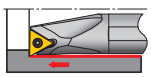
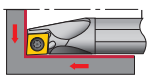
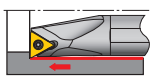
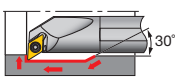
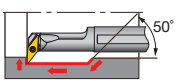
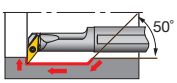
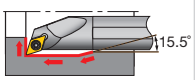
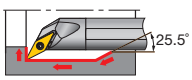
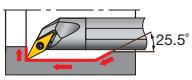
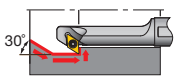
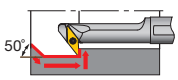
Application	Description & Application	ISO insert	Y-Pro	Shank material	Shank size (in)	Min. bore diameter: DMIN (in) (0 – 0.400 – 0.800 – 1.200 – 1.600 – 2.000)	Page
	**SVZBR/L** Internal retracting Insert: VB□□	✓		Steel	ø0.750"	ø1.000"	D098
	**SVJCR/L** Internal sphere cutting Insert: VC□□	✓		Steel	ø0.625"	ø1.000"	D044
	**SVJBR/L** Internal sphere cutting Insert: VB□□	✓		Steel	ø0.625"	ø1.000"	D043
	**SYQBR/L** Internal undercut & profiling Insert: YW□□		✓	Steel Carbide	ø0.500"- ø0.625" ø0.500"- ø0.625"	ø0.750" – ø0.875" ø0.750" – ø0.875"	D092
	**SYUBR/L** Boring & Internal profiling Insert: YW□□		✓	Steel Carbide	ø0.625" ø0.500"- ø0.625"	ø1.000" ø0.875" – ø1.000"	D084

Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

Metric

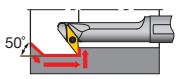
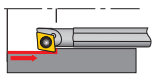
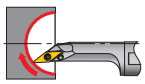
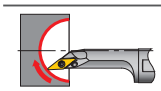
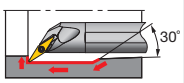
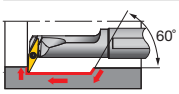
Application	Description & Application	ISO insert	Y-Pro	Shank material	Shank size (mm)	Min. bore diameter: DMIN (mm) (0 – 10 – 20 – 30 – 40 – 50)	Page
	**SEXPR/L** Boring & Internal facing Insert: EP□□	✓		Steel Carbide	ø4 - ø8 ø4 - ø8	ø4.5 – ø7 ø4.5 – ø7	D040 D041
	**SCLCR/L** Boring & Internal facing Insert: CC□□	✓		Steel Carbide	ø4 - ø25 ø4 - ø25	ø5 – ø27 ø5 – ø27	D023 D024
	**SWUBR/L** Boring Insert: WB□□	✓		Steel Carbide	ø5 - ø8 ø5 - ø8	ø6 – ø8 ø6 – ø8	D083
	**STUPR/L** Boring Insert: TP□□	✓		Steel Carbide	ø7 - ø32 ø7 - ø25	ø8 – ø34 ø8 – ø27	D067 D068
	**STFPR/L** Blind hole boring Insert: TP□□	✓		Steel Carbide	ø8 - ø25 ø8 - ø20	ø10 – ø27 ø10 – ø22	D050
	**SCLPR/L** Boring & Internal facing Insert: CP□□	✓		Steel Carbide	ø8 - ø25 ø8 - ø16	ø10 – ø27 ø10 – ø20	D026 D027
	**STFCR/L** Blind hole boring Insert: TC□□	✓		Steel Carbide	ø10 - ø16 ø10 - ø16	ø12 – ø18 ø12 – ø18	D049
	**SDUCR/L** Boring & Internal profiling Insert: DC□□	✓		Steel Carbide	ø10 - ø25 ø10 - ø20	ø13 – ø32 ø13 – ø27	D058
	**SVUCR/L** Boring & Internal profiling Insert: VC□□	✓		Steel Carbide	ø12 - ø25 ø12 - ø25	ø16 – ø32 ø18 – ø32	D076
	**SVUBR/L** Boring & Internal profiling Insert: VB□□	✓		Steel Carbide	ø16 - ø25 ø16 - ø25	ø20 – ø32 ø24.5 – ø34	D072
	**SDQCR/L** Boring & Internal profiling Insert: DC□□	✓		Steel Carbide	ø10 - ø25 ø10 - ø20	ø13 – ø30 ø13 – ø25	D085 D086
	**SVQCR/L** Boring & Internal profiling Insert: VC□□	✓		Steel Carbide	ø10 - ø16 ø10 - ø16	ø13.5 – ø21.5 ø13.5 – ø21.5	D090
	**SVQBR/L** Boring & Internal profiling Insert: VB□□	✓		Steel Carbide	ø12 - ø25 ø12 - ø25	ø17 – ø30.5 ø17 – ø30.5	D088
	**SDZCR/L** Internal retracting Insert: DC□□	✓		Steel Carbide	ø12 - ø25 ø12 - ø16	ø14 – ø25 ø18 – ø22	D094
	**SVZCR/L** Internal retracting Insert: VC□□	✓		Steel	ø12	ø16	D099

Miniature Internal Turning - Quick Guide

Positive type

StreamJet-Bar

Metric

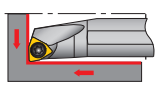
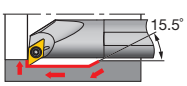
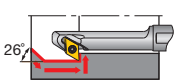
Application	Description & Application	ISO insert	Y-Pro	Shank material	Shank size (mm)	Min. bore diameter: DMIN (mm) (0 10 20 30 40 50)	Page
	**SVZBR/L** Internal retracting Insert: VB□□	✓		Steel	ø16 - ø32	ø20 – ø40	D098
	**SEZPR/L** Internal retracting Insert: EP□□	✓		Steel Carbide	ø4 - ø5 ø4 - ø5	ø5.5 – ø6.5 ø5.5 – ø6.5	D097
	**SVJCR/L** Internal sphere cutting Insert: VC□□	✓		Steel	ø12 - ø16	ø16 – ø20	D044
	**SVJBR/L** Internal sphere cutting Insert: VB□□	✓		Steel	ø20 - ø25	ø25 – ø30	D043
	**SYQBR/L** Internal undercut & profiling Insert: YW□□		✓	Steel Carbide	ø12 - ø16 ø12 - ø16	ø17 – ø21.5 ø17 – ø21.5	D092
	**SYUBR/L** Boring & Internal profiling Insert: YW□□		✓	Steel Carbide	ø16 ø12 - ø16	ø20 ø20 – ø24.5	D084

Miniature Internal Turning - Quick Guide

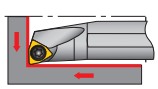
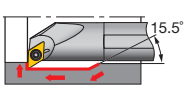
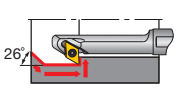
Double-sided insert with positive cutting edges

MiniForce-Turn

Inch

Application	Description & Application	MiniForce-Turn	Shank material	Shank size (in)	Min. bore diameter: DMIN (in) (0 0.400 0.800 1.200 1.600 2.000)	Page
	**SWLXR/L** Boring & Internal facing Insert: WXGU	✓	Steel Carbide	ø0.375" - ø1.000" ø0.375" - ø1.000"	ø0.500" – ø1.250" ø0.500" – ø1.250"	D034
	**SDXXR/L** Boring & Internal profiling Insert: DXGU	✓	Steel Carbide	ø0.375" - ø1.000" ø0.375" - ø1.000"	ø0.625" – ø1.250" ø0.625" – ø1.250"	D042
	**SDZXR/L** Internal retracting Insert: DXGU	✓	Steel	ø0.500" - ø0.750"	ø0.625" – ø0.875"	D093

Metric

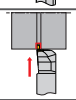
Application	Description & Application	MiniForce-Turn	Shank material	Shank size (mm)	Min. bore diameter: DMIN (mm) (0 10 20 30 40 50)	Page
	**SWLXR/L** Boring & Internal facing Insert: WXGU	✓	Steel Carbide	ø10 - ø20 ø10 - ø20	ø12 – ø22 ø12 – ø22	D034
	**SDXXR/L** Boring & Internal profiling Insert: DXGU	✓	Steel Carbide	ø10 - ø20 ø10 - ø20	ø13 – ø24 ø13 – ø24	D042
	**SDZXR/L** Internal retracting Insert: DXGU	✓	Steel Carbide	ø12 - ø20 ø12 - ø16	ø14 – ø20 ø18 – ø22	D093

Miniature Grooving - Quick Guide

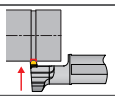
External Grooving

TetraMini-Cut

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.250	Groove width (in)	Max. groove depth (in)	Page
	STCR/L-18-CHP	TC*18R/L...	ø0.500" ø0.625"	0.013" - 0.118"	0.031" - 0.138"	G080 G081
	**STCR/L-18**	TC*18R/L...	ø0.375" ø1.000"	0.013" - 0.118"	0.031" - 0.138"	G080

Metric

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. groove depth (mm)	Page
	**JS-STCL18**	TC*18R...	ø14 ø25.4	0.33 - 3.0	0.8 - 3.5	G081

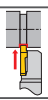
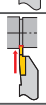
TetraForce-Cut

Inch

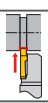
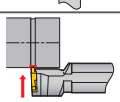
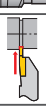
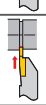
Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Groove width (in)	Max. groove depth (in)	Page
	STCR/L-27	TC*27...	ø0.375" ø1.000"	0.020" - 0.125"	0.039" - 0.252"	G090

J-series

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Groove width (in)	Max. groove depth (in)	Page
	**JSTGR/L**	JTGR/L3...	ø0.375" ø0.625"	0.013" - 0.118"	0.028" - 0.102"	G096
	**JSVGR/L**	JVGR/L...	ø0.375" ø0.625"	0.013" - 0.079"	0.028" - 0.217"	G101

Metric

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	G096
	**JS-TGL3**	JTGR3...	ø19.05 ø25.4	0.33 - 3.0	0.7 - 2.6	G096
	**JSVGR/L**	JVGR/L...	10 16	0.33 - 2.0	0.7 - 5.5	G101
	**JSXGR/L**	JXGR/L8...	10 25	0.7 - 2.0	4.5 - 6.0	G100

Miniature Grooving - Quick Guide

External Grooving

GTGN

Inch

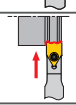
Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000 1.250	Groove width (in)	Max. groove depth (in)	Page
	CER/L	GTGN-16E…	ø0.750" ø1.250"	0.039" - 0.089"	0.049" - 0.071"	F087

Metric

Application	Designation	Insert	Shank size (mm) 0 10 20 30 40	Groove width (mm)	Max. groove depth (mm)	Page
	CER/L	GTGN-16E…	12 20	1.0 - 2.25	1.0 - 6.4	F087

TungHeavyGroove

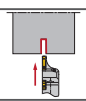
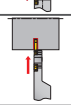
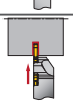
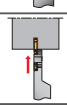
Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Groove width (in)	Max. groove depth (in)	Page
	FPGN	PSGB…	ø0.500" ø1.000"	0.394" - 0.984"	Wide grooving and profiling	G103
	**SPGN**	PSGB…	ø0.500" ø1.000"	0.394" - 0.984"	Wide grooving and profiling	G103

Parting

DuoJustCut

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Groove width (in)	Max. parting diameter (mm)	Page
	**JSXXR/L-X-CHP**	JXPG…	ø0.500" ø0.625"	0.039" - 0.079"	ø20	G112
	**JSXXR/L-X-S-CHP** **JSXXR/L-F-S-CHP**	JXPG…	ø0.500" ø0.625"	0.039" - 0.079"	ø20	G113
	**JSXXR/L**	JXPG…	ø0.375" ø0.625"	0.039" - 0.079"	ø20	G111
	**JSXXR/L-S**	JXPG…	ø0.375" ø0.500"	0.039" - 0.079"	ø20	G111

Miniature Parting - Quick Guide

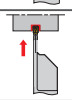
Parting

TungCut

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Groove width (in)	Max. parting diameter (in)	Page
	JCTER/L-CHP	DG.../SG...	ø0.500" – ø0.750"	0.079"	ø1.260"	G121
	JCTER/L	DG.../SG...	ø0.500" – ø0.625"	0.079" - 0.118"	ø1.260"	G120

Metric

Application	Designation	Insert	Shank size (mm) 0 10 20 30 40	Groove width (mm)	Max. parting diameter (mm)	Page
	JCTER/L-CHP	DG.../SG...	12 – 20	1.4 - 3.0	ø32	G121
	JCTER/L	DG.../SG...	10 – 20	1.4 - 3.0	ø32	G120
	**CGER/L**	DG.../SG...	10 – 20	1.4 - 3.0	ø55	G121

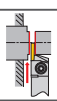
My-T

Metric

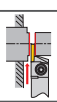
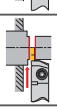
Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. parting diameter (mm)	Page
	JCGSSR/L	GE20...	10 – 25	2.0	ø32	F063

J-series

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Groove width (in)	Max. parting diameter (in)	Page
	**JCCWSR/L**	JCC*200F...	ø0.375" – ø0.625"	0.079"	ø0.787"	F105

Metric

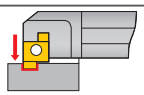
Application	Designation	Insert	Shank size (mm) 0 10 20 30	Groove width (mm)	Max. parting diameter (mm)	Page
	**JCCWSR/L**	JCC*200F...	10 – 25	2.0	ø20	F105
	**JCGWSR/L**	JCGN200F...	10 – 16	2.0	ø20	F106

Miniature Grooving - Quick Guide

Internal Grooving

SNG

Metric

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	F159

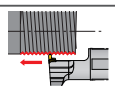
External Threading

TetraMini-Cut

Inch

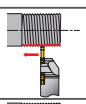
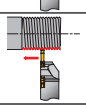
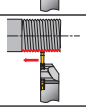
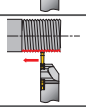
Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Corner R (mm)	Pitch (mm)	Page
	STCR/L-18-CHP	TCT18R/L...	ø0.500" – ø1.000"	0.05 - 0.2	0.4 - 3.0	G080 G081
	STCR/L-18	TCT18R/L...	ø0.375" – ø1.000"	0.05 - 0.2	0.4 - 3.0	G080

Metric

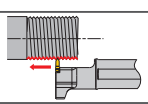
Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	**JS-STCL18**	TCT18R...	ø14 – ø25.4	0.05 - 0.2	0.4 - 3.0	G081

DuoJust-Cut

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Corner R (mm)	Pitch (mm)	Page
	**JSXXR/L-X-CHP**	JXTG12...	ø0.500" – ø0.625"	0.05Max. - 0.1	0.2 - 1.5	G112
	**JSXXR/L-X-S-CHP** **JSXXR/L-F-S-CHP**	JXTG12...	ø0.500" – ø0.625"	0.05Max. - 0.1	0.2 - 1.5	G113
	**JSXXR/L**	JXTG12...	ø0.375" – ø0.625"	0.05Max. - 0.1	0.2 - 1.5	G111
	**JSXXR/L-S**	JXTG12...	ø0.375" – ø0.500"	0.05Max. - 0.1	0.2 - 1.5	G111

Metric

Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	**JS-SXXL09**	JXTG12R...	ø19.05 – ø25.4	0.05Max. - 0.1	0.2 - 1.5	G115

Miniature Threading - Quick Guide

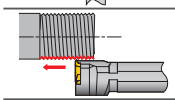
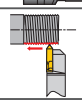
External Threading

J-series

Inch

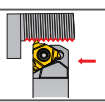
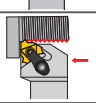
Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000	Corner R (mm)	Pitch (mm)	Page
	JSTTR/L	JTTR/L3...	ø0.375" ø0.625"	0.05 - 0.1	0.5 - 1.0	G109

Metric

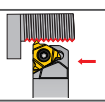
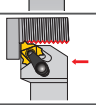
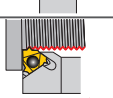
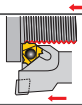
Application	Designation	Insert	Shank size (mm) 0 10 20 30	Corner R (mm)	Pitch (mm)	Page
	JSTTR/L	JTTR/L3...	10 16	0.05 - 0.1	0.5 - 1.0	G109
	**JS-TTL3**	JTTR3...	ø19.05 ø25.4	0.05 - 0.1	0.5 - 1.0	G109
	**JSXBR/L**	JXT*R6000F	10 25	0.03	0.5 - 1.0	G108

TungThread

Inch

Application	Designation	Insert	Shank size (in) 0 0.375 0.500 0.750 1.000 1.250	Corner R (mm)	Pitch (mm)	Page
	**JSE2R16-CHP**	16ER/L...	ø0.500" ø0.625"	0.05 - 0.22	0.5 - 3.0	G105
	**CER/L**	16ER/L...	ø0.750" ø1.250"	0.05 - 0.22	0.5 - 3.0	F087

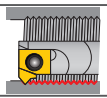
Metric

Application	Designation	Insert	Shank size (mm) 0 10 20 30 40	Corner R (mm)	Pitch (mm)	Page
	**JSE2R16-CHP**	16ER/L...	12 16	0.05 - 0.22	0.5 - 3.0	G105
	**CER/L**	16ER/L...	12 25	0.05 - 0.22	0.5 - 3.0	F087
	**B-S/CER/L**	16ER/L...	-	0.05 - 0.22	0.5 - 3.0	G106
	**BC-SER**	16ER/L...	-	0.05 - 0.22	0.5 - 3.0	G107

Internal Threading

TungThread

Metric

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

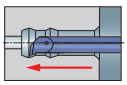
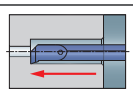
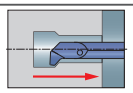
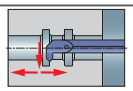
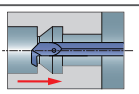
Miniature Internal Turning - Quick Guide

TinyMini-Turn - Solid carbide tools for small diameter turning

Boring, profiling & chamfering

TinyMini-Turn

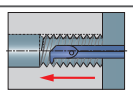
Metric

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	G070
	**JBP** Face grooving	ø4 & ø7	ø2.8 – ø5	G071
	**JBU** Back boring & chamfering	ø7	ø5	G071
	**JBC** Boring & 45° chamfering	ø7	ø5 – ø6.8	G071
	**JBB** Back boring	ø4 & ø7	ø3 – ø7	G072

Threading

TinyMini-Turn

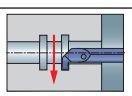
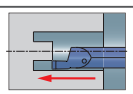
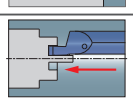
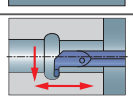
Metric

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	G072

Internal Grooving

TinyMini-Turn

Metric

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	G073
	**JBF** Face grooving	ø7	1 - 3	ø6 – ø15	G074
	**JBS** Face grooving (for shaft)	ø7	2	ø6	G074
	**JBR** Boring & profiling (full radius type)	ø7	1	ø5 – ø6.8	G075

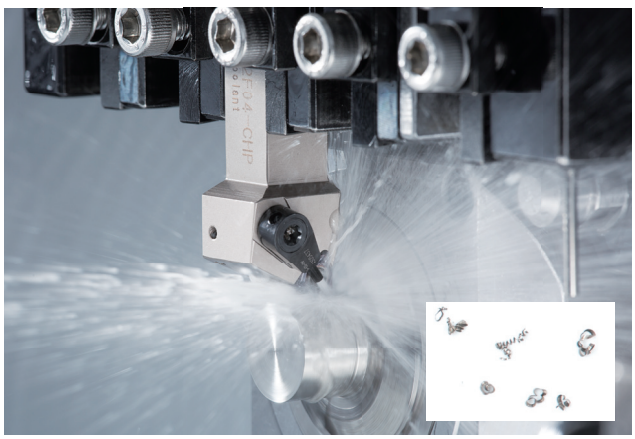
TUNGTURN JET

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

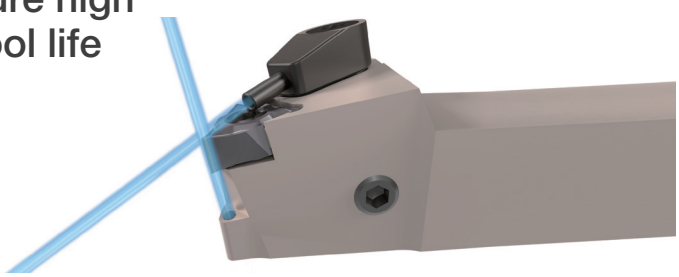
High pressure coolant (7 MPa)

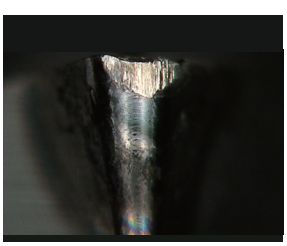


Coolant jets from two outlets ensure high cutting efficiency and extended tool life

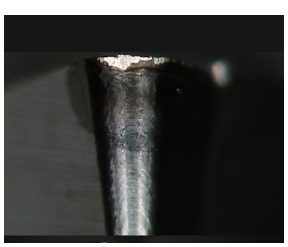
Directly to the cutting edge

Reliable chip control
Reduces crater and notch wears

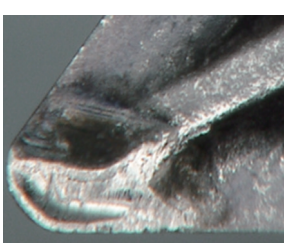




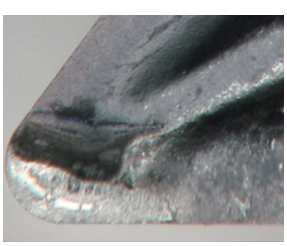
Excessive wear with external coolant supply (at normal pressure)



High pressure coolant (7 MPa)



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

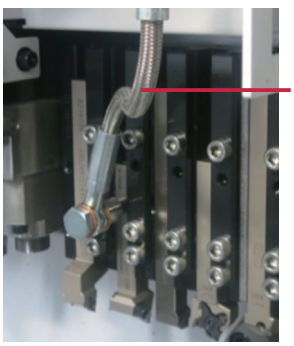


High pressure coolant (7 MPa)

Reference pages: G025, G028, G033, G037, G041, G045, G080, G091 - G095, G112 - G113

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

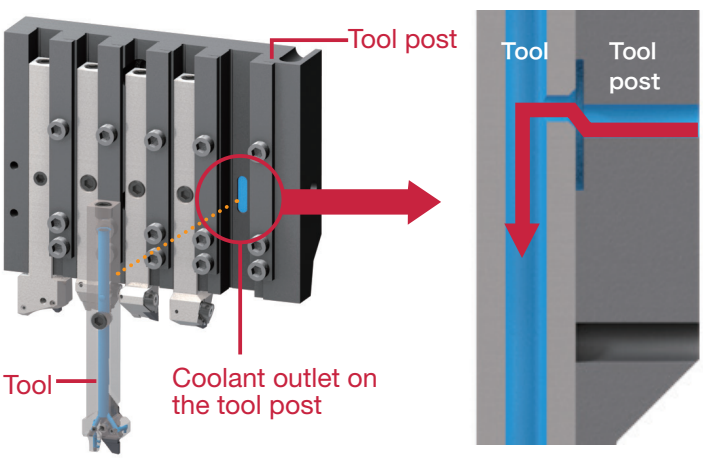
Conventional

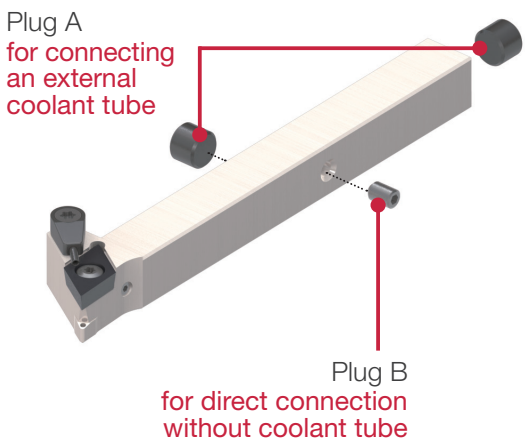


Direct connection without coolant tube

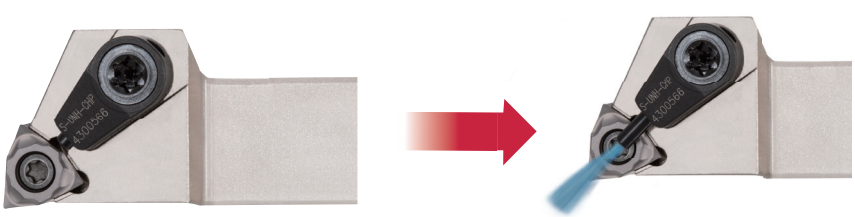
No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

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





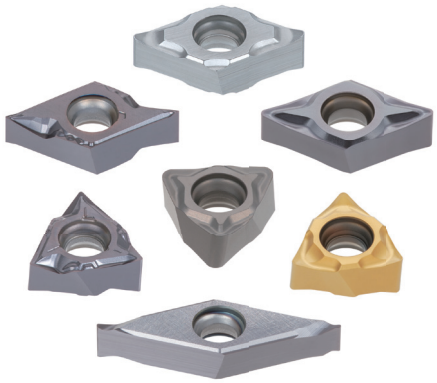
Use a non-coolant-through tool when a coolant supply is not needed through the tool.



Nozzle tube delivers coolant directly to the cutting edge

Reference pages : G025, G028, G033, G037, G041, G045, G080, G091, G105, G112 - G113, G121

MINIFORCE TURN

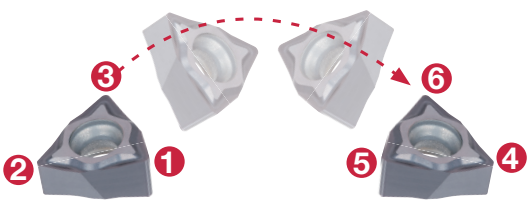


Economical double-sided positive insert

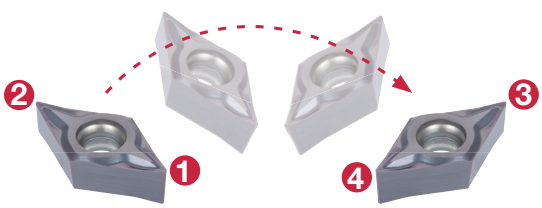
Innovative geometry and seat interface ensures stability and high performance.

Insert

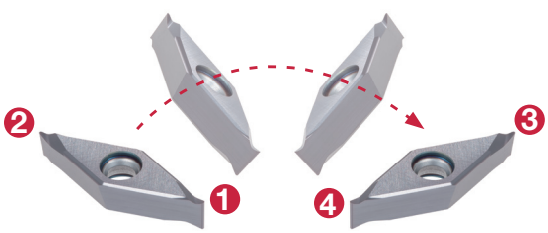
WXGU0403·· 6 positive cutting edges



DXGU0703·· 4 positive cutting edges

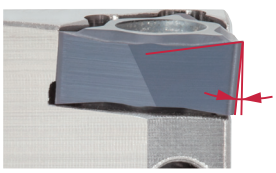


VXGU09T2·· 4 positive cutting edges

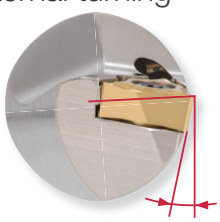


High rake angle

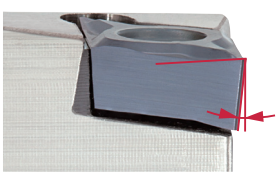
External turning



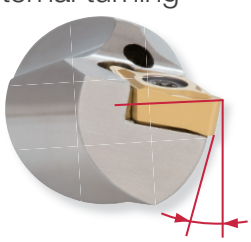
Internal turning



External turning



Internal turning

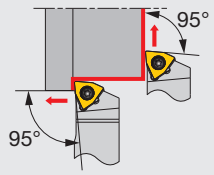


External turning

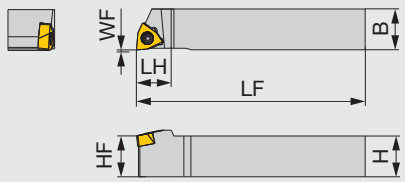
Reference pages : G023 - G024, G026, G031 - G032, G035, G040, G042 - G043, G069

JSWL2XR/L

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSWL2XR/L062	0.375	0.375	4.750	0.500	0.375	0	0.008	WXGU0403**L/R...	0.66
JSWL2XR/L082	0.500	0.500	4.750	0.500	0.500	0	0.008	WXGU0403**L/R...	0.66
JSWL2XR/L102	0.625	0.625	4.750	0.500	0.625	0	0.008	WXGU0403**L/R...	0.66

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS	TS
Cutting conditions	G069	

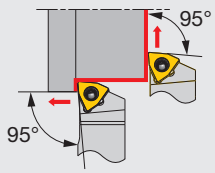
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	G069	

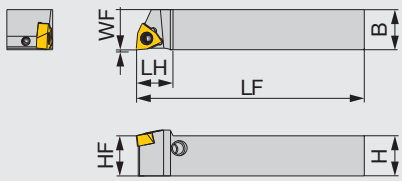
Reference pages: JSWL2XR/L: Inserts → B161 -, Standard cutting conditions → G069

JPWL2XR/L

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JPWL2XR/L062	0.375	0.375	4.750	0.500	0.375	0	0.008	WXGU0403**L/R...	0.66
JPWL2XR/L082	0.500	0.500	4.750	0.500	0.500	0	0.008	WXGU0403**L/R...	0.66
JPWL2XR/L102	0.625	0.625	4.750	0.500	0.625	0	0.008	WXGU0403**L/R...	0.66

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS	TS
Cutting conditions	G069	

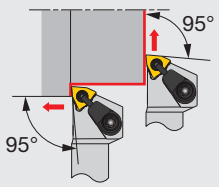
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	G069	

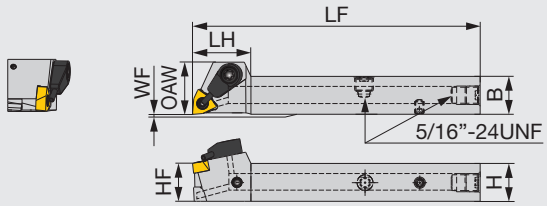
Reference pages: JPWL2XR/L: Inserts → B161 -, Standard cutting conditions → G069

JSWL2XR/L-CHP

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSWL2XR082X-CHP	0.500	0.500	4.750	0.728	0.500	0	0.650	0.008	WXGU0403**L...	0.66
JSWL2XR102X-CHP	0.625	0.625	4.750	0.728	0.625	0	0.650	0.008	WXGU0403**L...	0.66

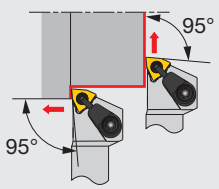
Metric	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSWL2XR1212X04-CHP	12	12	120	18.5	12	0	16.5	0.2	WXGU0403**L...	0.9
JSWL2XR1616X04-CHP	16	16	120	18.5	16	0	16.5	0.2	WXGU0403**L...	0.9

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

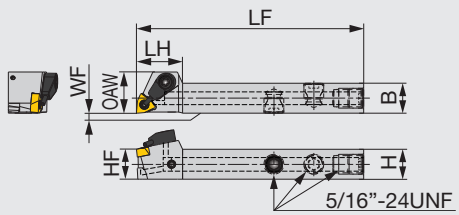
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench
JSWL2XR**-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.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSWL2XR/L082-CHP	0.500	0.500	3.344	0.750	0.500	0	0.650	0.008	WXGU0403**L/R...	0.66

Metric	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 clamping torque: lb·ft (*N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS	TS
Cutting conditions	G069	

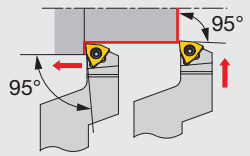
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	G069	

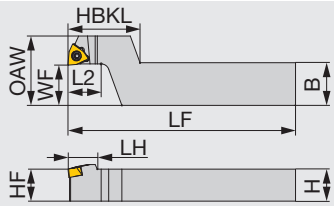
Reference pages: JSWL2XR/L-CHP: Inserts → B161 -, Standard cutting conditions → G069

JSWLXR-F

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



Cutting edge style **L**



Right hand (R) shown.

Inch	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque
JSWLXR082-F10	0.500	0.625	4.750	0.500	1.100	0.500	0.500	0.625	1.000	0.008	WXGU22**L...	0.66
JSWLXR102-F10	0.625	0.750	4.750	0.500	1.100	0.500	0.625	0.625	1.000	0.008	WXGU22**L...	0.66

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

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS	TS
Cutting conditions	G069	

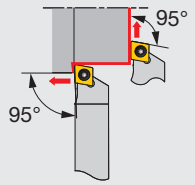
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	G069	

Reference pages: JSWLXR-F: Inserts → B161 -, Standard cutting conditions → G069

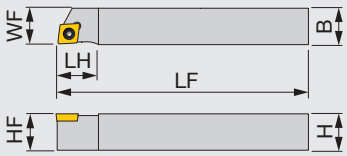
JSCL2CR/L

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



Cutting edge style **L2**

Without offset



Right hand (R) shown.

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

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

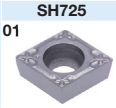
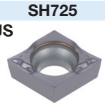
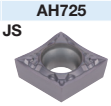
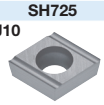
Torque: Recommended clamping torque: lbs·ft (*N·m)
**RE: Standard corner radius

SPARE PARTS

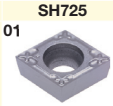
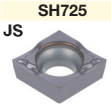
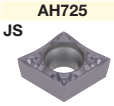
Designation	Clamping screw	Wrench
JSCL2CR/L062/082, JSCL2CR/L**06	CSTB-2.5	T-8F
JSCL2CR/L103, JSCL2CR/L**09	CSTB-4SD	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01 	JS 	JS 	J10 
Cutting conditions	G069			

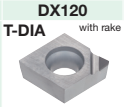
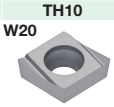
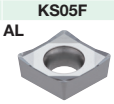
M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01 	JS 	JS 	J10
Cutting conditions	G069			

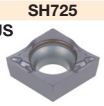
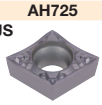
K

Application	medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

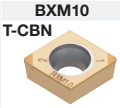
N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	TH10	KS05F
Chipbreaker shape	T-DIA  with rake	W20 	AL 
Cutting conditions	B026		

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS 	JS 
Cutting conditions	G069	

H

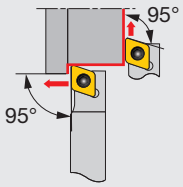
Application	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Chipbreaker shape	T-CBN 	T-CBN
Cutting conditions	B030	

Reference pages: JSCL2CR/L: Inserts → B111 -, CBN → B182, PCD → B196 -

J-SERIES

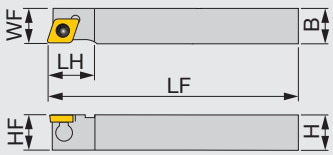
JTCL2CR/L

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



Cutting edge style **L2**

Without offset



Right hand (R) shown.

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

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

SPARE PARTS

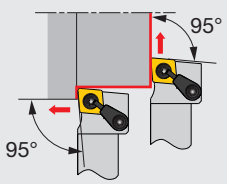
Designation	Clamp	Clamping screw	Wrench
JTCL2CR/L**06	JCP-2	JDS-3525	P-2F
JTCL2CR/L**09	JCP-3	JDS-5040	P-2.5F

TUNGTURN JET

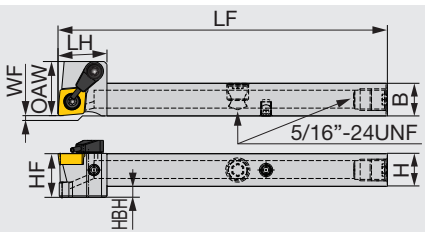
JSCL2CR-CHP

J-SERIES

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

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

Metric	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 clamping torque: lbs·ft (*N·m) **RE: Standard corner radius
*** : This item will be replaced with a new product in the future.

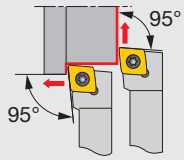
SPARE PARTS

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

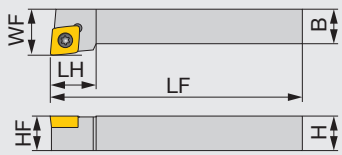
Reference pages: JTCL2CR/L, JSCL2CR-CHP: Inserts → B111 -, CBN → B182, PCD → B196 -

J-SERIES
JSCLCR/L

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



Cutting edge style **L**



Right hand (R) shown.

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

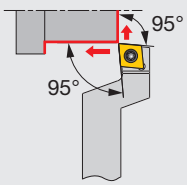
SPARE PARTS

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

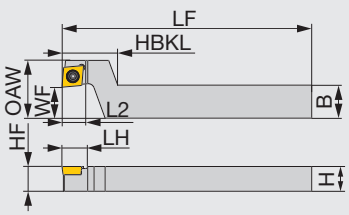
Torque: Recommended clamping torque: N·m
**RE: Standard corner radius

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.

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

SPARE PARTS

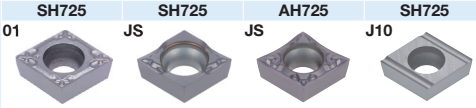
Designation	Clamping screw	Wrench
JSCLCR**F15	CSTB-4SD	T-8F

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

INSERT SELECTION

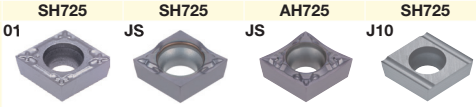
P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			



M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			



K

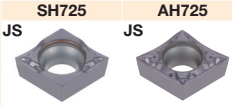
Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	TH10	KS05F
Chipbreaker shape	T-DIA	with rake W20	AL
Cutting conditions	B026		

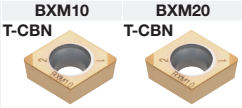
S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	



H

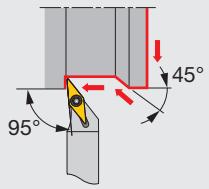
Application	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	



Reference pages: JSCLCR/L, JSCLCR-F: Inserts → B111 -, CBN → B182, PCD → B196 -

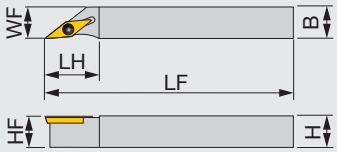
JSVL2PR/L

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



Cutting edge style **L2**

Without offset



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSVL2PR/L082	0.500	0.500	5.000	0.813	0.500	0.500	0.008	VP**1103...	0.89
JSVL2PR/L102	0.625	0.625	5.000	0.813	0.625	0.625	0.008	VP**1103...	0.89

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

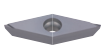
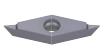
Torque: Recommended clamping torque: lbs·ft (*N·m)
**RE: Standard corner radius

SPARE PARTS

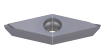
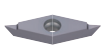
Designation	Clamping screw	Wrench
JSVL2PR/L082/102	CSTB-2.5	T-8F
JSVL2PR/L**08	CSTB-2L	T-6F
JSVL2PR/L**11	CSTB-2.5	T-8F

INSERT SELECTION

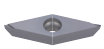
P

Application	Finish cutting	Finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JSP 
Cutting conditions	G069	

M

Application	Finish cutting	Finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JSP 
Cutting conditions	G069	

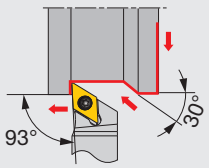
S

Application	Finish cutting	Finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JSP
Cutting conditions	G069	

Reference pages: JSVL2PR/L: Inserts → B157 -

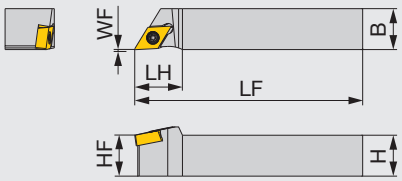
JSDJ2XR/L

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



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSDJ2XR/L062	0.375	0.375	4.750	0.625	0.375	0	0.008	DXGU0703**L/R...	0.66
JSDJ2XR/L082	0.500	0.500	4.750	0.625	0.500	0	0.008	DXGU0703**L/R...	0.66
JSDJ2XR/L102	0.625	0.625	4.750	0.625	0.625	0	0.008	DXGU0703**L/R...	0.66

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

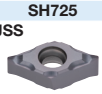
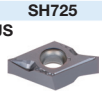
SPARE PARTS

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

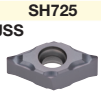
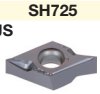
INSERT SELECTION

Swiss lathes

P

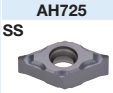
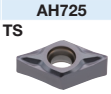
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

M

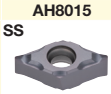
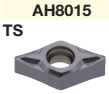
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

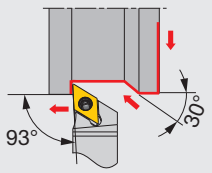
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

Reference pages: JSDJ2XR/L: Inserts → B127 -, Standard cutting conditions → G069

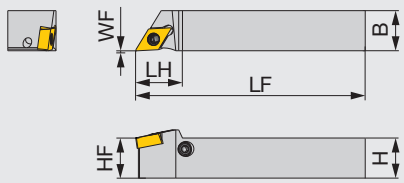
JPDJ2XR/L

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



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JPDJ2XR/L062	0.375	0.375	4.750	0.625	0.375	0	0.008	DXGU22**L/R...	0.66
JPDJ2XR/L082	0.500	0.500	4.750	0.625	0.500	0	0.008	DXGU22**L/R...	0.66
JPDJ2XR/L102	0.625	0.625	4.750	0.625	0.625	0	0.008	DXGU22**L/R...	0.66

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

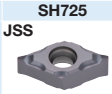
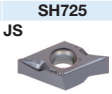
SPARE PARTS

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

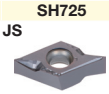
INSERT SELECTION

Swiss lathes

P

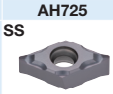
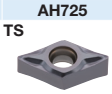
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

M

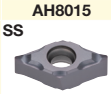
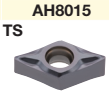
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS 
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

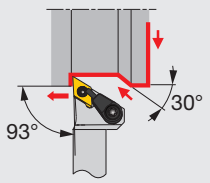
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

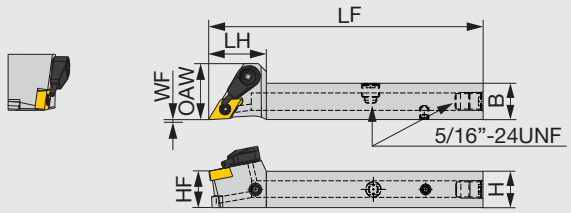
Reference pages: JPDJ2XR/L: Inserts → B127 -, Standard cutting conditions → G069

JSDJ2XR/L-CHP

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



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSDJ2XR082X-CHP	0.500	0.500	4.750	0.748	0.500	0	0.728	0.008	DXGU0703**L...	0.66
JSDJ2XR102X-CHP	0.625	0.625	4.750	0.748	0.625	0	0.728	0.008	DXGU0703**L...	0.66

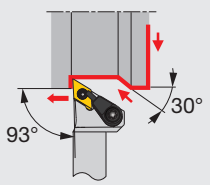
Metric	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJ2XR1212X07-CHP	12	12	120	19	12	0	18.5	0.2	DXGU0703**L...	0.9
JSDJ2XR1616X07-CHP	16	16	120	19	16	0	18.5	0.2	DXGU0703**L...	0.9

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

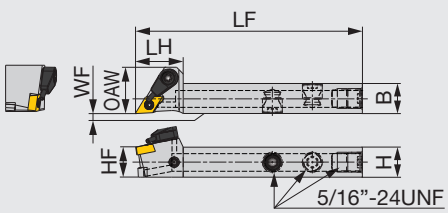
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSDJ2XR**-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.

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

Metric	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 clamping torque: lb·ft (*N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

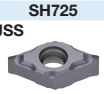
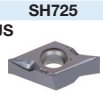
SPARE PARTS

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

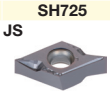
INSERT SELECTION

Swiss lathes

P

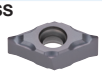
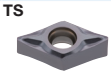
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

M

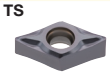
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS	JS 
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

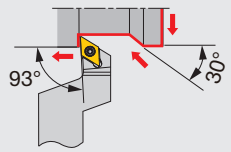
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS	TS 
Cutting conditions	G069	

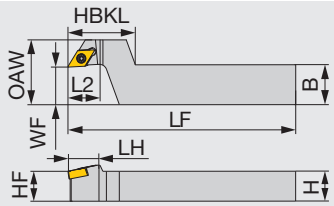
Reference pages: JSDJ2XR/L-CHP: Inserts → B127 -, Standard cutting conditions → G069

JSDJXR-F

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



Cutting edge style **J**



Right hand (R) shown.

Inch	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque
JSDJXR082-F10	0.500	0.625	4.750	0.500	1.130	0.625	0.500	0.625	1.000	0.008	DXGU0703**L...	0.66
JSDJXR102-F10	0.625	0.750	4.750	0.500	1.130	0.625	0.625	0.625	1.000	0.008	DXGU0703**L...	0.66

Metric	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque*
JSDJXR1016X07-F15	10	16	120	12	27	14	10	15	26	0.2	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 clamping torque: lbs·ft (*N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

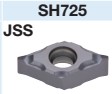
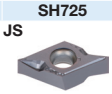
SPARE PARTS

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

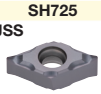
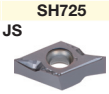
INSERT SELECTION

Swiss lathes

P

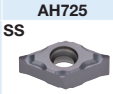
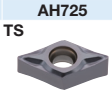
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

M

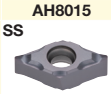
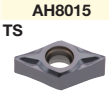
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

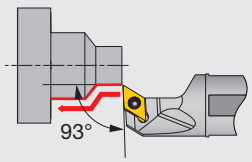
M

Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

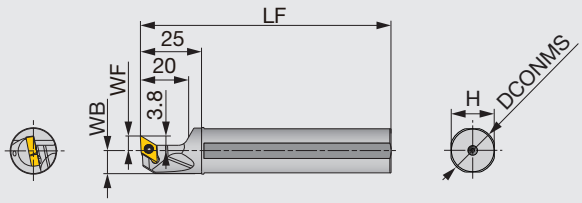
Reference pages: JSDJXR-F: Inserts → B127 -, Standard cutting conditions → G069

JS-SDUXL

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



Cutting edge style **U**



Left hand (L) shown.

Inch	DCONMS	WF	LF	H	WB	RE**	Insert	Torque
JS159F-SDUXL07	0.625	0.236	3.346	0.591	0.303	0.008	DXGU0703**L...	0.66
JS19G-SDUXL07	0.750	0.236	3.543	0.709	0.366	0.008	DXGU0703**L...	0.66
JS19X-SDUXL07	0.750	0.236	4.724	0.709	0.366	0.008	DXGU0703**L...	0.66
JS254X-SDUXL07	1.000	0.394	4.724	0.945	0.492	0.008	DXGU0703**L...	0.66

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

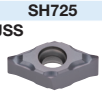
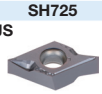
SPARE PARTS

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

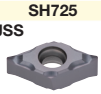
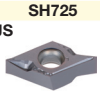
INSERT SELECTION

Swiss lathes

P

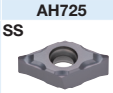
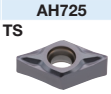
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

M

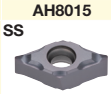
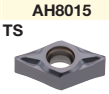
Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JSS 	JS 
Cutting conditions	G069	

Small CNC lathes

P

Application	Finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

M

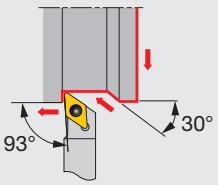
Application	Finish cutting	Medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	SS 	TS 
Cutting conditions	G069	

Reference pages: JS-SDUXL: Inserts → B127 -, Standard cutting conditions → G069

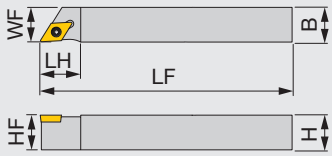
J-SERIES

JSDJ2CR/L

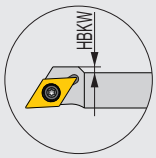
Screw-on toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J2**



Without offset



JSDJ2CR/L1010X11
JSDJ2CR/L1212F11
JSDJ2CR/L1212X11

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	HBKW	RE**	Insert	Torque
JSDJ2CR/L062	0.375	0.375	5.000	0.563	0.375	0.380	-	0.008	DC**0702...	0.89
JSDJ2CR/L082	0.500	0.500	5.000	0.563	0.500	0.500	-	0.008	DC**0702...	0.89
JSDJ2CR/L103	0.625	0.625	5.000	0.813	0.625	0.630	-	0.008	DC**11T3...	0.89

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

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

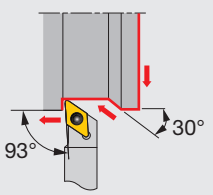
SPARE PARTS

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

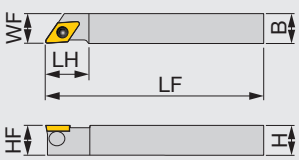
J-SERIES

JTDJ2CR/L

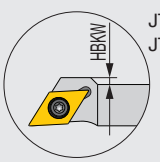
Back-clamp toolholder with 93° approach angle, for positive 55° rhombic inserts



Cutting edge style **J2**



Without offset



JTDJ2CR/L1212F11
JTDJ2CR/L1212X11

Right hand (R) shown.

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

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

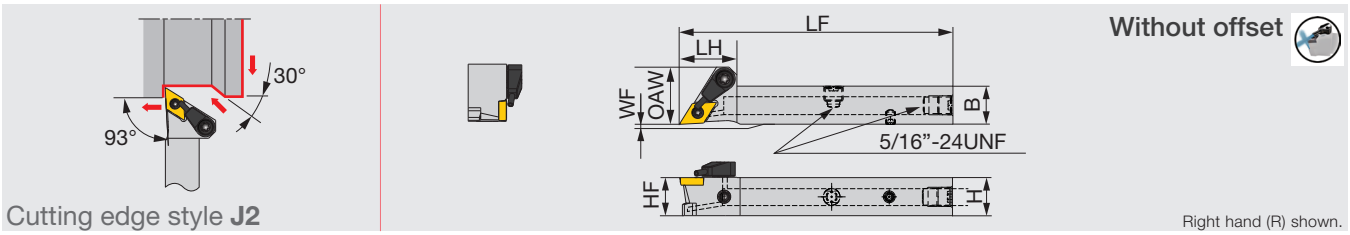
SPARE PARTS

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 → B121 -, CBN → B184-, PCD → B196 -

JSDJ2CR/L-CHP

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



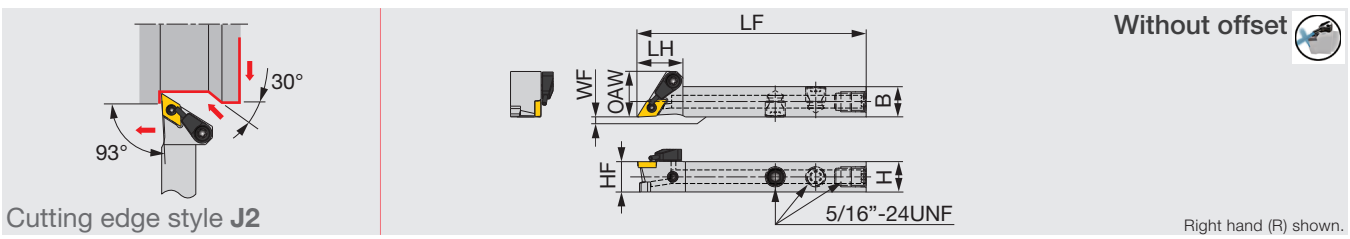
Metric	H	B	LF	LH	HF	WF	OAW	RE	Insert	Torque
JSDJ2CR1212X11-CHP	12	12	120	19	12	0	20.5	0.2	DC**11T3...	1.2
JSDJ2CR1616X11-CHP	16	16	120	19	16	0	20.5	0.2	DC**11T3...	1.2

Torque: Recommended clamping torque: N·m **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.



Inch	H	B	LF	LH	HF	WF	OAW	RE	Insert	Torque
JSDJ2CR/L082-CHP	0.500	0.500	3.344	0.710	0.500	0.500	0.710	0.2	DC**0702...	0.89

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

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

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSDJ2CR/L082-CHP, JSDJ2CR/L1212F07-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4
JSDJ2CR/L1212F11-CHP	CSTB-4SD	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

N

Application	Precision finishing	Medium cutting
Grade	DX120	KS05F
Chipbreaker shape	T-DIA with rake	AL
Cutting conditions	B026	

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

H

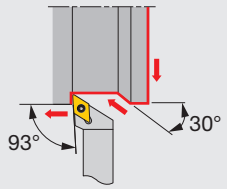
Application	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

Reference pages: JSDJ2CR/L-CHP: Inserts → B121 -, CBN → B184 -, PCD → B196 -

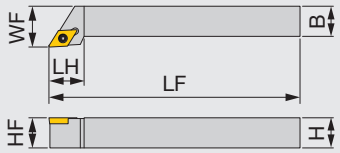
J-SERIES

JSDJCR/L

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



Cutting edge style **J**



Right hand (R) shown.

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

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

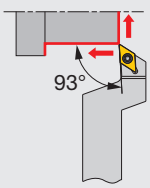
SPARE PARTS

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

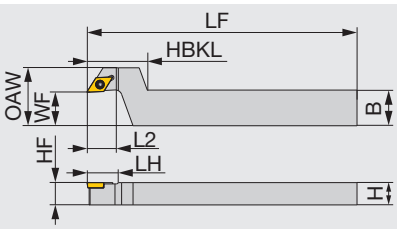
J-SERIES

JSDJCR-F

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



Cutting edge style **J**



Right hand (R) shown.

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

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

SPARE PARTS

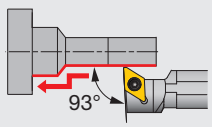
Designation	Clamping screw	Wrench
JSDJCR**07-F15	CSTB-2.5	T-8F
JSDJCR**11-F15	CSTB-4SD	T-8F

Reference pages: JSDJCR/L, JSDJCR-F: Inserts → B121 -, CBN → B184 -, PCD → B196 -

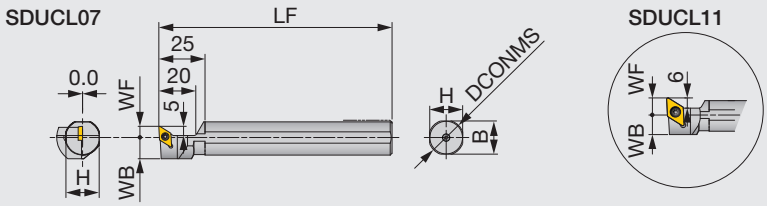
J-SERIES

JS-SDUCL

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



Cutting edge style **U**



Left hand (L) shown.

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

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

SPARE PARTS

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

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

M

Application	Precision Finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	T-DIA with rake	T-DIA	AL
Cutting conditions	B026		

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

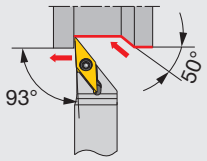
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

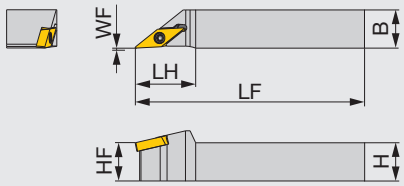
Reference pages: JS-SDUCL: Inserts → B121 -, CBN → B184 -, PCD → B196 -

MINIFORCE TURN
JSVJ2XR/L

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



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSVJ2XR/L067	0.375	0.375	4.750	0.669	0.375	0	0.008	VXGU09T2**L/R...	0.66
JSVJ2XR/L087	0.500	0.500	4.750	0.748	0.500	0	0.008	VXGU09T2**L/R...	0.66
JSVJ2XR/L107	0.625	0.625	4.750	0.748	0.625	0	0.008	VXGU09T2**L/R...	0.66

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

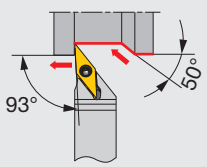
Torque: Recommended clamping torque: lbs·ft (*N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L). Use left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

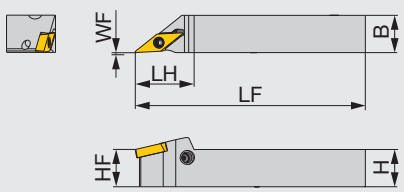
Designation	Clamping screw	Wrench
JSVJ2XR/L...	SR34-508	T-7F

MINIFORCE TURN
JPVJ2XR/L

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



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JPVJ2XR/L067	0.375	0.375	4.750	0.669	0.375	0	0.008	VXGU09T2**L/R...	0.66
JPVJ2XR/L087	0.500	0.500	4.750	0.748	0.500	0	0.008	VXGU09T2**L/R...	0.66
JPVJ2XR/L107	0.625	0.625	4.750	0.748	0.625	0	0.008	VXGU09T2**L/R...	0.66

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

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

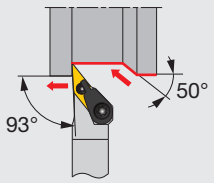
SPARE PARTS

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

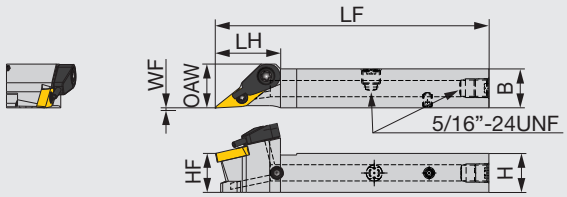
Reference pages: JSVJ2XR/L, JPVJ2XR/L: Inserts → B158, Standard cutting conditions → G069

JSVJ2XR/L-CHP

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



Cutting edge style **J2**



Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJ2XR087X-CHP	0.500	0.500	4.750	0.768	0.500	0	0.528	0.008	VXGU09T2**L...	0.66
JSVJ2XR107X-CHP	0.625	0.625	4.750	0.768	0.625	0	0.625	0.008	VXGU09T2**L...	0.66

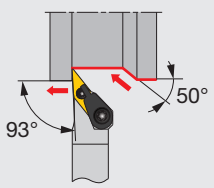
Metric	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque*
JSVJ2XR1212X09-CHP	12	12	120	19.5	12	0	13.4	0.2	VXGU09T2**L...	0.9
JSVJ2XR1616X09-CHP	16	16	120	19.5	16	0	16	0.2	VXGU09T2**L...	0.9

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

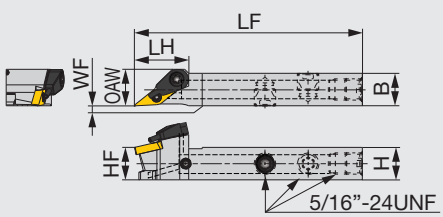
SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSVJ2XR**-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.

Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJ2XR/L087-CHP	0.500	0.500	4.750	0.748	0.500	0	0.020	0.008	VXGU09T2**L/R...	0.66

Metric	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

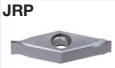
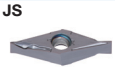
Torque: Recommended clamping torque: lb·ft (*N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

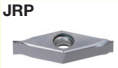
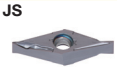
Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSVJ2XR/L**-CHP	SR34-508	S-CU-CHP	T-7F	SR5/16UNFTL360	P-4

INSERT SELECTION

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JS 
Cutting conditions	G069	

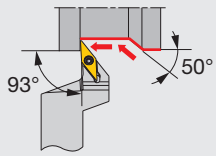
M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JS 
Cutting conditions	G069	

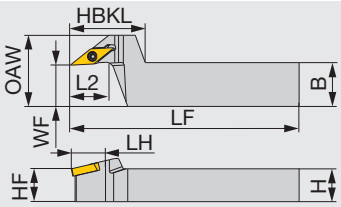
Reference pages: JSVJ2XR/L-CHP: Inserts → B158, Standard cutting conditions → G069

JSVJXR-F

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



Cutting edge style **J**



Right hand (R) shown.

Inch	H	B	LF	L2	HBKL	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJXR087-F10	0.500	0.625	4.750	0.500	1.130	0.750	0.500	0.625	1.000	0.008	VXGU09T2**L...	0.66
JSVJXR107-F10	0.625	0.750	4.750	0.500	1.130	0.750	0.625	0.625	1.000	0.008	VXGU09T2**L...	0.66

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

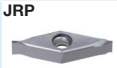
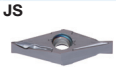
Torque: Recommended clamping torque: lbs·ft (*N·m) **RE: Standard corner radius
Use right-hand toolholders (R) with left-hand inserts (L).

SPARE PARTS

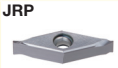
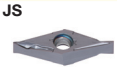
Designation	Clamping screw	Wrench
JSVJXR**-F10, JSVJXR**-F15	SR34-508	T-7F

INSERT SELECTION

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JS 
Cutting conditions	G069	

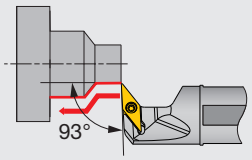
M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JS 
Cutting conditions	G069	

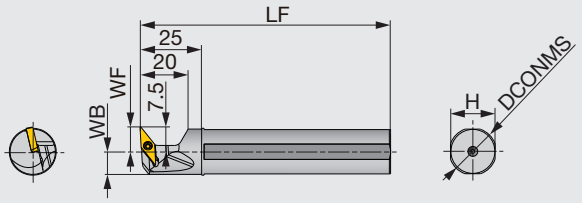
Reference pages: JSVJXR-F: Inserts → B158, Standard cutting conditions → G069

JS-SVUXL

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



Cutting edge style **U**



Left hand (L) shown.

Inch	DCONMS	WF	LF	H	WB	RE**	Insert	Torque
JS159F-SVUXL09	0.625	0.394	3.346	0.591	0.303	0.008	VXGU09T2**L...	0.66
JS19G-SVUXL09	0.750	0.394	3.543	0.709	0.362	0.008	VXGU09T2**L...	0.66
JS19X-SVUXL09	0.750	0.394	4.724	0.709	0.362	0.008	VXGU09T2**L...	0.66
JS254X-SVUXL09	1.000	0.394	4.724	0.945	0.488	0.008	VXGU09T2**L...	0.66

Metric	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

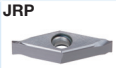
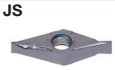
Torque: Recommended clamping torque: lbs·ft (*N·m) **RE: Standard corner radius
Use left-hand toolholders (L) with left-hand inserts (L).

SPARE PARTS

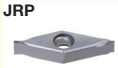
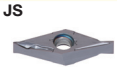
Designation	Clamping screw	Wrench
JS**-SVUXL09	SR34-508	T-7F

INSERT SELECTION

P

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JS 
Cutting conditions	G069	

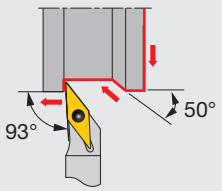
M

Application	Finish cutting	Medium to finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JS 
Cutting conditions	G069	

Reference pages: JS-SVUXL: Inserts → B158, Standard cutting conditions → G069

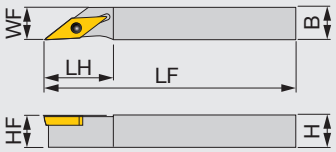
JSVJ2BR/L

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



Cutting edge style **J2**

Without offset



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSVJ2BR/L062	0.375	0.375	5.000	0.813	0.375	0.375	0.008	VB**1103...	0.89
JSVJ2BR/L082	0.500	0.500	5.000	0.813	0.500	0.500	0.008	VB**1103...	0.89
JSVJ2BR/L102	0.625	0.625	5.000	0.813	0.625	0.625	0.008	VB**1103...	0.89

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

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

SPARE PARTS

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

INSERT SELECTION

P

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

M

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

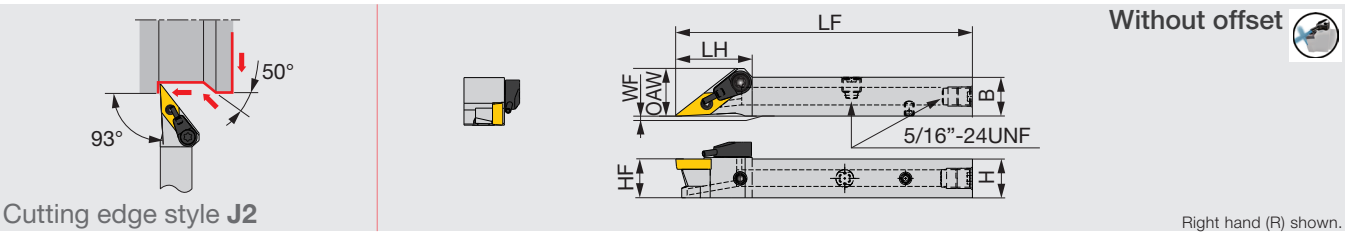
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

Reference pages: JSVJ2BR/L: Inserts → B152 -, CBN → B191 -

JSVJ2BR/L-CHP

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



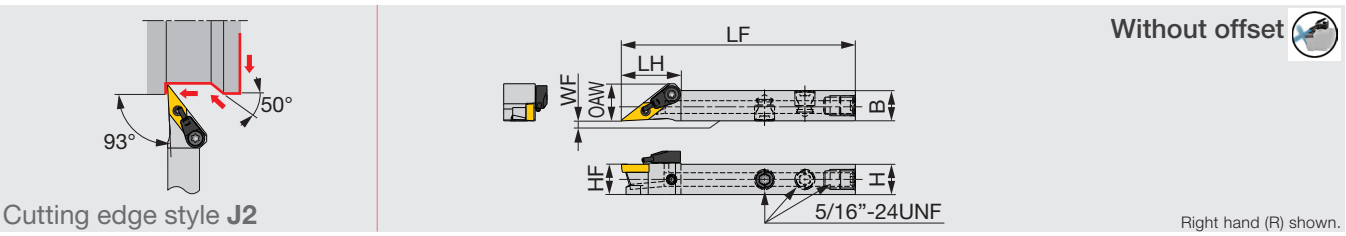
Metric	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJ2BR1212X11-CHP	12	12	120	23.6	12	0	14.7	0.2	VB**1103...	1.2
JSVJ2BR1616X11-CHP	16	16	120	23.6	16	0	16	0.2	VB**1103...	1.2

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

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSVJ2BR**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.



Inch	H	B	LF	LH	HF	WF	OAW	RE**	Insert	Torque
JSVJ2BR/L082-CHP	0.500	0.500	3.344	0.930	0.500	0	0.610	0.008	VB**1103...	0.89

Metric	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 clamping torque: lb·ft (*N·m) **RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench 1	Coolant plug	Wrench 2
JSVJ2BR/L**-CHP	CSTB-2.5	S-CU-CHP	T-8F	SR5/16UNFTL360	P-4

INSERT SELECTION

P

Application	Finish cutting	Medium to Finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

M

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

H

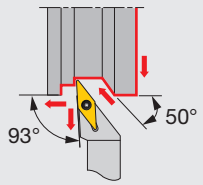
Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

Reference pages: JSVJ2BR/L-CHP: Inserts → B152 -, CBN → B191 -

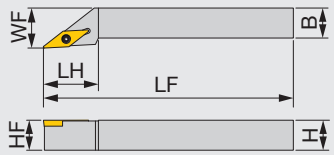
J-SERIES

JSVJBR/L

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



Cutting edge style **J**



Right hand (R) shown.

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

SPARE PARTS

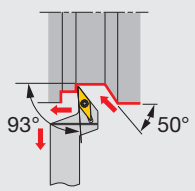
Designation	Clamping screw	Wrench
JSVJBR/L...	CSTB-2.5	T-8F

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

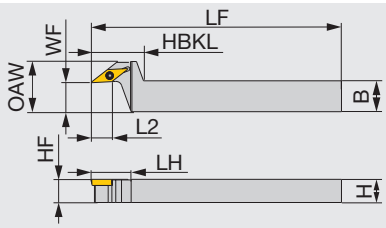
J-SERIES

JSVJBR-F

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



Cutting edge style **J**



Right hand (R) shown.

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

SPARE PARTS

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

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

INSERT SELECTION

P

Application	Finish cutting	Medium to Finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

M

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

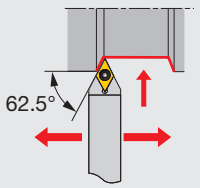
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

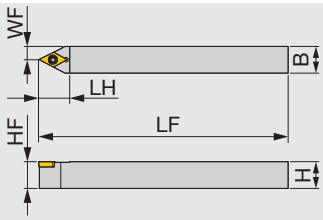
Reference pages: JSVJBR/L, JSVJBR-F: Inserts → B152 -, CBN → B191 -

JSDNCN

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



Cutting edge style **N**



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSDNCN062	0.375	0.375	5.000	0.563	0.375	0.188	0.008	DC**0702...	0.89
JSDNCN082	0.500	0.500	5.000	0.563	0.500	0.250	0.008	DC**0702...	0.89
JSDNCN103	0.625	0.625	5.000	0.813	0.625	0.313	0.008	DC**11T3...	0.89

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

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

SPARE PARTS

Designation	Clamping screw	Wrench
JSDNCN062/082, JSDNCN**07	CSTB-2.5	T-8F
JSDNCN103, JSDNCN**11	CSTB-4SD	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	T-DIA with rake	T-DIA	AL
Cutting conditions	B026		

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

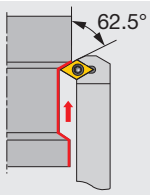
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

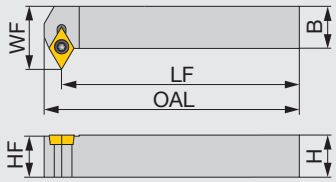
Reference pages: JSDNCN: Inserts → B121 -, CBN → B184 - , PCD → B196 -

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.

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

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

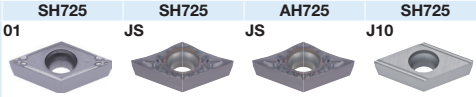
SPARE PARTS

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

INSERT SELECTION

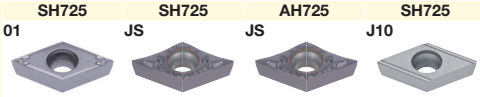
P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			



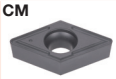
M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			



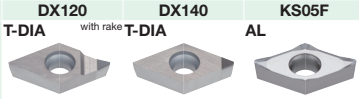
K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024



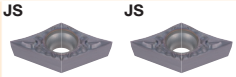
N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	T-DIA with rake	T-DIA	AL
Cutting conditions	B026		



S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	



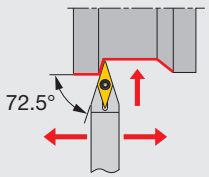
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

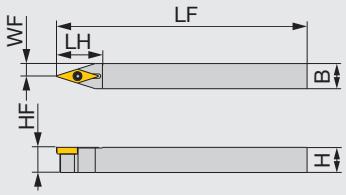
Reference pages: JSDN3CR/L: Inserts → B121 -, CBN → B184 - , PCD → B196 -

JSVNBN

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



Cutting edge style **N**



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

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

SPARE PARTS

Designation	Clamping screw	Wrench
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
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

M

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS	JS	J10
Cutting conditions	G069		

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS	JS
Cutting conditions	G069	

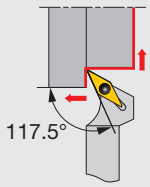
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

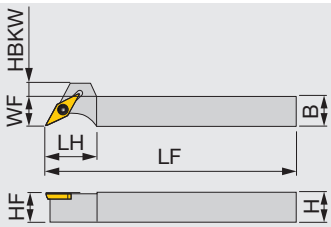
Reference pages: JSVNBN: Inserts → B152 -, CBN → B191 -

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.

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

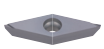
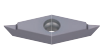
Torque: Recommended clamping torque: N·m
**RE: Standard corner radius

SPARE PARTS

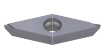
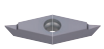
Designation	Clamping screw	Wrench
JSVP2PR/L**08	CSTB-2L	T-6F
JSVP2PR/L**11	CSTB-2.5	T-8F

INSERT SELECTION

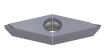
P

Application	Finish cutting	Finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JSP 
Cutting conditions	G069	

M

Application	Finish cutting	Finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JSP 
Cutting conditions	G069	

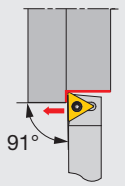
S

Application	Finish cutting	Finish cutting
Grade	SH725	SH725
Chipbreaker shape	JRP 	JSP
Cutting conditions	G069	

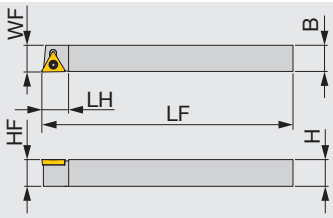
Reference pages: JSVP2PR/L: Inserts → B157 -

J-SERIES
JSTACR/L

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



Cutting edge style **A**



Without offset

Right hand (R) shown.

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

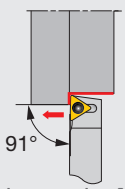
Torque: Recommended clamping torque: N·m **RE: Standard corner radius

SPARE PARTS

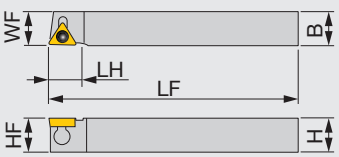
Designation	Clamping screw	Wrench
JSTACR/L**K08	CSTB-2L	T-6F
JSTACR/L**11	CSTB-2.5	T-8F

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.

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

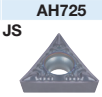
Torque: Recommended clamping torque: N·m **RE: Standard corner radius

SPARE PARTS

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

INSERT SELECTION

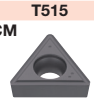
P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS 	J10
Cutting conditions	G069			

M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01	JS	JS	J10
Cutting conditions	G069			

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM 
Cutting conditions	B024

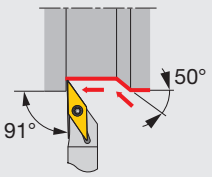
N

Application	Precision finishing	Medium cutting
Grade	DX120	KS05F
Chipbreaker shape	T-DIA with rake AL	
Cutting conditions	B026	

Reference pages: JSTACR/L, JTTACR/L: Inserts → B139 -, PCD → B196

JSVABR/L

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



Cutting edge style **A**

Without offset

Right hand (R) shown.

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

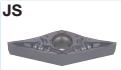
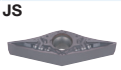
Torque: Recommended clamping torque: N·m
**RE: Standard corner radius

SPARE PARTS

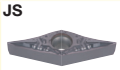
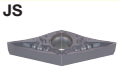
Designation	Clamping screw	Wrench
JSVABR/L...	CSTB-2.5	T-8F

INSERT SELECTION

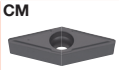
P

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS 	JS 	J10
Cutting conditions	G069		

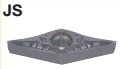
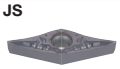
M

Application	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	AH725	SH725
Chipbreaker shape	JS 	JS 	J10
Cutting conditions	G069		

K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM 
Cutting conditions	B024

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS 	JS 
Cutting conditions	G069	

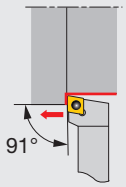
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

Reference pages: JSVABR/L: Inserts → B152 -, CBN → B191 -

JSCGCR/L

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



Cutting edge style **G**

Right hand (R) shown.

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

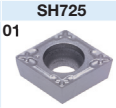
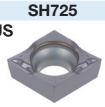
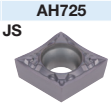
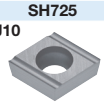
Torque: Recommended clamping torque: N·m
**RE: Standard corner radius

SPARE PARTS

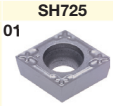
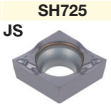
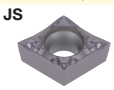
Designation	Clamping screw	Wrench
JSCGCR/L1212H06	CSTB-2.5	T-8F
JSCGCR/L1616H09	CSTB-4SD	T-8F

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01 	JS 	JS 	J10 
Cutting conditions	G069			

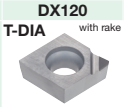
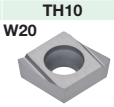
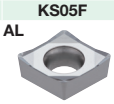
M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01 	JS 	JS 	J10
Cutting conditions	G069			

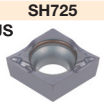
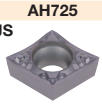
K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	TH10	KS05F
Chipbreaker shape	T-DIA  with rake W20 		AL 
Cutting conditions	B026		

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS 	JS 
Cutting conditions	G069	

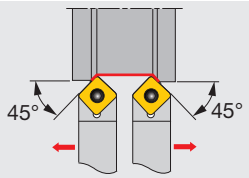
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM20
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B030	

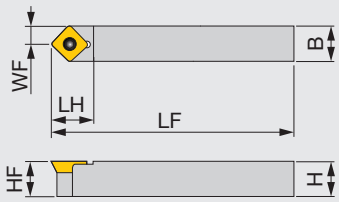
Reference pages: JSCGCR/L: Inserts → B111 -, CBN → B182, PCD → B196 -

SSDC/PN

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



Cutting edge style **D**



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

**RE: Standard corner radius

SPARE PARTS

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

INSERT SELECTION

P

Application	Medium to finish cutting	Medium cutting
Grade	AH725	AH725
Chipbreaker shape	PS	PM
Cutting conditions	B020	

M

Application	Medium cutting
Grade	AH725
Chipbreaker shape	PM
Cutting conditions	B022

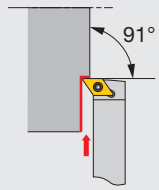
K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B024

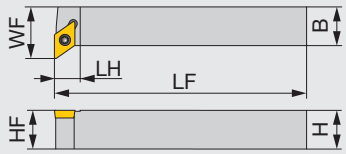
Reference pages: SSDC/PN: Inserts → B135 -

JSDFCR/L

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



Cutting edge style **F**



Right hand (R) shown.

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

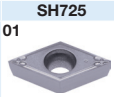
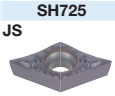
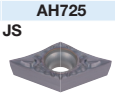
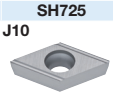
Torque: Recommended clamping torque: N·m
**RE: Standard corner radius

SPARE PARTS

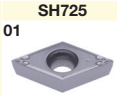
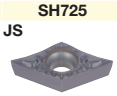
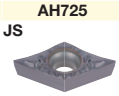
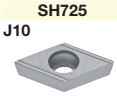
Designation	Clamping screw	Wrench
JSDFCR/L1212H07	CSTB-2.5	T-8F
JSDFCR/L1616H11	CSTB-4SD	T-8F

INSERT SELECTION

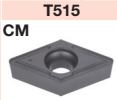
P

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01 	JS 	JS 	J10 
Cutting conditions	G069			

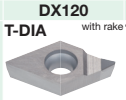
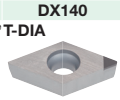
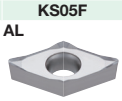
M

Application	Precision finishing	Finish cutting	Medium to finish cutting	Medium to finish cutting
Grade	SH725	SH725	AH725	SH725
Chipbreaker shape	01 	JS 	JS 	J10 
Cutting conditions	G069			

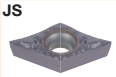
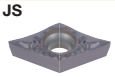
K

Application	Medium to finish cutting
Grade	T515
Chipbreaker shape	CM 
Cutting conditions	B024

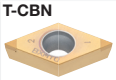
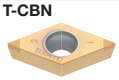
N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	T-DIA with rake 	T-DIA 	AL 
Cutting conditions	B026		

S

Application	Finish cutting	Medium to finish cutting
Grade	SH725	AH725
Chipbreaker shape	JS 	JS 
Cutting conditions	G069	

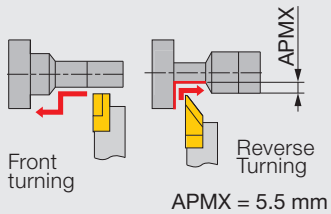
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN 	T-CBN 
Cutting conditions	B030	

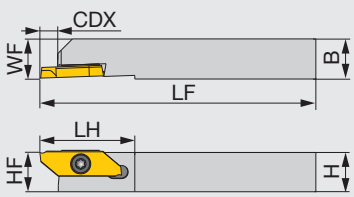
Reference pages: JSDFCR/L: Inserts → B121 -, CBN → B184 -, PCD → B196 -

JSXGR/L

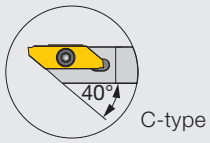
Screw-on toolholder for front/reverse turning and external grooving



APMX = 5.5 mm



Without offset



Right hand (R) shown.

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

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

SPARE PARTS

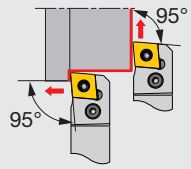
Designation	Clamping screw	Wrench 1	Wrench 2 *Optional
JSXGR/L...	CSTB-4SD	T-8F	(T-8L)

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

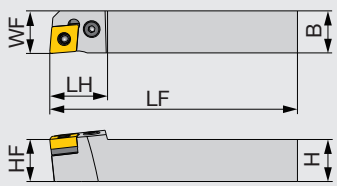
Reference pages: JSXGR/L: Inserts → B163

PCL2NR

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



Cutting edge style **L2**



Without offset

Right hand (R) shown.

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

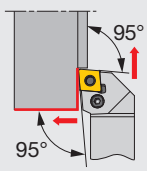
Torque: Recommended clamping torque: N·m
**RE: Standard corner radius

SPARE PARTS

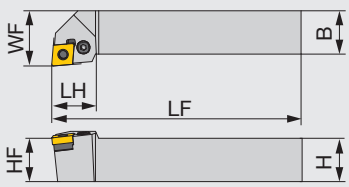
Designation	Shim	Clamping screw	Lever	Spring pin	Wrench
PCL2NR2020H12	LSC42	LCS4	LCL4	LSP4	P-3

PCLNR

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



Cutting edge style **L**



Right hand (R) shown.

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

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

SPARE PARTS

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

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B008			

M

Application	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T6120	T6130	T6130
Chipbreaker shape	SF	SM	SH
Cutting conditions	B010		

K

Application	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B012		

N

Application	Finish cutting	Medium cutting
Grade	DX140	TH10
Chipbreaker shape	T-DIA	P
Cutting conditions	B014	

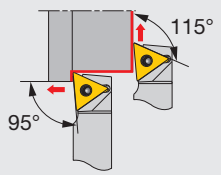
S

Application	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Chipbreaker shape	T-CBN	HRF	HRM
Cutting conditions	B016		

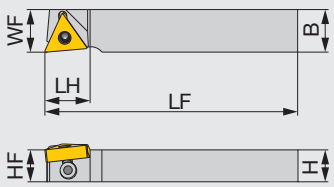
Reference pages: PCL2NR, PCLNR: Inserts → B056 -, CBN → B172 -, PCD → B194 -

JTTLNR/L

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



Cutting edge style **L**



Without offset

Right hand (R) shown.

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

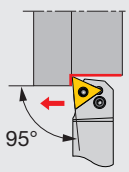
Torque: Recommended clamping torque: N·m **RE: Standard corner radius

SPARE PARTS

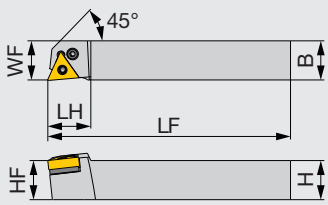
Designation	Clamp	Clamping screw	Wrench
JTTLNR/L...	JCP-3N	JDS-5040	P-2.5F

PTL2NR/L

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



Cutting edge style **L2**



Right hand (R) shown.

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

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

SPARE PARTS

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

INSERT SELECTION

P

Application	Precision finishing	Finish cutting		Medium cutting	Medium to heavy cutting
Grade	SH725	SH725	GT9530	T9215	T9215
Chipbreaker shape	01	JRP	TSF	TM	TH
Cutting conditions	G069		B008		

M

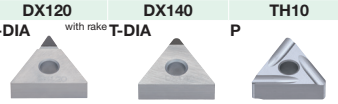
Application	Precision finishing	Finish cutting	Medium cutting
Grade	SH725	SH725	T6130
Chipbreaker shape	01	JRP	SM
Cutting conditions	G069		B010

K

Application	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B012		

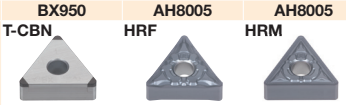
N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	T-DIA with rake	T-DIA	P
Cutting conditions	B014		



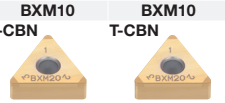
S

Application	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Chipbreaker shape	T-CBN	HRF	HRM
Cutting conditions	B016		



H

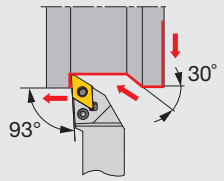
Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B018	



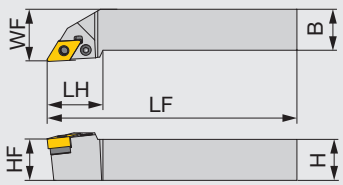
Reference pages: JTTLNR/L, PTL2NR/L: Inserts → B086 -, CBN → B178 -, PCD → B194 -

PDJNR

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



Cutting edge style **J**



Right hand (R) shown.

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

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

SPARE PARTS

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

INSERT SELECTION

P

Application	Precision finishing	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B008			

M

Application	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T6120	T6130	T6130
Chipbreaker shape	SF	SM	SH
Cutting conditions	B010		

K

Application	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B012		

N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	T-DIA with rake	T-DIA	P
Cutting conditions	B014		

S

Application	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Chipbreaker shape	T-CBN	HRF	HRM
Cutting conditions	B016		

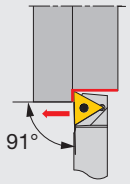
H

Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B018	

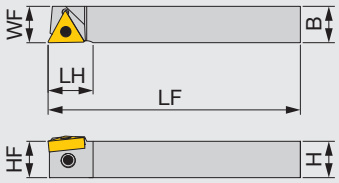
Reference pages: PDJNR: Inserts → B067 -, CBN → B174 -, PCD → B194 -

JTTANR/L

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



Cutting edge style **A**



Without offset

Right hand (R) shown.

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

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

SPARE PARTS

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

INSERT SELECTION

P

Application	Precision finishing	Finish cutting		Medium cutting	Medium to heavy cutting
Grade	SH725	SH725	GT9530	T9215	T9215
Chipbreaker shape	01	JRP	TSF	TM	TH
Cutting conditions	G069		B008		

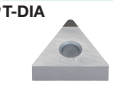
M

Application	Precision finishing	Finish cutting	Medium cutting
Grade	SH725	SH725	T6130
Chipbreaker shape	01	JRP	SM
Cutting conditions	G069		B010

K

Application	Finish cutting	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B012		

N

Application	Precision finishing	Finish cutting	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	T-DIA with rake	T-DIA 	P
Cutting conditions	B014		

S

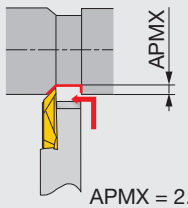
Application	Precision finishing	Finish cutting	Medium cutting
Grade	BX950	AH8005	AH8005
Chipbreaker shape	T-CBN	HRF	HRM
Cutting conditions	B016		

H

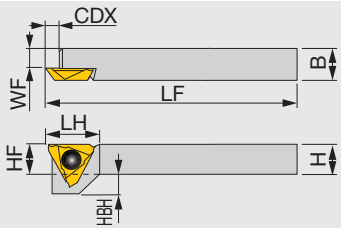
Application	Precision finishing	Finish cutting
Grade	BXM10	BXM10
Chipbreaker shape	T-CBN	T-CBN
Cutting conditions	B018	

Reference pages: JTTANR/L: Inserts → B086 -, CBN → B178 -, PCD → B194 -

J-SERIES
JSTBR/L
Screw-on toolholder for back turning



APMX = 2.5 mm



Right hand (R) shown.

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

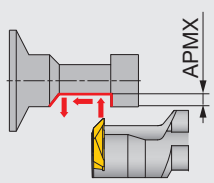
Metric	H	B	LF	LH	CDX	HF	WF	HBH	Insert	Torque*
JSTBR/L1010X3	10	10	120	15	5	10	6	5	JTBR/L3...	1.2
JSTBL1010K3	10	10	125	15	5	10	6	5	JTBR/L3...	1.2
JSTBR/L1212F3	12	12	85	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1212X3	12	12	120	15	5	12	8	3	JTBR/L3...	1.2
JSTBR/L1616X3	16	16	120	15	5	16	12	-	JTBR/L3...	1.2

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

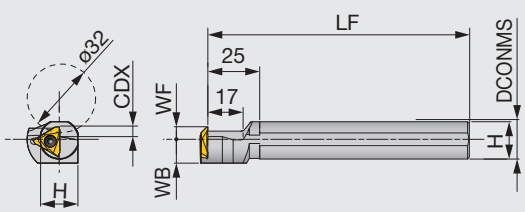
SPARE PARTS

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

J-SERIES
JS-TBL3
Screw-on toolholder for back turning



APMX = 2.5 mm



Right hand (R) shown.

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

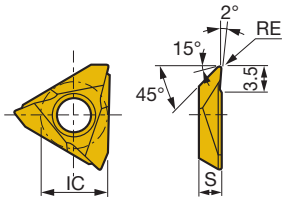
Torque: Recommended clamping torque: N·m

SPARE PARTS

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

Reference pages: JSTBR/L, JS-TBL3: Inserts, Standard cutting conditions → G062

JTB (Sharp edge)



Right hand (R) shown.

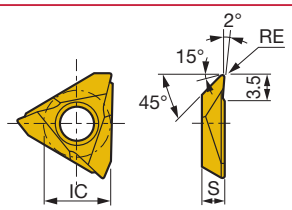
		Coated			Cermet	Uncoated
P	Steel	★	☆		★	
M	Stainless	★	☆			
K	Cast iron	★			☆	☆
N	Non-ferrous					★
S	Superalloys	☆	☆			★
H	Hard materials					★

★ : First choice
☆ : Second choice

Designation	HAND	RE (in)	Coated SH725	Coated J740	Cermet NS9530	Uncoated TH10	IC (mm)	S (mm)	Max. depth of cut (mm)
JTBR3000F	R	0.0012	●	●		●	9.438	3.18	2.5
JTBL3000F	L	0.0012	●	●		●	9.438	3.18	2.5
JTBR3005F	R	0.002	●	●		●	9.438	3.18	2.5
JTBL3005F	L	0.002	●	●		●	9.438	3.18	2.5
JTBR3010F	R	0.004	●	●	●	●	9.438	3.18	2.5
JTBL3010F	L	0.004	●	●	●	●	9.438	3.18	2.5
JTBR3015F	R	0.006	●	●			9.438	3.18	2.5
JTBL3015F	L	0.006	●				9.438	3.18	2.5

● : Line up

JTBR/L (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 (in)	Coated J740	Coated cermet J9530	IC (mm)	S (mm)	Max. depth of cut (mm)
JTBR3000	R	0.002	●	●	9.438	3.18	2.5
JTBL3000	L	0.002	●		9.438	3.18	2.5
JTBR3005	R	0.004	●	●	9.438	3.18	2.5
JTBL3005	L	0.004	●		9.438	3.18	2.5

● : Line up

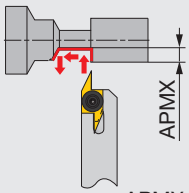
Reference pages: Toolholders → G061

STANDARD CUTTING CONDITIONS

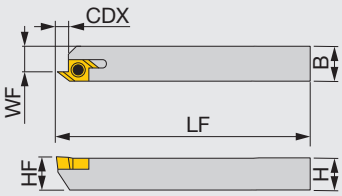
ISO	Workpiece material	Grade	Cutting speed *Vc* (sfm)	Feed *f* (ipr)
P	Steel 1045, etc.	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
		NS9530	164 - 492	0.0004 - 0.004
		J9530	164 - 492	0.0004 - 0.004
	Free-cutting steel	SH725	164 - 656	0.0004 - 0.004
		J740	33 - 328	0.0004 - 0.004
M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

JSEGR/L

Screw-on toolholder for back turning



APMX = 3 mm



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

Torque: Recommended clamping torque: N·m

SPARE PARTS

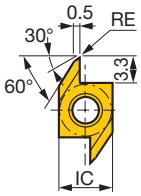
Designation	Clamping screw	Wrench
JSEGR/L...	CSTB-2.5	T-8F

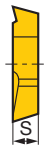
STANDARD CUTTING CONDITIONS (J10E type insert)

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

Reference pages: JSEGR/L: Inserts → G065

J10E (Sharp edge)





Right hand (R) shown.

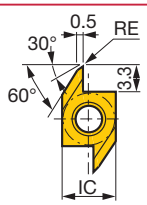
		Coated			Cermet		Uncoated	
P	Steel	★	☆		★			
M	Stainless	★	☆					
K	Cast iron	★			☆		☆	
N	Non-ferrous						★	
S	Superalloys	☆					★	
H	Hard materials						★	

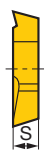
★ : First choice
☆ : Second choice

Designation	HAND	RE (mm)	SH725	J740	NS9530	TH10	IC (mm)	S (mm)	Max. depth of cut (mm)
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

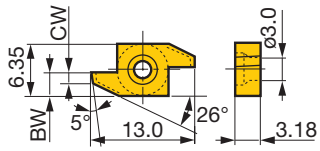
Designation	HAND	RE (mm)	J740	J9530	IC (mm)	S (mm)	Max. depth of cut (mm)
J10ER005B	R	0.05	●	●	6.35	3.18	3
J10EL005B	L	0.05	●		6.35	3.18	3
J10ER010B	R	0.1	●	●	6.35	3.18	3
J10EL010B	L	0.1	●		6.35	3.18	3

● : Line up

Reference pages: Toolholders → G064

INSERT

10E (Insert blank)



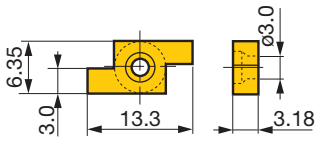
Right hand (R) shown.

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)



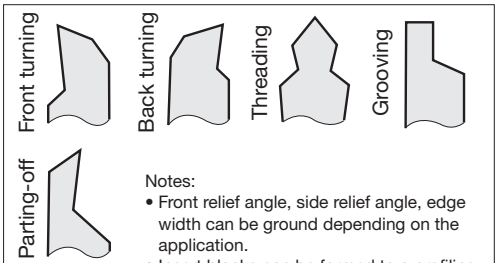
Right hand (R) shown.

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



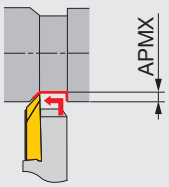
Notes:
- Front relief angle, side relief angle, edge width can be ground depending on the application.
- Insert blanks can be formed to a profiling tool which has a width up to 0.118".

Standard cutting conditions

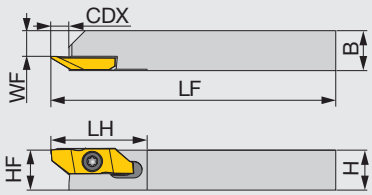
Operations	Workpiece material		Carbon steel	Stainless steel	Brass
Lateral feed (external turning)	Cutting speed (sfm)		~ 330	~ 160	~ 650
	Feed (ipr)	Roughing	~ 0.002	~ 0.001	~ 0.004
		Medium	~ 0.001	~ 0.001	~ 0.002
		Finishing	~ 0.0007	~ 0.0006	~ 0.0016
Parting-off Grooving Forming	Cutting speed (sfm)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

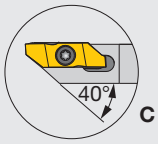
JSXBR/L

Screw-on toolholder for back turning and threading



APMX = 5.5 mm





C type

Right hand (R) shown.

Metric	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR/L1010K8-C	10	10	125	29	6.7	10	5.7	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...

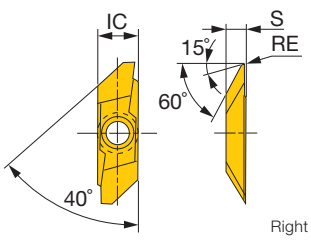
Can be used with JXT insert for threading.
Can be wrenched also from the back with a double-head screw.

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		★	

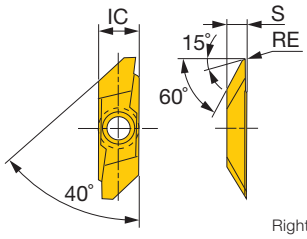
★ : First choice
☆ : Second choice

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

Reference pages: JSXBR/L: Inserts → G067 -, Standard cutting conditions → G068

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 (mm)	Coated J740	IC (mm)	S (mm)	Max. depth of cut (mm)
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* (sfm)	Feed: *f* (ipr) Grooving	Feed: *f* (ipr) Turning
P	Steel 1045, etc.	J740	33 - 328	0.0004 - 0.0012	0.0008 - 0.004
	Free-cutting steel	J740	33 - 328	0.0004 - 0.0012	0.0008 - 0.004
M	Stainless steel 303, etc.	J740	33 - 328	0.0004 - 0.0008	0.0008 - 0.003
N	Aluminum alloys, Brass Si < 12%, 5056, 6061, etc.	TH10	164 - 656	0.0004 - 0.0020	0.0008 - 0.004
S	Difficult-to-machine material, Titanium alloys Ti-6Al-4V, etc.	TH10	33 - 98	0.0004 - 0.0008	0.0008 - 0.002

Reference pages: Toolholders → G067

MINIFORCE TURN

STANDARD CUTTING CONDITIONS

FOR EXTERNAL TURNING

Applications	ISO	Workpiece material	Priority	Chip breaker	Grade	Cutting speed *Vc* (sfm)	Depth of cut *ap* (in)	Feed *f* (ipr)
For swiss type automatic lathes	P	Low carbon steel, Carbon steel 1045, etc. Low alloy steel, Alloy steel 4140, etc.	First choice	JS	SH725	164 - 590	0.004 - 0.118	0.001 - 0.004
			With high sharpness	JSS	SH725	164 - 590	0.004 - 0.059	0.001 - 0.004
	M	Stainless steel (Austenitic) 304, etc. Stainless steel (Martensitic and ferritic) 430, etc. Stainless steel (Precipitation hardened) 174, etc.	First choice	JS	SH725	164 - 590	0.004 - 0.049	0.001 - 0.004
			With high sharpness	JSS	SH725	164 - 590	0.004 - 0.059	0.001 - 0.004
For small size CNC lathes	P	Low carbon steel, Carbon steel 1045, etc. Low alloy steel, Alloy steel 4140, etc.	First choice	SS	AH725	164 - 590	0.006 - 0.059	0.002 - 0.008
				TS	AH725	164 - 590	0.012 - 0.079	0.003 - 0.012
			For improved surface finish	SS	NS9530	164 - 656	0.006 - 0.059	0.002 - 0.008
				TS	NS9530	164 - 656	0.012 - 0.079	0.003 - 0.012
			For wear resistance	SS	GT9530	164 - 820	0.006 - 0.059	0.002 - 0.008
				TS	GT9530	164 - 820	0.012 - 0.079	0.003 - 0.012
	M	Stainless steel (Austenitic) 304, etc. Stainless steel (Martensitic and ferritic) 430, etc. Stainless steel (Precipitation hardened) 174, etc.	First choice	SS	AH8015	164 - 492	0.006 - 0.059	0.002 - 0.008
			For impact resistance	TS	AH8015	164 - 492	0.012 - 0.079	0.003 - 0.012

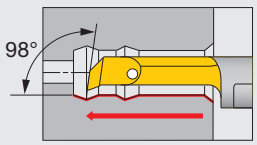
J-SERIES

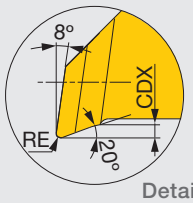
STANDARD CUTTING CONDITIONS

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

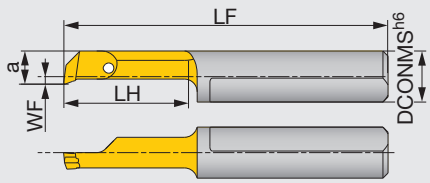
JBT R/L

Solid boring bar for boring, profiling and chamfering





Details of edge



Right hand (R) shown.

Metric	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

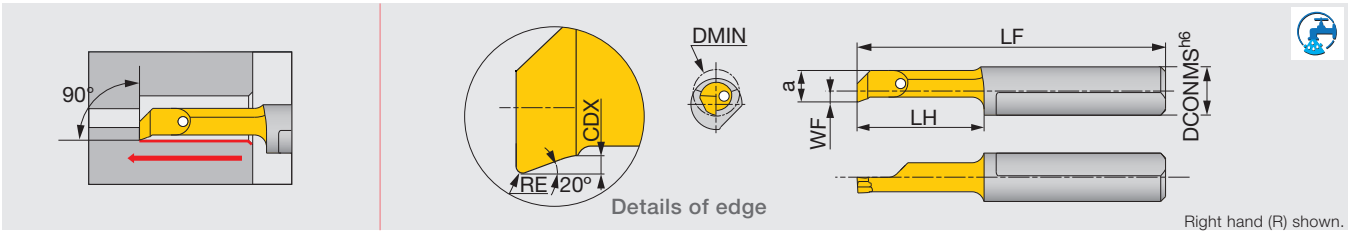
External
Internal
Grooving
Threading
Parting

Reference pages: JBT R/L: Standard cutting conditions → G078

TINYMTURN

JBP R

Solid boring bar for boring and chamfering



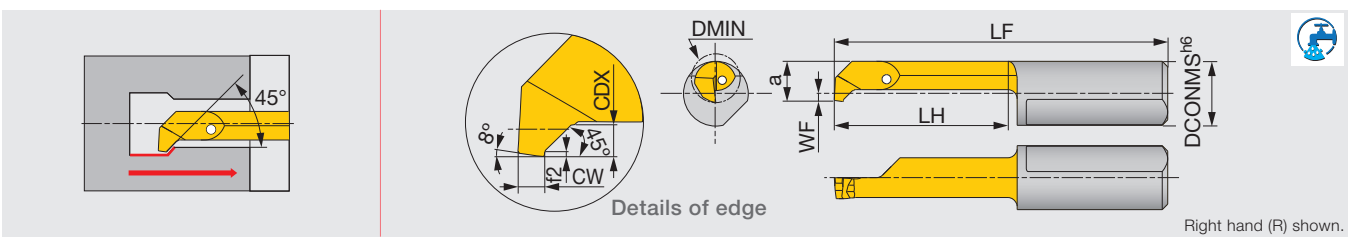
Metric	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{+0.05}_{0}$
JBPR04090010-D028	●	2.8	4	0.9	2.6	25.5	9	0.2	0.1
JBPR04150010-D028	●	2.8	4	0.9	2.6	31.5	15	0.2	0.1
JBPR04090010-D040	●	4	4	1.5	3.5	25.5	9	0.3	0.1
JBPR04150010-D040	●	4	4	1.5	3.5	31.5	15	0.3	0.1
JBPR07140015-D050	●	5	7	0.9	4.4	30	14	0.5	0.15
JBPR07190015-D050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



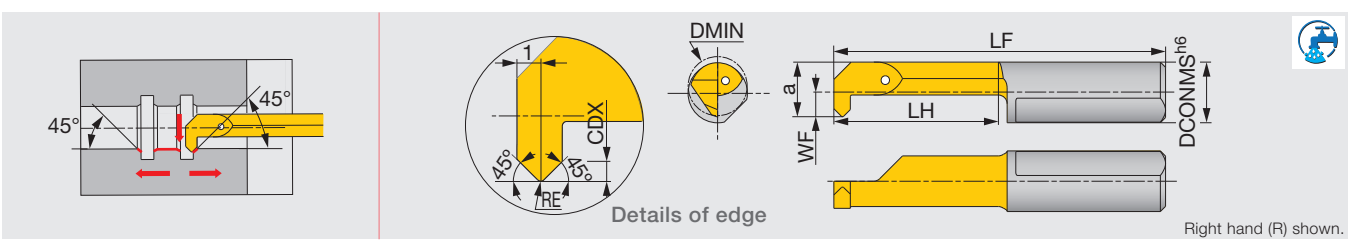
Metric	SH730	DMIN	DCONMS	WF	a	LF	LH	f2	CDX	CW $^{+0.05}_{0}$
JBUR07140010-D050	●	5	7	0.9	4.4	30	14	0.2	1	1
JBUR07190010-D050	●	5	7	0.9	4.4	35	19	0.2	1	1

● : Line up

TINYMTURN

JBC R

Solid boring bar for boring and 45° chamfering



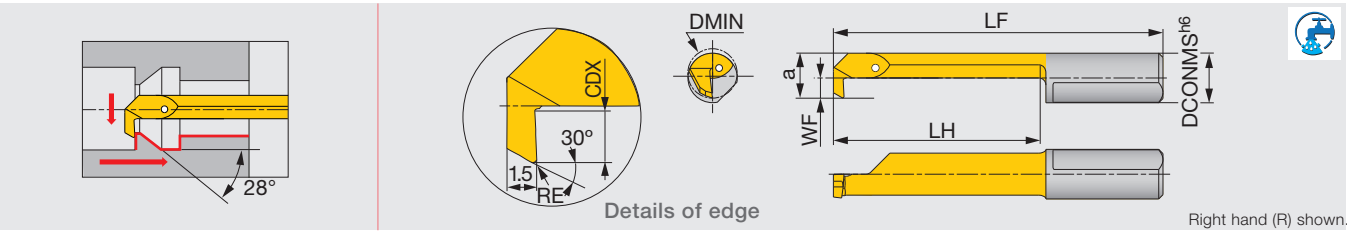
Metric	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE $^{\pm 0.05}$
JBCR07140020-D050	●	5	7	0.9	4.4	30	14	0.7	0.2
JBCR07190020-D050	●	5	7	0.9	4.4	35	19	0.7	0.2
JBCR07190020-D068	●	6.8	7	2.8	6.3	35	19	0.7	0.2

● : Line up

Reference pages: JBP R, JBU R, JBC R: Standard cutting conditions → G078

JBB R

Solid boring bar for back boring

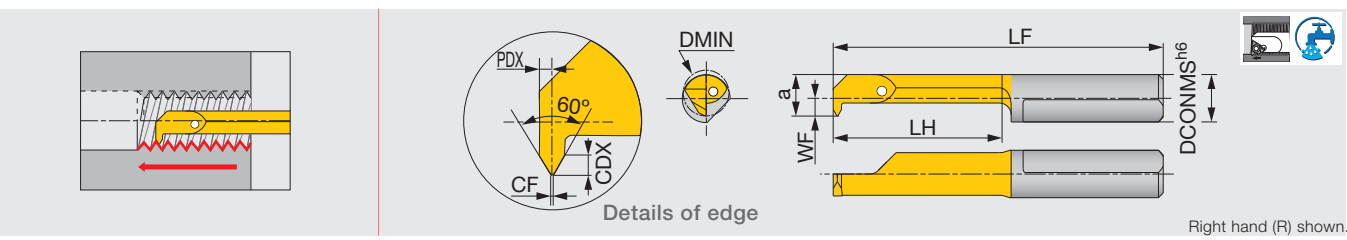


Metric	SH730	DMIN	DCONMS	WF	a	LF	LH	CDX	RE+0.05
JBBR04140020-D030	●	3	4	0.6	2.6	30	14	0.5	0.2
JBBR04190020-D030	●	3	4	0.6	2.6	35	19	0.5	0.2
JBBR04140015-D040	●	4	4	1.5	3.5	30	14	0.8	0.15
JBBR04240015-D040	●	4	4	1.5	3.5	40	24	0.8	0.15
JBBR07190020-D050	●	5	7	0.9	4.4	35	19	1	0.2
JBBR07290020-D050	●	5	7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

JBI R

Solid boring bar for threading (metric)



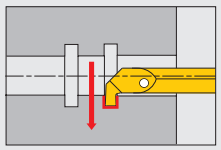
Metric	SH730	Pitch	DMIN	CF $^{0}_{-0.02}$	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
JBIR07140100-D060	●	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

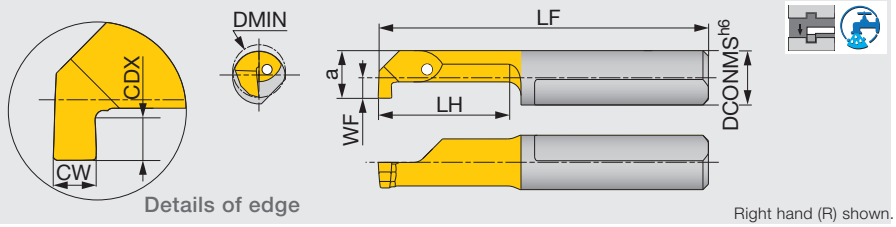
● : Line up

Reference pages: JBB R, JBI R: Standard cutting conditions → G078 - G079

JBG R/L

Solid boring bar for internal grooving





Metric	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 0.004" (0.1 mm)

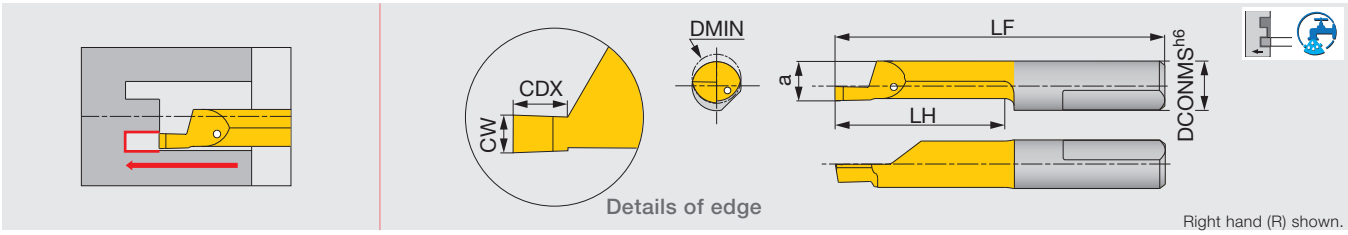
● : Line up

Reference pages: JBG R/L: Standard cutting conditions → G079

TINYMINITURN

JBF R/L

Solid boring bar for face grooving



Metric	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

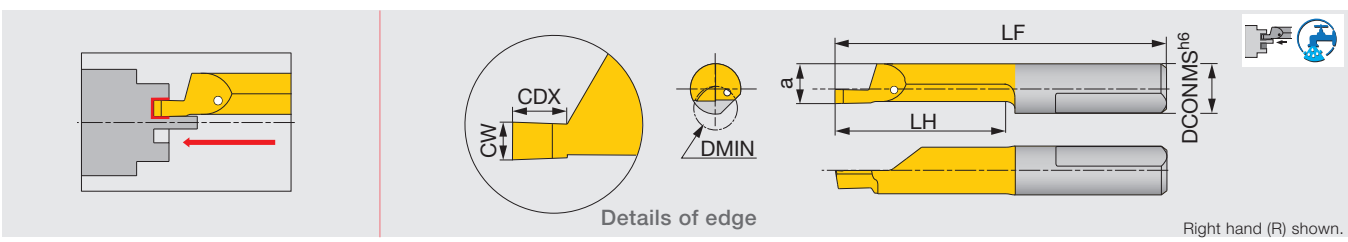
Corner radius: less than 0.004" (0.1 mm)

● : Line up

TINYMINITURN

JBS R

Solid boring bar for face grooving (for shaft)



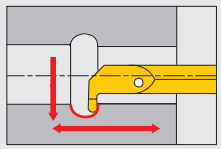
Metric	SH730	CW $^{+0.05}_{0}$	DMIN	DCONMS	a	LF	LH	CDX
JBSR07200200-D060	●	2	6	7	5.2	36	20	4

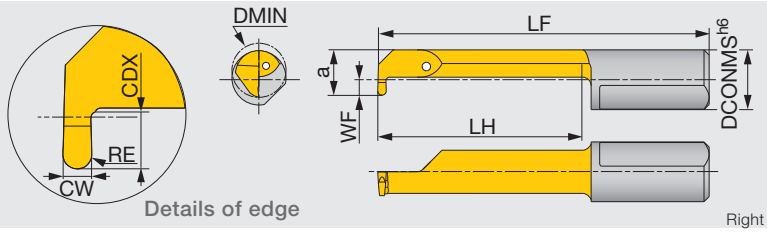
Corner radius: less than 0.004" (0.1 mm)

● : Line up

Reference pages: JBF R/L, JBS R: Standard cutting condition → G079

Solid boring bar for boring and profiling





Metric	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

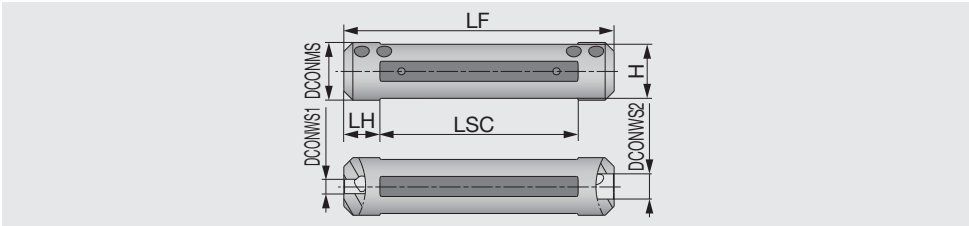
● : Line up

Reference pages: JBR R: Standard cutting conditions → G078

TINYMTURN

JBBS

Sleeve for external coolant supply



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

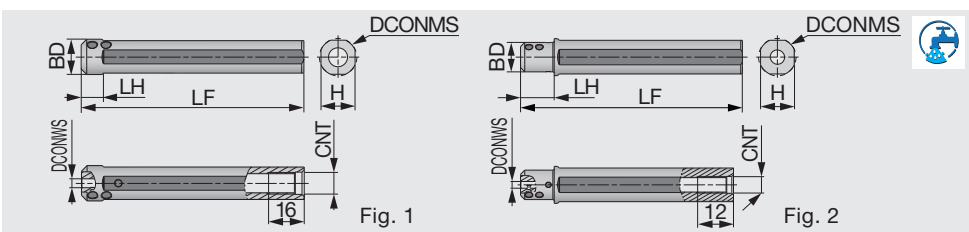
SPARE PARTS

Designation	Clamping screw	Wrench
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



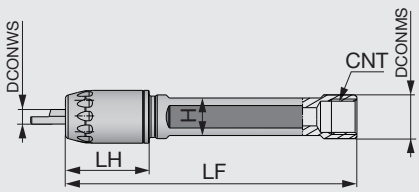
Metric	DCONMS	BD	DCONWS	LF	LH	H	CNT	Fig.
JBBS159-4-L100C	15.875	15.875	4	100	10	14.58	R1/8	1
JBBS159-7-L100C	15.875	15.875	7	100	10	14.58	R1/8	1
JBBS16-4-L100C	16	16	4	100	10	15	R1/8	1
JBBS16-7-L100C	16	16	7	100	10	15	R1/8	1
JBBS19-4-L100C	19.05	17.5	4	100	20	17.2	R1/8	2
JBBS19-7-L100C	19.05	17.5	7	100	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

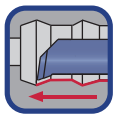
Collet chuck sleeve for solid carbide bars



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

SPARE PARTS

Designation	Cap	Wrench
JBBSA**-4-L100C	CAP-A-4	WRENCH-A-4
JBBSA**-7-L100C	CAP-A-7	WRENCH-A-7



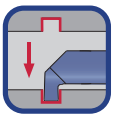
Boring, profiling, chamfering, back boring

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

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

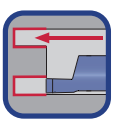
Threading (metric thread)

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



Internal grooving

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



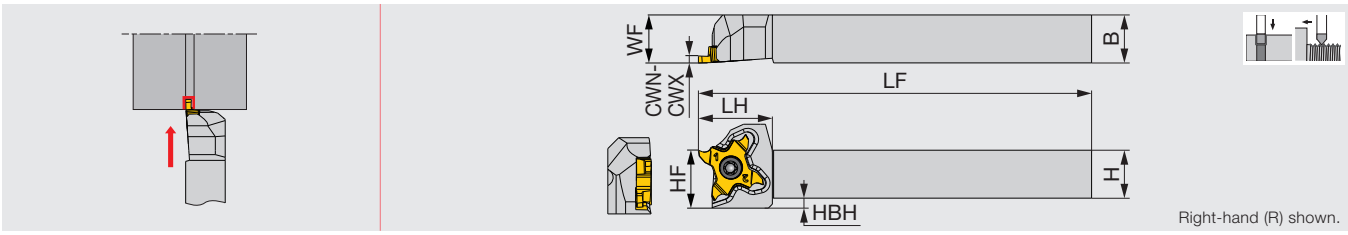
Face grooving

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

TETRAMINI CUT

STCR/L-18

External grooving and threading toolholder



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

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

SPARE PARTS

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

Left-Hand Insert

TCP18**L**...

Right-Hand Insert

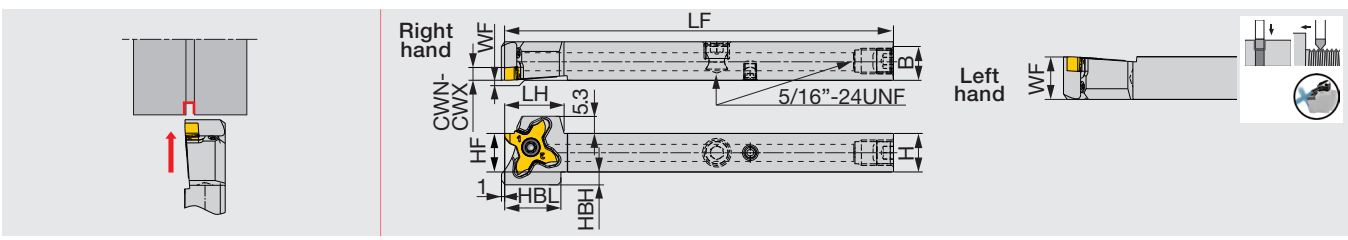
TCP18**R**...

TUNGTURN JET

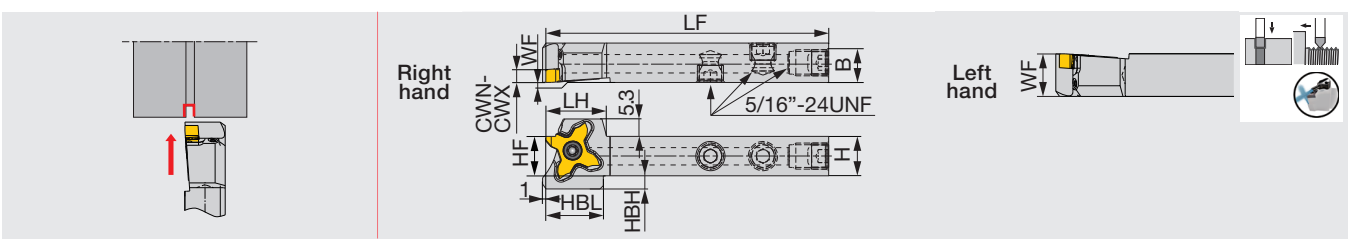
STCR/L-18-CHP

TETRAMINI CUT

External grooving and threading toolholder, with high pressure coolant capability



Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque
STCR/L08X18-CHP (1)	0.013	0.118	0.500	0.500	4.750	0.728	0.689	0.500	0/0.500	0.130	TC*18...	0.89
STCR/L10X18-CHP (1)	0.013	0.118	0.625	0.625	4.750	0.728	-	0.625	0/0.625	-	TC*18...	0.89



Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque
STCR/L08F18-CHP	0.013	0.118	0.500	0.500	3.344	0.728	0.689	0.500	0/0.500	0.130	TC*18...	0.89

SPARE PARTS

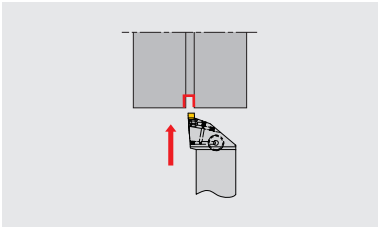
Designation	Clamping screw	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR**18-CHP	CSTC-4L100DL	T-1008/5

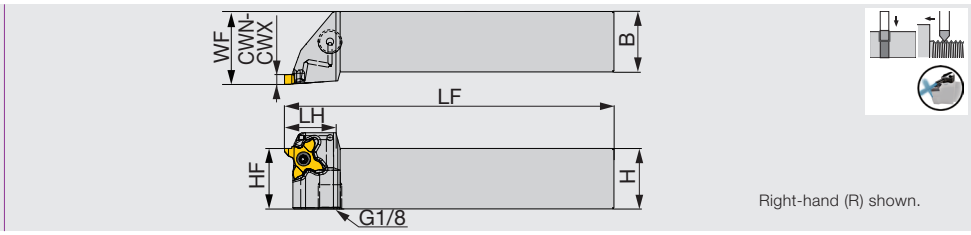
Use the right hand insert (TC*18R...) with the right hand toolholders (STCR...).
Use the left hand insert (TC*18...) with the left hand holder (STCL...).
(1) Compatible to the direct internal coolant supply system without the use of external coolant hose.
Torque: Recommended clamping torque: lbs·ft

Reference pages: STCR/L-18: Inserts → G083 - G088, Standard cutting conditions → G089 - G090

STCR/L-18-CHP

Threading tool - for external theading with high pressure coolant capability





Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque
STCR/L12-18-CHP	0.013	0.118	0.750	0.750	4.750	0.900	-	0.750	1.000	-	TC*18...	0.89
STCR/L16-18-CHP	0.013	0.118	1.000	1.000	5.500	.900	-	1.000	1.250	-	TC*18...	0.89

Use the right hand insert (TC*18R...) with the right hand toolholders (STCR...). Use the left hand insert (TC*18L) with the left hand holder (STCL...).
Torque: Recommended clamping torque: lbs·ft

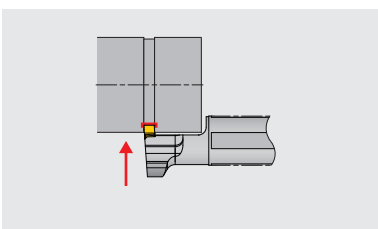
SPARE PARTS

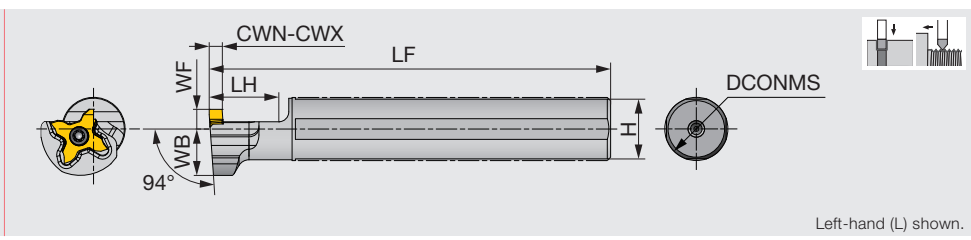
Designation	Clamping screw	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR**18-CHP	CSTC-4L100DL	T-1008/5

TETRAMINI CUT

JS-STCL18

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





Metric	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

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

SPARE PARTS

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

Reference pages: STCR/L-18-CHP: Inserts → G083 - G088, Standard cutting conditions → G089 - G090

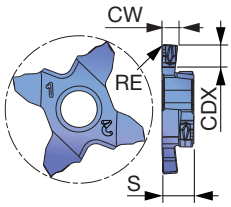
Selection guide for TetraMini-Cut inserts

Groove width		Corner rad.		TCS18R (G083)	TCG18R/L (G084 - 85)	TCP18R/L (G086)	TCP18R/L-F (G087)
				AH7025	AH7025	AH725	SH725
CW (in)	CW (mm)	RE (in)	RE (mm)	Honed edge	Honed edge	Lightly honed edge	Sharp edge
0.013	0.33	0.002	0.05			●	●
0.017	0.43	0.002	0.05			●	●
0.020	0.50	0.002	0.05			●	●
0.030	0.75	0.002	0.05			●	●
0.037	0.95	0.002	0.05			●	●
0.039	1.00	0.002	0.05				●
		0.004	0.1	●	●	●	●
0.047	1.20	0.002	0.05				●
		0.004	0.1	●	●	●	●
0.049	1.25	0.002	0.05				●
		0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
0.051	1.30	0.008	0.2	●	●		
0.055	1.40	0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
0.057	1.45	0.002	0.05				●
		0.004	0.1	●	●	●	●
		0.008	0.2		●		
0.059	1.50	0.002	0.05				●
		0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
0.063	1.60	0.008	0.2	●	●		
0.067	1.70	0.008	0.2	●	●		
0.069	1.75	0.002	0.05				●
		0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
0.073	1.85	0.008	0.2	●	●		
0.077	1.95	0.008	0.2	●	●		
0.079	2.00	0.002	0.05				●
		0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
0.089	2.25	0.008	0.2	●	●		
0.091	2.30	0.008	0.2	●	●		
0.098	2.50	0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
		0.012	0.3	●	●		
0.104	2.65	0.012	0.3	●	●		
0.110	2.80	0.012	0.3	●	●		
0.118	3.00	0.004	0.1	●	●	●	●
		0.008	0.2	●	●		
		0.012	0.3	●	●		

● : Line up

INSERT

TCS18R (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 (mm)	CW±0.001 (in)	RE (in)	Coated AH7025	CDX (in)	S (in)
TCS18R100-010	R	1	0.039	0.004	●	0.079	0.157
TCS18R120-010	R	1.2	0.047	0.004	●	0.079	0.157
TCS18R125-010	R	1.25	0.049	0.004	●	0.079	0.157
TCS18R125-020	R	1.25	0.049	0.008	●	0.079	0.157
TCS18R130-020	R	1.3	0.051	0.008	●	0.138	0.157
TCS18R140-010	R	1.4	0.055	0.004	●	0.138	0.157
TCS18R140-020	R	1.4	0.055	0.008	●	0.138	0.157
TCS18R145-010	R	1.45	0.057	0.004	●	0.138	0.157
TCS18R150-010	R	1.5	0.059	0.004	●	0.138	0.157
TCS18R150-020	R	1.5	0.059	0.008	●	0.138	0.157
TCS18R160-020	R	1.6	0.063	0.008	●	0.138	0.157
TCS18R170-020	R	1.7	0.067	0.008	●	0.138	0.157
TCS18R175-010	R	1.75	0.069	0.004	●	0.138	0.157
TCS18R175-020	R	1.75	0.069	0.008	●	0.138	0.157
TCS18R185-020	R	1.85	0.073	0.008	●	0.138	0.157
TCS18R195-020	R	1.95	0.077	0.008	●	0.138	0.157
TCS18R200-010	R	2	0.079	0.004	●	0.138	0.157
TCS18R200-020	R	2	0.079	0.008	●	0.138	0.157
TCS18R225-020	R	2.25	0.089	0.008	●	0.138	0.157
TCS18R230-020	R	2.3	0.091	0.008	●	0.138	0.157
TCS18R250-010	R	2.5	0.098	0.008	●	0.138	0.157
TCS18R250-020	R	2.5	0.098	0.008	●	0.138	0.157
TCS18R250-030	R	2.5	0.098	0.012	●	0.138	0.157
TCS18R265-030	R	2.65	0.104	0.012	●	0.138	0.157
TCS18R280-030	R	2.8	0.110	0.012	●	0.138	0.157
TCS18R300-010	R	3	0.118	0.004	●	0.138	0.157
TCS18R300-020	R	3	0.118	0.008	●	0.138	0.157
TCS18R300-030	R	3	0.118	0.012	●	0.138	0.157

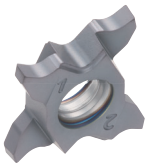
See page G089 for precautions of processing.

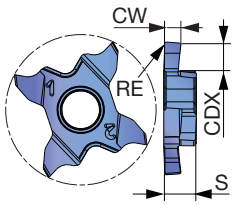
5 pieces per package
● : Line up

Reference pages: Toolholders → G080 - G081, Standard cutting conditions → G089 - G090

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 (mm)	CW±0.001 (in)	RE (in)	Coated AH7025	CDX (in)	S (in)
TCG18R100-010	R	1	0.039	0.004	●	0.079	0.157
TCG18L100-010	L	1	0.039	0.004	●	0.079	0.157
TCG18R120-010	R	1.2	0.047	0.004	●	0.079	0.157
TCG18L120-010	L	1.2	0.047	0.004	●	0.079	0.157
TCG18R125-010	R	1.25	0.049	0.004	●	0.079	0.157
TCG18L125-010	L	1.25	0.049	0.004	●	0.079	0.157
TCG18R125-020	R	1.25	0.049	0.008	●	0.079	0.157
TCG18L125-020	L	1.25	0.049	0.008	●	0.079	0.157
TCG18R130-020	R	1.3	0.051	0.008	●	0.079	0.157
TCG18L130-020	L	1.3	0.051	0.008	●	0.079	0.157
TCG18R140-010	R	1.4	0.055	0.004	●	0.138	0.157
TCG18L140-010	L	1.4	0.055	0.004	●	0.138	0.157
TCG18R140-020	R	1.4	0.055	0.008	●	0.138	0.157
TCG18L140-020	L	1.4	0.055	0.008	●	0.138	0.157
TCG18R145-010	R	1.45	0.057	0.004	●	0.138	0.157
TCG18L145-010	L	1.45	0.057	0.004	●	0.138	0.157
TCG18R145-020	R	1.45	0.057	0.008	●	0.138	0.157
TCG18L145-020	L	1.45	0.057	0.008	●	0.138	0.157
TCG18R150-010	R	1.5	0.059	0.004	●	0.138	0.157
TCG18L150-010	L	1.5	0.059	0.004	●	0.138	0.157
TCG18R150-020	R	1.5	0.059	0.008	●	0.138	0.157
TCG18L150-020	L	1.5	0.059	0.008	●	0.138	0.157
TCG18R160-020	R	1.6	0.063	0.008	●	0.138	0.157
TCG18L160-020	L	1.6	0.063	0.008	●	0.138	0.157
TCG18R170-020	R	1.7	0.067	0.008	●	0.138	0.157
TCG18L170-020	L	1.7	0.067	0.008	●	0.138	0.157
TCG18R175-010	R	1.75	0.069	0.004	●	0.138	0.157
TCG18L175-010	L	1.75	0.069	0.004	●	0.138	0.157
TCG18R175-020	R	1.75	0.069	0.008	●	0.138	0.157
TCG18L175-020	L	1.75	0.069	0.008	●	0.138	0.157
TCG18R185-020	R	1.85	0.073	0.008	●	0.138	0.157
TCG18L185-020	L	1.85	0.073	0.008	●	0.138	0.157
TCG18R195-020	R	1.95	0.077	0.008	●	0.138	0.157
TCG18L195-020	L	1.95	0.077	0.008	●	0.138	0.157

See page G089 for precautions of processing.

5 pieces per package
● : Line up

Reference pages: Toolholders → G080 - G081, Standard cutting conditions → G089 - G090

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

★ : First choice
☆ : Second choice

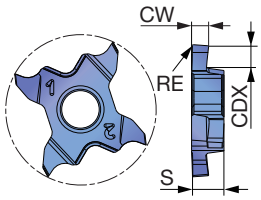
Designation	HAND	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH7025	CDX (in)	S (in)
TCG18R200-010	R	2	0.079	0.004	●	0.138	0.157
TCG18L200-010	L	2	0.079	0.004	●	0.138	0.157
TCG18R200-020	R	2	0.079	0.008	●	0.138	0.157
TCG18L200-020	L	2	0.079	0.008	●	0.138	0.157
TCG18R225-020	R	2.25	0.089	0.008	●	0.138	0.157
TCG18L225-020	L	2.25	0.089	0.008	●	0.138	0.157
TCG18R230-020	R	2.3	0.091	0.008	●	0.138	0.157
TCG18L230-020	L	2.3	0.091	0.008	●	0.138	0.157
TCG18R250-010	R	2.5	0.098	0.004	●	0.138	0.157
TCG18L250-010	L	2.5	0.098	0.004	●	0.138	0.157
TCG18R250-020	R	2.5	0.098	0.008	●	0.138	0.157
TCG18L250-020	L	2.5	0.098	0.008	●	0.138	0.157
TCG18R250-030	R	2.5	0.098	0.012	●	0.138	0.157
TCG18L250-030	L	2.5	0.098	0.012	●	0.138	0.157
TCG18R265-030	R	2.65	0.104	0.012	●	0.138	0.157
TCG18L265-030	L	2.65	0.104	0.012	●	0.138	0.157
TCG18R280-030	R	2.8	0.110	0.012	●	0.138	0.157
TCG18L280-030	L	2.8	0.110	0.012	●	0.138	0.157
TCG18R300-010	R	3	0.118	0.004	●	0.138	0.157
TCG18L300-010	L	3	0.118	0.004	●	0.138	0.157
TCG18R300-020	R	3	0.118	0.008	●	0.138	0.157
TCG18L300-020	L	3	0.118	0.008	●	0.138	0.157
TCG18R300-030	R	3	0.118	0.012	●	0.138	0.157
TCG18L300-030	L	3	0.118	0.012	●	0.138	0.157

See page G089 for precautions of processing.

5 pieces per package
● : Line up

Reference pages: Toolholders → G080 - G081, Standard cutting conditions → G089 - G090

TCP18R/L (lightly honed edge)



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

★ : First choice
☆ : Second choice

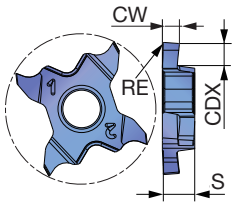
Designation	HAND	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	S (in)
TCP18R033-005	R	0.33	0.013	0.002	●	0.031	0.157
TCP18L033-005	L	0.33	0.013	0.002	●	0.031	0.157
TCP18R043-005	R	0.43	0.017	0.002	●	0.047	0.157
TCP18L043-005	L	0.43	0.017	0.002	●	0.047	0.157
TCP18R050-005	R	0.50	0.020	0.002	●	0.047	0.157
TCP18L050-005	L	0.50	0.020	0.002	●	0.047	0.157
TCP18R075-005	R	0.75	0.030	0.002	●	0.079	0.157
TCP18L075-005	L	0.75	0.030	0.002	●	0.079	0.157
TCP18R095-005	R	0.95	0.037	0.002	●	0.079	0.157
TCP18L095-005	L	0.95	0.037	0.002	●	0.079	0.157
TCP18R100-010	R	1	0.039	0.004	●	0.079	0.157
TCP18L100-010	L	1	0.039	0.004	●	0.079	0.157
TCP18R120-010	R	1.2	0.047	0.004	●	0.079	0.157
TCP18L120-010	L	1.2	0.047	0.004	●	0.079	0.157
TCP18R125-010	R	1.25	0.049	0.004	●	0.079	0.157
TCP18L125-010	L	1.25	0.049	0.004	●	0.079	0.157
TCP18R140-010-35	R	1.4	0.055	0.004	●	0.138	0.157
TCP18L140-010-35	L	1.4	0.055	0.004	●	0.138	0.157
TCP18R145-010	R	1.45	0.057	0.004	●	0.079	0.157
TCP18L145-010	L	1.45	0.057	0.004	●	0.079	0.157
TCP18R145-010-35	R	1.45	0.057	0.004	●	0.138	0.157
TCP18L145-010-35	L	1.45	0.057	0.004	●	0.138	0.157
TCP18R150-010	R	1.5	0.059	0.004	●	0.079	0.157
TCP18L150-010	L	1.5	0.059	0.004	●	0.079	0.157
TCP18R150-010-35	R	1.5	0.059	0.004	●	0.138	0.157
TCP18L150-010-35	L	1.5	0.059	0.004	●	0.138	0.157
TCP18R175-010	R	1.75	0.069	0.004	●	0.079	0.157
TCP18L175-010	L	1.75	0.069	0.004	●	0.079	0.157
TCP18R175-010-35	R	1.75	0.069	0.004	●	0.138	0.157
TCP18L175-010-35	L	1.75	0.069	0.004	●	0.138	0.157
TCP18R200-010	R	2	0.079	0.004	●	0.098	0.157
TCP18L200-010	L	2	0.079	0.004	●	0.098	0.157
TCP18R200-010-35	R	2	0.079	0.004	●	0.138	0.157
TCP18L200-010-35	L	2	0.079	0.004	●	0.138	0.157
TCP18R250-010	R	2.5	0.098	0.004	●	0.098	0.157
TCP18L250-010	L	2.5	0.098	0.004	●	0.098	0.157
TCP18R250-010-35	R	2.5	0.098	0.004	●	0.138	0.157
TCP18L250-010-35	L	2.5	0.098	0.004	●	0.138	0.157
TCP18R300-010	R	3	0.118	0.004	●	0.098	0.157
TCP18L300-010	L	3	0.118	0.004	●	0.098	0.157
TCP18R300-010-35	R	3	0.118	0.004	●	0.138	0.157
TCP18L300-010-35	L	3	0.118	0.004	●	0.138	0.157

See page G089 for precautions of processing.

5 pieces per package
● : Line up

Reference pages: Toolholders → G080 - G081, Standard cutting conditions → G089 - G090

TCP18R/L-F (sharp edge)



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

★ : First choice
☆ : Second choice

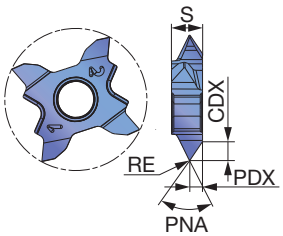
Designation	HAND	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated SH725	CDX (in)	S (in)
TCP18R033F-005	R	0.33	0.013	0.002	●	0.031	0.157
TCP18L033F-005	L	0.33	0.013	0.002	●	0.031	0.157
TCP18R043F-005	R	0.43	0.017	0.002	●	0.047	0.157
TCP18L043F-005	L	0.43	0.017	0.002	●	0.047	0.157
TCP18R050F-005	R	0.5	0.020	0.002	●	0.047	0.157
TCP18L050F-005	L	0.5	0.020	0.002	●	0.047	0.157
TCP18R075F-005	R	0.75	0.030	0.002	●	0.079	0.157
TCP18L075F-005	L	0.75	0.030	0.002	●	0.079	0.157
TCP18R095F-005	R	0.95	0.037	0.002	●	0.079	0.157
TCP18L095F-005	L	0.95	0.037	0.002	●	0.079	0.157
TCP18R100F-005	R	1	0.039	0.002	●	0.079	0.157
TCP18R100F-010	R	1	0.039	0.004	●	0.079	0.157
TCP18L100F-010	L	1	0.039	0.004	●	0.079	0.157
TCP18R120F-005	R	1.2	0.047	0.002	●	0.079	0.157
TCP18R120F-010	R	1.2	0.047	0.004	●	0.079	0.157
TCP18L120F-010	L	1.2	0.047	0.004	●	0.079	0.157
TCP18R125F-005	R	1.25	0.049	0.002	●	0.079	0.157
TCP18R125F-010	R	1.25	0.049	0.004	●	0.079	0.157
TCP18L125F-010	L	1.25	0.049	0.004	●	0.079	0.157
TCP18R140F-010-35	R	1.4	0.055	0.004	●	0.138	0.157
TCP18R145F-005-35	R	1.45	0.057	0.002	●	0.138	0.157
TCP18R145F-010	R	1.45	0.057	0.004	●	0.079	0.157
TCP18L145F-010	L	1.45	0.057	0.004	●	0.079	0.157
TCP18R145F-010-35	R	1.45	0.057	0.004	●	0.138	0.157
TCP18L145F-010-35	L	1.45	0.057	0.004	●	0.138	0.157
TCP18R150F-005-35	R	1.5	0.059	0.002	●	0.138	0.157
TCP18R150F-010	R	1.5	0.059	0.004	●	0.079	0.157
TCP18L150F-010	L	1.5	0.059	0.004	●	0.079	0.157
TCP18R150F-010-35	R	1.5	0.059	0.004	●	0.138	0.157
TCP18L150F-010-35	L	1.5	0.059	0.004	●	0.138	0.157
TCP18R175F-005-35	R	1.75	0.069	0.002	●	0.138	0.157
TCP18R175F-010	R	1.75	0.069	0.004	●	0.079	0.157
TCP18L175F-010	L	1.75	0.069	0.004	●	0.079	0.157
TCP18R175F-010-35	R	1.75	0.069	0.004	●	0.138	0.157
TCP18L175F-010-35	L	1.75	0.069	0.004	●	0.138	0.157
TCP18R200F-005-35	R	2	0.079	0.002	●	0.138	0.157
TCP18R200F-010	R	2	0.079	0.004	●	0.098	0.157
TCP18L200F-010	L	2	0.079	0.004	●	0.098	0.157
TCP18R200F-010-35	R	2	0.079	0.004	●	0.138	0.157
TCP18L200F-010-35	L	2	0.079	0.004	●	0.138	0.157
TCP18R250F-010	R	2.5	0.098	0.004	●	0.098	0.157
TCP18L250F-010	L	2.5	0.098	0.004	●	0.098	0.157
TCP18R250F-010-35	R	2.5	0.098	0.004	●	0.138	0.157
TCP18L250F-010-35	L	2.5	0.098	0.004	●	0.138	0.157
TCP18R300F-010	R	3	0.118	0.004	●	0.098	0.157
TCP18L300F-010	L	3	0.118	0.004	●	0.098	0.157
TCP18R300F-010-35	R	3	0.118	0.004	●	0.138	0.157
TCP18L300F-010-35	L	3	0.118	0.004	●	0.138	0.157

See page G089 for precautions of processing.

5 pieces per package
● : Line up

Reference pages: Toolholders → G080 - G081, Standard cutting conditions → G089 - G090

TCT18R/L (for threading)



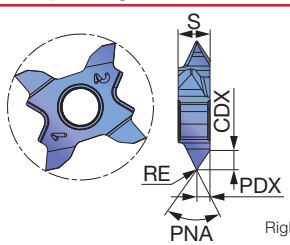
P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	
S	Superalloys	★
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	RE (in)	Coated AH725	Pitch min (in)	Pitch min (mm)	Pitch max (in)	Pitch max (mm)	PDX (in)	CDX (in)	PNA	S (in)
TCT18R-60N-010	R	0.004	●	0.031	0.8	0.118	3	0.063	0.105	60°	0.157
TCT18L-60N-010	L	0.004	●	0.031	0.8	0.118	3	0.063	0.105	60°	0.157
TCT18R-60N-020	R	0.008	●	0.031	0.8	0.118	3	0.063	0.101	60°	0.157
TCT18L-60N-020	L	0.008	●	0.031	0.8	0.118	3	0.063	0.101	60°	0.157

● : Line up

TCT18FR (sharp edge for threading)



Right-hand (R) shown.

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

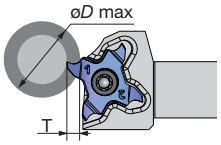
★ : First choice
☆ : Second choice

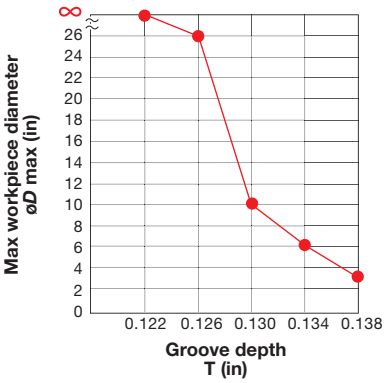
Designation	HAND	RE (in)	Coated SH725	Pitch min (in)	Pitch min (mm)	Pitch max (in)	Pitch max (mm)	PDX (in)	CDX (in)	PNA	S (in)
TCT18FR-60A-005	R	0.004	●	0.016	0.4	0.039	1	0.024	0.039	60°	0.157
TCT18FR-60A-010	L	0.004	●	0.039	1	0.079	2	0.039	0.064	60°	0.157

● : Line up

Reference pages: Toolholders → G080 - G081, Standard cutting conditions → G090

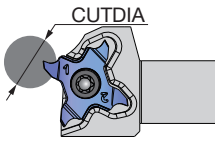
PRECAUTIONS OF PROCESSING





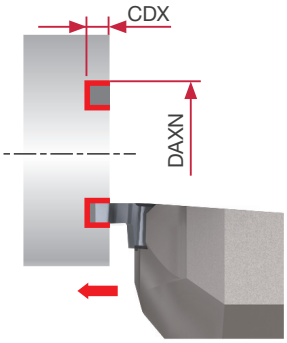
*Groove depth and max workpiece diameter (øD max)

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



Max workpiece diameter CUTDIA (in)
0.276

Minimum diameter for face grooving



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

STANDARD CUTTING CONDITIONS

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

ISO	Workpiece materials	Grades	Cutting speed *Vc* (sfm)	Feed: *f* (ipr) TCG	Feed: *f* (ipr) TCS
P	Low carbon steel 1015, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
	Carbon steel, Alloy steel 1055, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
	Prehardened steel NAK80, PX5, etc.	AH7025	262 - 591	0.001 - 0.005	0.001 - 0.006
M	Stainless steel S30400, etc.	AH7025	164 - 394	0.001 - 0.005	0.001 - 0.006
K	Gray cast iron No.250B, No.300B, etc.	AH7025	164 - 591	0.001 - 0.005	0.001 - 0.006
	Ductile cast iron 60-40-18, 80-55-06, etc.	AH7025	164 - 591	0.001 - 0.005	0.001 - 0.006
S	Titanium alloys Ti-6Al-4V, etc.	AH7025	98 - 262	0.001 - 0.005	0.001 - 0.006
	Superalloys Inconel718, etc.	AH7025	66 - 197	0.001 - 0.005	0.001 - 0.006

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

ISO	Workpiece materials	Priority	Grades	Cutting speed *Vc* (sfm)	Feed *f* (ipr)
P	Low carbon steel 1015, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
	Carbon steel, Alloy steel 1055, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	262 - 591	0.001 - 0.004
		Toughness	AH725	262 - 591	0.001 - 0.004
M	Stainless steel S30400, etc.	First choice	SH725	164 - 394	0.001 - 0.004
		Toughness	AH725	164 - 394	0.001 - 0.004
K	Gray cast iron No.250B, No.300B, etc.	First choice	AH725	164 - 591	0.001 - 0.004
		Sharpness	SH725	164 - 591	0.001 - 0.004
	Ductile cast iron 60-40-18, 80-55-06, etc.	First choice	AH725	164 - 591	0.001 - 0.004
		Sharpness	SH725	164 - 591	0.001 - 0.004
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	98 - 262	0.001 - 0.004
		Toughness	AH725	98 - 262	0.001 - 0.004
	Superalloys Inconel718, etc.	First choice	SH725	66 - 197	0.001 - 0.004
		Toughness	AH725	66 - 197	0.001 - 0.004

STANDARD CUTTING CONDITIONS

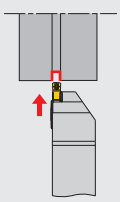
TCT18R/L (for threading / lightly honed edge) / TCT18FR (for threading / sharp edge)

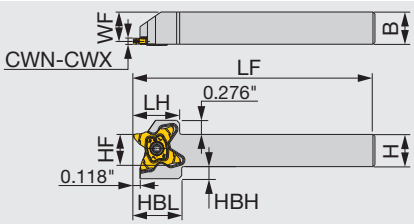
ISO	Workpiece material	Priority	Grades	Cutting speed *Vc* (sfm)	Pitch (in)	TPI
P	Low carbon steel 1015, etc.	First choice	SH725	197 - 492	0.016 - 0.079	64 - 12
		Toughness	AH725	197 - 492	0.031 - 0.118	32 - 8
	Carbon steel, Alloy steel 1055, etc.	First choice	SH725	197 - 492	0.016 - 0.079	64 - 12
		Toughness	AH725	197 - 492	0.031 - 0.118	32 - 8
	Prehardened steel NAK80, PX5, etc.	First choice	SH725	197 - 492	0.016 - 0.079	64 - 12
		Toughness	AH725	197 - 492	0.031 - 0.118	32 - 8
M	Stainless steel S30400, etc.	First choice	SH725	164 - 262	0.016 - 0.079	64 - 12
		Toughness	AH725	164 - 262	0.031 - 0.118	32 - 8
K	Gray cast iron No.250B, No.300B, etc.	First choice	AH725	164 - 328	0.031 - 0.118	32 - 8
		Sharpness	SH725	164 - 328	0.016 - 0.079	64 - 12
	Ductile cast iron 60-40-18, 80-55-06, etc.	First choice	AH725	164 - 328	0.031 - 0.118	32 - 8
		Sharpness	SH725	164 - 328	0.016 - 0.079	64 - 12
S	Titanium alloys Ti-6Al-4V, etc.	First choice	SH725	98 - 328	0.016 - 0.079	64 - 12
		Toughness	AH725	98 - 328	0.031 - 0.118	32 - 8
	Superalloys Inconel718, etc.	First choice	SH725	98 - 328	0.016 - 0.079	64 - 12
		Toughness	AH725	98 - 328	0.031 - 0.118	32 - 8

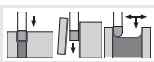
TETRAFORCE CUT

STCR/L-27

External grooving toolholder







Right hand (R) shown.

Inch	CWN	CWX	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque
STCR/L06-27	0.02	0.125	0.375	0.375	5.000	0.906	0.945	0.375	0.315	0.374	TC*27...	1.84
STCR/L08-27	0.02	0.125	0.500	0.500	5.000	0.906	0.945	0.500	0.440	0.287	TC*27...	1.84
STCR/L10-27	0.02	0.125	0.625	0.625	5.000	0.906	0.945	0.625	0.570	0.236	TC*27...	1.84
STCR/L12-27	0.02	0.125	0.750	0.750	5.000	0.906	0.945	0.750	0.690	0.118	TC*27...	1.84
STCR/L16-27	0.02	0.125	1.000	1.000	5.000	0.906	-	1.000	0.940	-	TC*27...	1.84

Torque: Recommended clamping torque: lbs·ft

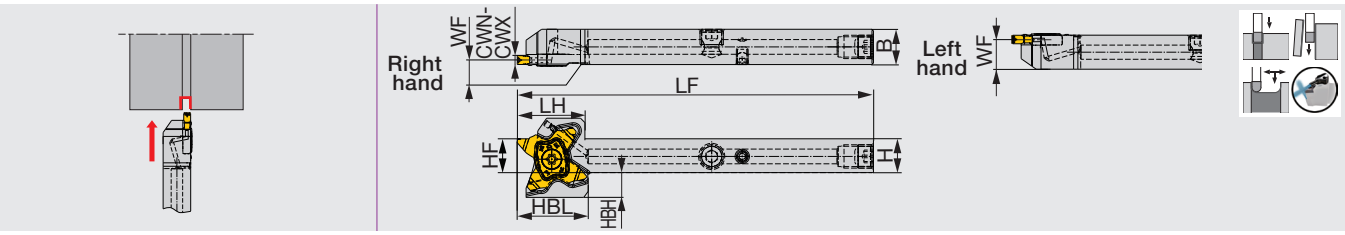
SPARE PARTS

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

Reference pages: STCR/L-27:
Inserts → G092 - G095, Standard cutting conditions → G095

STCR/L08-27-CHP

Grooving and parting-off tool with high pressure coolant capability



Inch	CWN	CWX	H	B	LF	LH	HF	WF(1)	HBH	HBL	Insert	Torque
STCR/L08-27-CHP	0.020	0.125	0.500	0.500	4.750	0.906	0.500	0.590/0.441	0.287	0.945	TC*27...	1.84

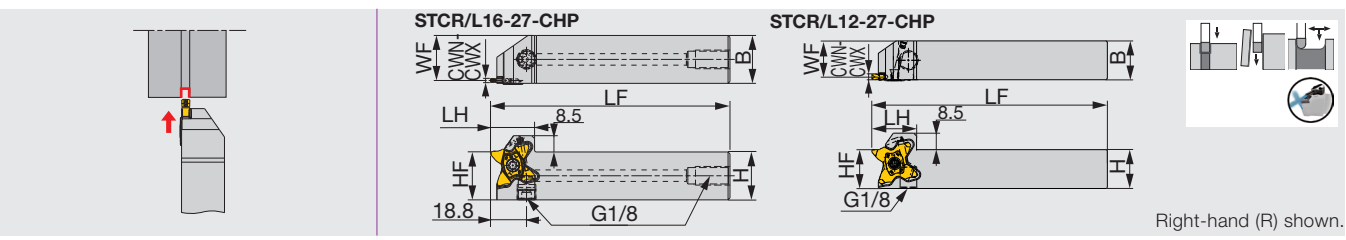
Make sure to avoid tool interferences when used on Swiss machines
Torque: Recommended clamping torque: lb·ft
(1) The above WF value is valid when an insert width of CW=3 is mounted.

SPARE PARTS

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

STCR/L12/16-27-CHP

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



Right-hand (R) shown.

Inch	CWN	CWX	H	B	LF	LH	HF	WF	Insert	Torque
STCR/L12-27-CHP	0.02	0.125	0.750	0.750	5.000	0.906	0.750	0.690	TC*27...	1.84
STCR/L16-27-CHP	0.02	0.125	1.000	1.000	4.920	0.906	1.000	0.940	TC*27...	1.84

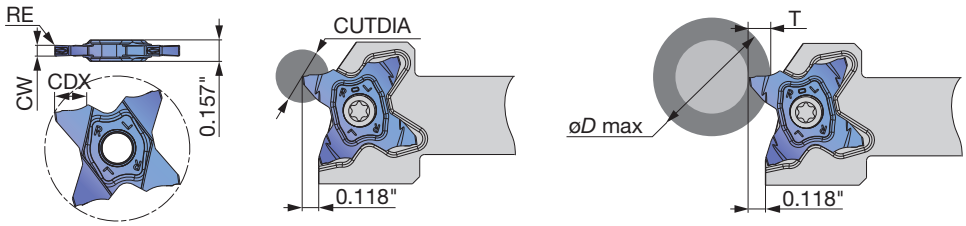
Torque: Recommended clamping torque: lbs·ft

SPARE PARTS

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

Reference pages: STCR/L08-27-CHP, STCR/L12/16-27-CHP:
Inserts → G092 - G095, Standard cutting conditions → G095

TCS27



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

★ : First choice
☆ : Second choice

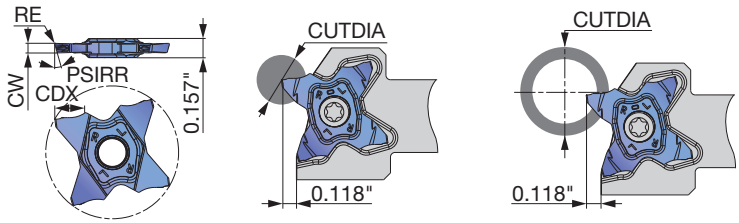
Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)											
							T≤0.039	T≤0.079	T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCS27-050-000	0.5	0.020	0	●	0.039	0.079	∞	-	-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

5 pieces per package
● : Line up

Reference pages: Toolholders → G090 - G091, Standard cutting conditions → G095

INSERT- FOR PARTING OFF

TCS27-R/L



Right hand (R) shown.

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

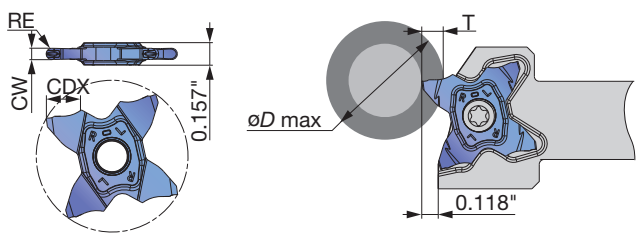
★ : First choice
☆ : Second choice

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

5 pieces per package
● : Line up

INSERT- FOR GROOVING AND PROFILING

TCS27 (Full R)



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

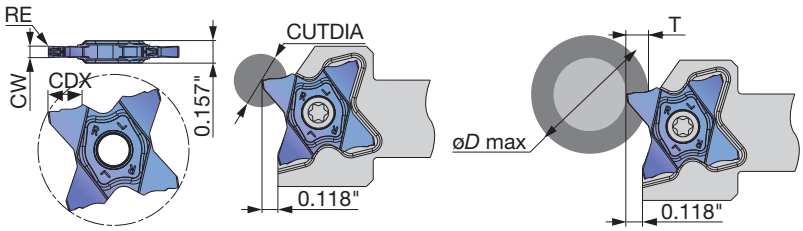
★ : First choice
☆ : Second choice

Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	Relation of groove depth (T) and Max. diameter (øD max) (in) T≤0.039 T≤0.079 T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCS27-157-079	1.57	0.062	0.031	●	0.118	∞	-	-	-	-	-	-	-	-	-
TCS27-200-100	2	0.079	0.039	●	0.118	∞	-	-	-	-	-	-	-	-	-
TCS27-239-120	2.39	0.094	0.047	●	0.224	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCS27-300-150	3	0.118	0.059	●	0.252	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165

5 pieces per package
● : Line up

Reference pages: Toolholders → G090 - G091, Standard cutting conditions → G095

TCM27



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

★ : First choice
☆ : Second choice

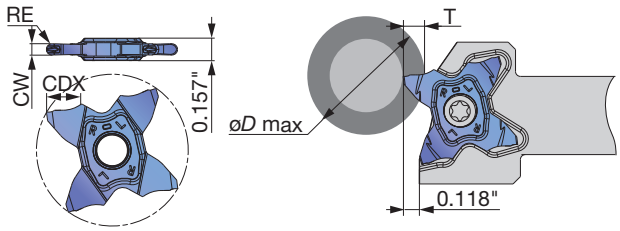
Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725	CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in) T≤0.039 T≤0.079 T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCM27-150-010	1.5	0.059	0.004	●	0.224	0.449	∞	23.622	11.024	7.087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

5 pieces per package
● : Line up

Reference pages: Toolholders → G090 - G091, Standard cutting conditions → G095

INSERT - FOR GROOVING AND PROFILING

TCM27 (Full R)



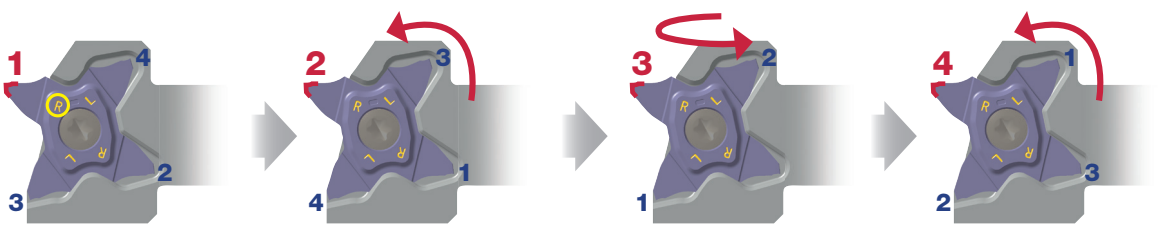
P	Steel	★	
M	Stainless	★	
K	Cast iron	★	
N	Non-ferrous		
S	Superalloys	★	
H	Hard materials		

★ : First choice
☆ : Second choice

Designation	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH725			CDX (in)	CUTDIA (in)	Relation of groove depth (T) and Max. diameter (øD max) (in)									
									T≤0.039 T≤0.079 T≤0.118	T≤0.138	T≤0.157	T≤0.177	T≤0.197	T≤0.217	T≤0.224	T≤0.236	T≤0.244	T≤0.252
TCM27-157-079	1.57	0.059	0.031	●			0.118	0.236	∞	-	-	-	-	-	-	-	-	-
TCM27-200-100	2	0.059	0.039	●			0.118	0.236	∞	23.622	-	-	-	-	-	-	-	-
TCM27-239-120	2.39	0.062	0.047	●			0.224	0.449	∞	23.622	11.024	7.087	5.118	1.969	1.378	-	-	-
TCM27-300-150	3	0.125	0.059	●			0.252	0.504	∞	23.622	11.024	7.087	5.315	4.134	3.740	3.346	3.071	2.165

5 pieces per package
● : Line up

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

STANDARD CUTTING CONDITIONS

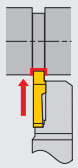
ISO	Workpiece materials	Grades	Cutting speed *Vc* (sfm)	Feed: *f* (ipr) Grooving, parting-off TCS	Grooving, parting-off TCM	Parting-off (with hand) TCS	Profiling (with full radius insert) TCS	Profiling (with full radius insert) TCM	Depth of cut for profiling (with full radius insert)
P	Steel 1045, etc.	AH725	330 - 660	0.002 - 0.006	0.002 - 0.010	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Alloy steel 4137, etc.	AH725	165 - 590	0.002 - 0.006	0.002 - 0.010	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
M	Stainless steel 304, etc.	AH725	165 - 490	0.002 - 0.006	0.002 - 0.008	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
K	Gray cast iron No.250, etc.	AH725	165 - 590	0.002 - 0.006	0.002 - 0.010	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
	Ductile cast iron 60-40-18, etc.	AH725	165 - 390	0.002 - 0.006	0.002 - 0.008	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.006	0.020
S	Titanium alloys Ti-6Al-4V, etc.	AH725	100 - 200	0.002 - 0.006	0.002 - 0.006	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.004	0.020
	Superalloys Inconel718, etc.	AH725	65 - 165	0.002 - 0.006	0.002 - 0.006	0.0016 - 0.005	0.002 - 0.004	0.002 - 0.004	0.020

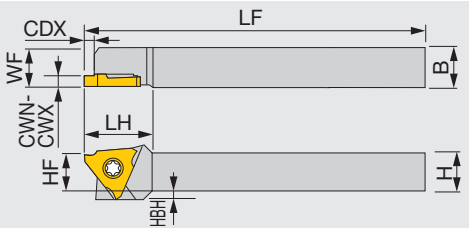
Reference pages: Toolholders → G090 - G091

J-SERIES

JSTGR/L

External grooving toolholder, for Swiss lathes





Without offset

Right hand (R) shown.

Inch	CWN	CWX	CDX	H	B	LF	LH	HF	WF	HBH	Insert	Torque
JSTGR/L063	0.013	0.118	0.028 - 0.102	0.375	0.375	5	0.75	0.375	0.375	0.100	JTGR/L3...	0.89
JSTGR/L083	0.013	0.118	0.028 - 0.102	0.500	0.500	5	0.75	0.500	0.500	-	JTGR/L3...	0.89
JSTGR/L103	0.013	0.118	0.028 - 0.102	0.625	0.625	5	0.75	0.625	0.625	-	JTGR/L3...	0.89

Metric	CWN	CWX	CDX	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
JSTGR/L1010X3	0.33	3	0.7 - 2.6	10	10	120	18.5	10	10	2	JTGR/L3...	1.2
JSTGR/L1212F3	0.33	3	0.7 - 2.6	12	12	85	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1212X3	0.33	3	0.7 - 2.6	12	12	120	18.5	12	12	-	JTGR/L3...	1.2
JSTGR/L1616X3	0.33	3	0.7 - 2.6	16	16	120	18.5	16	16	-	JTGR/L3...	1.2
JSTGL1616K3	0.33	3	0.7 - 2.6	16	16	125	18.5	16	16	-	JTGR/L3...	1.2

Can be wrenched also from the back with a double-head screw
Torque: Recommended clamping torque: lbs·ft (*N·m)

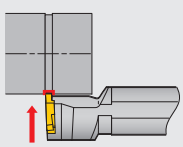
SPARE PARTS

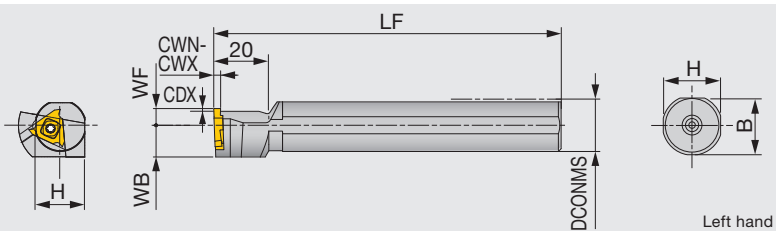
Designation	Clamping screw	Wrench
JSTGR/L...	CSTB-4SD	T-8F (Optional T-8L)

J-SERIES

JS-TGL3

External grooving toolholder, for Swiss lathes





Left hand (L) shown.

Metric	CWN	CWX	CDX	DCONMS	H	B	LF	WF	WB	Insert	Torque
JS19K-TGL3	0.33	3	0.7 - 2.6	19.05	18	18	125	6	11.5	JTGR3...	3
JS20K-TGL3	0.33	3	0.7 - 2.6	20	19	19	125	6	11.5	JTGR3...	3
JS22K-TGL3	0.33	3	0.7 - 2.6	22	21	21	125	6	11.5	JTGR3...	3
JS25K-TGL3	0.33	3	0.7 - 2.6	25.4	24	24	125	10	12.7	JTGR3...	3

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

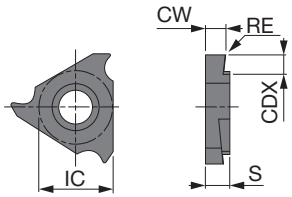
SPARE PARTS

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

External
Internal
Grooving
Threading
Parting

Reference pages: JSTGR/L, JS-TGL3: Inserts → G097 - G098, Standard cutting conditions → G099

JTG (Sharp edge)



Right hand (R) shown.

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

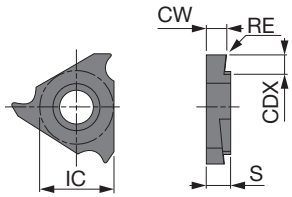
★ : First choice
☆ : Second choice

Designation	HAND	$CW^{+0.05}_{0}$ (mm)	$CW^{+0.002}_{0}$ (in)	RE (in)	SH725	J740	NS9530	TH10	CDX (in)	IC (mm)	S (mm)
JTGR3033F	R	0.33	0.013	0.0012	●	●		●	0.028	9.53	3.18
JTGL3033F	L	0.33	0.013	0.0012		●		●	0.028	9.53	3.18
JTGR3033F-005	R	0.33	0.013	0.002	●				0.028	9.53	3.18
JTGR3043F	R	0.43	0.017	0.0012		●			0.043	9.53	3.18
JTGR3050F	R	0.5	0.020	0.0012	●	●	●	●	0.043	9.53	3.18
JTGL3050F	L	0.5	0.020	0.0012	●	●		●	0.043	9.53	3.18
JTGR3050F-005	R	0.5	0.020	0.002	●				0.043	9.53	3.18
JTGL3050F-005	L	0.5	0.020	0.002	●				0.043	9.53	3.18
JTGR3065F	R	0.65	0.026	0.0012	●	●			0.075	9.53	3.18
JTGR3065F-010	R	0.65	0.026	0.004	●				0.075	9.53	3.18
JTGR3075F	R	0.75	0.030	0.0012	●	●	●	●	0.075	9.53	3.18
JTGL3075F	L	0.75	0.030	0.0012	●	●	●	●	0.075	9.53	3.18
JTGR3075F-010	R	0.75	0.030	0.004	●				0.075	9.53	3.18
JTGL3075F-010	L	0.75	0.030	0.004	●				0.075	9.53	3.18
JTGR3080F	R	0.8	0.031	0.0012	●	●			0.075	9.53	3.18
JTGR3080F-010	R	0.8	0.031	0.004	●				0.075	9.53	3.18
JTGR3085F	R	0.85	0.033	0.0012	●	●			0.075	9.53	3.18
JTGR3095F	R	0.95	0.037	0.0012	●	●	●	●	0.075	9.53	3.18
JTGL3095F	L	0.95	0.037	0.0012	●	●		●	0.075	9.53	3.18
JTGR3095F-010	R	0.95	0.037	0.004	●				0.075	9.53	3.18
JTGL3095F-010	L	0.95	0.037	0.004	●				0.075	9.53	3.18
JTGR3100F	R	1	0.039	0.002	●	●	●	●	0.083	9.53	3.18
JTGL3100F	L	1	0.039	0.002	●	●		●	0.083	9.53	3.18
JTGR3100F-010	R	1	0.039	0.004	●				0.083	9.53	3.18
JTGL3100F-010	L	1	0.039	0.004	●				0.083	9.53	3.18
JTGR3110F	R	1.1	0.043	0.002	●	●			0.083	9.53	3.18
JTGR3120F	R	1.2	0.047	0.002	●	●			0.083	9.53	3.18
JTGR3120F-010	R	1.2	0.047	0.004	●				0.083	9.53	3.18
JTGR3125F	R	1.25	0.049	0.002	●	●	●	●	0.083	9.53	3.18
JTGL3125F	L	1.25	0.049	0.002	●	●		●	0.083	9.53	3.18
JTGR3125F-010	R	1.25	0.049	0.004	●				0.083	9.53	3.18
JTGL3125F-010	L	1.25	0.049	0.004	●				0.083	9.53	3.18
JTGR3130F	R	1.3	0.051	0.002	●	●			0.083	9.53	3.18
JTGR3140F	R	1.4	0.055	0.002	●	●			0.083	9.53	3.18
JTGR3140F-010	R	1.4	0.055	0.004	●				0.083	9.53	3.18
JTGR3145F	R	1.45	0.057	0.002	●	●	●	●	0.083	9.53	3.18
JTGL3145F	L	1.45	0.057	0.002		●		●	0.083	9.53	3.18
JTGR3145F-010	R	1.45	0.057	0.004	●				0.083	9.53	3.18
JTGR3150F	R	1.5	0.059	0.002	●	●	●	●	0.083	9.53	3.18
JTGL3150F	L	1.5	0.059	0.002	●	●		●	0.083	9.53	3.18
JTGR3150F-010	R	1.5	0.059	0.004	●				0.083	9.53	3.18
JTGL3150F-010	L	1.5	0.059	0.004	●				0.083	9.53	3.18

● : Line up

Reference pages: Toolholders → G096, Standard cutting conditions → G099

JTG (Sharp edge)



Right hand (R) shown.

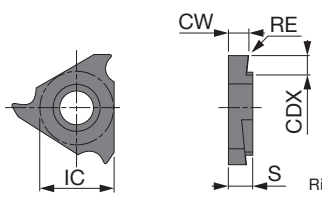
		SH725	J740	NS9530	TH10
P	Steel	★	★	★	☆
M	Stainless	★	★		
K	Cast iron			☆	★
N	Non-ferrous				★
S	Superalloys				★
H	Hard materials				

★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$ (mm)	CW$^{+0.002}_{0}$ (in)	RE (in)	Coated SH725	Coated J740	Cermet NS9530	Uncoated TH10	CDX (in)	IC (mm)	S (mm)
JTGR3175F	R	1.75	0.069	0.002	●	●	●	●	0.083	9.53	3.18
JTGL3175F	L	1.75	0.069	0.002		●	●	●	0.083	9.53	3.18
JTGR3175F-010	R	1.75	0.069	0.004	●				0.083	9.53	3.18
JTGR3180F	R	1.8	0.071	0.002	●	●			0.083	9.53	3.18
JTGR3200F	R	2	0.079	0.002	●	●	●	●	0.102	9.53	3.18
JTGL3200F	L	2	0.079	0.002	●	●		●	0.102	9.53	3.18
JTGR3200F-010	R	2	0.079	0.004	●				0.102	9.53	3.18
JTGL3200F-010	L	2	0.079	0.004	●				0.102	9.53	3.18
JTGR3225F	R	2.25	0.089	0.002	●	●			0.102	9.53	3.18
JTGR3250F	R	2.5	0.098	0.002	●	●	●	●	0.102	9.53	3.18
JTGL3250F	L	2.5	0.098	0.002	●	●		●	0.102	9.53	3.18
JTGR3250F-010	R	2.5	0.098	0.004	●				0.102	9.53	3.18
JTGL3250F-010	L	2.5	0.098	0.004	●				0.102	9.53	3.18
JTGR3275F	R	2.75	0.108	0.002		●			0.102	9.53	3.18
JTGR3300F	R	3	0.118	0.002	●	●			0.102	9.53	3.18
JTGR3300F-010	R	3	0.118	0.004	●				0.102	9.53	3.18

● : Line up

JTG (honed edge)



Right hand (R) shown.

		J9530
P	Steel	★
M	Stainless	
K	Cast iron	☆
N	Non-ferrous	
S	Superalloys	
H	Hard materials	

★ : First choice
☆ : Second choice

Designation	HAND	CW$^{+0.05}_{0}$ (mm)	CW$^{+0.002}_{0}$ (in)	RE (in)	Coated cermet J9530	CDX (in)	IC (mm)	S (mm)
JTGR3100	R	1	0.039	0.002	●	0.083	9.53	3.18
JTGR3125	R	1.25	0.049	0.002	●	0.083	9.53	3.18
JTGR3150	R	1.5	0.059	0.002	●	0.083	9.53	3.18
JTGR3200	R	2	0.079	0.002	●	0.102	9.53	3.18

● : Line up

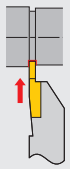
Reference pages: Toolholders → G096, Standard cutting conditions → G099

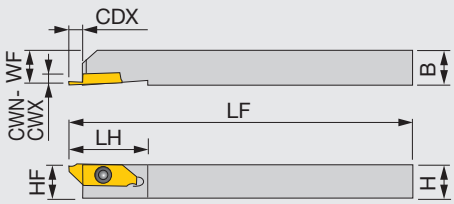
STANDARD CUTTING CONDITIONS (J-Series grooving tool)

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

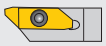
JSXGR/L

Screw-on toolholder for front turning, reverse turning and external grooving, for Swiss lathes





Without offset



1010, 1212 Shank

Right hand (R) shown.

Metric	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque
JSXGR/L1010K8-C	0.7	2	4.5 - 6	10	10	125	29	10	9.9	JXG...	1.3
JSXGR/L1212K8-C	0.7	2	4.5 - 6	12	12	125	29	12	11.9	JXG...	1.3
JSXGR/L1616K8	0.7	2	4.5 - 6	16	16	125	29	16	15.9	JXG...	1.3
JSXGR/L2020K8	0.7	2	4.5 - 6	20	20	125	29	20	19.9	JXG...	1.3
JSXGR/L2525K8	0.7	2	4.5 - 6	25	25	125	29	25	24.9	JXG...	1.3

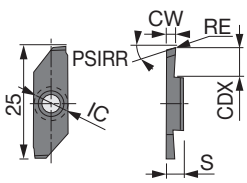
Can be wrenched also from the back with a double-head screw.
This toolholder can be used for JXF front-turning insert, JXR reverse-turning insert and JXG parting and grooving insert.
Torque: Recommended clamping torque: N·m

SPARE PARTS

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

INSERT

JXG (with hand, sharp edge)



Right hand (R) shown.

		Coated			Uncoated		
		J740			TH10		
P	Steel	★			☆		
M	Stainless	★					
K	Cast iron				☆		
N	Non-ferrous				★		
S	Superalloys				★		
H	Hard materials						

★ : First choice
☆ : Second choice

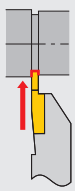
Designation	HAND	CW±0.001 (in)	CW±0.025 (mm)	RE (mm)	Coated J740			Uncoated TH10			CDX (mm)	IC (mm)	PSIRR	S (mm)
JXGR8070FA	R	0.028	0.7	0	●			●			4.5	8	15°	3.97
JXGL8070FA	L	0.028	0.7	0	●			●			4.5	8	15°	3.97
JXGR8070FA-005	R	0.028	0.7	0.05	●						4.5	8	15°	3.97
JXGR8100FA	R	0.039	1	0	●			●			6	8	15°	3.97
JXGL8100FA	L	0.039	1	0	●			●			6	8	15°	3.97
JXGR8100FA-005	R	0.039	1	0.05	●						6	8	15°	3.97
JXGR8100FA45	R	0.039	1	0	●			●			4.5	8	15°	3.97
JXGR8100FA45-005	R	0.039	1	0.05	●						4.5	8	15°	3.97
JXGR8150FA	R	0.059	1.5	0	●			●			6	8	15°	3.97
JXGL8150FA	L	0.059	1.5	0	●			●			6	8	15°	3.97
JXGR8150FA-005	R	0.059	1.5	0.05	●						6	8	15°	3.97
JXGR8150FA50	R	0.059	1.5	0	●			●			5	8	15°	3.97
JXGR8150FA50-005	R	0.059	1.5	0.05	●						5	8	15°	3.97
JXGR8180FA	R	0.071	1.8	0	●			●			6	8	15°	3.97
JXGR8180FA-005	R	0.071	1.8	0.05	●						6	8	15°	3.97
JXGR8200FA	R	0.079	2	0	●			●			6	8	15°	3.97
JXGL8200FA	L	0.079	2	0	●			●			6	8	15°	3.97
JXGR8200FA-005	R	0.079	2	0.05	●						6	8	15°	3.97
JXGR8200FN	R	0.079	2	0	●			●			6	8	0°	3.97
JXGL8200FN	L	0.079	2	0	●			●			6	8	0°	3.97
JXGR8200FN-005	R	0.079	2	0.05	●						6	8	0°	3.97

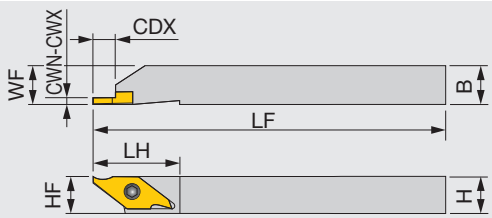
● : Line up

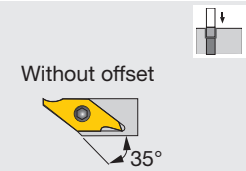
Reference pages: Standard cutting conditions → G102

JSVGR/L

External grooving toolholder, for Swiss lathes







Right hand (R) shown.

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

Metric	CWN	CWX	CDX	H	B	LF	LH	HF	WF	Insert	Torque*
JSVGR/L1010K-C	0.33	2	0.7 - 5.5	10	10	125	23	10	10	JVGR/L...	2.3
JSVGR/L1212K-C	0.33	2	0.7 - 5.5	12	12	125	23	12	12	JVGR/L...	2.3
JSVGR/L1616K	0.33	2	0.7 - 5.5	16	16	125	23	16	16	JVGR/L...	2.3

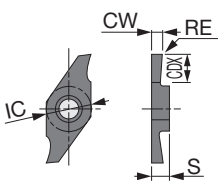
Torque: Recommended clamping torque: lbs·ft (*N·m)

SPARE PARTS

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

INSERT

JVG (with hand, sharp edge)



Right hand (R) shown.

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

★ : First choice
☆ : Second choice

Designation	HAND	$CW^{+0.05}_{0}$ (mm)	$CW^{+0.002}_{0}$ (in)	RE (in)	SH725	J740			NS9530			TH10			CDX (in)	IC (mm)	S (mm)
JVGR033F	R	0.33	0.013	0	●	●						●			0.028	7.94	3.18
JVGL033F	L	0.33	0.013	0	●										0.028	7.94	3.18
JVGR050F	R	0.5	0.020	0	●	●						●			0.043	7.94	3.18
JVGL050F	L	0.5	0.020	0	●										0.043	7.94	3.18
JVGR075F	R	0.75	0.030	0	●	●						●			0.075	7.94	3.18
JVGL075F	L	0.75	0.030	0	●										0.075	7.94	3.18
JVGR095F	R	0.95	0.037	0	●	●						●			0.075	7.94	3.18
JVGL095F	L	0.95	0.037	0	●										0.075	7.94	3.18
JVGR100F	R	1	0.039	0	●	●			●			●			0.217	7.94	3.18
JVGL100F	L	1	0.039	0	●				●			●			0.217	7.94	3.18
JVGR125F	R	1.25	0.049	0	●	●						●			0.197	7.94	3.18
JVGL125F	L	1.25	0.049	0	●										0.197	7.94	3.18
JVGR150F	R	1.5	0.059	0	●	●			●			●			0.217	7.94	3.18
JVGL150F	L	1.5	0.059	0	●				●			●			0.217	7.94	3.18
JVGR200F	R	2	0.079	0	●	●			●			●			0.217	7.94	3.18
JVGL200F	L	2	0.079	0	●										0.217	7.94	3.18

● : Line up

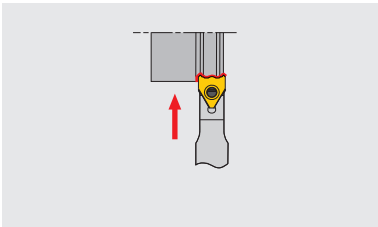
Reference pages: Standard cutting conditions → G102

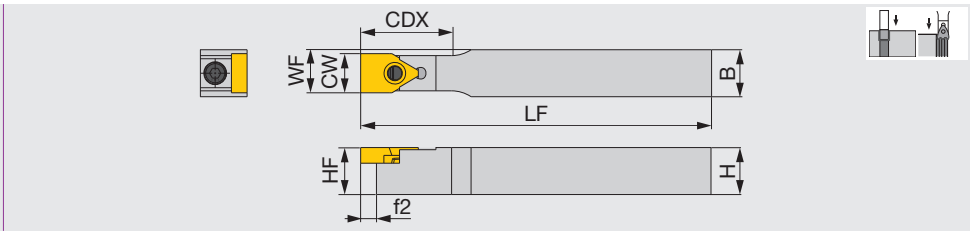
STANDARD CUTTING CONDITIONS (JXG and JVG inserts)

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

FPGN

Lever-lock external wide profile grooving toolholder





Inch	CW	CDX	H	B	LF	HF	WF	f2	Insert	Torque
FPGN08-10T20	0.394	0.984	0.500	0.500	4.946	0.500	0.450	0.216	PSGB10...	1.62
FPGN10-10T20	0.394	0.984	0.625	0.625	4.946	0.625	0.510	0.216	PSGB10...	1.62
FPGN12-10T20	0.394	0.984	0.750	0.750	5.196	0.750	0.570	0.216	PSGB10...	1.62
FPGN10-15T25	0.590	1.181	0.625	0.625	4.946	0.625	0.610	0.216	PSGB15...	1.62
FPGN12-15T25	0.590	1.181	0.750	0.750	5.196	0.750	0.670	0.216	PSGB15...	1.62
FPGN12-20T32	0.787	1.456	0.750	0.750	5.196	0.750	0.770	0.216	PSGB20...	6.27
FPGN16-20T32	0.787	1.456	1.000	1.000	6.196	1.000	0.890	0.216	PSGB20...	6.27
FPGN16-25T36	0.984	1.614	1.000	1.000	6.196	1.000	0.990	0.216	PSGB25...	6.27

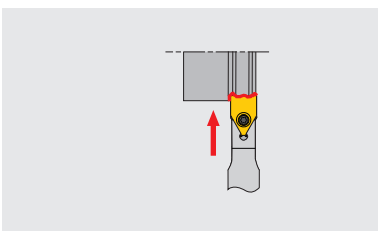
PSGB insert blank is available for tailored inserts.
Torque: Recommended clamping torque: lbs·ft

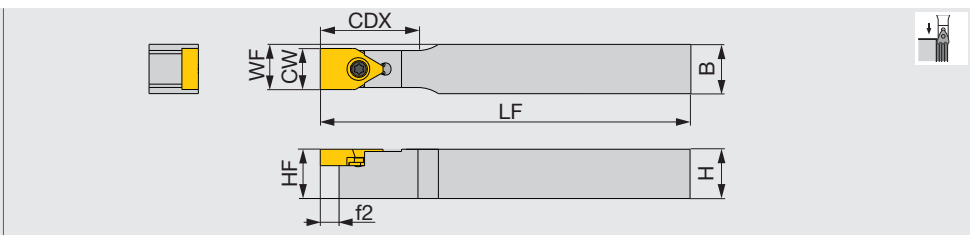
SPARE PARTS

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

SPGN

Screw-on external wide profile grooving toolholder





Inch	CW	CDX	H	B	LF	HF	WF	f2	Insert	Torque
SPGN08-10T20	0.394	0.984	0.500	0.500	4.946	0.500	0.450	0.216	PSGB10	0.96
SPGN10-10T20	0.394	0.984	0.625	0.625	4.946	0.625	0.510	0.216	PSGB10	0.96
SPGN12-10T20	0.394	0.984	0.750	0.750	5.196	0.750	0.570	0.216	PSGB10	0.96
SPGN10-15T25	0.590	1.181	0.625	0.625	4.946	0.625	0.610	0.216	PSGB15	2.58
SPGN12-15T25	0.590	1.181	0.750	0.750	5.196	0.750	0.670	0.216	PSGB15	2.58
SPGN12-20T32	0.787	1.456	0.750	0.750	5.196	0.750	0.770	0.216	PSGB20	3.69
SPGN16-20T32	0.787	1.456	1.000	1.000	6.196	1.000	0.890	0.216	PSGB20	3.69
SPGN16-25T36	0.984	1.614	1.000	1.000	6.196	1.000	0.990	0.216	PSGB25	3.69

PSGB insert blank is available for tailored inserts.
Torque: Recommended clamping torque: lbs·ft

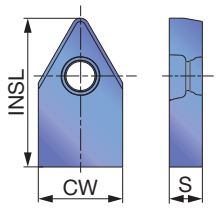
SPARE PARTS

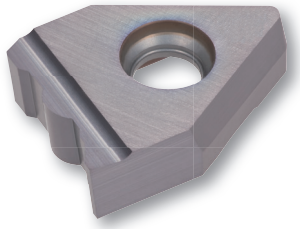
Designation	Clamping screw	Wrench
SPGN**-10T20	CSTB-3L081	T-8F
SPGN**-15T25	CSTB-4	T-15F
SPGN**-20T..., 25T...	CSTB-5	T-20F

Reference pages: FPGN, SPGN: Inserts, Standard cutting conditions → G104

INSERT

PSGB (Blank for wide profile grooving inserts*)





Specially tailored profile insert

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

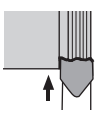
★ : First choice
☆ : Second choice

Designation	CW±0.025 (mm)	CW±0.001 (in)	Uncoated										INSL (in)	S (in)
			TH10	UX30										
PSGB10	10.2	0.402	●	●									0.709	0.157
PSGB15	15.2	0.598	●	●									0.787	0.197
PSGB20	20.2	0.795	●	●									1.062	0.256
PSGB25	25.2	0.992	●	●									1.062	0.256

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

Package quantity = 5pcs.
● : Line up

STANDARD CUTTING CONDITIONS

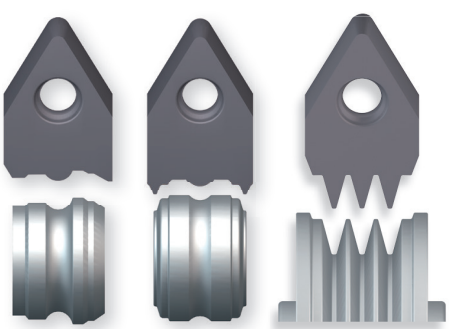


Wide profile grooving (PSGB insert)

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

Custom shaped inserts can be supplied on customer's request, according to the designated final shape on part drawing.

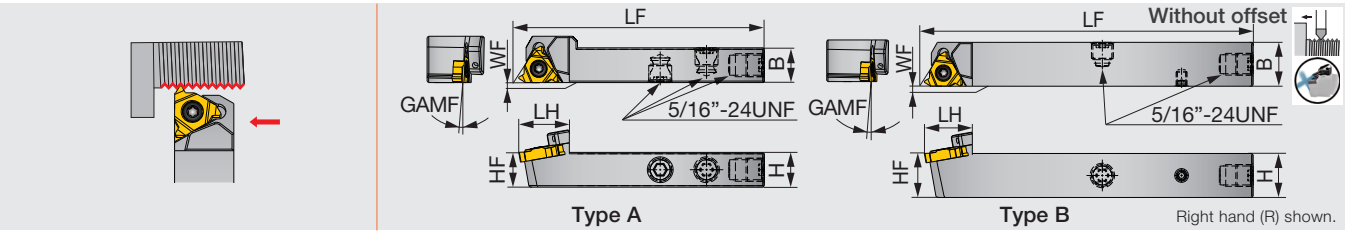
Semi-finished blanks PSGB types are offered for purchase.



Reference pages: Toolholders → G103

JSE2R16-CHP

External threading toolholder with high pressure coolant capability



Inch	H	B	LF	LH	HF	WF	GAMF	Type	Insert
JSE2R1212X16-CHP	0.500	0.500	4.750	0.748	0.500	0.000	1°	B	16ER...
JSE2R1616X16-CHP	0.625	0.625	4.750	0.748	0.625	0.000	1°	B	16ER...

Metric	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...

※ Connection with external coolant tube

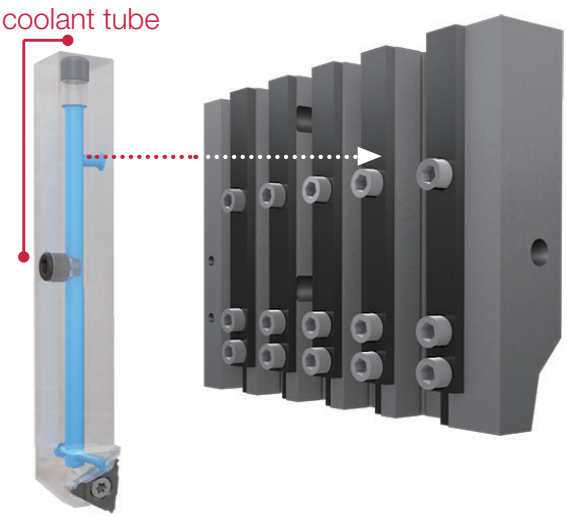
SPARE PARTS

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

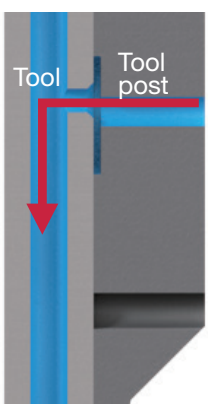
No need for coolant tube setup.
Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools

Internal thread
Optional connection with external coolant tube



Detailed view of the coolant flow after connection

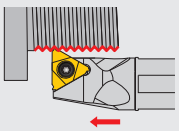


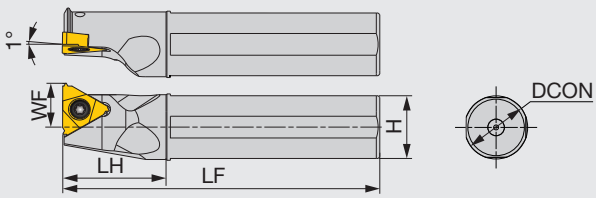
Reference pages: JSE2R16-CHP: Inserts → E010 -, Standard cutting conditions → E054

TUNGTHREAD

JS-SEL16

External threading toolholder for Swiss lathes





Right hand (R) shown.

Inch	DCON	H	LF	LH	WF	Insert
JS16F-SEL16	0.630	0.630	0.984	3.346	0.433	16ER...
JS19G-SEL16	0.750	0.750	1.181	3.543	0.492	16ER...
JS19X-SEL16	0.750	0.750	1.181	4.724	0.492	16ER...
JS20G-SEL16	0.787	0.787	1.181	3.543	0.512	16ER...
JS20X-SEL16	0.787	0.787	1.181	4.724	0.512	16ER...
JS25HSEL16	0.984	0.984	1.181	3.937	0.61	16ER...
JS254X-SEL16	1.181	0.984	1.181	4.724	0.618	16ER...

Metric	DCON	H	LF	LH	WF	Insert
JS16F-SEL16	16	15	85	25	11	16ER...
JS19G-SEL16	19.05	18	90	30	12.5	16ER...
JS19X-SEL16	19.05	18	120	30	12.5	16ER...
JS20G-SEL16	20	19	90	30	13	16ER...
JS20X-SEL16	20	19	120	30	13	16ER...
JS25HSEL16	25	24	100	30	15.5	16ER...
JS254X-SEL16	25.4	24	120	30	15.7	16ER...

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

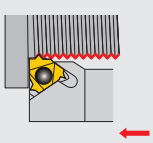
SPARE PARTS

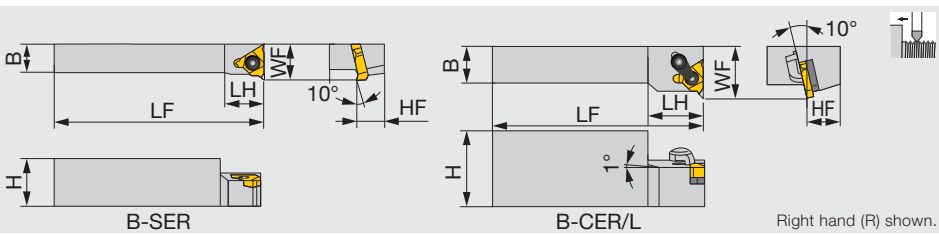
Designation	Clamping screw	Wrench
JS***-SEL16	CSTB-3.5	T-15F

TUNGTHREAD

B-S/CER/L

External threading toolholder for Swiss lathes





Right hand (R) shown.

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

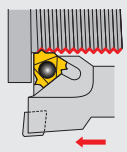
SPARE PARTS

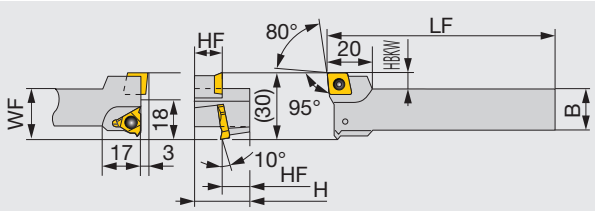
Designation	Clamp set	Shim set	Clamping screw	Wrench
B-SER**16	-	-	CSTB-3.5	T-15F
B-CER/L16M16	CSP16	A16-1	-	T-15F

Reference pages: JS-SEL16, B-S/CER/L: Inserts → E010 -, Standard cutting conditions → E054

BC-SER

External threading toolholder for multi-functional Swiss lathes





Right hand (R) shown.

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

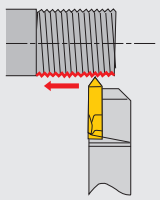
SPARE PARTS

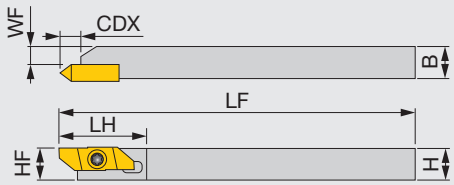
Designation	Clamping screw	Wrench
BC-SER12K16	CSTB-3.5	T-15F

Reference pages: BC-SER/L: Inserts → B111 - (CC*T09T3...), E010 - (16ER...),
Standard cutting conditions → E054

JSXBR/L

Screw-on external threading toolholder, for Swiss lathes





C-type

Right hand (R) shown.

Metric	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...

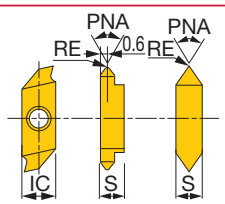
Can be wrenched from back side with both end torx screw.
This toolholder is compatible with JXB-type inserts and JXT-type inserts.

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

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

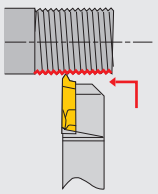
★ : First choice
☆ : Second choice

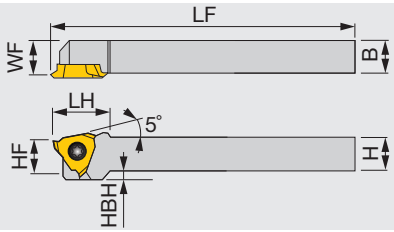
Designation	RE (mm)	J740			TH10									PNA	IC (mm)	S (mm)
JXT1R6000F	0.03	●			●									60°	8	3.97
JXT2R6000F	0.03	●			●									60°	8	3.97

● : Line up

J-SERIES
JSTTR/L

Screw-on external threading toolholder, for Swiss lathes





Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L063	0.375	0.375	5.000	0.6875	0.375	0.375	0.100	JTTR/L30...
JSTTR/L083	0.500	0.500	5.000	0.6875	0.500	0.500	-	JTTR/L30...
JSTTR/L103	0.625	0.625	5.000	0.6875	0.625	0.625	-	JTTR/L30...

Metric	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L30...
JSTTR/L1212F3	12	12	85	18.5	12	11.5	-	JTTR/L30...
JSTTR/L1212X3	12	12	120	18.5	12	11.5	-	JTTR/L30...
JSTTR/L1616X3	16	16	120	18.5	16	15.5	-	JTTR/L30...

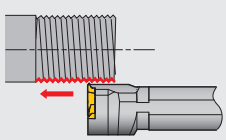
Recommended clamping torque: 0.89 lbs·ft, 1.2 N·m

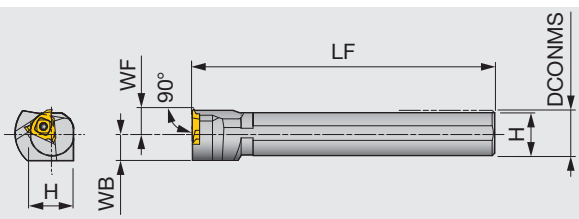
SPARE PARTS

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.

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

Recommended clamping torque: 3.5 N·m

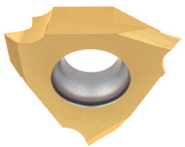
SPARE PARTS

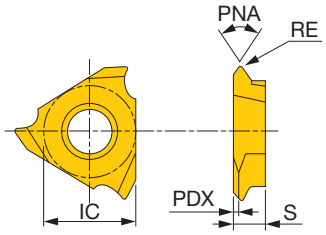
Designation	Clamping screw	Wrench
JS**-TTL3	CSTB-4S	T-15F

Reference pages: JSTTR/L, JS-TTL3: Inserts, Standard cutting conditions → G110

INSERT

JTT (sharp edge)





Right hand (R) shown.

		Coated			Cermet		Uncoated	
		SH725	J740		NS9530		TH10	
P	Steel	★	☆		★			
M	Stainless	★	☆					
K	Cast iron	★			☆		★	
N	Non-ferrous						★	
S	Superalloys	☆					★	
H	Hard materials	☆					★	

★ : First choice
☆ : Second choice

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

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

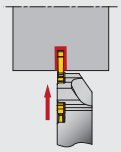
● : Line up

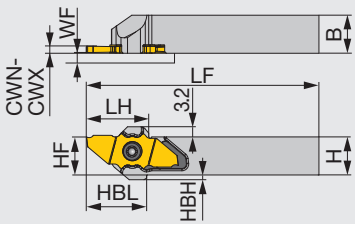
STANDARD CUTTING CONDITIONS

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

JSXXR/L

Parting toolholder, for Swiss lathes





Right hand (R) shown.

Inch	CWN	CWX	H	B	LF**	LH**	HF	WF	HBL**	HBH	Insert	Torque
JSXXR/L063	0.039	0.079	0.375	0.375	4.750	0.774	0.375	0.008	0.748	0.12	JX*G06...,12...,16..., 20...	0.89
JSXXR/L083	0.039	0.079	0.500	0.500	4.750	0.774	0.500	0.008	0.748	0.06	JX*G06...,12...,16..., 20...	0.89
JSXXR/L103	0.039	0.079	0.625	0.625	4.750	0.774	0.625	0.008	-	-	JX*G06...,12...,16..., 20...	0.89

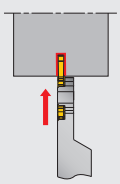
Torque: Recommended clamping torque: lbs·ft
**LF (Functional Length), LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 0.079" shorter than the above values with JX*G12... and JXPG20...inserts, and 0.157" shorter for JXPG06... insert.
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...).

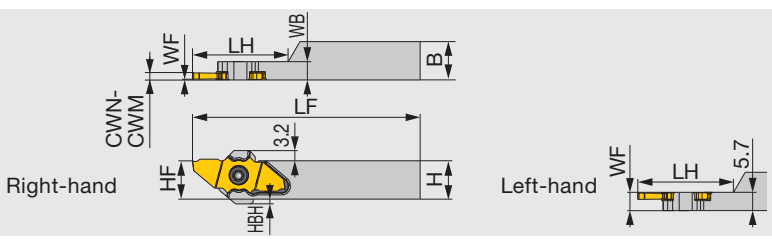
SPARE PARTS

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)





Inch	CWN	CWM	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque
JSXXR/L063-S	0.039	0.079	0.375	0.375	4.750	1.030	0.383	0.008/0.217	0.120	JX*G06...,12...,16..., 20...	0.89
JSXXR/L083-S	0.039	0.079	0.500	0.500	4.750	1.030	0.500	0.008/0.217	0.060	JX*G06...,12...,16..., 20...	0.89

Torque: Recommended clamping torque: lbs·ft
**LF (Functional Length) and LH (Head Length) values shown above are true with JXPG16... insert. LF and LH will be 0.079" shorter than the above values with JX*G12... insert, and 0.157" shorter for JXPG06... insert. LF, LH, and HBL will all be 0.079" shorter with JXPG20... insert.
JXPG20... insert will not fit.
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...).

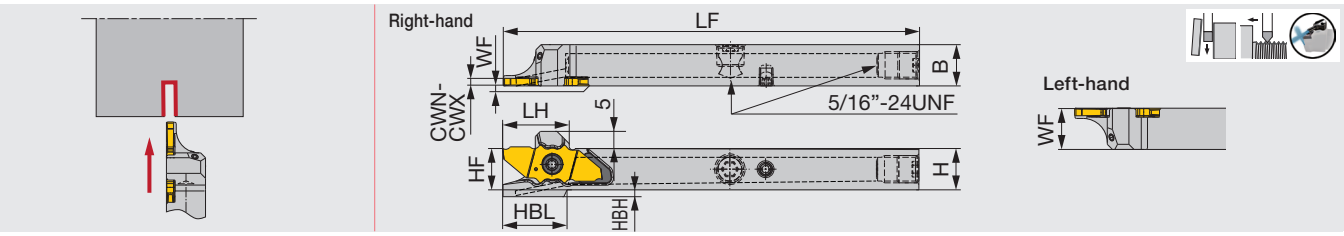
SPARE PARTS

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

Reference pages: JSXXR/L, JSXXR/L-S: Inserts → G116 - G117, Standard cutting conditions → G119

JSXXR/L-X-CHP

Parting-off tool for swiss lathes with high pressure coolant capability



Inch	CWN	CWX	H	B	WF	LF**	HF	HBH	LH**	HBL**	Insert	Torque
JSXXR/L083X-CHP	0.039	0.079	0.500	0.500	0.008/0.492	4.750	0.500	0.051	0.764	0.736	JX*G06...,12...,16..., 20...	0.89
JSXXR/L103X-CHP	0.039	0.079	0.625	0.625	0.008/0.617	4.750	0.625	0	0.764	0	JX*G06...,12...,16..., 20...	0.89

Torque: Recommended clamping torque: lbs·ft
**LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 0.079" shorter than the above values with JX*G12... and JXPG20... inserts, and 0.157" shorter for JXPG06... insert.
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...).

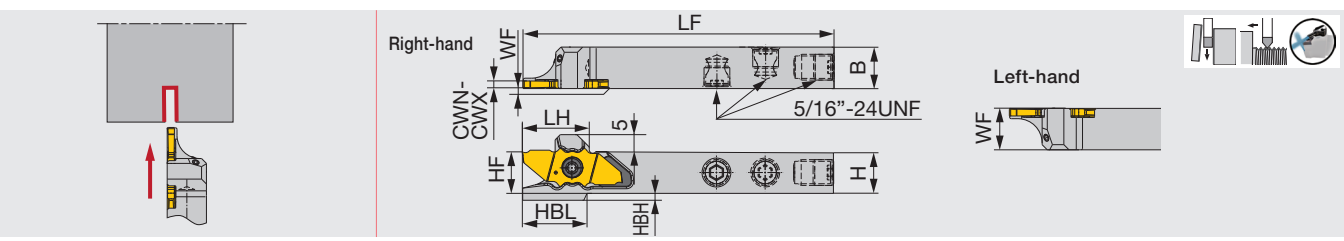
SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet 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 : 0.039" and 0.059" (for a max parting diameter of ø0.236")
: 0.059" and 0.079" (for max parting diameters of ø0.472", ø0.630" and ø0.787")
Threading pitch range : 0.008" - 0.059"

JSXXR/L-F-CHP

Parting-off tool for swiss lathes



Inch	CWN	CWX	H	B	LF**	LH**	HF	WF	HBL**	HBH	Insert	Torque
JSXXR/L083F-CHP	0.039	0.079	0.500	0.500	3.344	≤ 0.764	0.5	0.008/0.492	0.736	0.051	JX*G06...,12...,16..., 20...	0.89

Torque: Recommended clamping torque: lb·ft
**LF (Functional Length) LH (Head Length), and HBL (Head-bottom Offset Length) values shown above are true with JXPG16... insert. LF, LH, and HBL will all be 0.079" shorter than the above values with JX*G12... and JXPG20... inserts, and 0.157" shorter for JXPG06... insert.
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

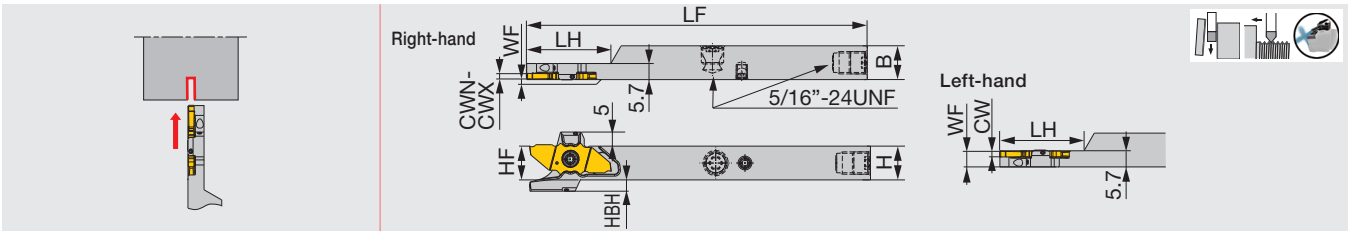
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2
JSXXR...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4
JSXXL...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4

Parting-off widths : 0.039" and 0.059" (for a max parting diameter of ø0.236")
: 0.059" and 0.079" (for max parting diameters of ø0.472", ø0.630" and ø0.787")
Threading pitch range : 0.008" - 0.059"

Reference pages: JSXXR/L-CHP, JSXXR/L-F-CHP: Inserts → G116 - G117,
Standard cutting conditions → G119

JSXXR/L-X-S-CHP

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



Inch	CWN	CWX	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque
JSXXR/L083X-S-CHP	0.039	0.079	0.500	0.500	4.750	1.181	0.500	0.008/0.217	0.051	JX*G06...,12...,16..., 20...	0.89
JSXXR/L103X-S-CHP	0.039	0.079	0.625	0.625	4.750	1.181	0.625	0.008/0.217	0	JX*G06...,12...,16..., 20...	0.89

Torque: Recommended clamping torque: lbs·ft
**LF (Overall Tool Length) and LH (Head Length) values shown above are true with JXPG16... insert. Both LF and LH will be 0.079" shorter than the above value with JX*G12... and JXPG20... inserts; 0.157" shorter with JXPG06... insert.
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

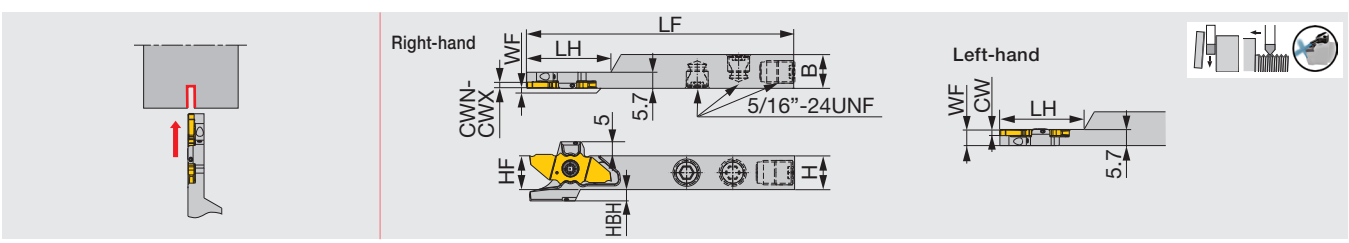
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR***-S-CHP	CSTC-4L055DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL***-S-CHP	CSTC-4L055DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Parting-off widths : 0.039" and 0.059" (for a max parting diameter of ø0.236")
: 0.059" and 0.079" (for max parting diameters of ø0.472", ø0.630" and ø0.787")

TUNGTURN JET
DUOJUST CUT

JSXXR/L-F-S-CHP

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



Inch	CWN	CWX	H	B	LF**	LH**	HF	WF	HBH	Insert	Torque
JSXXR/L083F-S-CHP	0.039	0.079	0.500	0.500	3.344	1.024	0.500	0.008/0.217	0.051	JX*G06...,12...,16..., 20...	0.89

Torque: Recommended clamping torque: lbs·ft
**LF (Overall Tool Length) and LH (Head Length) values shown above are true with JXPG16... insert. Both LF and LH will be 0.079" shorter than the above value with JX*G12... and JXPG20... inserts; 0.157" shorter with JXPG06... insert.
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...).

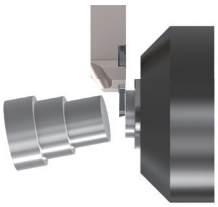
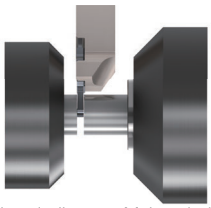
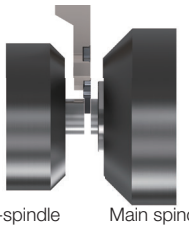
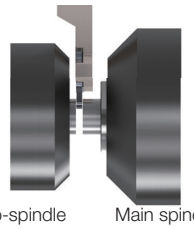
SPARE PARTS

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 : 0.039" and 0.059" (for a max parting diameter of ø0.236")
: 0.059" and 0.079" (for max parting diameters of ø0.472", ø0.630" and ø0.787")

Reference pages: JSXXR/L-X-S-CHP, JSXXR/L-F-S-CHP: Inserts → G116 - G117,
Standard cutting conditions → G119

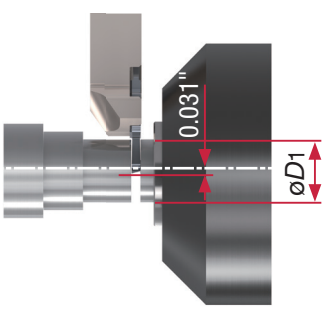
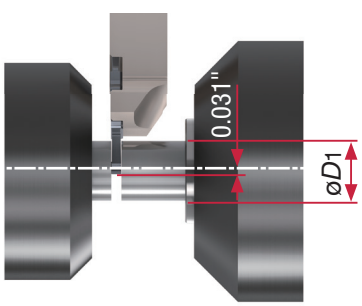
HOW TO SELECT TOOLS

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
ø1.575	- ø0.236	0.375	4.514	JXPG06*	JSXXR/L063-S
ø1.575	- ø0.236	0.500	4.514	JXPG06*	JSXXR/L083-S
ø1.575	- ø0.472	0.375	4.593	JXPG12*	JSXXR/L063-S
ø1.575	- ø0.472	0.500	4.593	JXPG12*	JSXXR/L083-S
ø1.575	- ø0.630	0.375	4.750	JXPG16*	JSXXR/L063-S
ø1.575	- ø0.630	0.500	4.750	JXPG16*	JSXXR/L083-S
ø1.575	- ø0.787	0.500	3.423	JXPG20*	JSXXR/L083F-S-CHP
ø1.969	- ø0.236	0.500	4.514	JXPG06*	JSXXR/L083-S
ø1.969	- ø0.236	0.625	4.514	JXPG06*	JSXXR/L103X-S-CHP
ø1.969	- ø0.472	0.500	4.593	JXPG12*	JSXXR/L083-S
ø1.969	- ø0.472	0.625	4.593	JXPG12*	JSXXR/L103X-S-CHP
ø1.969	- ø0.630	0.500	4.750	JXPG16*	JSXXR/L083-S
ø1.969	- ø0.630	0.500	4.750	JXPG16*	JSXXR/L083-S
ø1.969	- ø0.630	0.625	4.750	JXPG16*	JSXXR/L103X-S-CHP
ø1.969	- ø0.787	0.500	3.423	JXPG20*	JSXXR/L083F-S-CHP
ø1.969	- ø0.787	0.500	4.829	JXPG20*	JSXXR/L083X-S-CHP
ø1.969	- ø0.787	0.625	4.829	JXPG20*	JSXXR/L103X-S-CHP

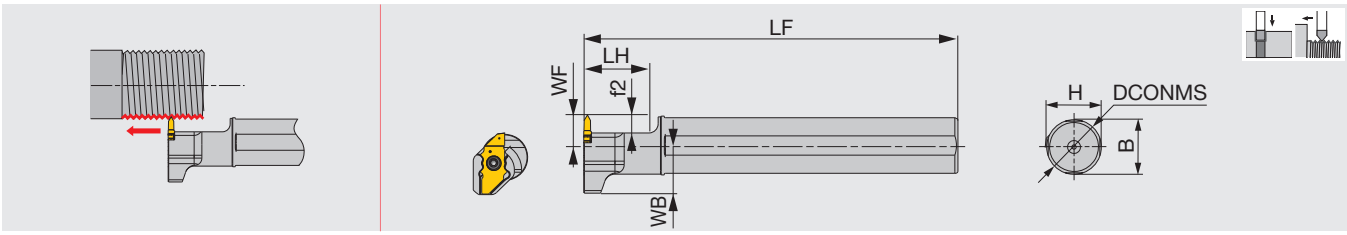
MAX. PARTING-OFF DIA. & DEPTH

Main-spindle tooling	Sub-spindle tooling
 Main spindle	 Sub-spindle Main spindle

There will be no tool-workpiece interference when parting off the workpiece with the cutting edge position apart from the workpiece center by 0.031" or more.

JS-SXXL09

Threading toolholder with round shank



Metric	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

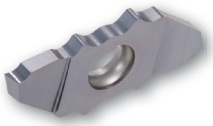
Torque: Recommended clamping torque: N·m
Threading insert (JXTG12FR) and parting-off inserts (JXPG06R ,12R) fit this holder.

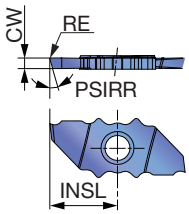
SPARE PARTS

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

Reference pages: JS-SXXL09: Inserts → G116 - G117, Standard cutting conditions → G119

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





Right hand (R) shown.

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

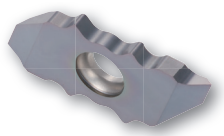
★ : First choice
☆ : Second choice

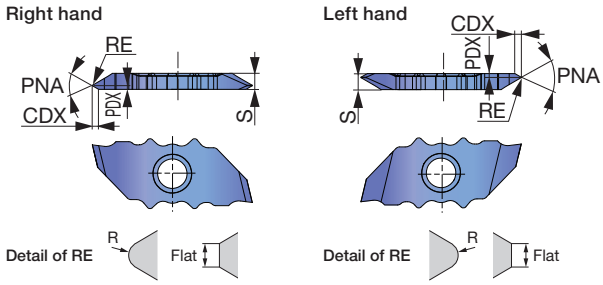
Designation	HAND	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	Coated SH725	CUTDIA (mm)	INSL (mm)	PSIRR/L
JXPG06R10F	R	1	0.039	0.002	●	6	10.5	0°
JXPG06L10F	L	1	0.039	0.002	●	6	10.5	0°
JXPG06R15F	R	1.5	0.059	0.002	●	6	10.5	0°
JXPG06L15F	L	1.5	0.059	0.002	●	6	10.5	0°
JXPG06R10F-15	R	1	0.039	0.002	●	6	10.5	15°
JXPG06L10F-15	L	1	0.039	0.002	●	6	10.5	15°
JXPG06R15F-15	R	1.5	0.059	0.002	●	6	10.5	15°
JXPG06L15F-15	L	1.5	0.059	0.002	●	6	10.5	15°
JXPG12R15F	R	1.5	0.059	0.002	●	12	12.5	0°
JXPG12L15F	L	1.5	0.059	0.002	●	12	12.5	0°
JXPG12R20F	R	2	0.079	0.002	●	12	12.5	0°
JXPG12L20F	L	2	0.079	0.002	●	12	12.5	0°
JXPG12R15F-15	R	1.5	0.059	0.002	●	12	12.5	15°
JXPG12L15F-15	L	1.5	0.059	0.002	●	12	12.5	15°
JXPG12R20F-15	R	2	0.079	0.002	●	12	12.5	15°
JXPG12L20F-15	L	2	0.079	0.002	●	12	12.5	15°
JXPG16R15F	R	1.5	0.059	0.002	●	16	14.5	0°
JXPG16L15F	L	1.5	0.059	0.002	●	16	14.5	0°
JXPG16R20F	R	2	0.079	0.002	●	16	14.5	0°
JXPG16L20F	L	2	0.079	0.002	●	16	14.5	0°
JXPG16R15F-15	R	1.5	0.059	0.002	●	16	14.5	15°
JXPG16L15F-15	L	1.5	0.059	0.002	●	16	14.5	15°
JXPG16R20F-15	R	2	0.079	0.002	●	16	14.5	15°
JXPG16L20F-15	L	2	0.079	0.002	●	16	14.5	15°
JXPG20R15F	R	1.5	0.059	0.002	●	20	16.5	0°
JXPG20L15F	L	1.5	0.059	0.002	●	20	16.5	0°
JXPG20R20F	R	2	0.079	0.002	●	20	16.5	0°
JXPG20L20F	L	2	0.079	0.002	●	20	16.5	0°
JXPG20R15F-15	R	1.5	0.059	0.002	●	20	16.5	15°
JXPG20L15F-15	L	1.5	0.059	0.002	●	20	16.5	15°
JXPG20R20F-15	R	2	0.079	0.002	●	20	16.5	15°
JXPG20L20F-15	L	2	0.079	0.002	●	20	16.5	15°

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

Reference pages: Toolholders → G111 - G115, Standard cutting conditions → G119

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





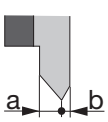
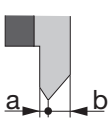
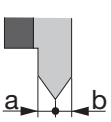
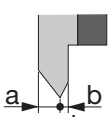
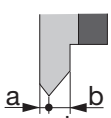
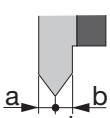
P	Steel	★
M	Stainless	★
K	Cast iron	★
N	Non-ferrous	★
S	Superalloys	★
H	Hard materials	★

★ : First choice
☆ : Second choice

Designation	HAND	RE (mm)	Coated SH725	Pitches (mm)	PDX (mm)	CDX (mm)	S (mm)	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	R 0.05	●	0.4 - 1	0.6	0.99	2.5	60°
JXTG12FL-60A-005	L	R 0.05	●	0.4 - 1	0.6	0.99	2.5	60°
JXTG12FR-60B-005	R	R 0.05	●	0.4 - 1	1.9	0.99	2.5	60°
JXTG12FL-60B-005	L	R 0.05	●	0.4 - 1	1.9	0.99	2.5	60°
JXTG12FR-60N-010	R	R 0.1	●	1 - 1.5	1.25	2.07	2.5	60°
JXTG12FL-60N-010	L	R 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

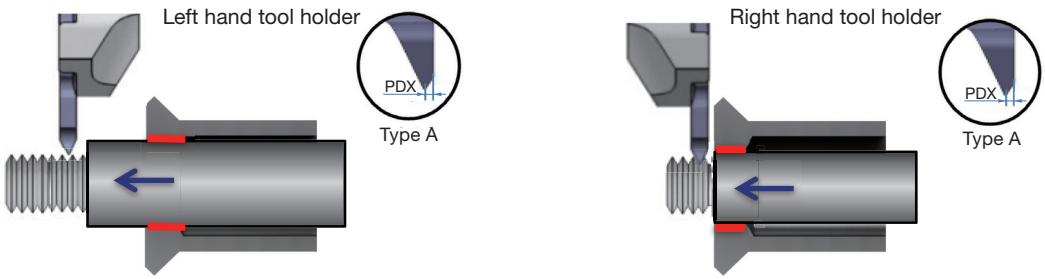
	Edge Orientation		
	Type A	Type B	Type N
Right hand	 a > b	 a < b	 a = b
Left hand	 a > b	 a < b	 a = b

JXTG 12 F R - 60 A - 005

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

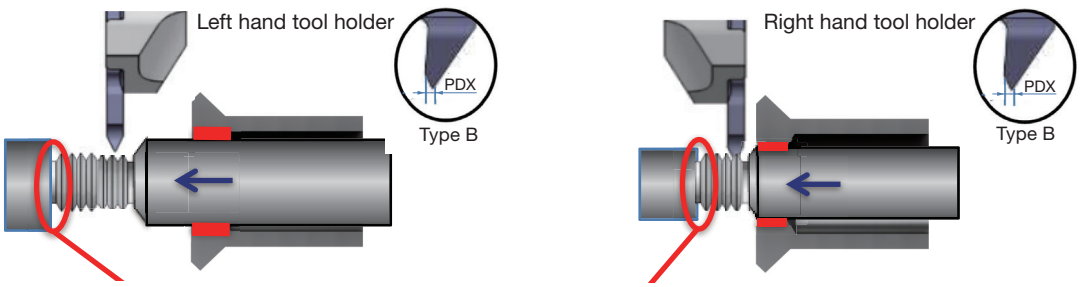
Reference pages: Toolholders → G111 - G115, Standard cutting conditions → G119

WHEN TO USE TYPE A AND TYPE B INSERT



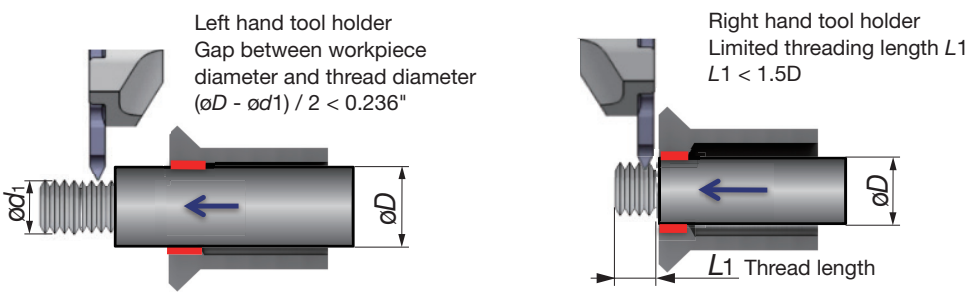
Threading close to the wall

Threading operation following back-turning

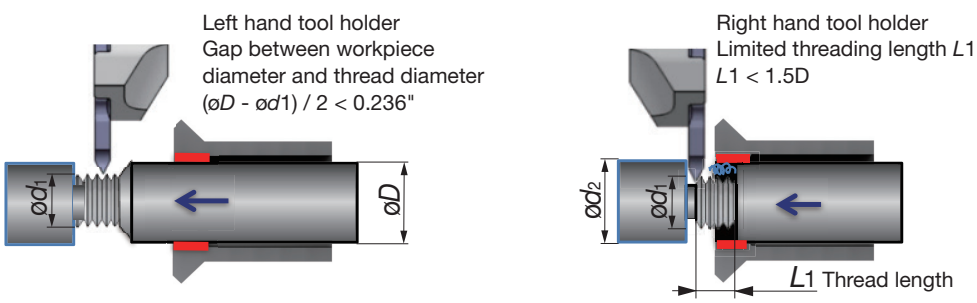


Undercutting needed in previous process

THREADING WORKPIECE IN MAIN SPINDLE



Threading operation following back-turning

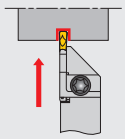


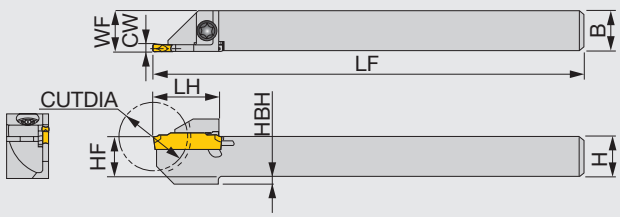
STANDARD CUTTING CONDITIONS (Parting-off)

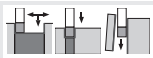
ISO	Workpiece materials	Grades	Cutting speed *Vc* (sfm)	Feed *f* (ipr)
P	Low carbon steel 1015, etc.	SH725	164 - 656	0.0004 - 0.002
	Carbon steel, Alloy steel 1055, etc.	SH725	164 - 656	0.0004 - 0.002
	Free cutting steel SUH22, SUH23, etc.	SH725	164 - 656	0.0004 - 0.002
M	Stainless steel S30400, etc.	SH725	164 - 656	0.0004 - 0.002
N	Aluminium alloys 5056, 6061, etc.	SH725	492 - 656	0.0004 - 0.002
	Copper alloys C2600, C280C, etc.	SH725	328 - 656	0.0004 - 0.002
S	Titanium alloys Ti-6Al-4V, etc.	SH725	98 - 262	0.0004 - 0.002
	Superalloys Inconel718, etc.	SH725	98 - 262	0.0004 - 0.002

JCTER/L

External grooving and parting toolholder, for Swiss lathes







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

Right hand (R) shown.

Inch	CW (in)	CW (mm)	Seat size	CUTDIA	H	B	LF	LH	HF	WF (1)	HBH	Torque
JCTER/L08-2T12	0.079	2	2	0.945	0.500	0.500	4.750	0.748	0.500	0.504	0.079	2.21
JCTER/L08-3T12	0.118	3	3	0.945	0.500	0.500	4.750	0.748	0.500	0.512	0.079	2.21
JCTER/L10-2T16	0.079	2	2	1.260	0.625	0.625	4.750	0.945	0.625	0.629	-	2.21
JCTER/L10-3T16	0.118	3	3	1.260	0.625	0.625	4.750	0.945	0.625	0.637	-	2.21

Metric	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
JCTER1010-1.4T10	1.4	1	20	10	10	125	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
JCTER1212-1.4T12	1.4	1	24	12	12	125	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) "WF" value is calculated with groove width "CW" shown in the table.
CUTDIA: Max. parting diameter
Torque: Recommended clamping torque: lbs·ft (*N·m)

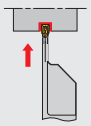
SPARE PARTS

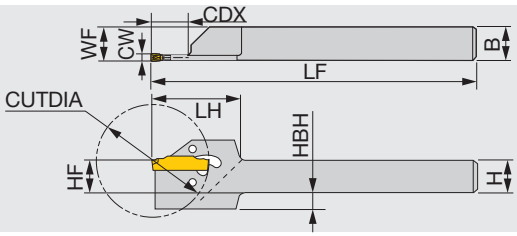
Designation	Clamping screw	Wrench
JCTER/L...	CSHB-4-A	T-15F

Reference pages: JCTER/L: Inserts → G124 - G129, Standard cutting conditions → G130

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.

Metric	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**) is not included. Please order it separately. Insert is clamped by the elastic deformation of the upper jaw.
(1) DG*/SG* maximum parting diameter will depend on the insert.
(2) "WF" value is calculated with groove width "CW" shown in the table.

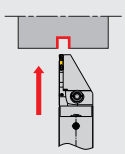
SPARE PARTS

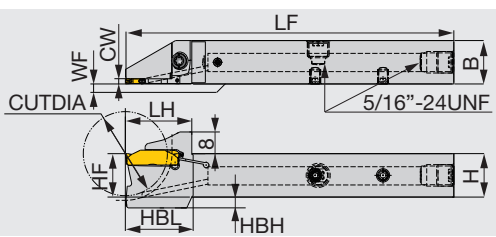
Designation	Wrench (Option)
CGER/L2020-1.4T14	CRW23
CGER/L****-2T17 - 4T19	CRW33

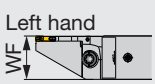
TUNGTURN JET
JCTER/L-CHP

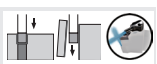
TUNGCUT

External grooving and parting toolholder with high pressure coolant capability









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

Right hand (R) shown.

Inch	CW (in)	CW (mm)	Seat size	CUTDIA	H	B	LF	LH	HBL	HF	WF (1)	HBH	Torque
JCTER/L08X2T12-CHP	0.079	2	2	0.984	0.500	0.500	4.750	0.972	0.965	0.500	0.000/0.500	0.169	2.21
JCTER/L10X2T12-CHP	0.079	2	2	0.984	0.625	0.625	4.750	0.972	0.965	0.625	0.000/0.625	0.039	2.21
JCTER/L10X2T16-CHP	0.079	2	2	1.260	0.625	0.625	4.750	0.972	0.965	0.625	0.000/0.625	0.157	2.21
JCTER/L12X2T16-CHP	0.079	2	2	1.260	0.750	0.750	4.750	0.972	0.965	0.750	0.000/0.750	0.037	2.21

Metric	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. "WF" value depends on the tool hand. With 0/12, WF is 0 for the right hand and 12 for the left hand.
CUTDIA: Max. parting diameter
Torque: Recommended clamping torque: lbs·ft (*N·m)

SPARE PARTS

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

Groove width: 0.079" (2.0 mm)

Reference pages: CGER/L, JCTER/L-CHP: Inserts → G124 - G129, Standard cutting conditions → G130

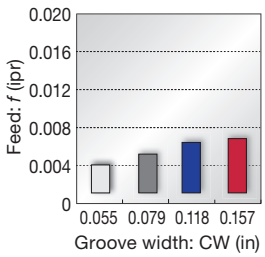
External grooving and parting

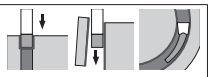
DGS type (2 corners)
SGS type (1 corner)

G124, G127 page

For Swiss lathes

Unique-designed edge and chipbreaker
Handed insert available
CW = 0.055" - 0.157"



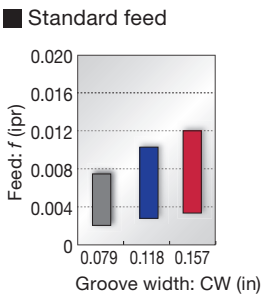


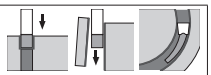
DGM type (2 corners)
SGM type (1 corner)

G125, G126 page

High fracture resistance

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



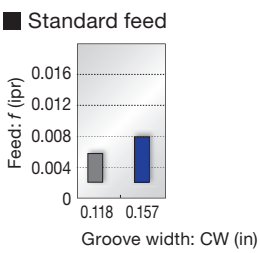


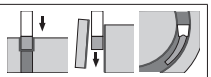
DGL type (2 corners)

G129 page

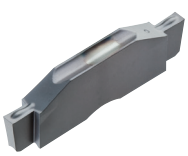
1st choice for mild steel

Chipbreaker with excellent chip control at low feed
Suitable for mild steel that often gives difficulties in chip control
CW = 0.118" - 0.157"





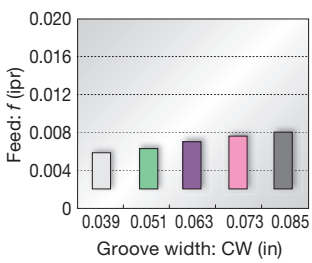
DGE type (2 corners)



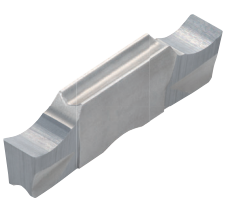
G128 page

For high accurate and shallow groove

Excellent chip control
CW = 0.039" - 0.085"



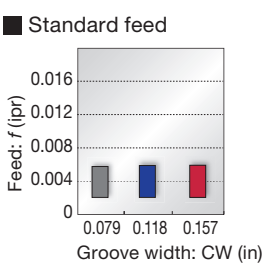
DGG type (2 corners)

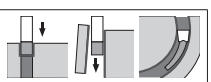


G128 page

For non-ferrous materials and titanium

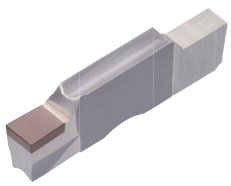
Chipbreaker with low cutting force
Sharp cutting edge that prevents vibration and delivers fine surface finish
CW = 0.079" - 0.157"





External grooving of hardened steel

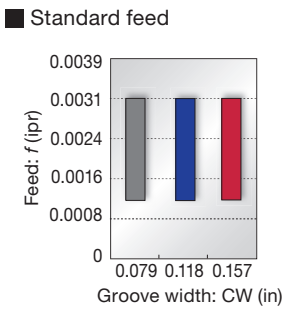
SGN-CBN type (1 corner)

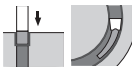


G129 page

For hardened steel cutting

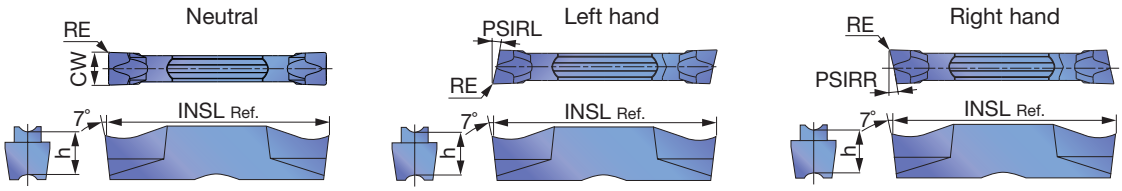
Optimum cutting edge shape for grooving of hardened steels
High tolerance width for finishing
CW = 0.079" - 0.157"
(CW = ±0.001")





DGS

External grooving and parting, 2 corners



		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	Seat size	HAND	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated							Cermet						INSL (in)	h (in)	PSIRL	PSIRR
						T9225	T9125	AH7025	AH725	GH130			NS9530									
DGS1.4-016	1	N	1.4	0.055	0.006			●	●	●									0.630	0.169	0°	0°
DGS2-020	2	N	2	0.079	0.008	●	●	●	●	●			●						0.787	0.197	0°	0°
DGS2-020-6R	2	R	2	0.079	0.008			●	●	●									0.787	0.197	0°	6°
DGS2-020-6L	2	L	2	0.079	0.008			●	●	●									0.787	0.197	6°	0°
DGS2-002-6R	2	R	2	0.079	0.0008				●	●									0.768	0.197	0°	6°
DGS2-002-6L	2	L	2	0.079	0.0008				●	●									0.768	0.197	6°	0°
DGS2-020-15R	2	R	2	0.079	0.008			●	●	●									0.787	0.197	0°	15°
DGS2-020-15L	2	L	2	0.079	0.008			●	●	●									0.787	0.197	15°	0°
DGS2-002-15R	2	R	2	0.079	0.0008				●	●									0.768	0.197	0°	15°
DGS2-002-15L	2	L	2	0.079	0.0008				●	●									0.768	0.197	15°	0°
DGS3-020	3	N	3	0.118	0.008	●	●	●	●	●			●						0.787	0.197	0°	0°
DGS3-020-6R	3	R	3	0.118	0.008			●	●	●									0.787	0.197	0°	6°
DGS3-020-6L	3	L	3	0.118	0.008			●	●	●									0.787	0.197	6°	0°
DGS3-002-6R	3	R	3	0.118	0.0008				●	●									0.766	0.197	0°	6°
DGS3-002-6L	3	L	3	0.118	0.0008				●	●									0.766	0.197	6°	0°
DGS3-020-15R	3	R	3	0.118	0.008			●	●	●									0.787	0.197	0°	15°
DGS3-020-15L	3	L	3	0.118	0.008			●	●	●									0.787	0.197	15°	0°
DGS3-002-15R	3	R	3	0.118	0.0008				●	●									0.766	0.197	0°	15°
DGS3-002-15L	3	L	3	0.118	0.0008				●	●									0.766	0.197	15°	0°
DGS4-030	4	N	4	0.157	0.012	●	●	●	●	●			●						0.787	0.197	0°	0°
DGS4-030-4R	4	R	4	0.157	0.012			●	●	●									0.787	0.197	0°	4°
DGS4-030-4L	4	L	4	0.157	0.012			●	●	●									0.787	0.197	4°	0°
DGS5-030	5	N	5	0.197	0.012	●	●	●	●	●			●						0.984	0.217	0°	0°
DGS6-030	6	N	6	0.236	0.012	●	●	●	●	●									0.984	0.217	0°	0°

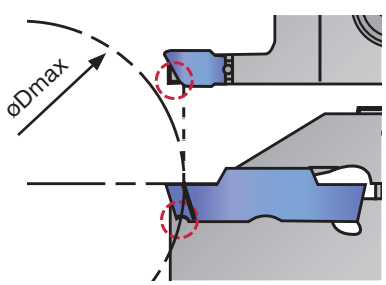
● : Line up

Caution

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

Designation	øDmax (in)
DGM2-002-15R/L	1.102
DGM3-002-15R/L	1.141
DGM4-030-15R/L	1.181
SGM3-020-15R/L	4.055

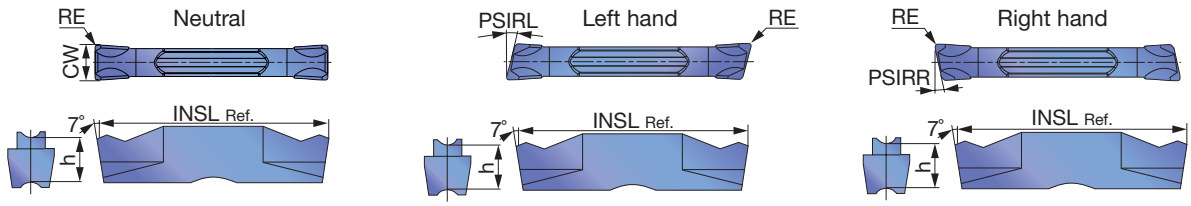
Designation	øDmax (in)
DGS2-002-15R/L	1.102
DGS3-002-15R/L	1.141
SGS3-020-15R/L	4.055
SGS3-002-15R/L	1.338



Reference pages: Toolholders → G121, Standard cutting conditions → G130

DGM

External grooving and parting, 2 corners



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

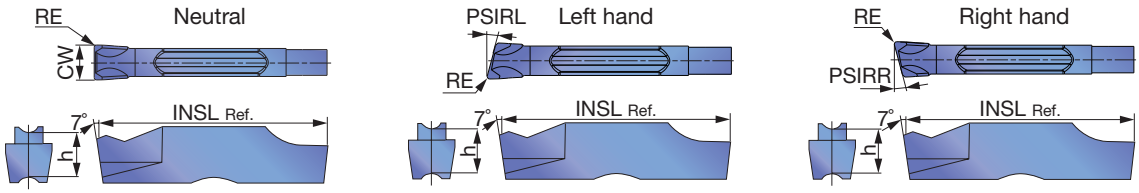
★ : First choice
☆ : Second choice

Designation	Seat size	HAND	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated								Cermet					INSL (in)	h (in)	PSIRL	PSIRR
						T9225	T9125	AH7025	AH725	AH905	GH130			NS9530								
DGM2-020	2	N	2	0.079	0.008	●	●	●	●		●			●					0.787	0.197	0°	0°
DGM2-020-6R	2	R	2	0.079	0.008			●	●		●								0.787	0.197	0°	6°
DGM2-020-6L	2	L	2	0.079	0.008			●	●		●								0.787	0.197	6°	0°
DGM2-020-8R	2	R	2	0.079	0.008			●	●		●								0.787	0.197	0°	8°
DGM2-020-8L	2	L	2	0.079	0.008			●	●		●								0.787	0.197	8°	0°
DGM2-020-15R	2	R	2	0.079	0.008			●	●		●								0.787	0.197	0°	15°
DGM2-020-15L	2	L	2	0.079	0.008			●	●		●								0.787	0.197	15°	0°
DGM2-002-15R	2	R	2	0.079	0.0008				●		●								0.762	0.197	0°	15°
DGM2-002-15L	2	L	2	0.079	0.0008				●		●								0.762	0.197	15°	0°
DGM3-020	3	N	3	0.118	0.008	●	●	●	●	●	●			●					0.787	0.197	0°	0°
DGM3-020-6R	3	R	3	0.118	0.008			●	●		●								0.787	0.197	0°	6°
DGM3-020-6L	3	L	3	0.118	0.008			●	●		●								0.787	0.197	6°	0°
DGM3-002-6R	3	R	3	0.118	0.0008				●		●								0.766	0.197	0°	6°
DGM3-002-6L	3	L	3	0.118	0.0008				●		●								0.766	0.197	6°	0°
DGM3-020-15R	3	R	3	0.118	0.008			●	●		●								0.787	0.197	0°	15°
DGM3-020-15L	3	L	3	0.118	0.008			●	●		●								0.787	0.197	15°	0°
DGM4-030	4	N	4	0.157	0.012	●	●	●	●	●	●			●					0.787	0.197	0°	0°
DGM4-030-4R	4	R	4	0.157	0.012			●	●		●								0.787	0.197	0°	4°
DGM4-030-4L	4	L	4	0.157	0.012			●	●		●								0.787	0.197	4°	0°
DGM4-030-15R	4	R	4	0.157	0.012			●	●		●								0.787	0.197	0°	15°
DGM4-030-15L	4	L	4	0.157	0.012			●	●		●								0.787	0.197	15°	0°
DGM5-030	5	N	5	0.197	0.012	●	●	●	●	●	●			●					0.984	0.217	0°	0°
DGM5-030-4R	5	R	5	0.197	0.012			●	●		●								0.984	0.217	0°	4°
DGM6-030	6	N	6	0.236	0.012	●	●	●	●	●	●								0.984	0.217	0°	0°
DGM8-040	8	N	8	0.315	0.016	●	●	●	●		●								1.181	0.264	0°	0°

● : Line up

Reference pages: Toolholders → G121, Standard cutting conditions → G130

External deep grooving and parting, 1corner



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

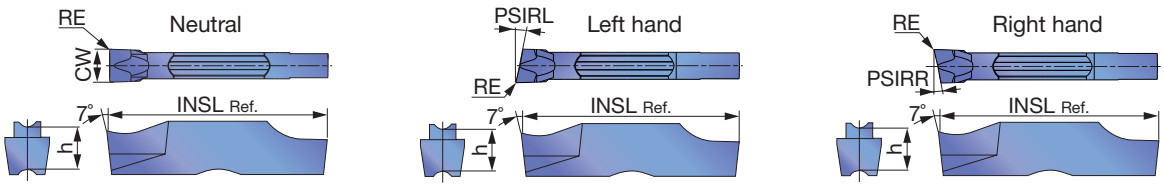
★ : First choice
☆ : Second choice

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

● : Line up

Reference pages: Toolholders → G121, Standard cutting conditions → G130

External deep grooving and parting, 1corner



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

★ : First choice
☆ : Second choice

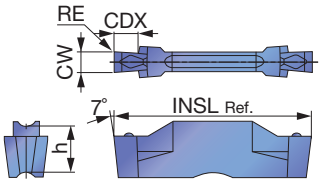
Designation	Seat size	HAND	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated AH7025	Coated AH725	Coated GH130	INSL (in)	h (in)	PSIRL	PSIRR
SGS2-020	2	N	2	0.079	0.008	●	●	●	0.787	0.197	0°	0°
SGS2-020-6R	2	R	2	0.079	0.008	●	●	●	0.787	0.197	0°	6°
SGS2-020-6L	2	L	2	0.079	0.008	●	●	●	0.787	0.197	6°	0°
SGS2-020-15R	2	R	2	0.079	0.008	●	●	●	0.787	0.197	0°	15°
SGS2-020-15L	2	L	2	0.079	0.008	●	●	●	0.787	0.197	15°	0°
SGS3-020	3	N	3	0.118	0.008	●	●	●	0.787	0.197	0°	0°
SGS3-020-6R	3	R	3	0.118	0.008	●	●	●	0.787	0.197	0°	6°
SGS3-020-6L	3	L	3	0.118	0.008	●	●	●	0.787	0.197	6°	0°
SGS3-002-6R	3	R	3	0.118	0.0008		●	●	0.780	0.197	0°	6°
SGS3-002-6L	3	L	3	0.118	0.0008		●	●	0.780	0.197	6°	0°
SGS3-020-15R	3	R	3	0.118	0.008	●	●	●	0.787	0.197	0°	15°
SGS3-020-15L	3	L	3	0.118	0.008	●	●	●	0.787	0.197	15°	0°
SGS3-002-15R	3	R	3	0.118	0.0008		●	●	0.780	0.197	0°	15°
SGS3-002-15L	3	L	3	0.118	0.0008		●	●	0.780	0.197	15°	0°
SGS4-030	4	N	4	0.157	0.012	●	●	●	0.787	0.197	0°	0°
SGS5-030	5	N	5	0.197	0.012	●	●	●	0.984	0.217	0°	0°
SGS6-030	6	N	6	0.236	0.012	●	●	●	0.984	0.217	0°	0°

● : Line up

Reference pages: Toolholders → G121, Standard cutting conditions → G130

DGE

External grooving (for high precision)



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

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated AH7025	Coated AH725	Coated GH130	Cermet NS9530	CDX (in)	INSL (in)	h (in)
DGE100-000	2	1	0.039	0		●	●	●	0.098	0.787	0.197
DGE130-000	2	1.3	0.051	0		●	●	●	0.098	0.787	0.197
DGE160-010	2	1.6	0.063	0.004	●	●	●	●	0.098	0.787	0.197
DGE185-010	2	1.85	0.073	0.004	●	●	●	●	0.138	0.787	0.197
DGE215-015	2	2.15	0.085	0.006	●	●	●	●	0.138	0.787	0.197

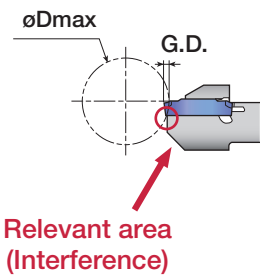
● : Line up

Caution

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

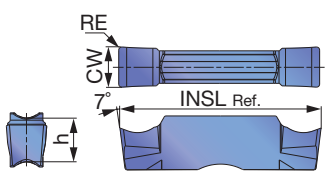
G.D = Groove depth

Designation	Max. groove depth (in)	øDmax (in) G.D. = 0.039	G.D. = 0.059	G.D. = 0.079	G.D. = 0.098	G.D. = 0.118
DGE100-000	0.079	∞	0.73	0.45	-	-
DGE130-000						
DGE160-010						
DGE185-010	0.118				0.35	0.28
DGE215-015						



DGG

External grooving (for high precision)



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

★ : First choice
☆ : Second choice

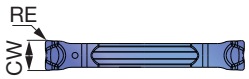
Designation	Seat size	CW±0.02 (mm)	CW±0.001 (in)	RE (in)	Coated AH7025	Cermet NS9530	Uncoated KS05F	INSL (in)	h (in)
DGG200-020	2	2	0.079	0.008	●	●	●	0.787	0.197
DGG300-020	3	3	0.118	0.008	●	●	●	0.787	0.197
DGG400-040	4	4	0.157	0.016	●	●	●	0.787	0.197
DGG500-040	5	5	0.197	0.016	●	●	●	0.984	0.217
DGG600-040	6	6	0.236	0.016	●	●	●	0.984	0.217

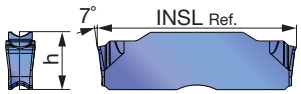
● : Line up

Reference pages: Toolholders → G121, Standard cutting conditions → G130

DGL

External grooving and parting





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

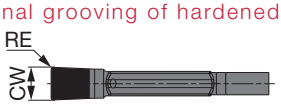
★ : First choice
☆ : Second choice

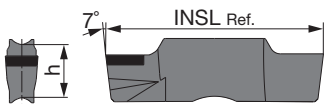
Designation	Seat size	CW±0.05 (mm)	CW±0.002 (in)	RE (in)	Coated AH7025	INSL (in)	h (in)
DGL3-025	3	3	0.118	0.010	●	0.787	0.197
DGL4-030	4	4	0.157	0.012	●	0.787	0.197
DGL5-030	5	5	0.197	0.012	●	0.984	0.217
DGL6-080	6	6	0.236	0.031	●	0.984	0.217

● : Line up

SGN

External grooving of hardened steel





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

★ : First choice
☆ : Second choice

Designation	Seat size	CW±0.025 (mm)	CW±0.001 (in)	RE (in)	CBN BX360	INSL (in)	h (in)
SGN200-020	2	2	0.079	0.008	●	0.787	0.197
SGN300-020	3	3	0.118	0.008	●	0.787	0.197
SGN400-020	4	4	0.157	0.008	●	0.787	0.197

● : Line up

Reference pages: Toolholders → G121, Standard cutting conditions → G130

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Hardness	Chipbreaker	Priority	Grade	Cutting speed *Vc* (sfm)
P	Steel 1045, 4135, etc.	< 300 HB	DGS	First choice	AH7025, AH725	164 - 591
		< 300 HB	DGM	Priority for wear resistance	T9225	262 - 984
		< 300 HB	DGM	Priority for wear resistance	T9125	262 - 656
		< 300 HB	DGS	Priority for fracture resistance	GH130	164 - 394
		< 300 HB	DGS	Priority for surface finish	NS9530	262 - 722
		< 300 HB	DGL	For mild steel Chip control	AH7025	164 - 591
M	Stainless steel 304SS, 316SS, 17-4 PH, etc.	< 200 HB	DGS	First choice	GH130	164 - 394
		< 200 HB	DGM	Priority for impact resistance	AH7025, AH725	164 - 394
K	Gray cast iron No.250B, No.300B, etc.	-	DGM	First choice	GH130	164 - 591
	Ductile cast iron 60-40-18, 60-55-06, etc.	-	DGM	First choice	GH130	164 - 394
N	Aluminum alloys Si < 12%	-	DGG	First choice	KS05F	328 - 1640
S	Titanium alloys Ti-6Al-4V, etc.	< HRC 40	DGM	First choice	AH905	66 - 262
		< HRC 40	DGS	Priority for fracture resistance	AH7025, AH725	66 - 262
H	Hardened steel 4137, etc.	> HRC 50	DGN	First choice	BX360	262 - 492

See page G122 - G123 for feed: *f* (ipr).

Reference pages: Toolholders → G121