

External Toolholder



External Toolholder - Content structure

- Indexable toolholders are listed by insert shape.
- Toolholders in the catalog are our standard items.

How to use the page

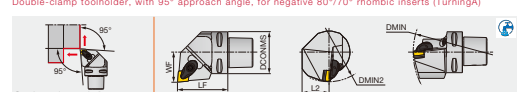
- Method 1** Select the insert shape described at the left end of each page, jump to the page on the left index, and choose a designation you need (4) in the dimension table (3). Applicable inserts are shown in (6) and (8).
- Method 2** Select the series name of a toolholder on C003 and check the details on each page.
- Method 3** Select an item from Quick Guide on C004 - C014.

CN
Rhombic, 80°
with hole

GN
Rhombic, 70°
with hole

2 TURNING
C-ACLNR/L

Double-clamp toolholder, with 95° approach angle, for negative 60°/70° rhombic inserts (Turning A)

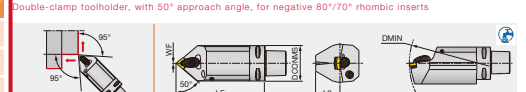


Cutting edge style L

Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert	Torque
CSACLNR/L22040-0904H	32	40	20	22	110	121	0.8	CN*/GNMG0904L	3
CSACLNR/L22040-12N	32	40	20	22	121	116	0.8	CN*/GNGA1204L	3
CSACLNR/L27050-0904H	40	50	25	27	140	110	0.8	CN*/GNMG0904L	3
CSACLNR/L27050-12N	40	50	25	27	140	110	0.8	CN*/GNGA1204L	3
CSACLNR/L30080-12N	50	60	30	35	155	110	0.8	CN*/GNMG0904L	3
CSACLNR/L40065-0904H	63	65	35	45	190	110	0.8	CN*/GNMG0904L	3
CSACLNR/L45065-12N	63	65	41	45	190	125	0.8	CN*/GNGA1204L	3
CSACLNR/L45135-12N	63	135	41	45	190	110	0.8	CN*/GNGA1204L	3
CSACLNR/L45065-16N	63	65	41	45	190	125	1.2	CN*/1608L	6.4

1 **C** **4** **3** **6**

3 Double-clamp toolholder, with 50° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style L

Metric	DCONMS	LF	L2	WF	DMIN	RE	Insert	Torque
CSACLNR/N0090-12 ³	50	90	32	0	0	0.8	CN*/GNGA1204L	3
CSACLNR/N0090-12N ³	50	90	32	0	165	0.8	CN*/GNGA1204L	3
CSACLNR/N0125-12 ³	50	125	32	0	0	0.8	CN*/GNGA1204L	3
CSACLNR/N0125-12N ³	50	125	32	0	165	0.8	CN*/GNGA1204L	3
CSACLNR/N0150-12N ³	63	100	37.5	0	190	0.8	CN*/GNGA1204L	3
CSACLNR/N0150-12N ³	63	140	37.5	0	190	0.8	CN*/GNGA1204L	3

SPARE PARTS


Designation	Clamp	Lever	Block	Clamp screw	Shim	Spring	Spring pin	Wrench	Wrench
CSACLNR/L	DCM-43	DLL-43	DPB-43	DLS-43	LBC-42	BP-10	LSP-4	P-3	P-4

Reference pages: C-ACLNR/L, C-ACLNR/L Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -
Parts for coolant hose → C133

C020 tungaloy.com/us

TUNECAP
C-PCLNR/L

5 Lever-lock toolholder, with 95° approach angle, for negative 60°/70° rhombic inserts



Cutting edge style L

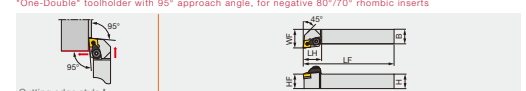
Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
CPCLNR/L30080-12N	50	60	32	35	155	110	0.8	CN*/GNMG0904L
CPCLNR/L45065-12N	63	65	41	45	190	125	0.8	CN*/GNGA1204L

SPARE PARTS

Designation	Clamp	Lever	Block	Clamp screw	Shim	Spring	Spring pin	Wrench	Wrench
CPCPLNR/L	DCM-43	DLL-43	DPB-43	DLS-43	LBC-42	BP-10	LSP-4	P-3	P-4

7 DCLNR/L

One-Double toolholder with 95° approach angle, for negative 60°/70° rhombic inserts



Cutting edge style L

Metric	H	B	LF	LH	HF	WF	RE**	Insert
DCLNR/L2020K12	20	20	125	30	25	25	0.8	CN*/GNGA1204L
DCLNR/L2020K12	25	25	150	30	25	32	0.8	CN*/GNGA1204L
DCLNR/L2025F12	32	25	170	30	32	32	0.8	CN*/GNGA1204L

SPARE PARTS

Designation	Clamp	Lever	Block	Clamp screw	Shim	Spring	Spring pin	Wrench	Wrench
DCLNR/L	DCM-43	DLL-43	DPB-43	DLS-43	LBC-42	BP-10	LSP-4	P-3	P-4

8 INSERT SELECTION

Application	Grade	Chipbreaker shape	Application	Grade	Chipbreaker shape
Finishing	TN15	TF	Finishing	TN15	TF
Medium cutting	TN15	TM	Medium to heavy cutting	TN15	TM
Medium to heavy cutting	TN15	TH	Finishing	AN505	SM
Medium to heavy cutting	TN15	TH	Medium cutting	AN505	SH
Finishing	DX120	DF	Medium to heavy cutting	AN505	SH
Medium cutting	DX140	DF	Medium to heavy cutting	AN505	SH
Medium to heavy cutting	TH10	DF	Medium to heavy cutting	AN505	SH

Reference pages: C-PCLNR/L Inserts → B054 -, CBN → B168 -, B178, PCD → B211 -
DCLNR/L Inserts → B054 -, CBN → B168 -, B178, PCD → B211 -
Parts for coolant hose → C133

Tungaloy C021

- 1: Insert shape
- 2: Series name of indexable external toolholders
- 3: Dimension table
- 4: Toolholder designation
e.g. right-hand, 1 inch square shank

→ **ACLNR16 33-A**

- 5: Dimension drawing (conforming to ISO13399)
- 6: Applicable insert
- 7: Spare parts
- 8: Basic selection
- 9: Reference pages

When ordering

- Please specify the designation and quantity.
e.g. ACLNR164-A ... 1 (one external toolholder per package)
- * Inserts are not included. Please order those separately.

Main products

		Inch	Metric
	ADDMULTURN Ultimate solution for multi-directional turning C015	✓	✓
	TURNFEED Innovative tool realizing both high productivity and economy C017	✓	✓
	ISO ETURN  Small-sized "Eco" insert series for maximized profits C018	✓	✓
	MINIFORCE  Economical double-sided inserts with excellent sharpness C057, C119 C128, C129	✓	✓
	TURNINGA Highly rigid clamping system with excellent repeatability C019 -	✓	✓
	TUNG TJET  Toolholders for high pressure coolant supply C024 -, C036 -, C093 - C105 -, C121 -	✓	✓
	DIMPLEFX Ceramic insert with dimple for highly efficient cast iron machining C027, C042 -, C059 C081, C109	✓	✓
	TURNTEC Inserts and toolholders for roughing large depths of cut with high productivity C060, C061	✓	✓
	Y-PRO SERIES Inserts with 25° corner angle for profiling C103, C107, C110 C112, C130 - C132	✓	✓
	TURNFEED Tool series for super high-feed cutting C127	✓	✓
	FIXRTURN Highly productive round insert with 6 indexes C071, C074	✓	✓



























External Toolholder - Quick Guide (Square shanks)

Inch

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (in)					Coolant supply		Page		
				0.750x0.750	1.000x1.000	1.250x1.250				External supply		TUNGALOY (Through-coolant)	
ADD TURN 	Front turning: 95° Back turning: 21.5° 	ATXOR/L	6C-TOMG** 	○	○	○				✓		C102	
	Front turning: 117.5° Back turning: 27.5° 	ATXOR/L	6V-TOMG** 	○	○	○				✓		C102	
	Front turning: 95° Back turning: 21.5° 	STXCR/L-CHP-MC	3C-TCMT** 		○						✓		C100
TURN FEED 	48.5° 	PPXOR/L**-HD	POMG ** 		○	○				✓		C063	
	22.5° 	PPXOR/L**-HF			○	○				✓		C063	
Double clamp A TURNING 	L 95° 	ACLNR/L**4	CN** 43 80° 	○	○	○				✓		C019	
		ACLNR/L**-4-CHP-MC	GNGA 43 70° 	○	○						✓		C024
		ACLNR/L**33	CN** 33 80° GNMG 33 70° 	○	○						✓		C019
	K 95° 	ACKNR/L**4	CN** 43 80° 		○						✓		C029
		R 75° 	ACRNR/L**4			○					✓		C032
	L 95° 	AWLNR/L**4	WN** 43 80° 	○	○	○					✓		C121
		AWLNR/L**-4-CHP-MC		○	○						✓		C125
		AWLNR/L**33	WN** 33 80° 	○	○						✓		C121
	J 93° 	ATJNR/L**3	TN** 33 		○	○					✓		C088
	G 91° 	ATGNR/L**3	60° 		○	○					✓		C091
	F 91° 	ATFNR/L**3			○	○					✓		C094
	Q 105° 	ATQNR/L**3			○	○					✓		C096
	J 93° 	ADJNR/L**4	DN** 43 55° 	○	○	○					✓		C036
ADJNR/L**-4-CHP-MC		FNGA 43 45° 		○	○						✓	C040	
ADJNR/L**33		DN** 33 55° FNMG 33 45° 	○	○						✓		C036	
P 62.5° * 	ADPNN**4	DN** 43 55° FNGA 43 45° 		○	○					✓		C049	

*: Tungaloy's symbol

Inch

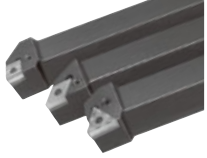




























Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (in)					Coolant supply		Page	
				0.750x0.750	1.000x1.000					External supply		TUNGALOY (Through-coolant)
TURNING 	Q 107.5° 	ADQNR/L**4	DN** 43 55° FNGA 43 45° 	○	○					✓		C045
			DN** 33 55° FNMG 33 45° 	○	○					✓		C045
	J 93° 	AVJNR/L**3	VN** 33 35° 	○	○					✓		C103
	V 72.5° 	AVNN**3	YN** 33 	○	○					✓		C107
	Q 117.5° 	AVQNR/L**3	25° 	○	○					✓		C110
	J 93° 	AVJNR/L**2.33	VN** 2.33 	○	○					✓		C103
	V 72.5° 	AVNN**2.33	35° 	○	○					✓		C107
	Q 122.5° 	AVQNR/L**2.33		○	○					✓		C110
	B 75° 	ASBNR/L**4	SN** 43 	○	○					✓		C085
	D 45° 	ASDNN**4	90° 	○	○					✓		C076
	S 45° 	ASSNR/L**4		○	○					✓		C078
	K 75° 	ASKNR/L**4		○	○					✓		C082
		ARGNR/L	RN** 		○					✓		C065

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



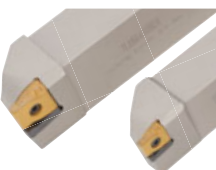


External Toolholder - Quick Guide (Square shanks)

Inch

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (in)					Coolant supply		Page	
				0.625x0.625	0.750x0.750	1.000x1.000				External supply		TUNGALOY (Through-coolant)
	L 95° 	PCLNR/L**4-CHP	CN** 43 80° 									
			GNGA 43 70° 									
		PCLNR/L**33	CN** 33 80° 							✓		
		PCLNR/L**33-CHP	GNMG 33 70° 							✓		
			PCLNR/L**33-CHP-N								✓	
	L 95° 	PWLNR/L**4-CHP	WN** 43 80° 								✓	
			PWLNR/L**33	WN** 33 80° 							✓	
				PWLNR/L**33-CHP								✓
	G 91° 	PTGNR/L**3-CHP	TN** 33 60° 								✓	
			PTGNR/L**23	TN** 23 60° 							✓	
				PTGNR/L**23-CHP								✓
	J 93° 	PDJNR/L**4-CHP	DN** 43 55° 								✓	
			FNGA 43 45° 									
				PDJNR/L**33	DN** 33 55° 	○	○	○				✓
			PDJNR/L**33-CHP	FNMG 33 45° 							✓	
	J 93° 	PVJNR/L**3-CHP	VN** 33 35° 								✓	
			YN** 33 25° 									
				PVJNR/L**2.33	VN** 2.33 35° 	○						✓
		PVJNR/L**2.33-CHP								✓		
Q 107.5° 		PVQNR/L**3-CHP	VN** 33 35° 							✓		
			YN** 33 25° 							✓		

Inch

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (in)						Coolant supply		Page
				0.375x0.375	0.500x0.500	0.625x0.625	0.750x0.750	1.000x1.000	1.250x1.250	1.500x1.500	External supply	
	L 95°	SCLCR/L**3	CC** 32.5 80°			○	○	○		✓		C034
		SCLCR/L**4	CC** 43 80°				○	○		✓		C034
	L 95°	JSWLXR/L JSWL2XR/L	WX** 22 80°	○	○	○	○	○		✓		C128, C129
		G 91°	STGCR/L**2	TC** 21.5 60°	○	○				✓		C099
	STGCR/L**3		TC** 32.5 60°			○	○		✓		C099	
	J 93°	SDJCR/L**2	DC** 21.5 55°	○	○				✓		C052	
		SDJCR/L**3	DC** 32.5 55°		○	○	○	○	✓		C052	
		JSDJXR/L JSDJ2XR/L	DX** 22 55°	○	○	○	○	○	✓		C057	
	J 93°	SVJCR/L**3	VC** 33 35°			○	○	○	✓		C113	
		JSVJXR/L JSVJ2XR/L	VX** 73.5 35°	○	○	○	○	○	✓		C119	
	Q 117.5°	SVQCR/L**3	VC** 33 35°					○	✓		C116	
	J 93°	SYJBR/L	YWMT16				○	○	✓		C130	
	Q 122.5°	SYQBR/L	25°				○	○	✓		C131	
	H 100°	SYHBR/L					○	○	✓		C132	
I 76.5°	SYIBN					○	○	✓		C131		
		SRGCR/L	RCM*					○	✓		C070	
		SRDCN					○		✓		C073	
Double clamp for dimple ceramic insert C DIMPLEFX 	L 45°	CCLNR/L-RD	CNGD 80°					○	✓		C027	
	S 45°	CSSNR/L-RD	SNGD 90°					○	✓		C081	
	S 45°	CHSNR/L-RD	HNGD 90°					○	✓		C059	
TURNTEC 	A 93°	TLANR/L-16	LNMX16				○	○	○	✓	C060	
	F 93°	TLFNR/L-16	LNMX16				○	○		✓	C061	
	B 75°	TLBNR/L-24	LNMX24					○	✓		C061	















External Toolholder - Quick Guide (Square shanks)

Metric

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm)					Coolant supply		Page		
				20x20	25x25	32x25	32x32	40x40	External supply	TUNGALOY (Through-coolant)			
ADD TURN 	Front turning: 95° Back turning: 21.5° 	ATXOR/L	6C-TOMG** 	○	○		○			✓		C102	
	Front turning: 117.5° Back turning: 27.5° 	ATXOR/L	6V-TOMG** 	○	○		○			✓		C102	
	Front turning: 95° Back turning: 21.5° 	STXCR/L-CHP-MC	3C-TCMT** 			○					✓		C100
TURN FEED 	48.5° 	PPXOR/L**-HD	POMG** 				○	○		✓		C063	
	22.5° 	PPXOR/L**-HF					○	○		✓		C063	
Double clamp A TURNING 	L 95° 	ACLNR/L**12	CN**12 80° 	○	○	○				✓		C019	
		ACLNR/L**12-CHP-MC	GNGA12 70° 									✓	C024
		ACLNR/L**0904	CN**09 80° GNMG09 70° 	○	○						✓		C019
	L 95° 	AWLNR/L**08	WN**08 80° 	○	○	○					✓		C121
		AWLNR/L**08-CHP-MC										✓	C125
		AWLNR/L**06	WN**06 80° 	○	○						✓		C121
	J 93° 	ATJNR/L**16	TN**16 	○	○						✓		C088
	G 91° 	ATGNR/L**16	60° 	○	○						✓		C091
	F 91° 	ATFNR/L**16		○	○						✓		C094
	Q 105° 	ATQNR/L**16		○	○						✓		C096
	J 93° 	ADJNR/L**15	DN**15 55° FNGA15 45° 	○	○	○					✓		C036
		ADJNR/L**15-CHP-MC										✓	C040
ADJNR/L**1104		DN**11 55° FNMG11 45° 	○	○						✓		C036	
P 62.5° * 	ADPNN**15	DN**15 55° FNGA15 45° 	○	○						✓		C049	
Q 107.5° 	ADQNR/L**15	DN**15 55° FNGA15 45° 	○	○						✓		C045	
	ADQNR/L**11	DN**11 55° FNMG11 45° 	○	○						✓		C045	

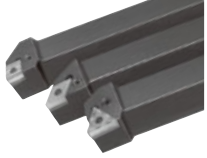


























*: Tungaloy's symbol

Metric

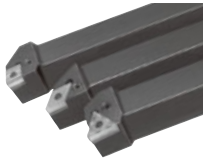




















Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm)					Coolant supply		Page
				20x20	25x25	32x25	32x32	40x40	External supply	TUNGALLOY (Through-coolant)	
Double clamp A 	J 93°	AVJNR/L**16	VN**16 	○	○				✓		C103
	V 72.5°	AVVNN**16	YN**16 	○	○				✓		C107
	Q 117.5°	AVQNR/L**16		○	○				✓		C110
	J 93°	AVJNR/L**1204	VN**1204	○	○				✓		C103
	V 72.5°	AVVNN**1204		○	○				✓		C107
	Q 122.5°	AVQNR/L**1204		○	○				✓		C110
	B 75°	ASBNR/L12	SN**12	○	○				✓		C085
	D 45°	ASDNN12		○	○				✓		C076
	S 45°	ASSNR/L12		○	○				✓		C078
	K 75°	ASKNR/L12		○	○				✓		C082
		ARGNR/L	RN** 		○				✓		C065
One Double D 	L 95°	DCLNR/L12	CN**12  GNGA12 	○	○	○			✓		C021
	L 95°	DWLNR/L08	WN**08 	○	○	○			✓		C122
	J 93°	DDJNR/L15	DN**15 	○	○	○			✓		C037
	Q 105°	DDQNR/L15	FNGA15 	○	○	○			✓		C046
	G 91°	DTGNR/L16	TN**16 	○	○				✓		C092
	F 91°	DTFNR/L16		○	○				✓		C094
	B 75°	DSBNR/L12	SN**12	○	○				✓		C086
	D 45°	DSDNN12		○	○				✓		C076
	S 45°	DSSNR/L12		○	○				✓		C079
	K 75°	DSKNR/L12		○	○				✓		C082
		DRGNR/L12	RN** 		○				✓		C066

External Toolholder - Quick Guide (Square shanks)

Metric

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm)					Coolant supply		Page	
				16x16	20x20	25x25	32x25	32x32	External supply	TUNGALOY (Through-coolant)		
Lever lock P 	L 95° 	PCLNR/L**12 PCL2NR**12	CN**12  80°	○	○	○	○		✓		C022	
		PCLNR/L**12-CHP PCLNR/L**12-CHP-MC	GNGA12  70°		○	○					✓	C023, C024
		PCLNR/L**0904	CN**09  80°		○	○				✓		C022
		PCLNR/L**09-CHP-MC	GNMG09  70°		○					✓		C024
		PCLNR/L**09-CHP-N			○	○					✓	
	B 75° 	PCBNR/L**12	CN**12  80°			○				✓		C031
	F 91° 	PCFNR/L	CN**12  80° GNGA12  70°		○	○				✓		C030
	L 95° 	PWLNR/L**08-CHP PWLNR/L**08-CHP-MC	WN**08  80°		○	○					✓	C124, C125
		PWLNR/L**0604	WN**06  80°		○	○				✓		C123
		PWLNR/L**0604-CHP			○	○					✓	
	L 95° 	PTL2NR/L**16	TN**16  60°		○					✓		C088
	J 93° 	PTJNR/L**1104	TN**11  60°			○				✓		C089
	G 91° 	PTGNR/L**16	TN**16  60°		○	○	○			✓		C092
		PTGNR/L**16-CHP				○	○				✓	C093
		PTGNR/L**1104	TN**11  60°			○	○			✓		C092
PTGNR/L**1104-CHP					○	○				✓		C093
F 91° 	PTFNR/L**16	TN**16  60°		○	○	○			✓		C095	
	PTFNR/L**1104	TN**11  60°			○	○			✓		C095	
























Metric

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm)					Coolant supply		Page	
				16x16	20x20	25x25	32x25	32x32	External supply	TUNGALOY (Through-coolant)		
	J 93° 	PDJNR/L**15	DN**15 55° 		○	○	○		✓		C038	
		PDJNR/L**15-CHP	FNGA15 45° 		○	○				✓		C039
		PDJNR/L**1104	DN**11 55° 	○	○	○			✓		C038	
		PDJNR/L**1104-CHP	FNMG11 45° 		○	○				✓		C039
	P 62.5° *	PDPNN**15	DN**15 55° 			○			✓		C050	
	Q 107.5°	PDQNR/L15	FNGA15 45° 			○			✓		C047	
	J 93° 	PVJNR/L**16-CHP	VN**16 35°  YN**16 25° 		○	○				✓		C105
		PVJNR/L**1204	VN**12 35° 	○	○	○			✓		C104	
		PVJNR/L**1204-CHP			○	○				✓		C105
	Q 107.5° 	PVQNR/L**1204	VN**12 35° 		○	○			✓		C111	
		PVQNR/L**16-CHP	VN**16 35°  YN**16 25° 		○	○				✓		C112
	V 72.5°	PVVNN**1204	VN**12 35° 		○	○			✓		C108	
	B 75°	PSBNR/L12	SN**12		○	○			✓		C086	
	D 45°	PSDNN12			○	○			✓		C077	
	S 45°	PSSNR/L12	90° 		○	○	○		✓		C080	
	K 75°	PSKNR/L12			○	○			✓		C083	
		PRGNR/L	RN** 		○	○			✓		C066	
		PRGCR/L	RCM**12 			○	○	○		✓		C069
PRDCN12					○	○			✓		C072	

*: Tungaloy's symbol

External Toolholder - Quick Guide (Square shanks)

Metric

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Sizes of square shanks (mm)							Coolant supply		Page		
				10x10	16x16	20x20	25x25	32x25	32x32	40x40	External supply	TUNGALLOY (Through-coolant)			
	L 95°	SCLCR/L	CC**12  80°			○						✓		C034	
	L 95°	JSWLXR/L JSWL2XR/L	WX**04  80°	○	○	○	○					✓		C128, C129	
	A 91°	STACR/L	TC**16  60°		○							✓		C098	
	J 93°		SDJCR/L11	DC**11  55°		○	○	○					✓		C052
			JSDJXR/L JSDJ2XR/L	DX**07  55°	○	○	○	○					✓		C057
	N 62.5°	SDNCN11	DC**11  55°			○	○	○					✓		C054
	Q 107.5°	SDQCR/L11					○	○					✓		C054
	J 93°		SVJCR/L	VC**16  35°			○	○	○				✓		C113
			JSVJXR/L JSVJ2XR/L	VX**09  35°	○	○	○	○					✓		C119
	V 72.5°	SVVCN	VC**16  35°				○	○					✓		C115
	Q 117.5°	SVQCR/L						○	○				✓		C116
	J 93°	SYJBR/L16		YWMT16 				○	○				✓		C130
	Q 122.5°	SYQBR/L16		 25°					○	○			✓		C131
	H 100°	SYHBR/L16								○	○		✓		C132
	I 76.5°		SYIBN16										✓		C131
SRACR/L			RCM*	○		○						✓		C068	
SRGCR/L				○			○					✓		C070, C071	
		SRDCN					○	○				✓		C073, C074	
	L 45°	CCLNR/L-RD	CNGD  80°					○	○			✓		C027	
	J 93°	CDJNR/L-RD	DNGD  55°					○	○			✓		C042	
	N 63°	CDNNN-RD							○			✓		C044	
	V72.5°	CVVNN-RD	VNGD  35°						○			✓		C109	
	S 45°	CSSNR/L-RD	SNGD  90°						○			✓		C081	
	S 45°	CHSNR/L-RD	HNGD  90°						○			✓		C059	
	A 93°	TLANR/L6	LNMX16 					○	○		○	✓		C060	
	F 93°	TLFNR/L16	LNMX16 						○		○	✓		C061	
	B 75°	TLBNR/L24	LNMX24 								○	✓		C061	

Metric

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Size						Coolant supply		Page
				C3	C4	C5	C6			Through-coolant	TUNG TAPT (Through-coolant)	
	E	C6STECN-Y-CHP	3C-TCMT** 				○			✓		C101
	N	C6SDNCN-Y-CHP	2D-DCMT** 				○			✓		C056
Double clamp A	L 95°	C*ACLNR/L12	CN**12 80° 	○	○	○	○			✓		C020
	L 95°	C*ACLNN12	GNGA12 70° 			○	○			✓		C020
	M	C6ACMNN0904	CN**09 80° 				○			✓		C032
	L 95°	C*ACLNR/L**0904	GNMG09 70° 	○	○		○			✓		C020
Lever lock P	L 95°	C*PCLNR/L12	CN**12 80° 			○	○			✓		C021
		C*PCLNR/L**12-CHP	GNGA12 70° 		○	○	○			✓		C026
	M	C6PCMNN**12-CHP	CN**09 80° 				○			✓		C033
	L 95°	C*PCLNR/L**0904-CHP	GNMG09 70° 		○		○			✓		C026
Double clamp A	L 95°	C*AWLNR/L08	WN**08 80° 		○		○			✓		C122
		C*AWLNR/L06	WN**06 80° 		○					✓		C122
Lever lock P	L 95°	C*PWLNR/L**08-CHP	WN**08 80° 		○		○			✓		C126
		C*PWLNR/L**06-CHP	WN**06 80° 		○					✓		C126

Grade
Insert
Ext. Toolholder
Int. Toolholder
Threading
Grooving
Miniature tool
Milling cutter
Endmill
Drilling tool
Tooling System
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Metric

Brand name / Clamp system	Approach angle (Cutting edge style)	Designation	Inserts	Size						Coolant supply		Page
				C3	C4	C5	C6			Through-coolant	TUNG TIGHT (Through-coolant)	
Double clamp A	J 93°	C*ADJNR/L15	DN**15 		○	○	○			✓		C036
	N 62.5°	C*ADNNN15				○	○			✓		C043
	Q 107.5°	C*ADQNR/L15	FNGA15 		○	○				✓		C046
	U 93°	C*ADUNR/L			○					✓		C051
	J 93°	C*ADJNR/L1104	DN**11 FNMG11 		○	○		○		✓		C036
Lever lock P	J 93°	C*PDJNR/L15	DN**15 			○	○			✓		C040
		C*PDJNR/L**15-CHP	FNGA15 		○	○	○				✓	C041
		C*PDJNR/L**1104-CHP	DN**11 		○		○				✓	C041
	M	C6PDMNL1104-CHP	FNMG11 				○			✓		C048
Screw-on S	J 93°	C*SDJCR/L-CHP	DC**11 	○						✓		C053
Double clamp A	J 93°	C4ATJNR/L	TN**16 		○					✓		C089
Lever lock P	J 93°	C4PTJNR/L			○					✓		C090
Double clamp A	J 93°	C*AVJNR/L12	VN**12 		○		○			✓		C104
	Q 117.5°	C*AVQNR/L16	VN**16 YN**16 		○					✓		C110
Lever lock P	J 93°	C*PVJNR/L**-CHP	VN**16 YN**16 		○		○			✓		C106
		C*PVJNR/L**1204-CHP	VN**12 		○		○			✓		C106
Screw-on S	J 93°	C*SVJCR/L	VC**16 			○	○			✓		C114
	V 72.5°	C*SVVCN				○	○			✓		C114



Ultra high productivity of Front Turning, Back Turning, Profiling, and Face Turning with **ONE SINGLE TOOL**

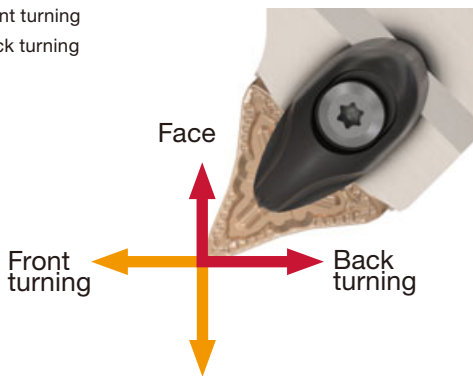
A
B
C
D
E
F
G
H
I
J
K
L
M

Double-sided 6-corner insert with 80° or 35° corner angle for versatile applications

- Back (pull) turning: High feed designed cutting edge improves productivity about 200% higher than existing ISO tools with no need for special programming.
- Front (push) turning: Same machining process is available using the same cutting edge angle as standard ISO tools.

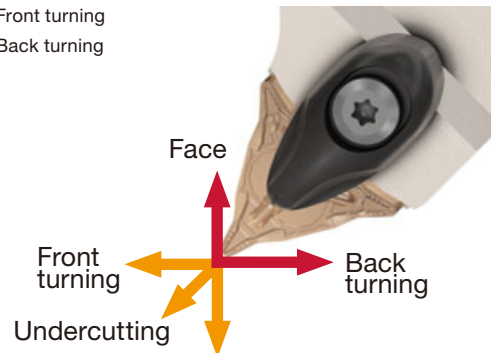
6C-TOMG

- Front turning
- Back turning



6V-TOMG

- Front turning
- Back turning

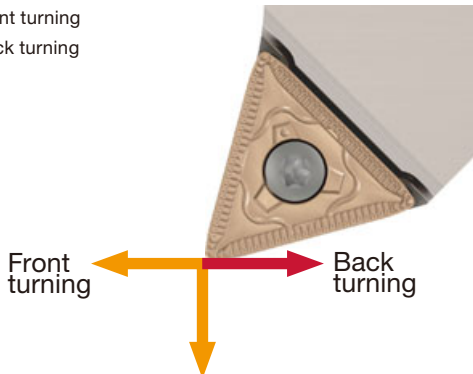


Single-sided 3-corner insert for super high productivity

- Back (pull) turning: High feed designed cutting edge improves productivity 300 - 400% higher than standard ISO tools.
- Front (push) turning: Applicable to great D.O.C.

3C-TCMT

- Front turning
- Back turning



Internal coolant toolholder prevents chip jamming and maximizes performance during back turning operations



Reference pages: **C100, C102**

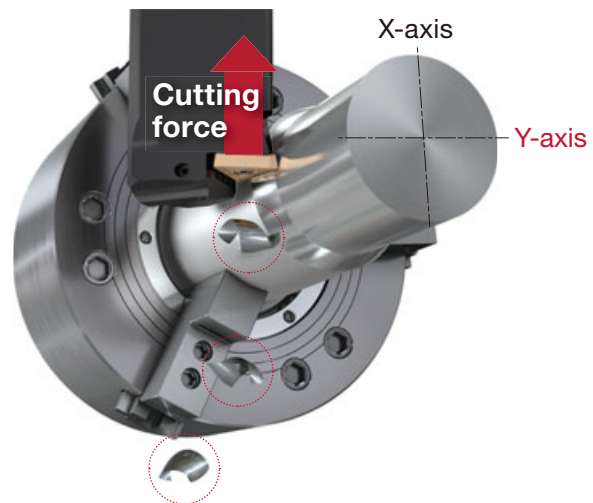
LEADING IN THE NEW DIRECTION

Y-axis turning tool with PSC connection for multitasking machines



■ Y-axis machining benefits

- The cutting force vector is directed in the longitudinal axis of the tool, resulting in higher stability and minimized vibration
- No chip entanglements, chips are directed down and away from the workpiece and toolholder



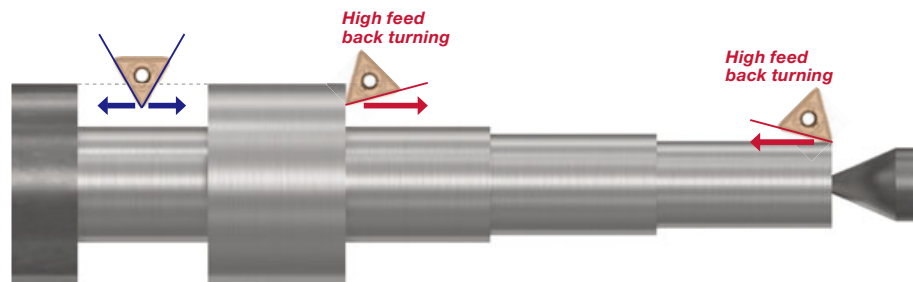
■ Tooling image of Y-axis orientation and applying high feed back turning

Medium cutting



3C-TCMT

Insert: 3C-TCMT29X608-TM
(Single-sided, 3 corners)



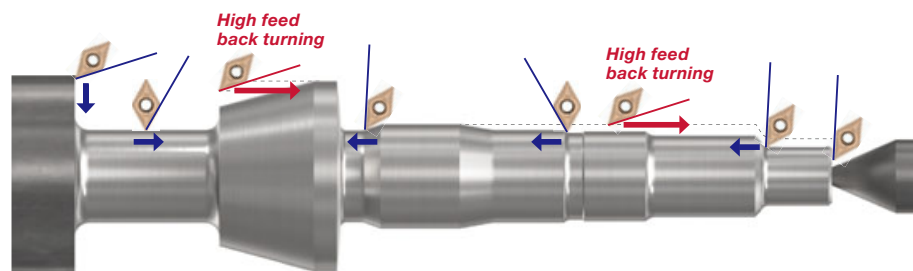
- Thanks to its high-feed geometry, **AddY-axisTurn** insert provides high productivity
- Y-axis tool orientation allows both sides of the cutting edge to be used, providing stable and long tool life

Finishing - Profiling



2D-DCMT

Insert: 2D-DCMT13T404-ZF
(Single-sided, 2 corners)



- **AddY-axisTurn** allows a precision workpiece completion with a single tool setup
- No interference with the tailstock
- Eliminates chip entanglement, promoting fully automated manufacturing

TURN^{TEN}FEED

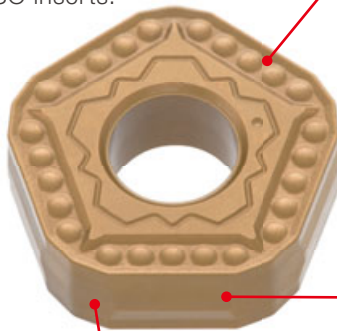


Economical, 10-cornered insert ensures high machining efficiency

- Available in 2 types of holders: HD type for large depths of cut and HF type for high feed turning
- Maximum 0.276" depth of cut, or maximum 0.079" feed per rev is attainable!

Economical 10-cornered, double-sided, M-class insert

Achieves outstanding cost efficiency over standard ISO inserts.

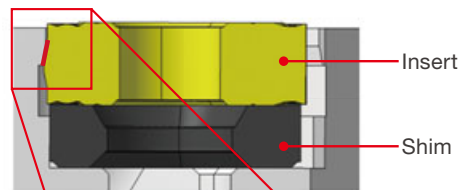


New – MNW style chipbreaker

Features protrusions on the rake face to facilitate smooth chip control, while achieving high crater wear resistance.

Dovetail clamping

Ensures secure insert retention while promoting smooth chip flow thanks to the integration of lever lock and dovetail clamping methods.



Flat Wiper

Built in the cutting edge to achieve superior machining surface at higher feed rates!

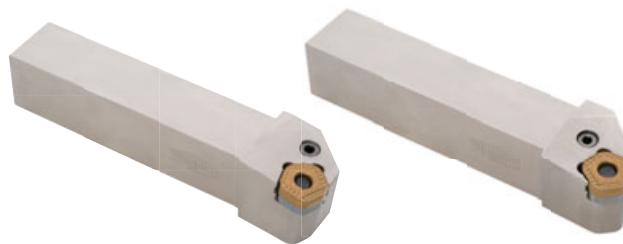


Holder selections

Available in 2 types:

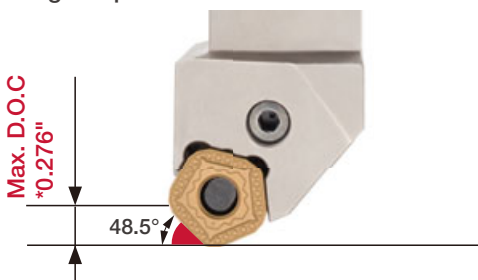
- HD holder for large depths of cut
- HF holder for high feed turning

Inserts are interchangeable between these two holders.

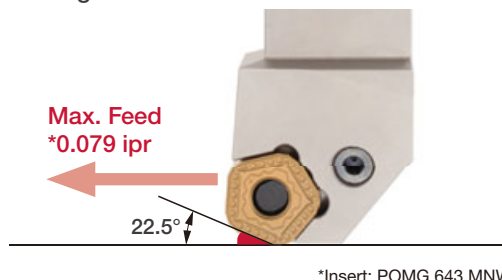


Features of Holders

HD holder
For High Depth of Cut



HF holder
For High Feed



*Insert: POMG 643 MNW

Reference pages: **C063**

Grade
Insert
Ext. Toolholder
Int. Toolholder
Threading
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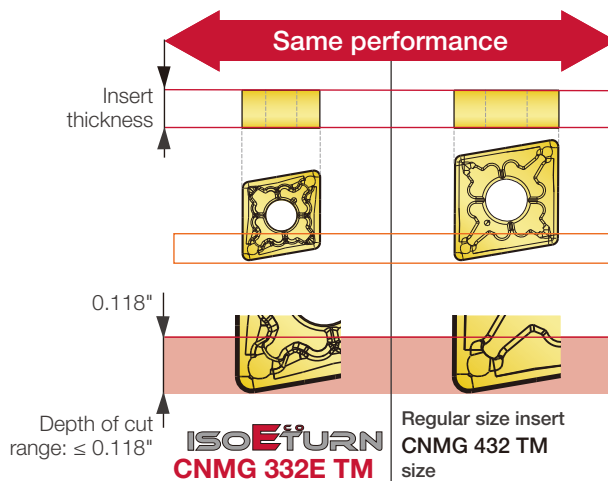




ISO-EcoTurn Small size inserts, for an economical advantage

Uncompromising insert performance

Comparison of ISO-EcoTurn and regular size inserts



ISO-EcoTurn inserts feature the identical thickness and chipbreaker geometry as Tungaloy's regular size inserts. These properties provide cutting performance equal to that of the regular size inserts, including chip control at a depth of cut up to 0.118".

Chip control

ISO-EcoTurn inserts incorporate an identical chipbreaker geometry as regular size inserts providing the same chip removal at a depth of cut up to 0.118".

ISO^{Eco}TURN
CNMG 332E TM

Regular size
CNMG 432 TM

Depth of cut (in)	0.118					
	0.079					
	0.059					
	0.039					
	0.020					
Condition	0.004	0.006	0.008	0.012	0.016	
	Feed (ipr)					

Depth of cut (in)	0.118					
	0.079					
	0.059					
	0.039					
	0.020					
Condition	0.004	0.006	0.008	0.012	0.016	
	Feed (ipr)					

Workpiece : 1045
Cutting speed : Vc = 660 sfm
Coolant : Wet

CN

GN



Rhombic, 80°
with hole

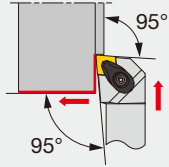


Rhombic, 70°
with hole

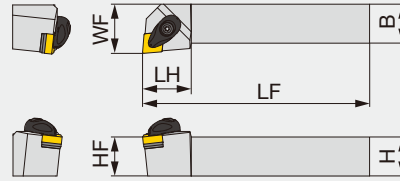
TURNING

ACLNR/L

Double-clamp toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Cutting edge style L



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ACLNR/L1233-A	0.750	0.750	4.500	0.900	0.750	1.000	0.031	CN**/GNMG 33...	2.2
ACLNR/L124-A	0.750	0.750	4.500	1.000	0.750	1.000	0.031	CN**/GNGA 43...	2.2
ACLNR/L1633-A	1.000	1.000	6.000	1.000	1.000	1.250	0.031	CN**/GNMG 33...	2.2
ACLNR/L164-A	1.000	1.000	6.000	1.250	1.000	1.250	0.031	CN**/GNGA 43...	2.2
ACLNR/L204-A	1.250	1.250	7.000	1.500	1.250	1.500	0.031	CN**/GNGA 43...	2.2
ACLNR/L205-A	1.250	1.250	7.000	1.500	1.250	1.500	0.047	CN** 54...	4.7
ACLNR/L206-A	1.250	1.250	7.000	1.500	1.250	1.500	0.047	CN** 64...	4.7
ACLNR/L245-A	1.500	1.500	8.000	1.500	1.500	1.750	0.047	CN** 54...	4.7
ACLNR/L246-A	1.500	1.500	8.000	1.500	1.500	1.750	0.047	CN** 64...	4.7

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ACLNR/L2020K0904-A	20	20	125	25	20	25	0.8	CN**/GNMG0904...	3
ACLNR/L2020H12-A	20	20	100	26	20	25	0.8	CN**/GNGA1204...	3
ACLNR/L2020K12-A	20	20	125	26	20	25	0.8	CN**/GNGA1204...	3
ACLNR/L2525M0904-A	25	25	150	25	25	32	0.8	CN**/GNMG0904...	3
ACLNR/L2525K12-A	25	25	125	30	25	32	0.8	CN**/GNGA1204...	3
ACLNR/L2525M12-A	25	25	150	30	25	32	0.8	CN**/GNGA1204...	3
ACLNR/L2525M16-A	25	25	150	31	25	32	1.2	CN**1606...	6.4
ACLNR/L3225P12-A	32	25	170	30	32	32	0.8	CN**/GNGA1204...	3
ACLNR/L3225P16-A	32	25	170	31	32	32	1.2	CN**1606...	6.4
ACLNR/L3232P16-A	32	32	170	31	32	40	1.2	CN**1606...	6.4
ACLNR/L3232P19-A	32	32	170	40	32	40	1.2	CN**1906...	6.4
ACLNR/L4040S19-A	40	40	250	40	40	50	1.2	CN**1906...	6.4

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench1	Wrench2
ACLNR/L**33-A, ACLNR/L**0904-A	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASC322	CSTB-3.5	T-15F	-
ACLNR/L**4-A, ACLNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASC422	CSTB-3.5	T-15F	-
ACLNR/L**5-A, ACLNR/L**16-A	ACP5S	ACS-6W	BP-8.8	SP-2.5	ASC533	CSTB-5	-	KEYV-T20
ACLNR/L**6-A, ACLNR/L**19-A	ACP6S	ACS-6W	BP-8.8	SP-2.5	ASC634	CSTB-5	-	KEYV-T20

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: ACLNR/L: Inserts → B054 -, B075, CBN → B168 -, B178, PCD → B211 -

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



CN



Rhombic, 80° with hole

GN

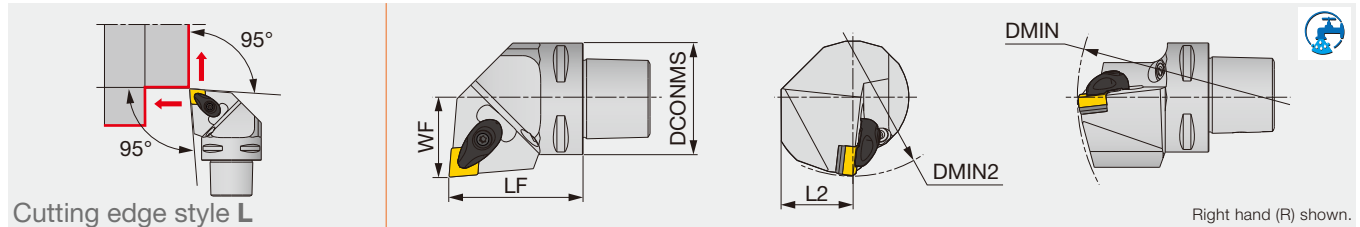


Rhombic, 70° with hole

TURNINGA

C-ACLNR/L

Double-clamp toolholder, with 95° approach angle, for negative 80°/70° rhombic inserts (TurningA)

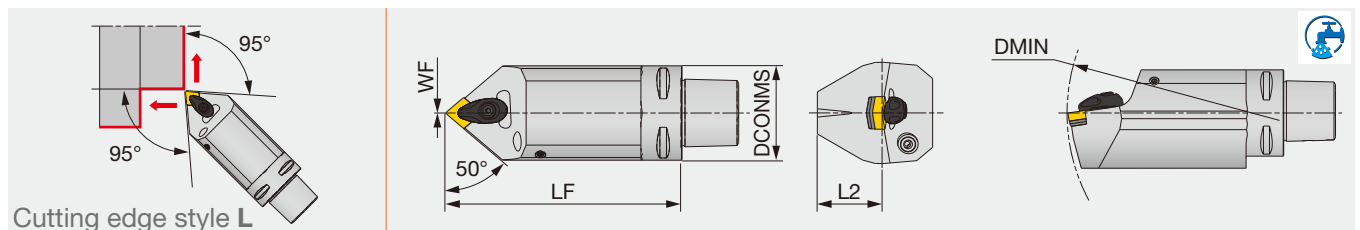


Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert	Torque
C3ACLNR/L22040-0904N	32	40	20	22	110	121	0.8	CN**/GNMG0904...	3
C3ACLNR/L22040-12N	32	40	20	22	121	116	0.8	CN**/GNGA1204...	3
C4ACLNR/L27050-0904N	40	50	25	27	140	110	0.8	CN**/GNMG0904...	3
C4ACLNR/L27050-12N	40	50	25	27	140	110	0.8	CN**/GNGA1204...	3
C5ACLNR/L35060-12N	50	60	32	35	165	110	0.8	CN**/GNGA1204...	3
C6ACLNR/L45065-0904N	63	65	35	45	190	110	0.8	CN**/GNMG0904...	3
C6ACLNR/L45065-12N	63	65	41	45	190	125	0.8	CN**/GNGA1204...	3
C6ACLNR/L45135-12N	63	135	41	45	190	110	0.8	CN**/GNGA1204...	3
C6ACLNR/L45065-16N	63	65	41	45	190	125	1.2	CN**1606...	6.4

Applicable for 7 MPa (1015 PSI) coolant
Torque: Recommended clamping torque: N·m

C-ACLNN

Double-clamp toolholder, with 50° approach angle, for negative 80°/70° rhombic inserts



Metric	DCONMS	LF	L2	WF	DMIN	RE	Insert	Torque
C5ACLNN00090-12 ⁽¹⁾	50	90	32	0	-	0.8	CN**/GNGA1204...	3
C5ACLNN00090-12N ⁽²⁾	50	90	32	0	165	0.8	CN**/GNGA1204...	3
C5ACLNN00125-12 ⁽¹⁾	50	125	32	0	-	0.8	CN**/GNGA1204...	3
C5ACLNN00125-12N ⁽²⁾	50	125	32	0	165	0.8	CN**/GNGA1204...	3
C6ACLNN00100-12N ⁽²⁾	63	100	37.5	0	190	0.8	CN**/GNGA1204...	3
C6ACLNN00140-12N ⁽²⁾	63	140	37.5	0	190	0.8	CN**/GNGA1204...	3

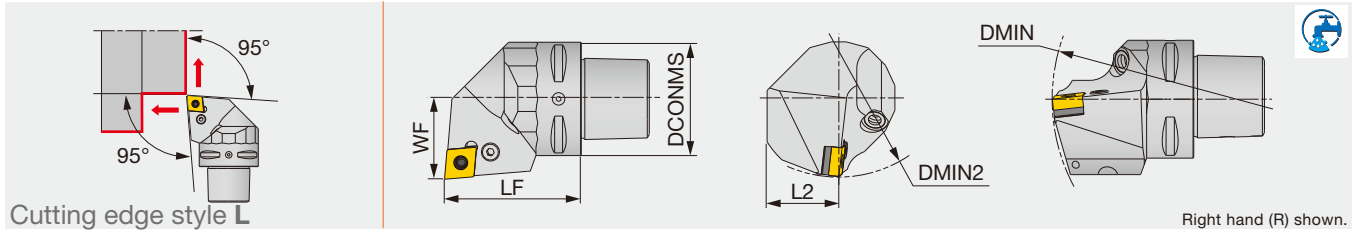
The items without DMIN cannot be used for boring.
Torque: Recommended clamping torque: N·m
(1) Applicable for 3 MPa (435 PSI) coolant (2) Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS

Designation	Clamp	Clamping screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench 1	Wrench 2
C*ACLN***-0904N	ACP3S-E	ACS-5W	SATZ-M10X1-5	ASC322	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C*ACLN***-12N	ACP4S	ACS-5W	SATZ-M8X1-M3	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C6ACLN*45065-16N	ACP5S	ACS-6W	SATZ-M8X1-M3	ASC533	CSTB-5	BP-8.8	SP-2.5	KEYV-T20	-
C5ACLNN00090-12	ACP4S	ACS-5W	EZ83	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F
C5ACLNN00125-12	ACP4S	ACS-5W	EZ83	ASC422	CSTB-3.5	BP-7	SP-2.5	-	T-15F

Reference pages: C-ACLNR/L, C-ACLNN: Inserts → **B054 - , B075**, CBN → **B168 - , B178**, PCD → **B211 -**
Parts for coolant hose → **C133**

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



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C5PCLNR/L35060-12N	50	60	32	35	165	110	0.8	CN**/GNGA1204...
C6PCLNR/L45065-12N	63	65	41	45	190	125	0.8	CN**/GNGA1204...

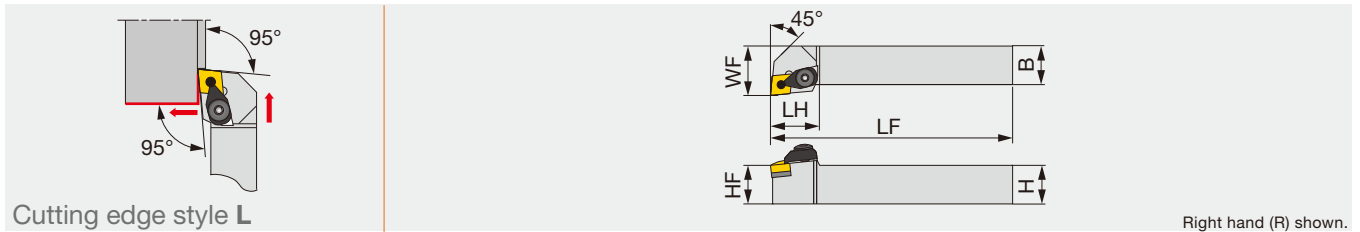
Applicable for 7 MPa (1015 PSI) coolant
The item without DMIN and DMIN2 cannot be used for boring.

SPARE PARTS

Designation	Coolant parts	Lever	Clamping screw	Shim	Spring pin	Wrench
C5PCLN*35060-12	EZ104	LCL4	LCS4	LSC42	LSP4	P-3
C*PCLN***-12N	SATZ-M10X1-M5	LCL4	LCS4	LSC42	LSP4	P-3

DCLNR/L

"One-Double" toolholder with 95° approach angle, for negative 80°/70° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
DCLNR/L2020K12	20	20	125	30	20	25	0.8	CN**/GNGA1204...
DCLNR/L2525M12	25	25	150	30	25	32	0.8	CN**/GNGA1204...
DCLNR/L3225P12	32	25	170	30	32	32	0.8	CN**/GNGA1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts **RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench1	Wrench2
DCLNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSC42	BP-10	LSP4	P-3	P-4

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-PCLNR/L: Inserts → **B054** -, CBN → **B168** -, **B178**, PCD → **B211** -
DCLNR/L: Inserts → **B054** -, CBN → **B168** -, **B178**, PCD → **B211** -,
Parts for coolant hose → **C133**



CN



Rhombic, 80°
with hole

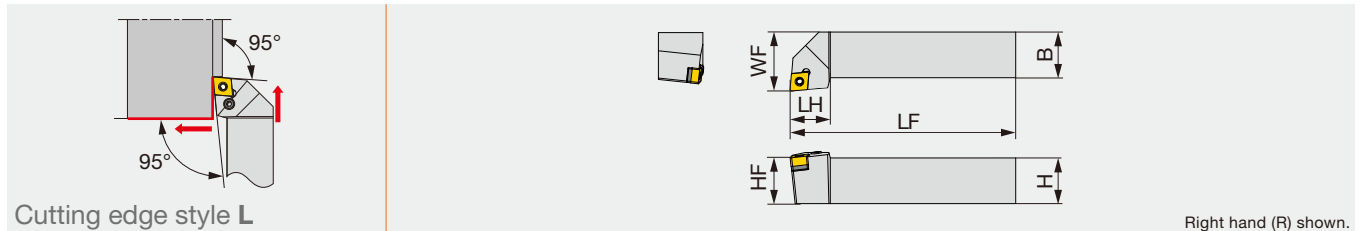
GN



Rhombic, 70°
with hole

PCLNR/L

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



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PCLNR/L1233	0.750	0.750	4.500	0.813	0.750	1.000	0.031	CN**/GNMG 33...	1.5
PCLNR/L1633	1.000	1.000	6.000	0.813	1.000	1.250	0.031	CN**/GNMG 33...	1.5

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR/L1616H09	16	16	100	20	16	20	0.8	CN**0903...	2
PCLNR/L1616	16	16	100	26	16	20	0.8	CN**/GNGA1204...	3
PCLNR/L1616H12E	16	16	100	26	16	20	0.8	CN**/GNGA1204...	3
PCLNR/L2020K09	20	20	125	20	20	25	0.8	CN**0903...	2
PCLNR/L2020K0904	20	20	125	20	20	25	0.8	CN**/GNMG0904...	2
PCLNR/L2020	20	20	125	28	20	25	0.8	CN**/GNGA1204...	3
PCLNR/L2020K12E	20	20	125	28	20	25	0.8	CN**/GNGA1204...	3
PCLNR/L2525M09	25	25	150	20	25	32	0.8	CN**0903...	2
PCLNR/L2525M0904	25	25	150	25	25	32	0.8	CN**/GNMG0904...	2
PCLNR/L2525M4	25	25	150	28	25	32	0.8	CN**/GNGA1204...	3
PCLNR/L2525M12E	25	25	150	28	25	32	0.8	CN**/GNGA1204...	3
PCLNR/L2525M16E	25	25	150	31	25	25	1.2	CN**1606...	3
PCLNR/L3225P4	32	25	170	28	32	32	0.8	CN**/GNGA1204...	3
PCLNR/L3232	32	32	170	40	32	40	1.2	CN**1906...	5
PCLNR/L3225P12E	32	25	170	28	32	32	0.8	CN**/GNGA1204...	3
PCLNR/L3225P16E	32	25	150	31	32	32	1.2	CN**1606...	3
PCLNR3232P16E	32	32	170	31	32	40	1.2	CN**1606...	3
PCLNR/L3232P19E	32	32	170	40	32	40	1.2	CN**1906...	5

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

**RE: Standard corner radius

SPARE PARTS

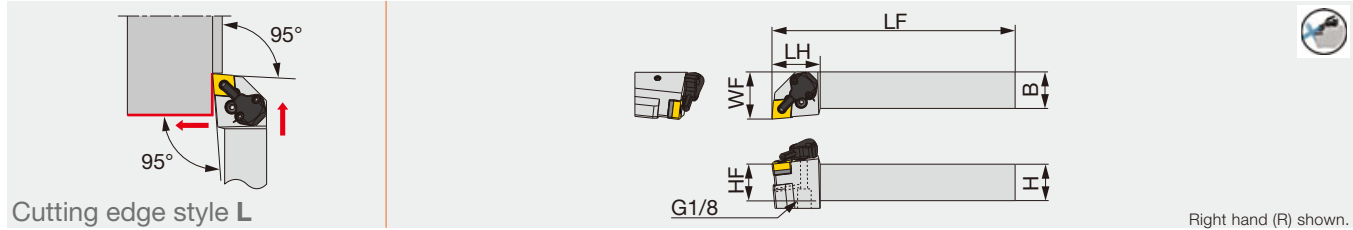
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCLNR/L**33	LSC317	LCS3	P-2.5	LSP3	LCL33
PCLNR/L**09	ELSC32	LCS3	P-2.5	LSP3L	LCL33
PCLNR/L1616	LSC42	LCS4CA	P-3	LSP4	LCL4
PCLNR/L1616H12E	ELSC42	LCS4CA	P-3	LSP4S	LCL43S
PCLNR/L**0904	LSC317	LCS3	P-2.5	LSP3	LCL33
PCLNR/L2020	LSC42	LCS4	P-3	LSP4	LCL4
PCLNR/L2020K12E, **2525M12E, **3225P12E	ELSC42	LCS4	P-3	LSP4S	LCL43M
PCLNR/L2525M4, **3225P4	LSC42	LCS4	P-3	LSP4	LCL4
PCLNR/L**16E	ELSC53	LCS5	P-3	LSP6C	LCL54
PCLNR/L3232	LSC63	LCS6	P-4	LSP6	LCL6
PCLNR/L3232P19E	ELSC63	LCS6	P-4	LSP6	LCL6

Reference pages: PCLNR/L: Inserts → **B054 - , B075**, CBN → **B168 - , B178**, PCD → **B211 -**

PCLNR/L-CHP

Tube connection

Lever lock toolholders – 95° approach angle.
For negative 80°/70° rhombic insert. High-pressure coolant capability.



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PCLNR/L1233-CHP	0.750	0.750	4.500	1.300	0.750	1.250	0.031	CN**/GNMG 33...	1.48
PCLNR/L124-CHP	0.750	0.750	4.500	1.300	0.750	1.250	0.031	CN**/GNGA 43...	2.21
PCLNR/L1633-CHP	1.000	1.000	6.000	1.300	1.000	1.250	0.031	CN**/GNMG 33...	1.48
PCLNR/L164-CHP	1.000	1.000	6.000	1.300	1.000	1.250	0.031	CN**/GNGA 43...	2.21

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PCLNR/L2020K0904-CHP	20	20	125	33	20	32	0.8	CN**/GNMG0904...	2
PCLNR/L2020K12-CHP	20	20	125	33	20	32	0.8	CN**/GNGA1204...	3
PCLNR/L2525M0904-CHP	25	25	150	33	25	32	0.8	CN**/GNMG0904...	2
PCLNR/L2525M12-CHP	25	25	150	33	25	32	0.8	CN**/GNGA1204...	3

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

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PCLNR/L**33-CHP, PCLNR/L**0904-CHP	LSC317	LCS3	P-2.5	LSP3	LCL33
PCLNR/L**4-CHP, PCLNR/L**12-CHP	LSC42	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PCLNR/L**33-CHP, PCLNR/L**0904-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PCLNR/L**4-CHP, PCLNR/L**12-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA	with rake DIA	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PCLNR/L-CHP: Inserts → **B054 - , B075**, CBN → **B168 - , B178**, PCD → **B211 -**
Parts for coolant hose → **C133**

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



CN



Rhombic, 80°
with hole

GN



Rhombic, 70°
with hole

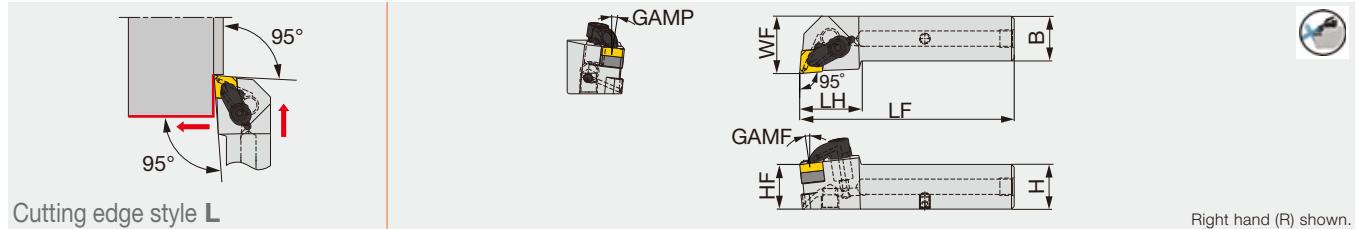
ACLNR/L-CHP-MC

Direct connection

Tube connection

Double clamping tool holders-95° approach angle

For negative 80°/70° rhombic insert. High-pressure coolant capability with tube and direct connections



Inch	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque
ACLNR/L12-4-CHP-MC	0.750	0.750	4.500	1.378	0.750	1.000	6°	6°	CN**/GNGA 43...	2.95
ACLNR/L16-4-CHP-MC	1.000	1.000	6.000	1.378	1.000	1.250	6°	6°	CN**/GNGA 43...	2.95

Metric	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque*
ACLNR/L2020X-12-CHP-MC	20	20	105	35	20	25	6°	6°	CN**/GNGA1204...	4
ACLNR/L2525X-12-CHP-MC	25	25	120	35	25	32	6°	6°	CN**/GNGA1204...	4

Torque: Recommended clamping torque: lbs-ft (*N·m)
Applicable for 14 MPa (2031 PSI) pressure coolant

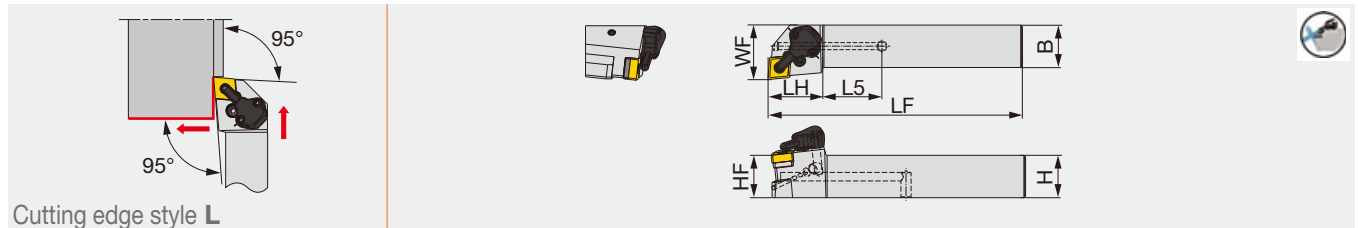
Designation	Clamp set	Shim	Shim screw	screw for tube connection	Coolant plug	O-ring	Wrench
ACLNL...	LCGL-4JCSET	RCT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20
ACLNR...	LCGR-4JCSET	RCT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20

PCLNR/L2020X-CHP-MC

Direct connection

Lever lock toolholders – 95° approach angle.

For negative 80°/70° rhombic insert. High-pressure coolant capability with bottom direct connection



Metric	H	B	LF	LH	HF	L5	WF	Insert	Torque
PCLNR/L2020X09-CHP-MC	20	20	97	27	20	29	25	CN**/GNMG0904...	2
PCLNR/L2020X12-CHP-MC	20	20	97	27	25	29	25	CN**/GNGA1204...	3

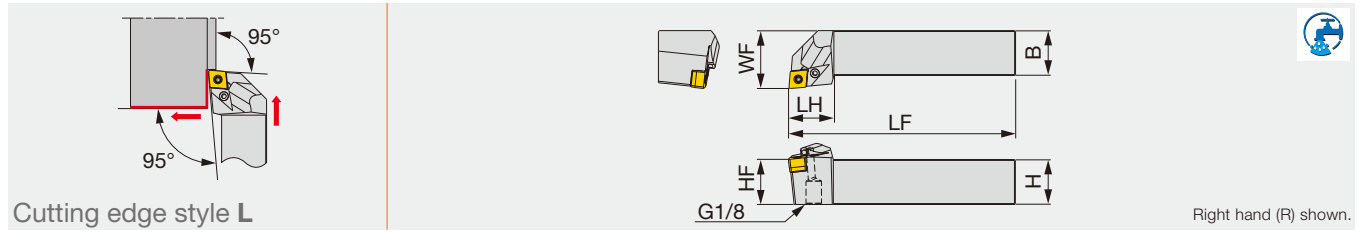
Torque: Recommended clamping torque: N·m

Designation	Shim	Spring	Lever	Spring	Spring pin	Wrench	Coolant unit	Wrench	Coolant plug	Wrench
PCLNR/L2020X09-CHP-MC	TCN323	SP3	LR3	SR117-2014	PN3-4	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	-
PCLNR/L2020X12-CHP-MC	TCN443	SP4	LR4DH	SR117-2010	PN3-4L	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	HW3.0

Reference pages: ACLNR/L-CHP-MC, PCLNR/L2020X-CHP-MC:

Inserts → **B054 -**, **B075**, CBN → **B168 -**, **B178**, PCD → **B211 -**, Parts for coolant hose → **C133**

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



Inch	H	B	LF	LH	HF	WF	RE**	Air hole	Insert	Torque
PCLNR/L1233-CHP-N	0.750	0.750	4.000	1.300	0.750	1.250	0.031	With	CN**/GNMG 33...	1.48
PCLNR/L1633-CHP-N	1.000	1.000	5.000	1.300	1.000	1.250	0.031	With	CN**/GNMG 33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Air hole	Insert	Torque*
PCLNR/L2020H0904-CHP-N	20	20	100	25	20	25	0.8	With	CN**/GNMG0904...	2
PCLNR/L2525K0904-CHP-N	25	25	125	25	25	32	0.8	With	CN**/GNMG0904...	2

Torque: Recommended clamping torque: lbs-ft (*N·m)
 **RE: The holder measurements are true with this insert radius
 Applicable for 14 MPa (2031 PSI) pressure coolant

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCLNR/L**33-CHP-N, PCLNR/L**0904-CHP-N	LSC317	LCS3	P-2.5	LSP3	LCL33

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Chipbreaker shape	TF	TSF	TM	TH
	Cutting conditions	B004			

M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Chipbreaker shape	SF	SM	SH
	Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Chipbreaker shape	All-round	All-round	All-round
	Cutting conditions	B008		

N	Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140	TH10
	Chipbreaker shape	DIA	with rake DIA	P
	Cutting conditions	B010		

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005	AH8005
	Chipbreaker shape	CBN	HRF	HRM
	Cutting conditions	B012		

H	Application	Precision finishing	Finishing
	Grade	BXA10	BXA20
	Chipbreaker shape	CBN	CBN
	Cutting conditions	B014	

Reference pages: PCLNR/L-CHP-N: Inserts → **B054 - , B075**
 Parts for coolant hose → **C133**



CN



Rhombic, 80°
with hole

GN

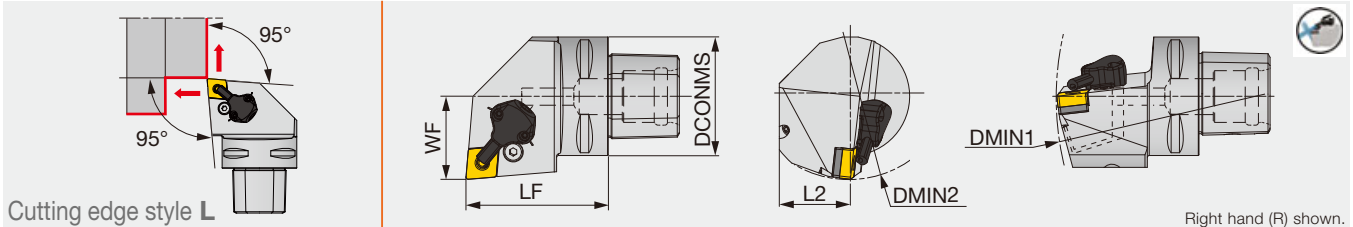


Rhombic, 70°
with hole

TUNGCAP

C-PCLNR/L-CHP

Lever lock toolholders with TungCap connection – 95° approach angle.
For negative 80°/70° rhombic insert. High-pressure coolant capability.



Metric	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque
C4PCLNR/L27050-0904-CHP	40	50	25	27	140	110	0.8	CN**/GNMG0904...	2
C4PCLNR/L27050-12-CHP	40	50	25	27	140	110	0.8	CN**/GNGA1204...	3
C5PCLNR/L35060-12-CHP	50	60	32	35	165	110	0.8	CN**/GNGA1204...	3
C6PCLNR/L45065-0904-CHP	63	65	41	45	195	125	0.8	CN**/GNMG0904...	2
C6PCLNR/L45065-12-CHP	63	65	41	45	195	125	0.8	CN**/GNGA1204...	3

Torque: Recommended clamping torque: N·m

Applicable for 14 MPa (2031 PSI) pressure coolant

**RE: Standard corner radius

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OTHERS

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PCLNR/L**0904-CHP	LSC317	LCS3	P-2.5	LSP3	LCL33
C*PCLNR/L**12-CHP	LSC42	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PCLNR/L**0904-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N
C*PCLNR/L**12-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade	Grade
	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
	DX120	DX140	TH10
Chipbreaker shape	DIA	with rake DIA	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	Grade
	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-PCLNR/L-CHP: Inserts → **B054 - , B075**, CBN → **B168 - , B178**, PCD → **B211 -**
Parts for coolant hose → **C133**

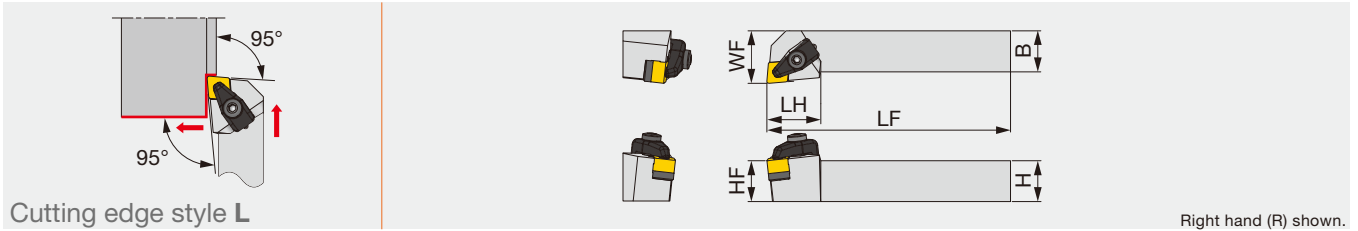
CN



Rhombic, 80°
without hole

DIMPLEFX CCLNR/L-RD

Double-clamp toolholder with 95° approach angle, for negative 80° rhombic ceramic inserts with dimple



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
CCLNR/L16M45-RD	1.000	1.000	6.000	1.300	1.000	1.250	0.047	CNGD 45...	3.0
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CCLNR/L2525M1207-RD	25	25	150	33	25	32	1.2	CNGD1207...	4
CCLNR3225P1207-RD	32	25	170	33	32	32	1.2	CNGD1207...	4

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

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CCLNR/L*-RD	CCP4-A	CCS4-A	CC44-A	BH5-10-A	BP-5-A	P-3	P-4

INSERT SELECTION

K	Application	Finishing to medium cutting
	Grade	FX105
	Chipbreaker shape	
	Cutting conditions	C136

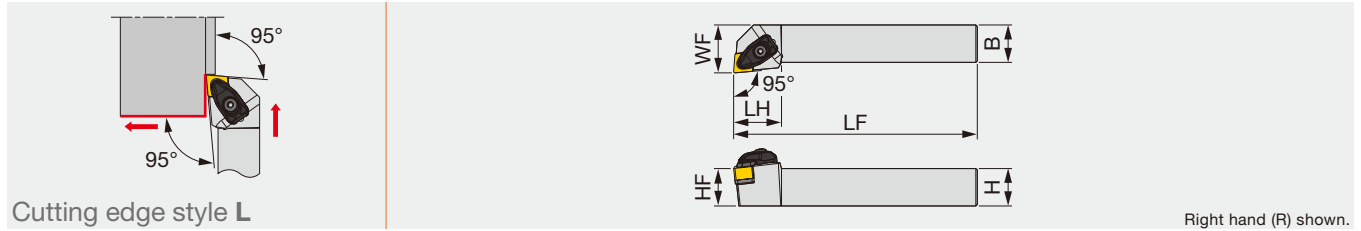
Reference pages: CCLNR/L-RD: Inserts → **B065**,
Standard cutting conditions → **C136**

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



TCLNR/L-F

Toolholder with carbide clamping plate, with 95° approach angle, for negative 80° rhombic ceramic inserts without hole



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
TCLNR/L 16-43D-F	1.000	1.000	6.000	1.260	1.000	1.250	0.031	CNGN 432...
TCLNR/L 16-45D-F	1.000	1.000	6.000	1.260	1.000	1.250	0.031	CNGN 432...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
TCLNR/L2525M1204-F	25	25	150	32	25	32	0.8	CNGN1204...
TCLNR/L2525M1207-F	25	25	150	32	25	32	0.8	CNGN1207...

**RE: Standard corner radius

SPARE PARTS							
Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
TCLNR/L **-43D-F	DCLS-4F	DLS-4A	TSC-44	BH-40050-A	DSP-4A	T-15F	P-3
TCLNR/L2525M1204-F	DCLS-4F	DLS-4A	TSC-44	BH-40050-A	DSP-4A	T-15F	P-3
TCLNR/L **-45D-F	DCLS-4F	DLS-4A	TSC-42	BH-40050-A	DSP-4A	T-15F	P-3
TCLNR/L2525M1207-F	DCLS-4F	DLS-4A	TSC-42	BH-40050-A	DSP-4A	T-15F	P-3

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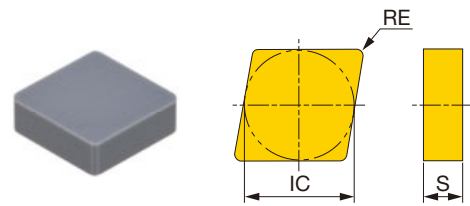
V

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Y

OTHERS

INSERT CNGN-E/T1



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

★ : First choice

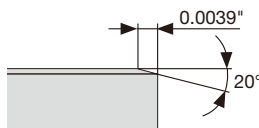
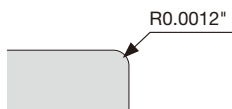
Designation		Edge prep.*	Ceramic			RE (in)	IC (in)	S (in)
Inch	Metric		TS200	TS300				
CNGN 432-E	CNGN120408-E	E	●			0.031	0.500	0.187
CNGN 433-E	CNGN120412-E	E	●			0.047	0.500	0.187
CNGN 433-T1	CNGN120412-T1	T1	●			0.047	0.500	0.187
CNGN 452-E	CNGN120708-E	E	●			0.031	0.500	0.313
CNGN 453-E	CNGN120712-E	E	●	●		0.047	0.500	0.313
CNGN 454-T1	CNGN120716-T1	T1	●			0.063	0.500	0.313

* Types of cutting edge preparations

● : Line up

E: Low cutting force

T1: Strong cutting edge



Reference pages: TCLNR/L-F: Standard cutting conditions → C136

CN

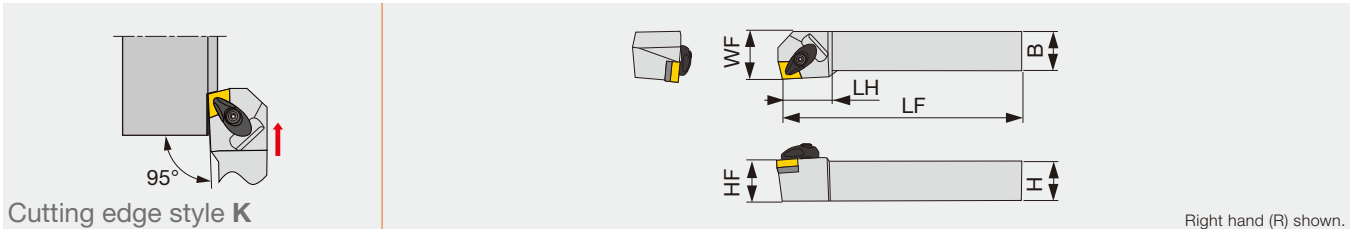


Rhombic, 80°
with hole

TURNING

ACKNR/L

Double-clamp toolholder with 95° approach angle, for negative 80° rhombic inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ACKNR/L164-A	1.000	1.000	6.000	1.375	1.000	1.312	0.032	CN** 43...	2.2

Torque: Recommended clamping torque: lb-ft
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench 1
ACKNR/L164-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASC422	CSTB-3.5	T-15F

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

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



CN



Rhombic, 80° with hole

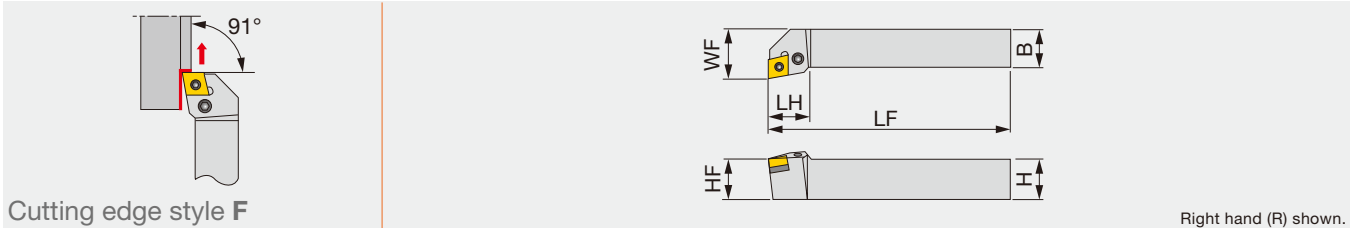
GN



Rhombic, 70° with hole

PCFNR/L

Lever-lock type toolholder for facing with 91° approach angle, for negative 80°/70° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PCFNR/L2020	20	20	125	28	20	25	0.8	CN**/GNGA1204...
PCFNR/L2525	25	25	150	28	25	32	0.8	CN**/GNGA1204...

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCFNR/L...	LSC42 D30	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Chipbreaker shape	TF	TSF	TM	TH
	Cutting conditions	B004			

M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Chipbreaker shape	SF	SM	SH
	Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Chipbreaker shape	All-round	All-round	All-round
	Cutting conditions	B008		

N	Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140	TH10
	Chipbreaker shape	DIA	with rake DIA	P
	Cutting conditions	B010		

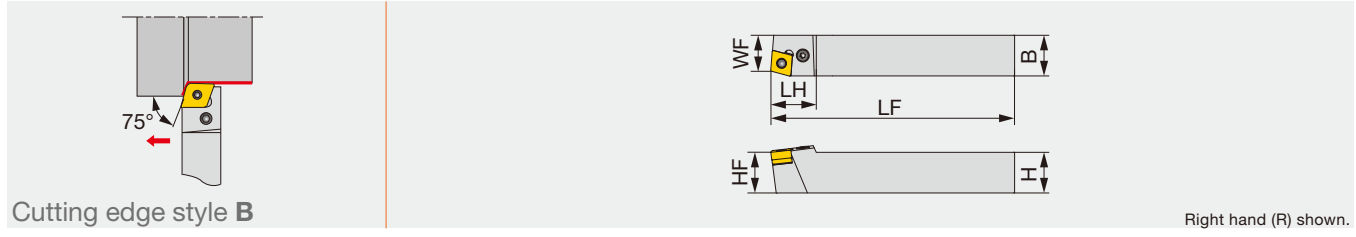
S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005	AH8005
	Chipbreaker shape	CBN	HRF	HRM
	Cutting conditions	B012		

H	Application	Precision finishing	Finishing
	Grade	BXA10	BXA20
	Chipbreaker shape	CBN	CBN
	Cutting conditions	B014	

Reference pages: PCFNR/L: Inserts → B054 -, CBN → B168 -, B178, PCD → B211

PCBNR/L

Lever-lock toolholder with 75° approach angle, for negative 80° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PCBNR/L2525	25	25	150	28	25	22	0.8	CN**1204...

Note: 100° corner is used.
**RE: Standard corner radius

SPARE PARTS					
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PCBNR/L2525	LSC42	LCS4	P-3	LSP4	LCL4

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

INSERT SELECTION

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

M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Chipbreaker shape	SF	SM	SH
	Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Chipbreaker Shape	All-round	All-round	All-round
	Cutting conditions	B008		

N	Application	Medium cutting
	Grade	TH10
	Chipbreaker Shape	P
	Cutting conditions	B010

S	Application	Finishing	Medium cutting
	Grade	AH8005	AH8005
	Chipbreaker Shape	HRF	HRM
	Cutting conditions	B012	

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

CN



Rhombic, 80° with hole

GN

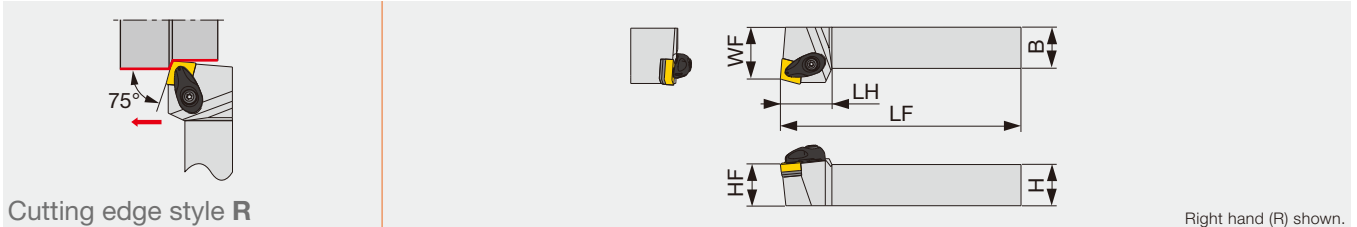


Rhombic, 70° with hole

TURNING A

ACRNR/L

Double-clamp toolholder with 75° approach angle, for negative 80° rhombic inserts

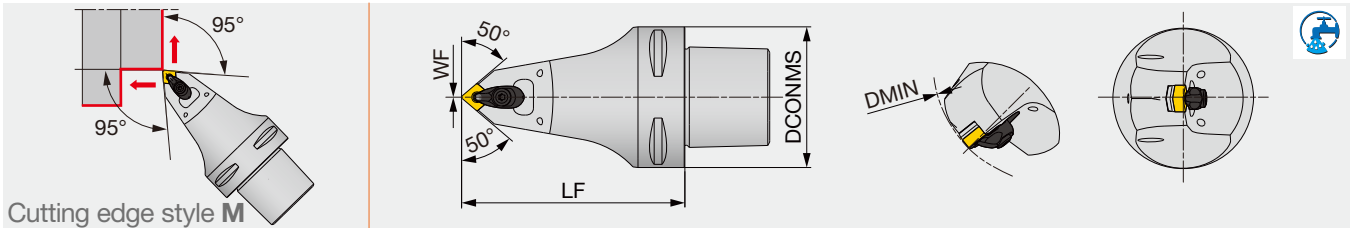


Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ACRNR/L164-A	1.000	1.000	6.000	1.25	1.000	1.25	0.032	CN** 43...	2.2

Torque: Recommended clamping torque: lb-ft
**RE: Standard corner radius

C-ACMNN

Double-clamp toolholder, with 50° approach angle, for negative 80°/70° rhombic inserts



Metric	DCONMS	LF	WF	DMIN	RE**	Insert
C6ACMNN00100-0904N	63	100	0	110	0.8	CN**/GNMG0904...
C6ACMNN00140-0904N	63	140	0	110	0.8	CN**/GNMG0904...

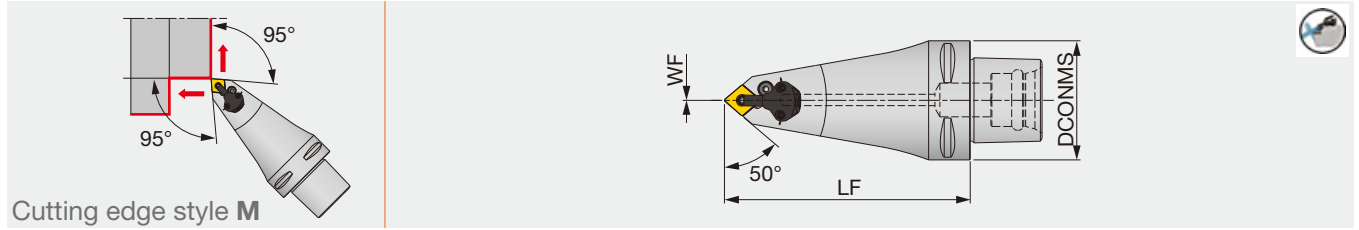
**RE: The holder measurements are true with this insert radius
Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Spring pin	Wrench
ACRNR/L164-A	ACP4S	ACS-5W	ASC422	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ACMNN001**-0904N	ACP3S-E	ACS-5W	ASC322	CSTB-3.5	BP-7	SP-2.5	T-15F

Reference pages: ACRNR/L: Inserts → **B054 -**, CBN → **B168 -**, PCD → **B211**
C-ACMNN: Inserts → **B054, B075**
Parts for coolant hose → **C133**

Lever lock toolholder with TungCap connection.
For negative 80°/70° rhombic insert. High-pressure coolant capability.



Metric	DCONMS	LF	WF	RE**	Insert	Torque
C6PCMNN00130-12-CHP	63	130	0	0.8	CN**/GNGA1204...	3

Torque: Recommended clamping torque: N·m
Applicable for 14 MPa (2031 PSI) pressure coolant
**RE: Standard corner radius

For external turning only.

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C6PCMNN00130-12-CHP	LSC42	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C6PCMNN00130-12-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Chipbreaker shape	TF	TSF	TM	TH
	Cutting conditions	B004			
M	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T6215	AH6225	AH6225	
	Chipbreaker shape	SF	SM	SH	
	Cutting conditions	B006			
K	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T515	T515	T515	
	Chipbreaker shape	All-round	All-round	All-round	
	Cutting conditions	B008			
N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	DX120	DX140	TH10	
	Chipbreaker shape	DIA	with rake DIA	P	
	Cutting conditions	B010			
S	Application	Precision finishing	Finishing	Medium cutting	
	Grade	BX470	AH8005	AH8005	
	Chipbreaker shape	CBN	HRF	HRM	
	Cutting conditions	B012			
H	Application	Precision finishing	Finishing		
	Grade	BXA10	BXA20		
	Chipbreaker shape	CBN	CBN		
	Cutting conditions	B014			

Reference pages: C-PCMNN-CHP: Inserts → **B054**, CBN → **B168 -**, **B178**, PCD → **B211**
Parts for coolant hose → **C133**

CC

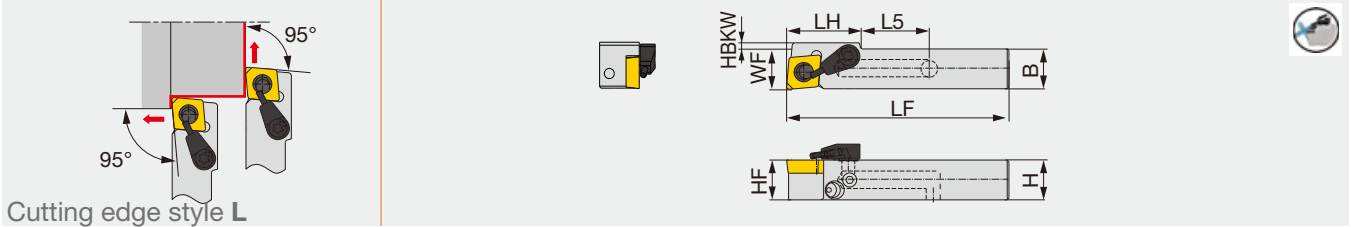


**Rhombic, 80°
with hole
Positive 7°**

PCLCR/L1616X09S-CHP-MC

Direct connection

Lever lock toolholders – 95° approach angle.
For positive 80° rhombic insert. High-pressure coolant capability with bottom direct connection



Metric	H	B	LF	LH	L5	HF	WF	HBKW	Insert
PCLCR/L1616X09S-CHP-MC	16	16	71	23	17	16	16.2	-	CC**09T3...

Applicable for 14 MPa (2031 PSI) pressure coolant

SPARE PARTS

Designation	Lever	Pin	Clamping screw	Wrench	Coolant plug	Coolant unit
PCLCR/L1616X09S-CHP-MC	SLLV-3	SLPI-3	SR10400150	HW2.5/5	SR5/16UNFTL360	S-CU-CHP

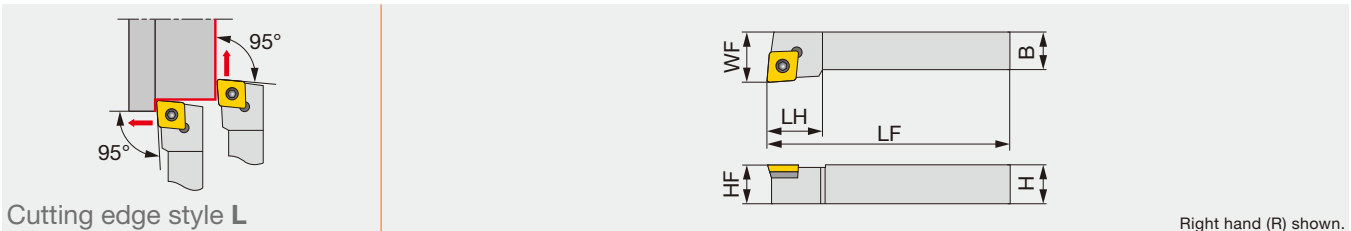
C

D

F

SCLCR/L

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



Inch	H	B	LF	LH	HF	WF	RE**	Insert
SCLCR/L103	0.625	0.625	4.000	0.625	0.625	0.750	0.031	CC** 32.5...
SCLCR/L123	0.750	0.750	4.500	0.625	0.750	0.750	0.031	CC** 32.5...
SCLCR/L124B	0.750	0.750	4.500	0.625	0.750	0.750	0.031	CC** 43...
SCLCR/L163	1.000	1.000	6.000	0.625	1.000	0.750	0.031	CC** 32.5...
SCLCR/L164D	1.000	1.000	6.000	0.750	1.000	0.750	0.031	CC** 43...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SCLCR/L1616H09	16	16	100	16	16	20	0.8	CC**09T3...
SCLCR/L2020K12	20	20	125	20	20	25	0.8	CC**1204...

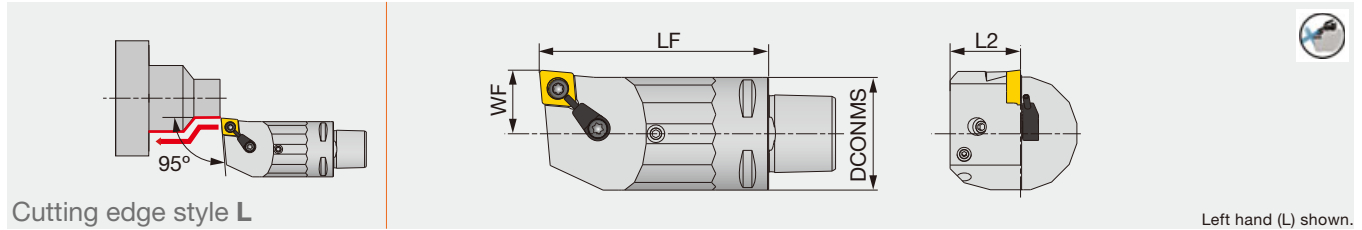
**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
SCLCR/L**3, SCLCR/L1616H09	CSTB-3.5L	DTS5-3.5	SSC32	P-3.5	T-15F
SCLCR/L124B, 164D	CSPB-5	DTS6-4	SSC4T3	P-4	T20F
SCLCR/L2020K12	CSTB-4F	DTS6-4	SSC4T3	P-4	T-15F

Reference pages: PCLCR/L1616X09S-CHP-MC: Inserts → **B112 -**, CBN → **B189 -**, PCD → **B213**
Parts for coolant hose → **C133**
SCLCR/L: Inserts → **B112 -**, CBN → **B189 -**, PCD → **B213**

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



Cutting edge style L

Left hand (L) shown.

Metric	DCONMS	LF	L2	WF	RE	Insert
C3SCLCL18040-09-CHP	32	40	20	18	0.8	CC**09T3...
C3SCLCL18065-09-CHP	32	65	20	18	0.8	CC**09T3...

Applicable for 14 MPa (2031 PSI) coolant
Cannot be used for boring

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
C3SCLCL...	CSTB-4S	S-CU-CHP	T-15F

INSERT SELECTION

P	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	NS9530	T9215	T9215
	Chipbreaker shape	01	PSS	PS	PM
	Cutting conditions	B016			
M	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	GH330	AH6225	AH6225	AH6225
	Chipbreaker shape	W**	PSS	PS	PM
	Cutting conditions	B018			
K	Application	Finishing to medium cutting			
	Grade	T515			
	Chipbreaker shape	CM			
	Cutting conditions	B020			
N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	DX120	DX140	KS05F	
	Chipbreaker shape	DIA	with rake DIA	AL	
	Cutting conditions	B022			
S	Application	Finishing	Finishing to medium cutting		
	Grade	AH8015	AH8015		
	Chipbreaker shape	PSS	PS		
	Cutting conditions	B024			
H	Application	Precision finishing	Finishing		
	Grade	BXA10	BXA20		
	Chipbreaker shape	CBN	CBN		
	Cutting conditions	B026			

Reference pages: C-SCLCL-CHP: Inserts → **B112** -, CBN → **B189** -, PCD → **B213**
Parts for coolant hose → **C133**



DN

Rhombic, 55° with hole

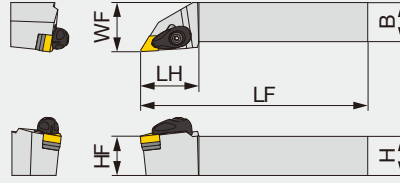
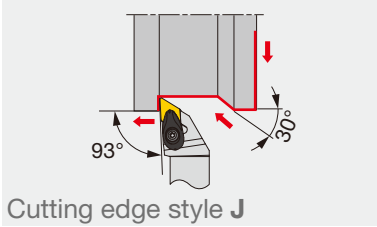
FN

Rhombic, 45° with hole

TURNING

ADJNR/L

Double-clamp toolholder with 93° approach angle, for negative 55°/45° rhombic inserts



Right hand (R) shown.

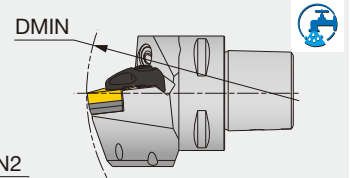
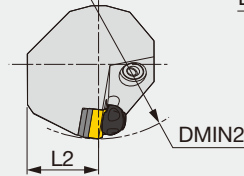
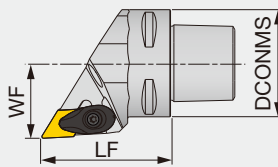
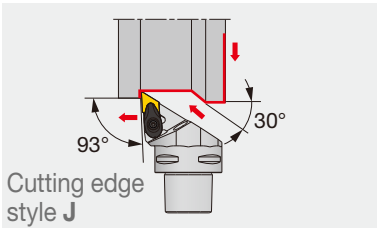
Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ADJNR/L1233-A	0.750	0.750	4.500	1.250	0.750	1.000	0.031	DN**/FNMG 33...	2.2
ADJNR/L124-A	0.750	0.750	4.500	1.500	0.750	1.000	0.031	DN**/FNGA 43...	2.2
ADJNR/L1633-A	1.000	1.000	6.000	1.250	1.000	1.250	0.031	DN**/FNMG 33...	2.2
ADJNR/L164-A	1.000	1.000	6.000	1.500	1.000	1.250	0.031	DN**/FNGA 43...	2.2
ADJNR/L204-A	1.250	1.250	7.000	1.500	1.250	1.500	0.031	DN**/FNGA 43...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ADJNR/L2020K1104-A	20	20	125	30	20	25	0.8	DN**/FNMG1104...	3
ADJNR/L2020K15-A	20	20	125	36	20	25	0.8	DN**/FNGA1504...	3
ADJNR/L2020K1506-A	20	20	125	36	20	25	0.8	DN**/FNGA1506...	3
ADJNR/L2525M1104-A	25	25	150	30	25	32	0.8	DN**/FNMG1104...	3
ADJNR/L2525M15-A	25	25	150	36	25	32	0.8	DN**/FNGA1504...	3
ADJNR/L2525M1506-A	25	25	150	36	25	32	0.8	DN**/FNGA1506...	3
ADJNR/L3225P15-A	32	25	170	36	32	32	0.8	DN**/FNGA1504...	3

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

C-ADJNR/L

Double-clamp toolholder, with 93° approach angle, for negative 55°/45° rhombic inserts



Right hand (R) shown.

Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C3ADJNR/L22050-1104N	32	50	20	22	121	85	0.8	DN**/FNMG1104...
C4ADJNR/L27050-1104N	40	50	25	27	145	110	0.8	DN**/FNMG1104...
C4ADJNR/L27050-15N	40	50	25	27	145	110	0.8	DN**/FNGA1504...
C5ADJNR/L35060-15N	50	60	32	35	165	110	0.8	DN**/FNGA1504...
C6ADJNR/L45065-1104N	63	65	35	45	190	110	0.8	DN**/FNMG1104...
C6ADJNR/L45065-15N	63	65	41	45	190	110	0.8	DN**/FNGA1504...
C6ADJNR/L45135-15N	63	135	41	45	190	110	0.8	DN**/FNGA1504...

Applicable for 7 MPa (1015 PSI) coolant

Option: ASD423 (Shim for DN**1506**)

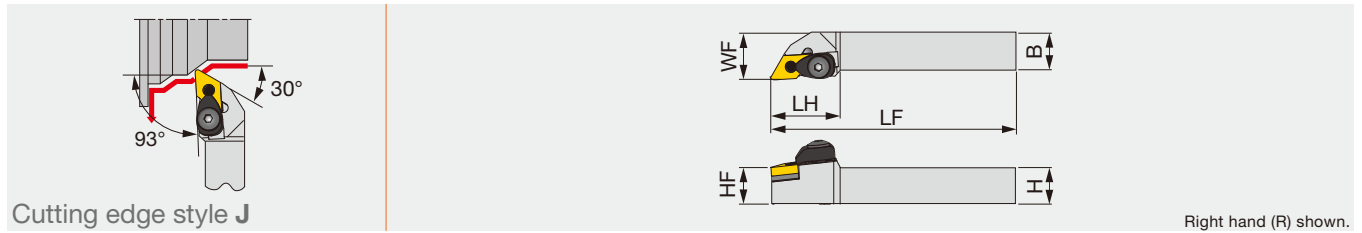
SPARE PARTS

Designation	Clamp	Clamp screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench
ADJNR/L**33-A, ADJNR/L**1104-A, C*ADJNR/L**1104N	ACP3S-E	ACS-5W	-	ASD322	CSTB-3.5	BP-7	SP-2.5	T-15F
ADJNR/L**4-A, ADJNR/L**15-A	ACP4S	ACS-5W	-	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
ADJNR/L**1506-A	ACP4S	ACS-5W	-	ASD423	CSTB-3.5	BP-7	SP-2.5	T-15F
C*ADJNR/L**15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Reference pages: ADJNR/L, C-ADJNR/L: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211

DDJNR/L

One-Double toolholder with 93° approach angle, for negative 55°/45° rhombic inserts



Right hand (R) shown.

Metric	H	B	LF	LH	HF	WF	RE**	Insert
DDJNR/L2020K15	20	20	125	38	20	25	0.8	DN**/FNGA1504...
DDJNR/L2020K1506	20	20	125	38	20	25	0.8	DN**/FNGA1506...
DDJNR/L2525M15	25	25	150	38	25	32	0.8	DN**/FNGA1504...
DDJNR/L2525M1506	25	25	150	38	25	32	0.8	DN**/FNGA1506...
DDJNR/L3225P15	32	25	170	38	32	32	0.8	DN**/FNGA1504...
DDJNR/L3225P1506	32	25	170	38	32	32	0.8	DN**/FNGA1506...

Note: Except for 57-type chipbreaker inserts
 **RE: Standard corner radius

SPARE PARTS									
Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench1	Wrench2
DDJNR/L**15	DCPM-43	DLCL43	DPIS43	DLCS43	LSD42	BP-10	LSP4	P-3	P-4
DDJNR/L**1506	DCPM-43	DLCL43	DPIS44	DLCS43	LSD42	BP-10	LSP4	P-3	P-4

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Chipbreaker shape	TF	TSF	TM	TH
	Cutting conditions	B004			
M	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T6215	AH6225	AH6225	
	Chipbreaker shape	SF	SM	SH	
	Cutting conditions	B006			
K	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T515	T515	T515	
	Chipbreaker shape	All-round	All-round	All-round	
	Cutting conditions	B008			
N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	DX120	DX140	TH10	
	Chipbreaker shape	DIA	with rake DIA	P	
	Cutting conditions	B010			
S	Application	Precision finishing	Finishing	Medium cutting	
	Grade	BX470	AH8005	AH8005	
	Chipbreaker shape	CBN	HRF	HRM	
	Cutting conditions	B012			
H	Application	Precision finishing	Finishing		
	Grade	BXA10	BXA20		
	Chipbreaker shape	CBN	CBN		
	Cutting conditions	B014			

Reference pages DDJNR/L: Inserts → B066 -, CBN → B172 -, B176 -, PCD → B211



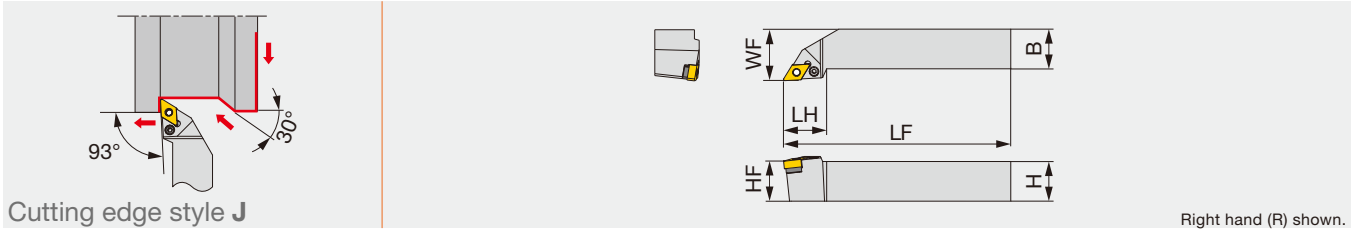
DN

FN



PDJNR/L

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



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PDJNR/L1033	0.625	0.625	4.000	1.125	0.625	0.875	0.031	DN**/FNMG 33...	1.5
PDJNR/L1233	0.750	0.750	4.500	1.125	0.750	1.000	0.031	DN**/FNMG 33...	1.5
PDJNR/L1633	1.000	1.000	6.000	1.125	1.000	1.250	0.031	DN**/FNMG 33...	1.5

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR/L1616H1104	16	16	100	27	16	20	0.8	DN**/FNMG1104...	2
PDJNR/L1616H11	16	16	100	27	16	20	0.8	DN**/FNMG1104...	2
PDJNR/L2020K1104	20	20	125	27	20	25	0.8	DN**/FNMG1104...	2
PDJNR/L2020K11	20	20	125	27	20	25	0.8	DN**/FNMG1104...	2
PDJNR/L2020	20	20	125	34	20	25	0.8	DN**/FNGA1504...	3
PDJNR2020K15E	20	20	125	36	20	25	0.8	DN**/FNGA1506...	3
PDJNR/L2520	25	20	150	34	25	25	0.8	DN**/FNGA1504...	3
PDJNR/L2525M1104	25	25	150	27	25	32	0.8	DN**/FNMG1104...	2
PDJNR/L2525M11	25	25	150	27	25	32	0.8	DN**/FNMG1104...	2
PDJNR/L2525	25	25	150	34	25	32	0.8	DN**/FNGA1504...	3
PDJNR/L2525M15E	25	25	150	36	25	32	0.8	DN**/FNGA1506...	3
PDJNR/L3225	32	25	170	32	32	32	0.8	DN**/FNGA1504...	3
PDJNR3225P15E	32	25	170	36	32	34	0.8	DN**/FNGA1506...	3

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

SPARE PARTS

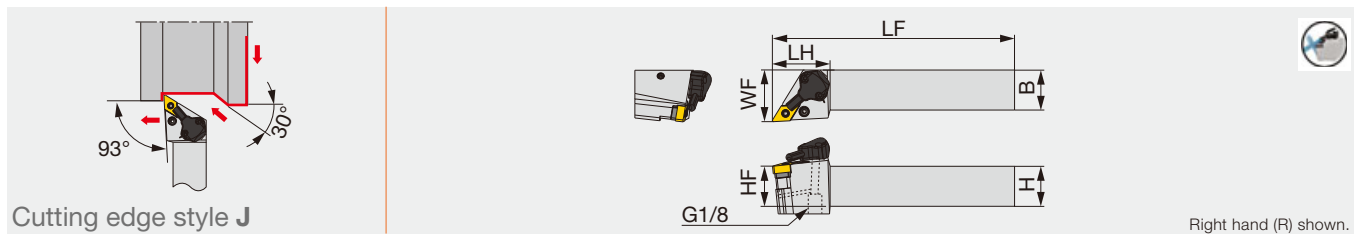
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PDJNR/L**33, PDJNR/L**11/1104	ELSD32	LCS3	P-2.5	LSP3	LCL33L
PDJNR/L2020	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR2020K15E	ELSD42	ELCS4	P-3	LSP4S	LCL44
PDJNR/L2520	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR/L2525	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR/L2525M15E	ELSD42	ELCS4	P-3	LSP4S	LCL44
PDJNR/L3225	LSD42	LCS4	P-3	LSP4	LCL4
PDJNR3225P15E	ELSD42	ELCS4	P-3	LSP4S	LCL44

Reference pages: PDJNR/L: Inserts → B066 -, B075 -, CBN → B172 -, B176 -,PCD → B211

PDJNR/L-CHP

Tube connection

Lever lock toolholders – 93° approach angle.
For negative 55°/45° rhombic insert. High-pressure coolant capability.



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PDJNR/L1233-CHP	0.750	0.750	4.500	1.420	0.750	1.250	0.031	DN**/FNMG 33...	1.48
PDJNR/L124-CHP	0.750	0.750	4.500	1.420	0.750	1.250	0.031	DN**/FNGA 43...	2.21
PDJNR/L1633-CHP	1.000	1.000	6.000	1.420	1.000	1.250	0.031	DN**/FNMG 33...	1.48
PDJNR/L164-CHP	1.000	1.000	6.000	1.420	1.000	1.250	0.031	DN**/FNGA 43...	2.21

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PDJNR/L2020K1104-CHP	20	20	125	36	20	32	0.8	DN**/FNMG1104...	2
PDJNR/L2020K15-CHP	20	20	125	36	20	32	0.8	DN**/FNGA1504...	3
PDJNR/L2525M1104-CHP	25	25	150	36	25	32	0.8	DN**/FNMG1104...	2
PDJNR/L2525M15-CHP	25	25	150	36	25	32	0.8	DN**/FNGA1504...	3

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

**RE: Standard corner radius
20Mpa (2901 PSI)

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PDJNR/L**33-CHP, PDJNR/L**1104-CHP	ELSD32	LCS3	P-2.5	LSP3	LCL33L
PDJNR/L**4-CHP, PDJNR/L**15-CHP	LSD43A	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PDJNR/L**33-CHP, PDJNR/L**1104-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PDJNR/L**4-CHP, PDJNR/L**15-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

M

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T6215	AH6225	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	TH10
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PDJNR/L-CHP: Inserts → **B066 - , B075 -**, CBN → **B172 - , B176 -**,PCD → **B211**
Parts for coolant hose → **C133**

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



DN

FN

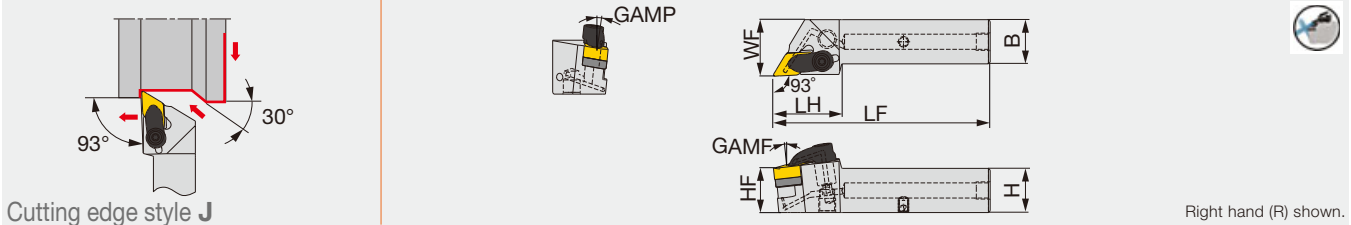


ADJNR/L-CHP-MC

Direct connection Tube connection

Double clamping tool holders-93° approach angle

For negative 55°/45° rhombic insert. High-pressure coolant capability with tube and direct connections



Inch	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque
ADJNR/L12-4-CHP-MC	0.750	0.750	4.331	1.575	0.750	1.000	6°	6°	DN**/FNGA 44(43)...	2.95
ADJNR/L16-4-CHP-MC	1.000	1.000	4.921	1.575	1.000	1.250	6°	6°	DN**/FNGA 44(43)...	2.95

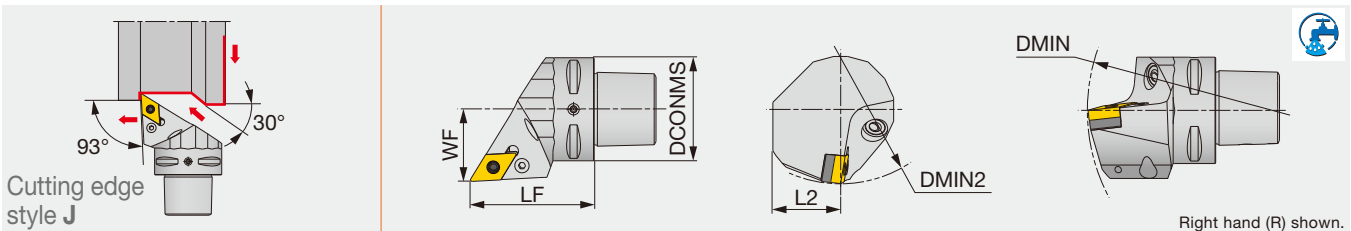
Metric	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque*
ADJNR/L2020X-15-CHP-MC	20	20	110	40	20	25	6°	6°	DN**/FNGA1506(04)...	4
ADJNR/L2525X-15-CHP-MC	25	25	125	40	25	32	6°	6°	DN**/FNGA1506(04)...	4

Torque: Recommended clamping torque: lbs-ft (*N·m)
Use RDT443 shim when using DN**/FNGA43..., DN**/FNGA1504... inserts
Applicable for 14 MPa (2031 PSI) pressure coolant

Designation	Clamp set	Shim 1	Shim 2 (Optional)	Shim screw	Screw for tube connection	Coolant plug	O-ring	Wrench
ADJNL...	LCGL-4JCSET	RDT433	(RDT443)	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20
ADJNR...	LCGR-4JCSET	RDT433	(RDT443)	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20

TUNGCAP C-PDJNR/L

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



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C5PDJNR/L35060-15N	50	60	32	35	165	110	0.8	DN**/FNGA1504(06)...
C6PDJNR/L45065-15N	63	65	41	45	195	95	0.8	DN**/FNGA1504(06)...

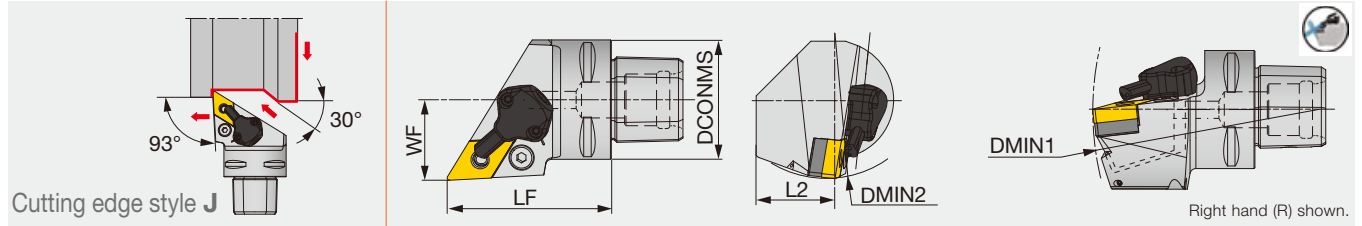
Applicable for 7 MPa (1015 PSI) coolant

Designation	Coolant parts	Shim	Lever	Clamping screw	Spring pin	Wrench
C5PDJN*35060-15N	SATZ-M10X1-M5	LSD43A	LCL4	LCS4	LSP4	P-3
C6PDJN*45065-15N	SATZ-M10X1-M5	LSD43A	LCL4	LCS4	LSP4S	P-3

Option: LSD42A (Shim for DN**1506**), LSP4S (Spring pin for DN**1506**)

Reference pages: ADJNR/L-CHP-MC: Inserts → B066 -, CBN → B172 -, B176 -,PCD → B211
C-PDJNR/L: Inserts → B066 -, CBN → B172 -, B176 -,PCD → B211
Parts for coolant hose → C133

Lever lock toolholders with TungCap connection – 93° approach angle.
For negative 55°/45° rhombic insert. High-pressure coolant capability.



Metric	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque
C4PDJNR/L27055-1104-CHP	40	55	27	27	145	110	0.8	DN**/FNMG1104...	2
C4PDJNR/L27055-15-CHP	40	55	27	27	145	110	0.8	DN**/FNGA1504(06)...	3
C5PDJNR/L35060-15-CHP	50	60	32	35	165	110	0.8	DN**/FNGA1504(06)...	3
C6PDJNR/L45065-1104-CHP	63	65	35	45	195	95	0.8	DN**/FNMG1104...	2
C6PDJNR/L45065-15-CHP	63	65	35	45	195	95	0.8	DN**/FNGA1504(06)...	3

Torque: Recommended clamping torque: N·m
Applicable for 14 MPa (2031 PSI) pressure coolant
**RE: Standard corner radius

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PDJNR/L**1104-CHP	ELSD32	LCS3	P-2.5	LSP3	LCL33L
C*PDJNR/L**-15-CHP	LSD43A	LCS4	P-3	LSP4	LCL4

Option: LSD42A (Shim for DN**1506...), LSP4S (Spring pin for DN**1506...)

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PDJNR/L**1104-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N
C*PDJNR/L**-15-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Chipbreaker shape	TF	TSF	TM	TH
	Cutting conditions	B004			
M	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T6215	AH6225	AH6225	
	Chipbreaker shape	SF	SM	SH	
	Cutting conditions	B006			
K	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T515	T515	T515	
	Chipbreaker shape	All-round	All-round	All-round	
	Cutting conditions	B008			
N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	DX120	DX140	TH10	
	Chipbreaker shape	DIA	DIA with rake	P	
	Cutting conditions	B010			
S	Application	Precision finishing	Finishing	Medium cutting	
	Grade	BX470	AH8005	AH8005	
	Chipbreaker shape	CBN	HRF	HRM	
	Cutting conditions	B012			
H	Application	Precision finishing	Finishing		
	Grade	BXA10	BXA20		
	Chipbreaker shape	CBN	CBN		
	Cutting conditions	B014			

Reference pages: C-PDJNR/L-CHP: Inserts → **B066 - B075 -** CBN → **B172 - B176 -** PCD → **B211**
Parts for coolant hose → **C133**

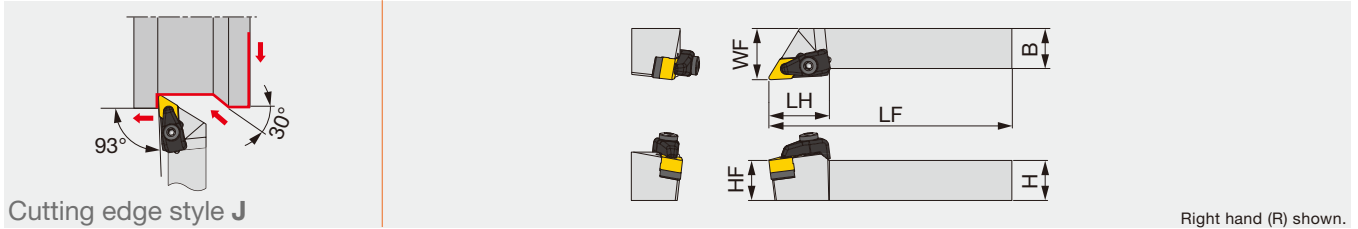


DN

 Rhombic, 55°
without hole

DIMPLEFX CDJNR/L-RD

Double-clamp toolholder with 93° approach angle, for negative 55° rhombic ceramic inserts with dimple



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
CDJNR/L2525M1507-RD	25	25	150	38	25	32	1.2	DNGD1507...	4
CDJNR3225P1507-RD	32	25	170	38	32	32	1.2	DNGD1507...	4

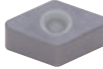
Torque: Recommended clamping torque: N·m

**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CDJNR/L*-RD	CCP4-A	CCS4-A	CD44-A	BH5-10-A	BP-5-A	P-3	P-4

INSERT SELECTION

K	Application	Finishing to medium cutting
	Grade	FX105
	Chipbreaker shape	
	Cutting conditions	C136

Reference pages: CDJNR/L-RD: Inserts → **B074**

Standard cutting conditions → **C136**

DN

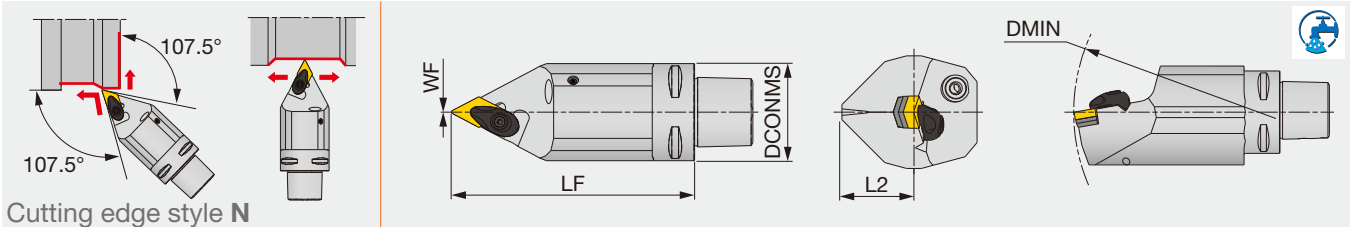
FN



TURNING

C-ADNNN

Double-clamp toolholder, with 62.5° approach angle, for negative 55°/45° rhombic inserts



Metric	DCONMS	LF	L2	WF	DMIN	RE	Insert
C5ADNNN00090-15 ⁽¹⁾	50	90	32	0	-	0.8	DN**/FNGA1504(06)...
C5ADNNN00090-15N ⁽²⁾	50	90	32	0	165	0.8	DN**/FNGA1504(06)...
C5ADNNN00125-15 ⁽¹⁾	50	125	32	0	-	0.8	DN**/FNGA1504(06)...
C5ADNNN00125-15N ⁽²⁾	50	125	32	0	165	0.8	DN**/FNGA1504(06)...
C6ADNNN00100-15N ⁽²⁾	63	100	37.5	0	190	0.8	DN**/FNGA1504(06)...
C6ADNNN00140-15N ⁽²⁾	63	140	37.5	0	190	0.8	DN**/FNGA1504(06)...

The items without DMIN cannot be used for boring
 (1) Applicable for 3 MPa (435 PSI) coolant (2) Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench
C5ADNNN00090-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00090-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00125-15	ACP4S	ACS-5W	EZ104	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C5ADNNN00125-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00100-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F
C6ADNNN00140-15N	ACP4S	ACS-5W	SATZ-M10X1-M5	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Option: ASD423 (Shim for DN**1506**)

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-ADNNN: Inserts → B066 -, CBN → B172 -, B176 -, PCD → B211
 Parts for coolant hose → C133

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

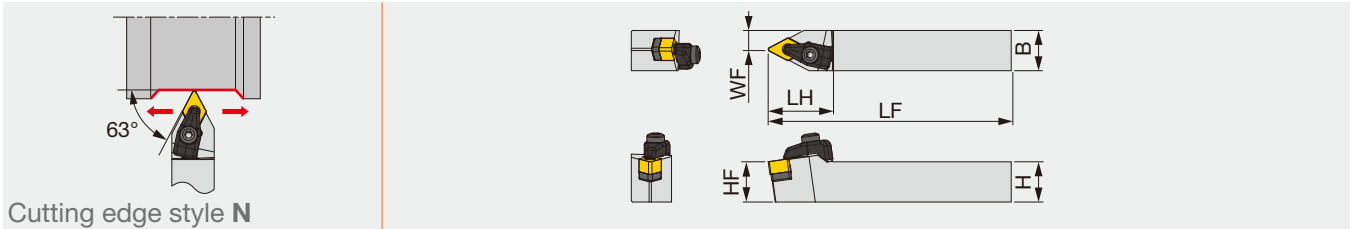


DN



DIMPLEFX CDNNN-RD

Double-clamp toolholder with 63° approach angle, for negative 55° rhombic ceramic inserts with dimple



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
CDNNN2525M1507-RD	25	25	150	40	25	12.5	1.2	DNGD1507...	4

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

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CDNNN2525M1507-RD	CCP4-A	CCS4-A	CD44-A	BH5-10-A	BP-5-A	P-3	P-4

C

D

F

G

H

R

S

T

V

W

Y

OTHERS

INSERT SELECTION

K	Application	Finishing to medium cutting
	Grade	FX105
	Chipbreaker shape	
	Cutting conditions	C136

Reference pages: CDNNN-RD: Inserts → **B074**
Standard cutting conditions → **C136**

DN

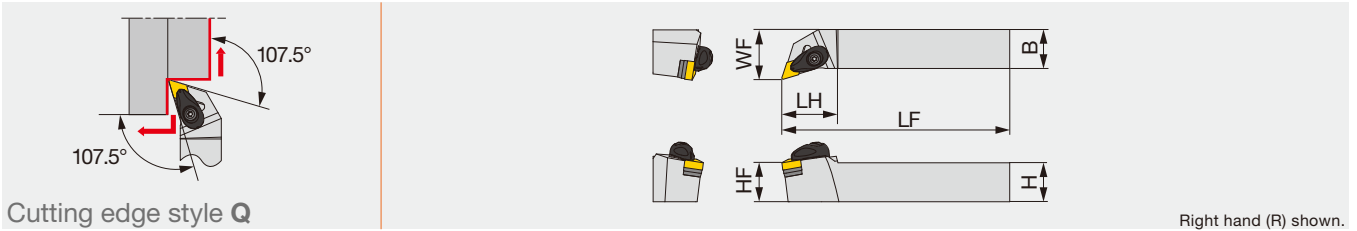
FN



TURNING

ADQNR/L

Double-clamp toolholder with 107.5° approach angle, for negative 55°/45° rhombic inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ADQNR/L1233-A	0.750	0.750	4.500	1.150	0.750	1.000	0.031	DN**/FNMG 33...	2.2
ADQNR/L124-A	0.750	0.750	4.500	1.250	0.750	1.000	0.031	DN**/FNGA 43...	2.2
ADQNR/L1633-A	1.000	1.000	6.000	1.150	1.000	1.250	0.031	DN**/FNMG 33...	2.2
ADQNR/L164-A	1.000	1.000	6.000	1.500	1.000	1.250	0.031	DN**/FNGA 43...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ADQNR/L2020K1104-A	20	20	125	30	20	25	0.8	DN**/FNMG1104...	3
ADQNR/L2020K15-A	20	20	125	32	20	25	0.8	DN**/FNGA1504...	3
ADQNR/L2020K1506-A	20	20	125	32	20	25	0.8	DN**/FNGA1506...	3
ADQNR/L2525M1104-A	25	25	150	30	25	32	0.8	DN**/FNMG1104...	3
ADQNR/L2525M15-A	25	25	150	36	25	32	0.8	DN**/FNGA1504...	3
ADQNR/L2525M1506-A	25	25	150	36	25	32	0.8	DN**/FNGA1506...	3

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ADQNR/L**33-A, ADQNR/L**1104-A	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASD322	CSTB-3.5	T-15F
ADQNR/L124, 164-A, ADQNR/L**15-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F
ADQNR/L**1506-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASD423	CSTB-3.5	T-15F

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: ADQNR/L: Inserts → B066 -, B075, CBN → B172 -, B176 -, PCD → B211

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



DN

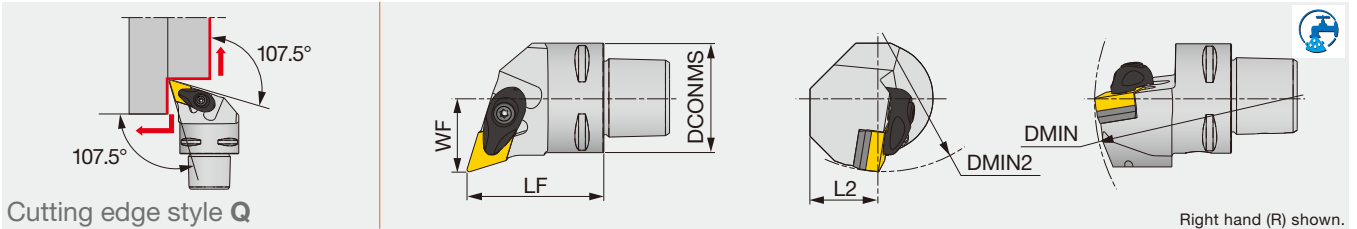
FN



TURNING

C-ADQNR/L

Double-clamp toolholder, with 107.5° approach angle, for negative 55°/45° rhombic inserts



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C3ADQNR/L22040-15N	32	40	20	22	121	85	0.8	DN**/FNGA1504...
C4ADQNR/L27050-15N	40	50	25	27	145	110	0.8	DN**/FNGA1504...

Applicable for 7 MPa (1015 PSI) a coolant

Option: ASD423 (Shim for DN**1506**)

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
C*ADQNR/L**15N	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F

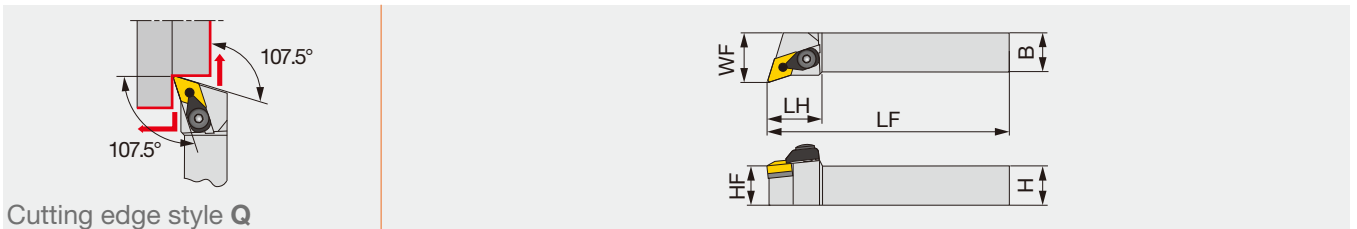
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D

F

DDQNR/L

"One-Double" toolholder with 107.5° approach angle, for negative 55°/45° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
DDQNR/L2020K15	20	20	125	35	20	25	0.8	DN**/FNGA1504...
DDQNR/L2020K1506	20	20	125	35	20	25	0.8	DN**/FNGA1506...
DDQNR/L2525M15	25	25	150	35	25	32	0.8	DN**/FNGA1504...
DDQNR/L2525M1506	25	25	150	35	25	32	0.8	DN**/FNGA1506...
DDQNR/L3225P15	32	25	170	35	32	32	0.8	DN**/FNGA1504...
DDQNR/L3225P1506	32	25	170	35	32	32	0.8	DN**/FNGA1506...

Note: Except for 57-type chipbreaker inserts

**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DDQNR/L**15	DCPM-43	DLCL43	DPIS43	DLCS43	LSD42	BP-10	LSP4	P-3	P-4
DDQNR/L**1506	DCPM-43	DLCL43	DPIS44	DLCS43	LSD42	BP-10	LSP4	P-3	P-4

W

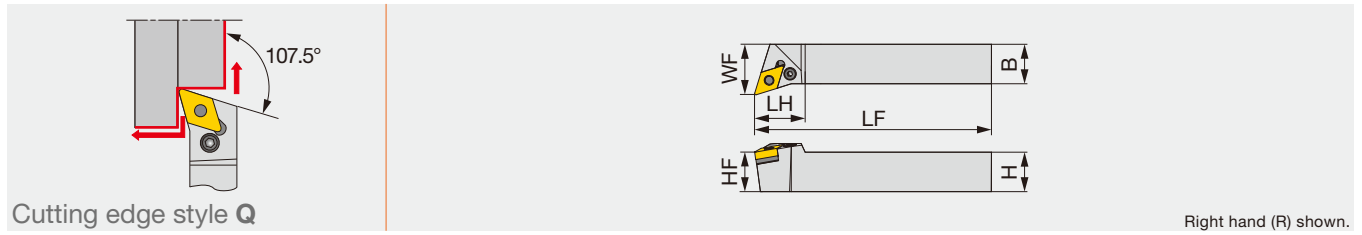
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OTHERS

Reference pages: C-ADQNR/L, DDQNR/L: Inserts → **B066 -**, CBN → **B172 -**, **B176 -**, PCD → **B211**

PDQNR/L

Lever-lock toolholder with 107.5° approach angle, for negative 55°/45° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PDQNR/L2525	25	25	150	32	25	32	0.8	DN**/FNGA1504...

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PDQNR/L...	LSD42 D30	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PDQNR/L: Inserts → B066 -, CBN → B172 -, B176 -, PCD → B211



DN

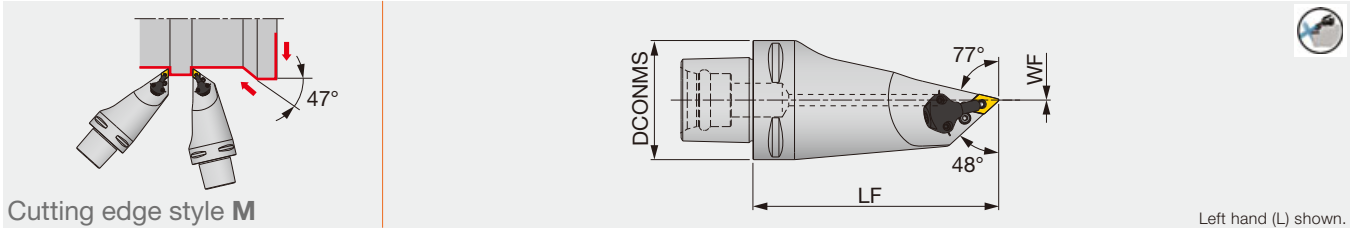
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TUNGCAP C-PDMNL-CHP

Direct connection

Lever lock toolholder with TungCap connection.
For negative 55°/45° rhombic insert. High-pressure coolant capability.



Metric	DCONMS	LF	WF	RE **	Insert	Torque
C6PDMNL00130-1104-CHP	63	130	0	0.8	DN**/FNMG1104...	2

Torque: Recommended clamping torque: N·m
Applicable for 14 MPa (2031 PSI) pressure coolant
**RE: Standard corner radius

For external turning only.

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C6PDMNL00130-1104-CHP	ELSD32	LCS3	P-2.5	LSP3	LCL33L

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C6PDMNL00130-1104-CHP	CU-D-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

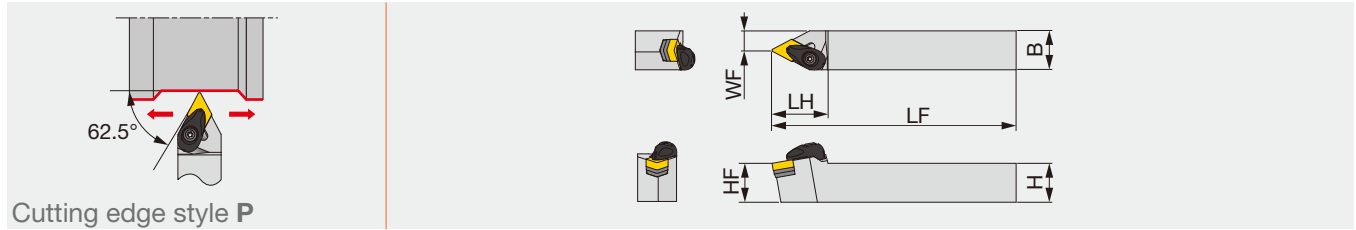
Application	Finishing	Medium cutting
	Grade	T9215
Chipbreaker shape	TSF	TM
Cutting conditions	B004	

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

Application	Medium cutting
Grade	T515
Chipbreaker shape	TM
Cutting conditions	B008

Reference pages: C-PDMNL-CHP: Inserts → **B066 -**, **B075**, CBN → **B172**
Parts for coolant hose → **C133**

Double-clamp toolholder with 62.5° approach angle, for negative 55°/45° rhombic inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ADPNN124-A	0.750	0.750	4.500	1.500	0.750	0.375	0.031	DN**/FNGA 43...	2.2
ADPNN164-A	1.000	1.000	6.000	1.500	1.000	0.500	0.031	DN**/FNGA 43...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ADPNN2020K15-A	20	20	125	36	20	7.5	0.8	DN**/FNGA1504...	3
ADPNN2525M15-A	25	25	150	36	25	12.5	0.8	DN**/FNGA1504...	3

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

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ADPNN...	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Chipbreaker shape	TF	TSF	TM	TH
	Cutting conditions	B004			
M	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T6215	AH6225	AH6225	
	Chipbreaker shape	SF	SM	SH	
	Cutting conditions	B006			
K	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T515	T515	T515	
	Chipbreaker shape	All-round	All-round	All-round	
	Cutting conditions	B008			
N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	DX120	DX140	TH10	
	Chipbreaker shape	DIA	with rake DIA	P	
	Cutting conditions	B010			
S	Application	Precision finishing	Finishing	Medium cutting	
	Grade	BX470	AH8005	AH8005	
	Chipbreaker shape	CBN	HRF	HRM	
	Cutting conditions	B012			
H	Application	Precision finishing	Finishing		
	Grade	BXA10	BXA20		
	Chipbreaker shape	CBN	CBN		
	Cutting conditions	B014			

Reference pages: ADPNN: Inserts → **B066 -**, CBN → **B172 -**, **B176**, PCD → **B211**



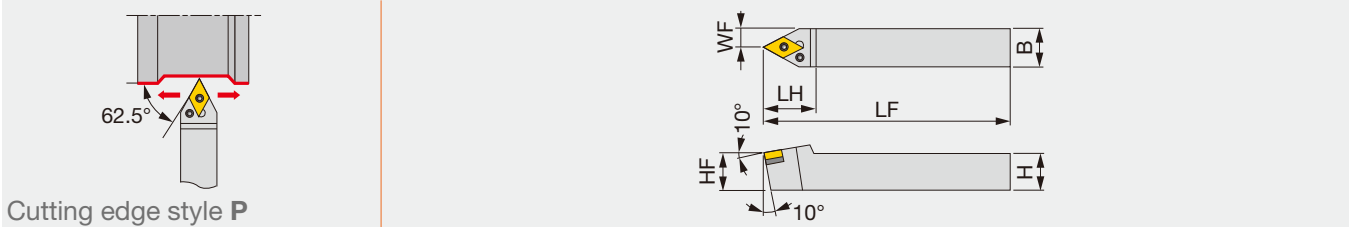
DN

FN



PDPNN

Lever-lock toolholder with 62.5° approach angle, for negative 55°/45° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PDPNN2525	25	25	150	36	25	12.5	0.8	DN**/FNGA1504...
PDPNN2525M15E	25	25	150	36	25	12.5	0.8	DN**/FNGA1506...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PDPNN2525	LSD42	LCS4	P-3	LSP4	LCL4
PDPNN2525M15E	ELSD42	ELCS4	P-3	LSP4S	LCL44

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

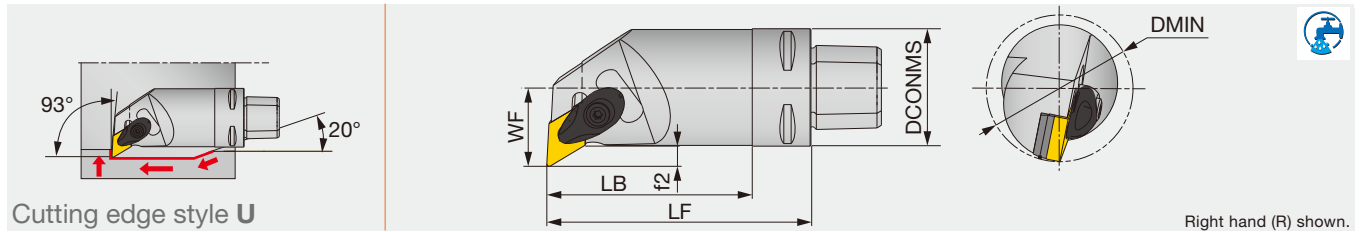
Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PDPNN: Inserts → B066 -, CBN → B172 -, B176, PCD → B211



Metric	DMIN	DCONMS	LF	LB	WF	f2	RE	Insert
C4ADUNR20070-15	38	40	70	50	20	5	0.8	DN**/FNGA1504...
C4ADUNR27090-15	50	40	90	-	27	7	0.8	DN**/FNGA1504...

Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Spring pin	Wrench
C*ADUNR/L...	ACP4S	ACS-5W	ASD432	CSTB-3.5	BP-7	SP-2.5	T-15F

Option: ASD423 (Shim for DN**1506**)

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-ADUNR/L: Inserts → B066 -, CBN → B172 -, B176, PCD → B211
Parts for coolant hose → C133

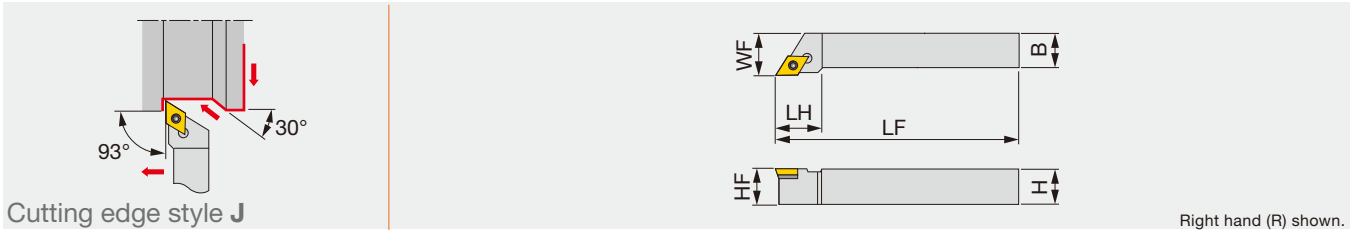


DC

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

SDJCR/L

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



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
SDJCR/L062	0.375	0.375	2.500	0.625	0.375	0.500	0.016	DC** 21.5...
SDJCR/L082	0.500	0.500	3.500	0.625	0.500	0.625	0.016	DC** 21.5...
SDJCR/L083	0.500	0.500	3.500	-	0.500	0.625	0.016	DC** 32.5...
SDJCR/L103	0.625	0.625	4.000	-	0.625	0.750	0.031	DC** 32.5...
SDJCR/L123	0.750	0.750	4.500	-	0.750	1.000	0.031	DC** 32.5...
SDJCR/L163	1.000	1.000	6.000	-	1.000	1.250	0.031	DC** 32.5...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SDJCR1616H11	16	16	100	20	16	20	0.8	DC**11T3...
SDJCR/L2020K11	20	20	125	20.5	20	25	0.8	DC**11T3...
SDJCR/L2525M11	25	25	150	21.5	25	32	0.8	DC**11T3...

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
SDJCR/L**2	CSTB-2.5	-	-	-	T-8F
SDJCR/L**3, SDJCR/L**11	CSTB-3.5L	DTS5-3.5	SSD32	P-3.5	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH6225	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

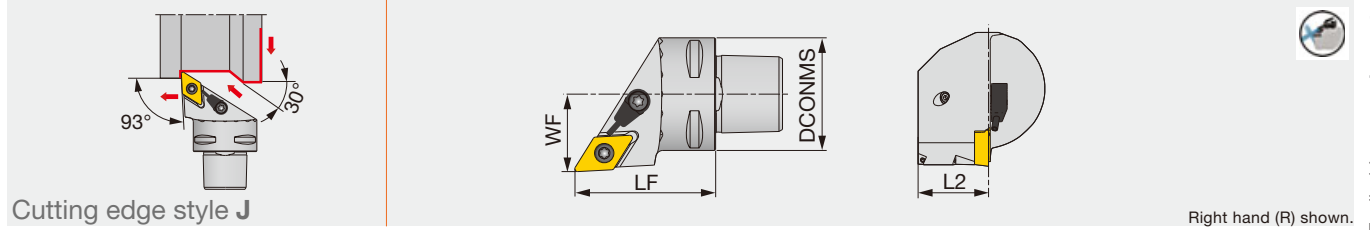
Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA	with rake DIA	AL
Cutting conditions	B022		

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: SDJCR/L: Inserts → **B121** -, CBN → **B194**, PCD → **B214**

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



Metric	DCONMS	LF	L2	WF	RE	Insert
C3SDJCR/L22040-11-CHP	32	40	20	22	0.8	DC**11T3...

Applicable for 14 MPa (2031 PSI) coolant
Cannot be used for boring

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
C3SDJCR/L22040-11-CHP	CSTB-4S	S-CU-CHP	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	GH330	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

Application	Finishing to medium cutting
	Grade
Chipbreaker shape	CM
Cutting conditions	B020

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	AL
Cutting conditions	B022		

Application	Finishing	Finishing to medium cutting
	Grade	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: C-SDJCR/L-CHP: Inserts → **B121** -, CBN → **B194**, PCD → **B214**
Parts for coolant hose → **C133**



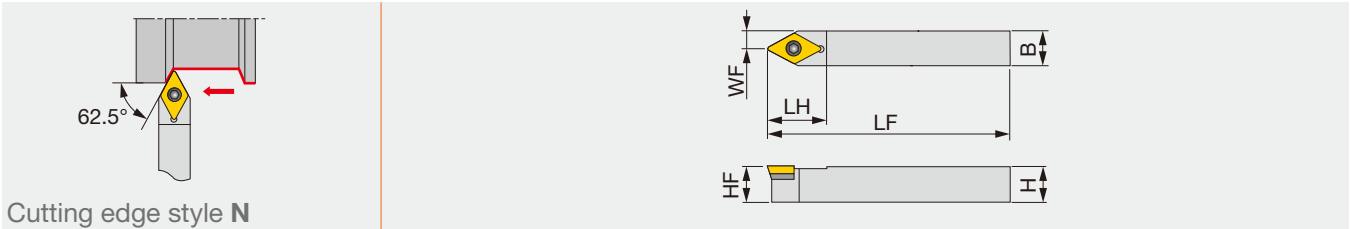
DC



Rhombic, 55°
with hole
Positive 7°

SDNCN

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



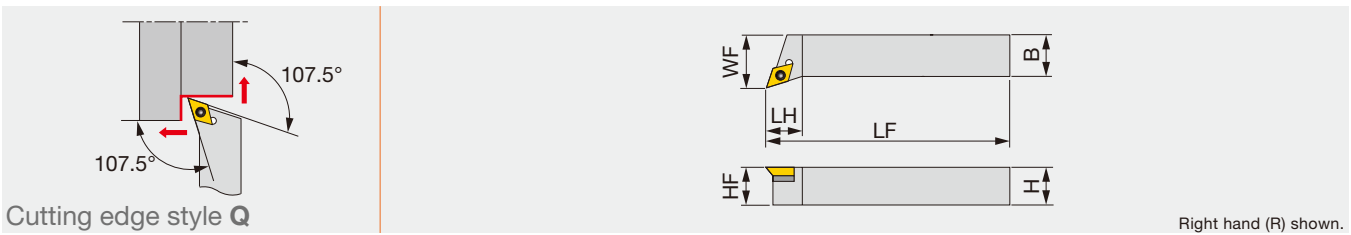
Metric	H	B	LF	LH	HF	WF	RE**	Insert
SDNCN1616H11	16	16	100	21	16	8	0.8	DC**11T3...
SDNCN2020K11	20	20	125	21	20	10	0.8	DC**11T3...
SDNCN2525M11	25	25	150	21	25	12.5	0.8	DC**11T3...

**RE: Standard corner radius

C

SDQCR/L

Screw-on toolholder with 107.5° approach angle, for positive 55° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
SDQCR/L2020K11	20	20	125	20.5	20	25	0.8	DC**11T3...
SDQCR2525M11	25	25	150	21.5	25	32	0.8	DC**11T3...

**RE : Standard corner radius

T

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
SDNCN..., SDQCR/L...	CSTB-3.5L	DTS5-3.5	SSD32	P-3.5	T-15F

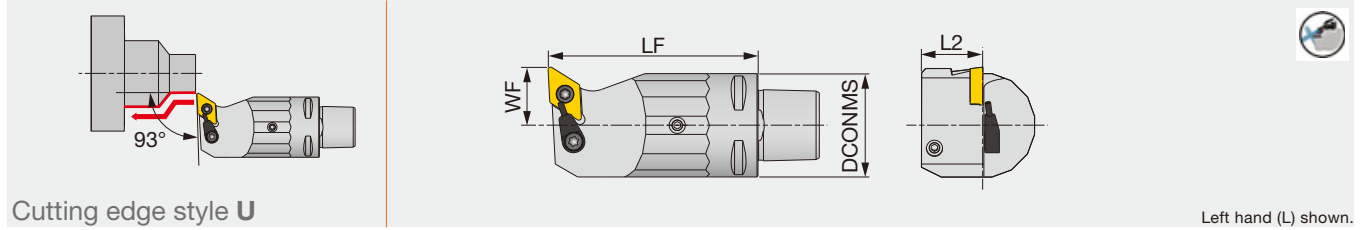
W

Y

OTHERS

Reference pages: SDNCN, SDQCR/L: Inserts → **B121** -, CBN → **B194**, PCD → **B214**

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



Cutting edge style **U**

Left hand (L) shown.

Metric	DCONMS	LF	L2	WF	RE	Insert
C3SDUCL18040-11-CHP	32	40	19	18	0.8	DC**11T3...
C3SDUCL18065-11-CHP	32	65	19	18	0.8	DC**11T3...

Applicable for 14 MPa (2031 PSI) coolant
Cannot be used for boring

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench
C3SDUCL...	CSTB-4S	S-CU-CHP	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	T9215
Chipbreaker shape	PSS	PS	PM
Cutting conditions	B016		

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	GH330	AH6225	AH6225
Chipbreaker shape	W**	PSS	PS	PM
Cutting conditions	B018			

Application	Finishing to medium cutting
	Grade
Chipbreaker shape	CM
Cutting conditions	B020

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	AL
Cutting conditions	B022		

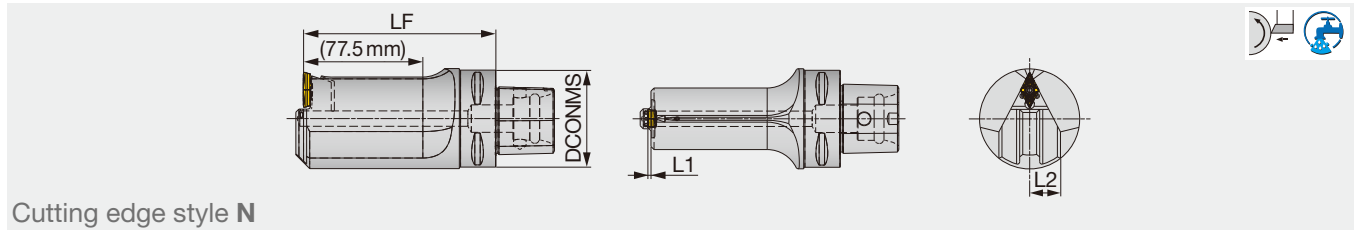
Application	Finishing	Finishing to medium cutting
	Grade	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: C-SDUCL-CHP: Inserts → **B121** -, CBN → **B194**, PCD → **B214**
Parts for coolant hose → **C133**



Screw-on Y-axis turning toolholder with TungCap connection, for positive 55° rhombic inserts



Cutting edge style N

Metric	SS	DCONMS	LF	L1	L2	RE	Insert	Torque
C6SDNCN00125-13-Y-CHP	C6	63	125	2	20	0.4	2D-DCMT13T4...	3.5

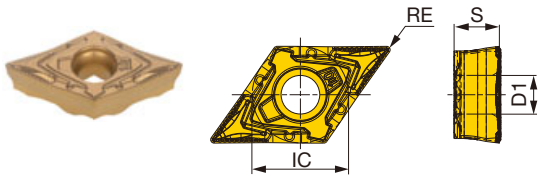
Torque: Recommended clamping torque: N·m

SPARE PARTS

Designation	Clamping screw	Grip	Torx bit
C6SDNCN00125-13-Y-CHP	CSTB-4M	H-TB2W	BT15M

INSERT

2D-DCMT**-ZF



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

★ : First choice
☆ : Second choice

Designation	RE (in)	Coated						IC (in)	S (in)	D1 (in)
		T9215								
2D-DCMT13T404-ZF	0.016	●						0.433	0.203	0.173

Please note that 2D-DCMT... insert is not recommended for pull face-turning method (pulling the insert away from the part center).

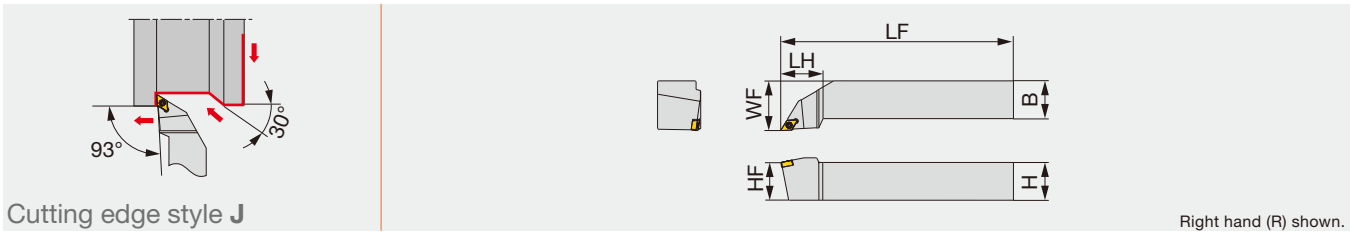
● : Line up

DX

Rhombic, 55° with hole

MINIFORCE TURN JSDJXR/L

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



Cutting edge style J

Right hand (R) shown.

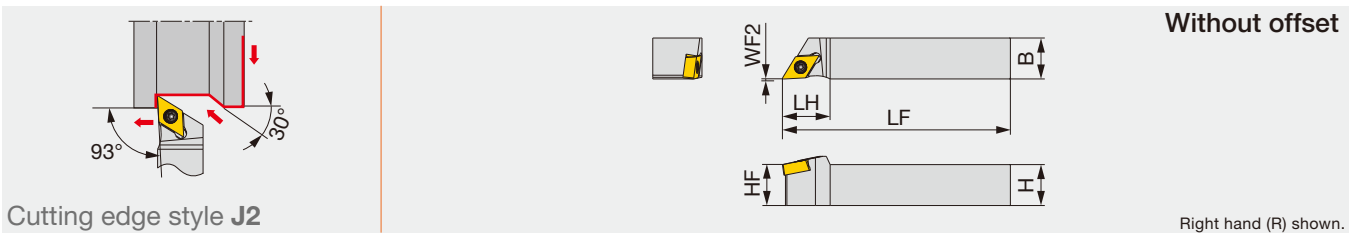
Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSDJXR/L122	0.750	0.750	4.500	1.125	0.750	1.000	0.008	DX*U 22**/L/R...	0.66
JSDJXR/L162	1.000	1.000	6.000	1.125	1.000	1.250	0.008	DX*U 22**/L/R...	0.66
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSDJXR/L2020K07	20	20	125	27	20	25	0.4	DX*U0703**/L/R...	0.9
JSDJXR/L2525M07	25	25	150	27	25	32	0.4	DX*U0703**/L/R...	0.9

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

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

JSDJ2XR/L

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



Cutting edge style J2

Without offset

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF2	RE**	Insert	Torque
JSDJ2XR/L062	0.375	0.375	4.750	0.625	0.375	0	0.008	DX*U 22**/L/R...	0.66
JSDJ2XR/L082	0.500	0.500	4.750	0.625	0.500	0	0.008	DX*U 22**/L/R...	0.66
JSDJ2XR/L102	0.625	0.625	4.750	0.625	0.625	0	0.008	DX*U 22**/L/R...	0.66
Metric	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSDJ2XR/L1010X07	10	10	120	14	10	0	0.2	DX*U0703**/L/R...	0.9
JSDJ2XR/L1212F07	12	12	85	14	12	0	0.2	DX*U0703**/L/R...	0.9
JSDJ2XR/L1212X07	12	12	120	14	12	0	0.2	DX*U0703**/L/R...	0.9
JSDJ2XR/L1616X07	16	16	120	18	16	0	0.2	DX*U0703**/L/R...	0.9
JSDJ2XR/L2020H07	20	20	100	18	20	0	0.2	DX*U0703**/L/R...	0.9

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

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

Application	Finishing	Medium cutting
	Grade	SH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	SH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Small CNC lathes

Application	Finishing	Medium cutting
	Grade	AH725
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Reference pages:
 JSDJXR/L, JSDJ2XR/L:
 Inserts → **B126 -**,
 Standard cutting conditions → **C136**

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

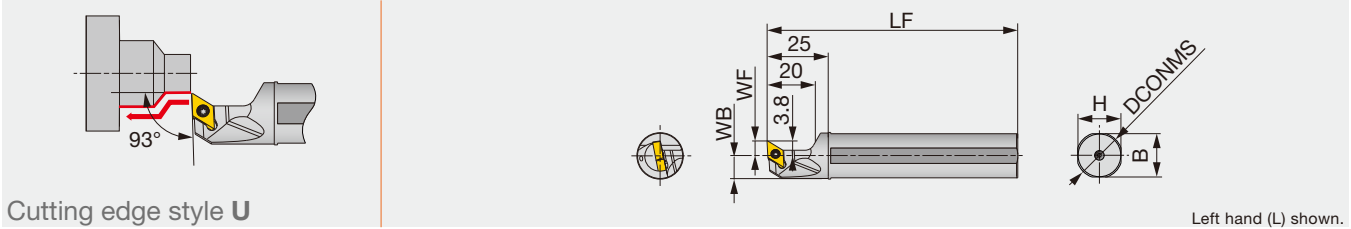


DX



MINIFORCE TURN JS-SDUXL

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



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

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

Application	Finishing	Medium cutting
	Grade	Grade
	SH725	AH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	Grade
	SH725	AH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Small CNC lathes

Application	Finishing	Medium cutting
	Grade	Grade
	AH725	AH725
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	Grade
	AH8015	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Reference pages: JS-SDUXL: Inserts → **B126** -
 Standard cutting conditions → **C136**

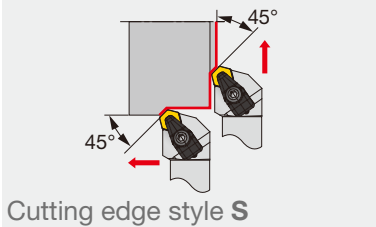
HN



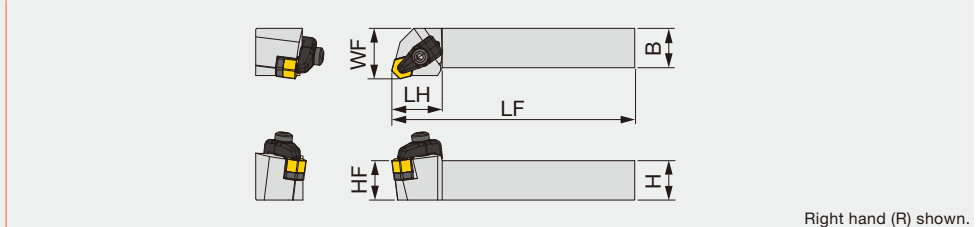
Hexagonal,
120°
without hole

DIMPLEFX CHSNR/L-RD

Double-clamp toolholder with 45° approach angle, for negative 120° hexagonal ceramic inserts with dimple



Cutting edge style S



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
CHSNR16M45-RD	1.000	1.000	6.000	1.260	1.000	1.250	0.047	HNGD 45...	3.0

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CHSNR2525M0507-RD	25	25	150	32	25	32	1.2	HNGD0507...	4

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

**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
CHSNR...	CCP4-A	CCS4-A	CH44-A	BH-40050-A	BP-5-A	P-3	P-4

INSERT SELECTION



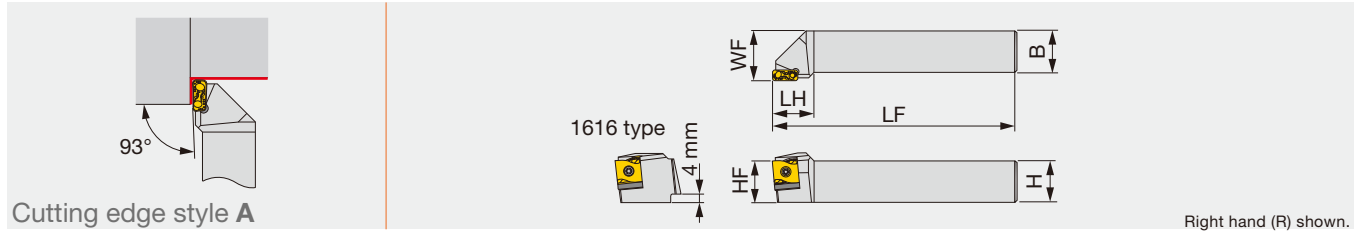
Application	Finishing to medium cutting
Grade	FX105
Chipbreaker Shape	
Cutting conditions	C136

Reference pages: CHSNR/L-RD: Inserts → **B111**

Standard cutting conditions → **C136**



Screw-on toolholder for roughing with 93° approach angle, for negative tangential inserts



Inch	H	B	LF	LH	HF	WF	Insert
TLANR/L10-12	0.625	0.625	4.000	0.790	0.625	0.750	LNMX1204**R/L...
TLANR/L12-12	0.750	0.750	4.500	0.790	0.750	1.000	LNMX1204**R/L...
TLANR/L12-16	0.750	0.750	4.500	1.000	0.750	1.000	LNMX1606**R/L...
TLANR/L16-12	1.000	1.000	6.000	0.790	1.000	1.250	LNMX1204**R/L...
TLANR/L16-16	1.000	1.000	6.000	1.000	1.000	1.180	LNMX1606**R/L...
TLANR/L20-16	1.250	1.250	6.000	1.380	1.250	1.460	LNMX1606**R/L...
TLANR/L20-24	1.250	1.250	6.000	1.380	1.250	1.500	LNMX2410**R/L...
TLANR/L24-16	1.500	1.500	7.000	1.380	1.500	1.700	LNMX1606**R/L...
TLANR/L24-24	1.500	1.500	7.000	1.380	1.500	1.700	LNMX2410**R/L...
TLANR/L32-24	2.000	2.000	8.000	1.380	2.000	2.275	LNMX2410**R/L...

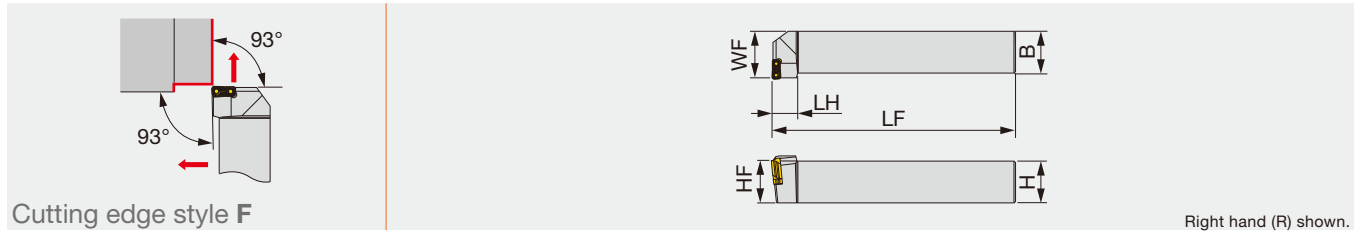
Metric	H	B	LF	LH	HF	WF	Insert
TLANR/L1616H12	16	16	100	20	16	20	LNMX1204**R/L...
TLANR/L1616M12S	16	16	150	20	16	20	LNMX1204**R/L...
TLANR/L2020K12	20	20	125	20	20	25	LNMX1204**R/L...
TLANR/L2020K16	20	20	125	25	20	25	LNMX1606**R/L...
TLANR/L2525M12	25	25	150	20	25	30	LNMX1204**R/L...
TLANR/L2525M16	25	25	150	25	25	30	LNMX1606**R/L...
TLANR/L3232P16	32	32	170	35	32	37	LNMX1606**R/L...
TLANR/L3232P24	32	32	170	35	32	38	LNMX2410**R/L...
TLANR/L4040R16	40	40	200	35	40	47	LNMX1606**R/L...
TLANR/L4040R24	40	40	200	40	40	47	LNMX2410**R/L...
TLANR/L5050S24	50	50	250	40	50	57	LNMX2410**R/L...

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Spring	Wrench 1	Wrench 2
TLANR**12, 12S	CSTB-3.5L115-S	CSTF-2L055-S	TSL12R	-	KEYV-T10	T-6F-S
TLANL**12, 12S	CSTB-3.5L115-S	CSTF-2L055-S	TSL12L	-	KEYV-T10	T-6F-S
TLANR**16	CSTB-4L115-S	-	TSL16R	PSP-16	KEYV-T15	-
TLANL**16	CSTB-4L115-S	-	TSL16L	PSP-16	KEYV-T15	-
TLANR**24	CSTB-5L163-S	-	TSL24R	PSP-16	KEYV-T20	-
TLANL**24	CSTB-5L163-S	-	TSL24L	PSP-16	KEYV-T20	-

Reference pages: TLANR/L: Inserts → **C062**, Standard cutting conditions → **C137**

Screw-on toolholder for roughing with 93° approach angle, for negative tangential inserts



Cutting edge style F

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	Insert
TLFNR/L16-16	1.000	1.000	6.000	0.750	1.000	1.181	LNMX1606**L/R...
TLFNR/L20-16	1.250	1.300	6.693	0.750	1.250	1.457	LNMX1606**L/R...
Metric	H	B	LF	LH	HF	WF	Insert
TLFNR/L2525M16	25	25	150	20	25	30	LNMX1606**L/R...
TLFNR/L3232P16	32	32	170	20	32	37	LNMX1606**L/R...

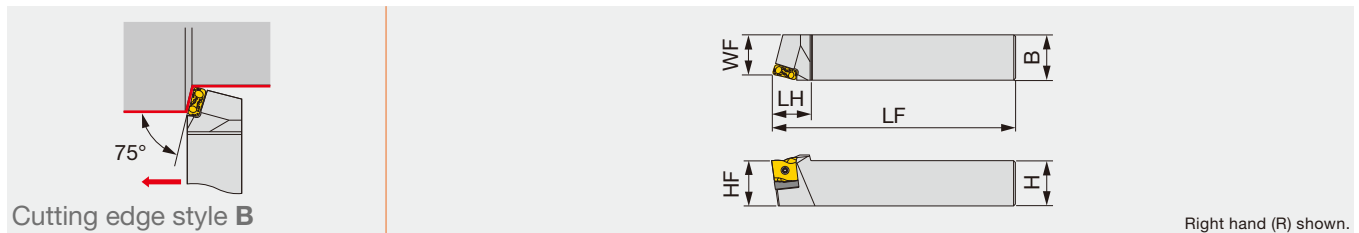
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Shim	Spring pin	Wrench
TLFNR...	CSTB-4L115-S	TSL16L	PSP-16	KEYV-T15
TLFNL...	CSTB-4L115-S	TSL16R	PSP-16	KEYV-T15

TLBNR/L

Screw-on toolholder for roughing with 75° approach angle, for negative tangential inserts



Cutting edge style B

Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	Insert
TLBNR/L24-24	1.500	1.500	7.874	1.378	1.500	1.378	LNMX2410**R/L...
Metric	H	B	LF	LH	HF	WF	Insert
TLBNR/L4040R24	40	40	200	35	40	35	LNMX2410**R/L...

SPARE PARTS

Designation	Clamping screw	Shim	Spring pin	Wrench
TLBNR...	CSTB-5L163-S	TSL24R	PSP-16	KEYV-T20
TLBNL...	CSTB-5L163-S	TSL24L	PSP-16	KEYV-T20

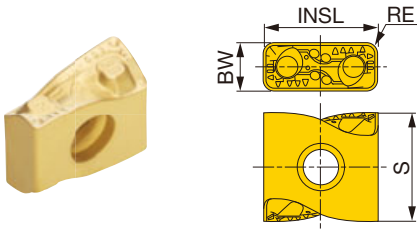
Reference pages: TLFNR/L, TLBNR/L:

Inserts → C062, Standard cutting conditions → C137



INSERT

LNMX12/16/24



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

★ : First choice
☆ : Second choice

Designation	HAND	RE (in)	Coated										BW (in)	INSL (in)	S (in)		
			T9115	T9125	AH725												
LNMX120408R-TDR	R	0.031	●	●											0.189	0.472	0.457
LNMX120408L-TDR	L	0.031	●	●											0.189	0.472	0.457
LNMX120412R-TDR	R	0.047	●	●											0.189	0.472	0.457
LNMX120412L-TDR	L	0.047	●	●											0.189	0.472	0.457
LNMX160608R-TDR	R	0.031	●	●											0.252	0.638	0.531
LNMX160608L-TDR	L	0.031	●	●											0.252	0.638	0.531
LNMX160612R-TDR	R	0.047	●	●											0.252	0.638	0.531
LNMX160612L-TDR	L	0.047	●	●											0.252	0.638	0.531
LNMX160616R-TDR	R	0.063	●	●											0.252	0.638	0.531
LNMX160616L-TDR	L	0.063	●	●											0.252	0.638	0.531
LNMX241016R-TDR	R	0.063	●	●											0.370	0.945	0.807
LNMX241016L-TDR	L	0.063	●	●											0.370	0.945	0.807
LNMX241024R-TDR	R	0.094	●	●											0.370	0.945	0.807
LNMX241024L-TDR	L	0.094	●	●											0.370	0.945	0.807
LNMX160608R-MDR	R	0.031	●		●										0.252	0.638	0.531
LNMX160608L-MDR	L	0.031	●		●										0.252	0.638	0.531
LNMX160612R-MDR	R	0.047	●		●										0.252	0.638	0.531
LNMX160612L-MDR	L	0.047	●		●										0.252	0.638	0.531
LNMX160608R-TWR	R	0.031	●												0.252	0.638	0.531
LNMX160608L-TWR	L	0.031	●	●											0.252	0.638	0.531
LNMX160612R-TWR	R	0.047	●	●											0.252	0.638	0.531
LNMX160612L-TWR	L	0.047	●	●											0.252	0.638	0.531

● : Line up

C

D

F

G

H

R

S

T

V

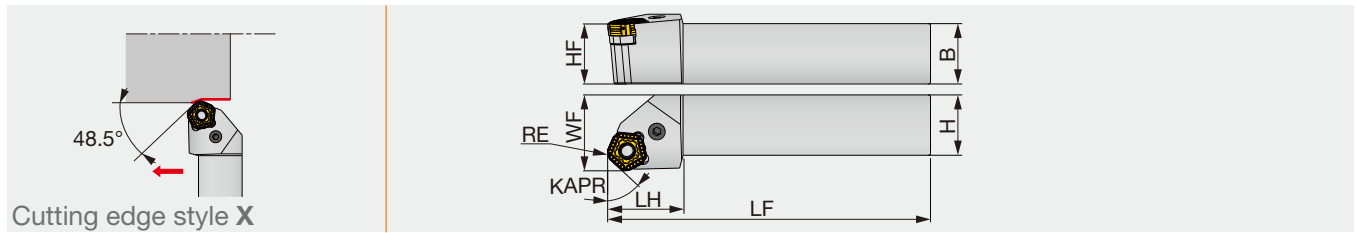
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Y

OTHERS

Reference pages: Standard cutting conditions → **C137**

Lever-lock toolholder with 48.5° approach angle, for negative 108° pentagonal inserts



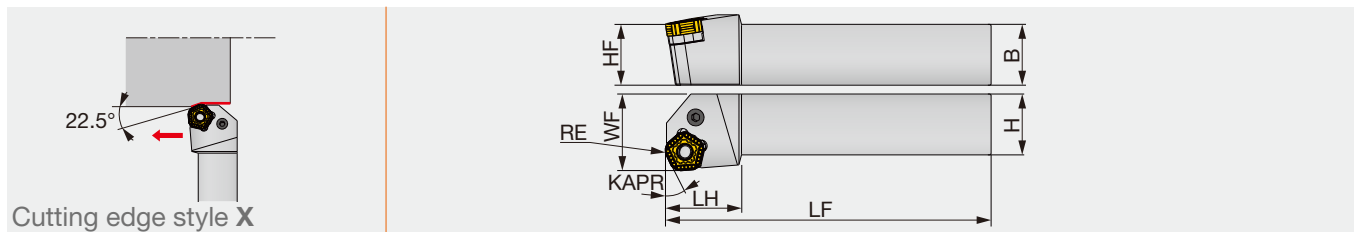
Inch	H	B	LF	LH	HF	WF	KAPR	RE	Insert
PPXOR/L165-HD	1.000	1.000	6.000	1.380	1.000	1.260	48.5°	0.047	POMG 543...
PPXOR/L206-HD	1.250	1.250	7.000	1.500	1.250	1.510	48.5°	0.047	POMG 643...

Metric	H	B	LF	LH	HF	WF	KAPR	RE	Insert
PPXOR/L2525M11-HD	25	25	150	35	25	32	48.5°	1.2	POMG110612...
PPXOR/L3232P13-HD	32	32	170	40	32	40	48.5°	1.2	POMG130612...

Note: Since the corner angle of TurnTenFeed insert is 108°, the workpiece corner may require additional post-process to remove stock to achieve a right angle.

PPXOR/L-HF






Lever-lock toolholder with 22.5° approach angle, for negative 108° pentagonal inserts



Inch	H	B	LF	LH	HF	WF	KAPR	RE	Insert
PPXOR/L165-HF	1.000	1.000	6.000	1.380	1.000	1.260	22.5°	0.047	POMG 543...
PPXOR/L206-HF	1.250	1.250	7.000	1.500	1.250	1.510	22.5°	0.047	POMG 643...

Metric	H	B	LF	LH	HF	WF	KAPR	RE	Insert
PPXOR/L2525M11-HF	25	25	150	35	25	32	22.5°	1.2	POMG110612...
PPXOR/L3232P13-HF	32	32	170	40	32	40	22.5°	1.2	POMG130612...

Note: Since the corner angle of TurnTenFeed insert is 108°, the workpiece corner may require additional post-process to remove stock to achieve a right angle.

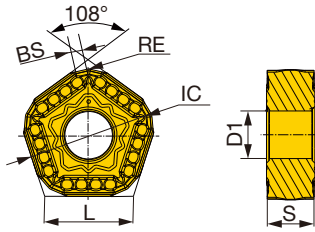
SPARE PARTS					
Designation	Shim	Spring pin	Lever	Clamping screw	Wrench
PPXOR/L165-H*, PPXOR/L2525M11-H*	LSPO53	LSP5	LCL5	LCS5	P-3
PPXOR/L206-H*, PPXOR/L3232P13-H*	LSPO63	LSP6	LCL6	LCS6	P-4

Reference pages: PPXOR/L-HD, PPXOR/L-HF:
Inserts → C064, Standard cutting conditions → C135



INSERT

POMG-MNW



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

★ : First choice
☆ : Second choice

Designation		RE (in)	Coated					IC (in)	L (in)	BS (in)	S (in)	D1 (in)	
			T9215	T9225	AH8015								
Inch	Metric	0.047	●	●	●								
POMG 543 MNW	POMG110612-MNW	0.047	●	●	●				0.625	0.454	0.059	0.250	0.250
POMG 643 MNW	POMG130612-MNW	0.047	●	●	●				0.750	0.545	0.079	0.250	0.312

● : Line up

- C
- D
- F
- G
- H
- R**
- S
- T
- V
- W
- Y
- OTHERS

Reference pages: Standard cutting conditions → **C135**

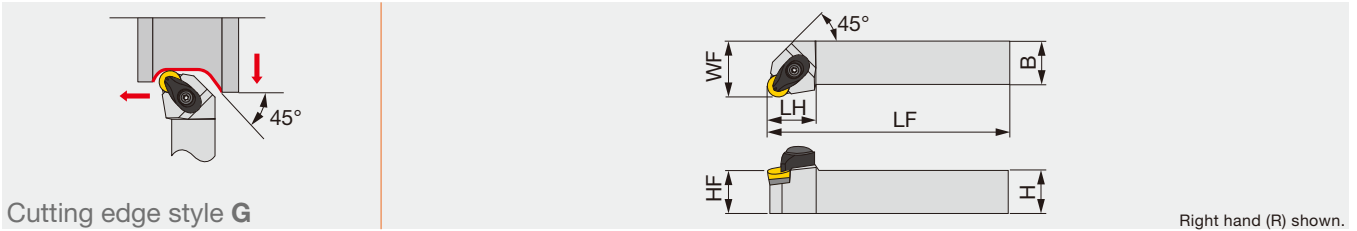
RN



Round,
with hole

TURNINGA ARGNR/L

Double-clamp toolholder with 91° approach angle, for negative round inserts



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ARGNR/L164-A	1.000	1.000	6.000	1.125	1.000	1.250	0.250	RN** 43...	2.2
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ARGNR/L2525M12-A	25	25	150	28	25	32	6.35	RN**120400	3

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ARGNR/L...	ACP4S	ACS-5W	BP-7	SP-2.5	ASR420	CSTB-3.5	T-15F

INSERT SELECTION

P	Application	Heavy cutting	M	Application	Heavy cutting	K	Application	Heavy cutting
	Grade	T9215		Grade	T9215		Grade	T9215
	Chipbreaker Shape			Chipbreaker Shape			Chipbreaker Shape	
	Cutting conditions	B004		Cutting conditions	B006		Cutting conditions	B008
N	Application	Heavy cutting	S	Application	Heavy cutting	H	Application	Finishing to medium cutting
	Grade	TH10		Grade	TH10		Grade	LX11
	Chipbreaker Shape			Chipbreaker Shape			Chipbreaker Shape	
	Cutting conditions	B010		Cutting conditions	B012		Cutting conditions	B014

Reference pages: ARGNR/L: Inserts → **B076**



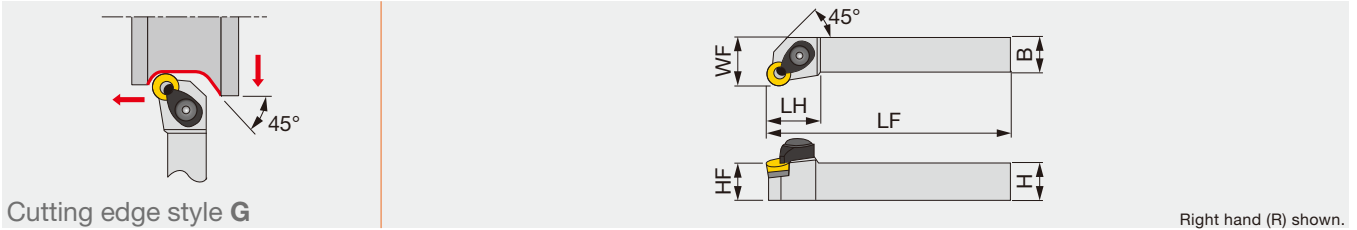
RN



Round,
with hole

DRGNR/L

"One-Double" toolholder with 91° approach angle, for negative round inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
DRGNR/L2525M12	25	25	150	28	25	32	6.35	RN**120400

**RE: Standard corner radius

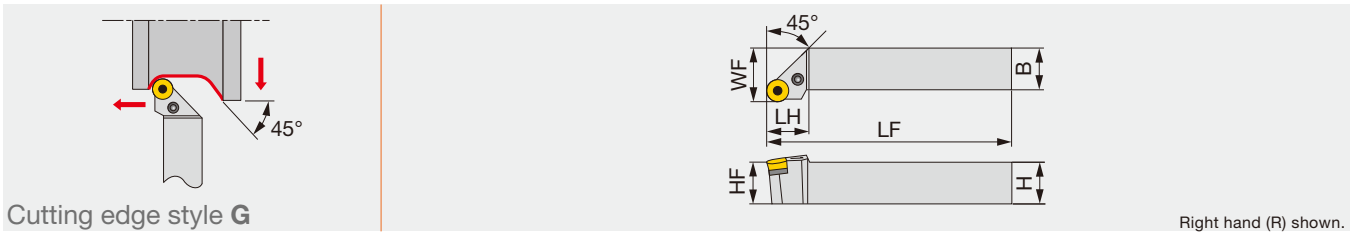
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DRGNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSR42	BP-10	LSP4	P-3	P-4

C

PRGNR/L

Lever-lock toolholder with 91° approach angle, for negative round inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PRGNR/L2020	20	20	125	19	20	25	4.76	RNMG090300-61
PRGNR/L2525M4	25	25	150	25	25	32	6.35	RN**120400

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PRGNR/L2020	LSR32	LCS3	P-2.5	LSP3	LCL3
PRGNR/L2525M4	LSR42	LCS4	P-3	LSP4	LCL4

S

T

V

W

Y

OTHERS

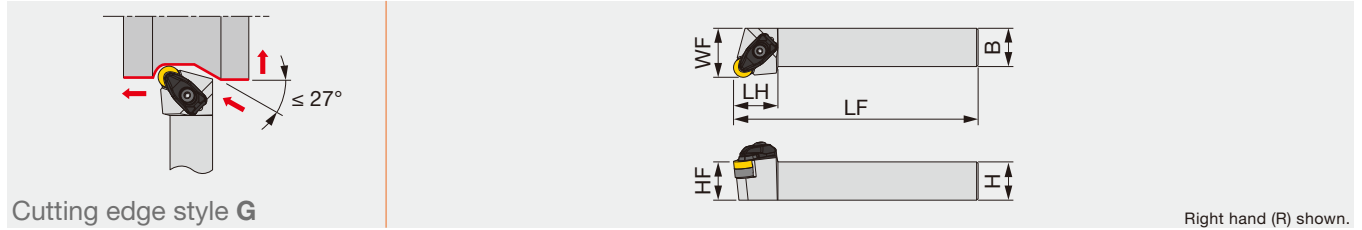
INSERT SELECTION

P	Application	Heavy cutting	M	Application	Heavy cutting	K	Application	Heavy cutting
	Grade	T9215		Grade	T9215		Grade	T9215
	Chipbreaker Shape	61		Chipbreaker Shape	61		Chipbreaker Shape	61
	Cutting conditions	B004		Cutting conditions	B006		Cutting conditions	B008
N	Application	Heavy cutting	S	Application	Heavy cutting	H	Application	Finishing to medium cutting
	Grade	TH10		Grade	TH10		Grade	LX11
	Chipbreaker Shape	61		Chipbreaker Shape	61		Chipbreaker Shape	
	Cutting conditions	B010		Cutting conditions	B012		Cutting conditions	B014

Reference pages: DRGNR/L, PRGNR/L: Inserts → **B076**

TRGNR/L-F

Toolholder with carbide clamping plate, with 90° approach angle, for negative round ceramic inserts without hole



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
TRGNR/L 16-45D-F	1.000	1.000	6.000	1.142	1.000	1.250	0.250	RNGN 45...
Metric	H	B	LF	LH	HF	WF	RE**	Insert
TRGNR/L2525M1207-F	25	25	150	29	25	32	6.35	RNGN1207...

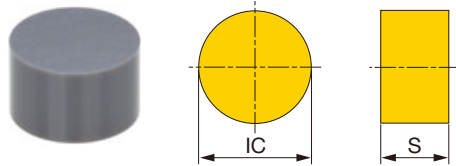
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
TRGNR/L...	DCLS-4F	DLS-4A	S-43	BH-M5X0.8X0.8	DSP-4A	T-15F	P-3

INSERT

RNGN-E/T1



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

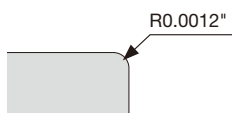
★ : First choice

Designation		Edge prep.*	Ceramic		RE (in)	IC (in)	S (in)
Inch	Metric		TS200	TS300			
RNGN 45-E	RNGN120700-E	E	●	●	-	0.500	0.313
RNGN 45-T1	RNGN120700-T1	T1	●	●	-	0.500	0.313

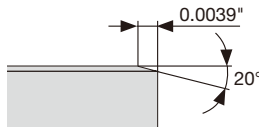
* Types of cutting edge preparations

● : Line up

E: Low cutting force



T1: Strong cutting edge



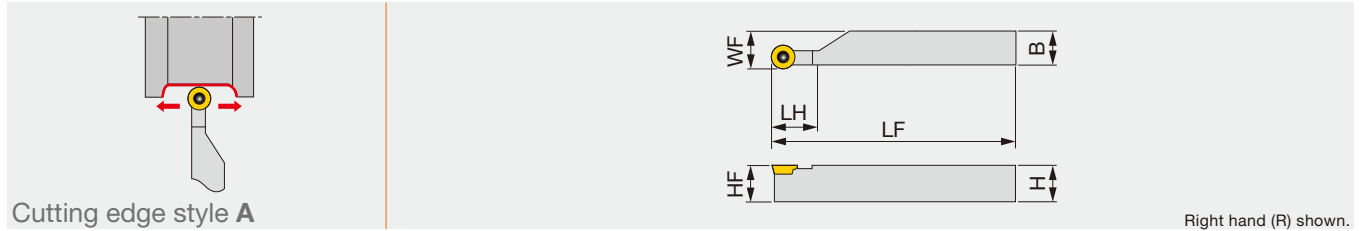
RC



Round,
with hole
Positive 7°

SRACR/L

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



Metric	H	B	LF	LH	HF	WF	Insert
SRACR1010H05	10	10	100	10	10	10.3	RCMT0502...
SRACR/L1212H05	12	12	100	10	12	12.3	RCMT0502...
SRACR/L1212H06	12	12	100	12	12	12.4	RC*T0602...
SRACR1616H05	16	16	100	10	16	16.3	RCMT0502...
SRACR/L1616H06	16	16	100	12	16	16.4	RC*T0602...
SRACR/L1616H08	16	16	100	16	16	16.5	RC*T0803...
SRACR/L2020K05	20	20	125	10	20	20.3	RCMT0502...
SRACR/L2020K06	20	20	125	12	20	20.4	RC*T0602...
SRACR/L2020K08	20	20	125	16	20	20.5	RC*T0803...
SRACR/L2525M05	25	25	150	10	25	25.3	RCMT0502...
SRACR/L2525M06	25	25	150	12	25	25.4	RC*T0602...
SRACR/L2525M08	25	25	150	16	25	25.5	RC*T0803...

SPARE PARTS



Designation	Clamping screw	Wrench
SRACR/L11*H05	CSTB-2.2R	T-7F
SRACR/L1212H06	CSTB-2.5	T-8F
SRACR1616H05	CSTB-2.2R	T-7F
SRACR/L1616H06	CSTB-2.5	T-8F
SRACR/L1616H08	CSTB-3	T-9F
SRACR/L2020K05	CSTB-2.2R	T-7F
SRACR/L2020K06	CSTB-2.5	T-8F
SRACR/L2020K08	CSTB-3	T-9F
SRACR/L2525M05	CSTB-2.2R	T-7F
SRACR/L2525M06	CSTB-2.5	T-8F
SRACR/L2525M08	CSTB-3	T-9F

C

D

F

G

H

R

S

T

V

W

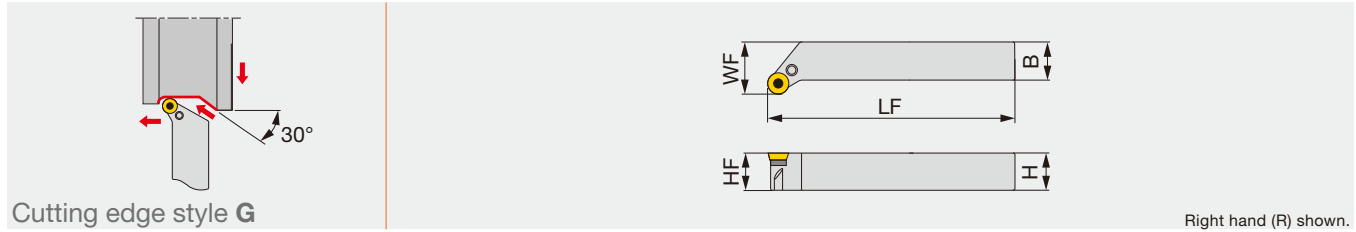
Y

OTHERS

Reference pages: SRACR/L: Inserts → **B130** -

PRGCR/L

Lever-lock toolholder with 91° approach angle, for positive round inserts



Right hand (R) shown.

Metric	H	B	LF	HF	WF	Insert
PRGCR/L2020K10	20	20	125	20	25	RCMM1003...
PRGCR/L2525M12	25	25	150	25	32	RCM*1204...
PRGCR/L3225P16	32	25	170	32	32	RCM*1606...
PRGCR/L3232P20	32	32	170	32	40	RCM*2006...

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PRGCR/L2020K10	LSR32C	LCS2	P-2	LSP3	LCL3C
PRGCR/L2525M12	LSR42C	LCS3	P-2.5	LSP3	LCL4C
PRGCR/L3225P16	LSR53C	LCS5	P-3	LSP4	LCL5C
PRGCR/L3232P20	LSR63C	LCS5	P-3	LSP6C	LCL6C

INSERT SELECTION

P	Application	Finishing to medium cutting	Heavy cutting	M	Application	Heavy cutting
	Grade	T9215	T9215		Grade	T9215
	Chipbreaker shape				Chipbreaker shape	
	Cutting conditions	B016			Cutting conditions	B018
K	Application	Heavy cutting		N	Application	Finishing to medium cutting
	Grade	T9215			Grade	KS05F
	Chipbreaker shape				Chipbreaker shape	
	Cutting conditions	B020			Cutting conditions	B022
S	Application	Finishing to medium cutting	Heavy cutting			
	Grade	AH8015	AH8015			
	Chipbreaker shape					
	Cutting conditions	B024				

Reference pages: PRGCR/L: Inserts → B130 -

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

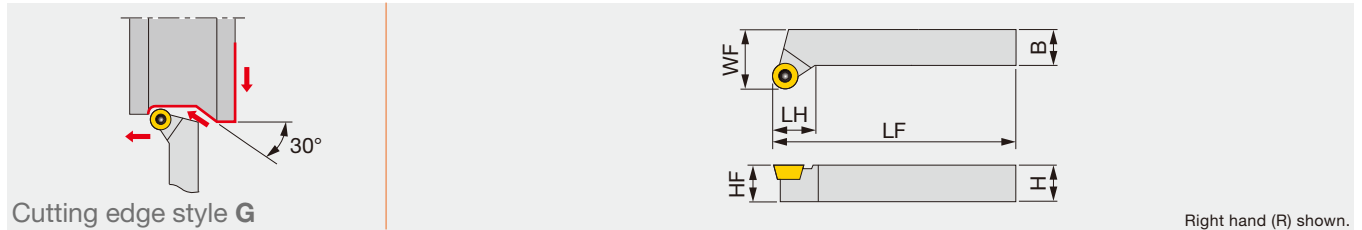
RC



Round,
with hole
Positive 7°

SRGCR/L

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



Metric	H	B	LF	LH	HF	WF	Insert
SRGCR1212H05	12	12	100	9.5	12	16	RCMT0502...
SRGCR/L1212H06	12	12	100	10	12	16	RC*T0602...
SRGCR/L1616H05	16	16	100	9.5	16	20	RCMT0502...
SRGCR/L1616H06	16	16	100	10	16	20	RC*T0602...
SRGCR/L1616H08	16	16	100	11	16	20	RC*T0803...
SRGCR/L2020K05	20	20	125	11.2	20	25	RCMT0502...
SRGCR/L2020K06	20	20	125	12	20	25	RC*T0602...
SRGCR/L2020K08	20	20	125	12.7	20	25	RC*T0803...
SRGCR/L2020K10	20	20	125	14	25	25	RC*T1003...
SRGCR/L2525M05	25	25	150	14.7	25	32	RCMT0502...
SRGCR/L2525M06	25	25	150	15	25	32	RC*T0602...
SRGCR/L2525M08	25	25	150	16.2	25	32	RC*T0803...
SRGCR/L2525M10	25	25	150	17.5	25	32	RC*T1003...

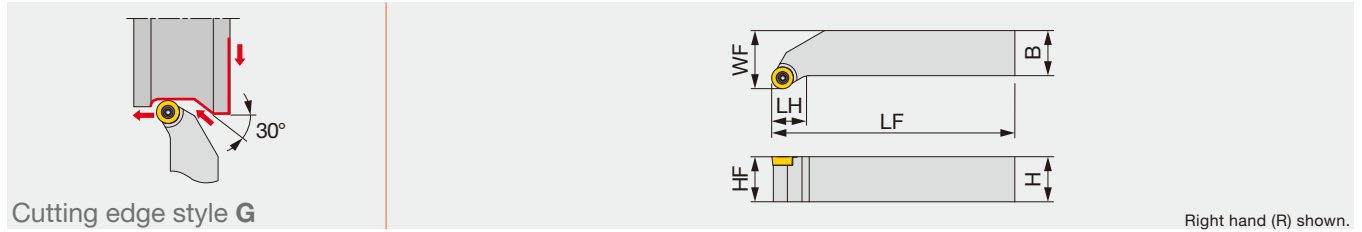
Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SRGCR1212H05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L1212H06	CSTB-2.5	-	-	-	T-8F
SRGCR/L1616H05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L1616H06	CSTB-2.5	-	-	-	T-8F
SRGCR/L1616H08	CSTB-3	-	-	-	T-9F
SRGCR/L2020K05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L2020K06	CSTB-2.5	-	-	-	T-8F
SRGCR/L2020K08	CSTB-3	-	-	-	T-9F
SRGCR/L2020K10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F
SRGCR/L2525M05	CSTB-2.2R	-	-	-	T-7F
SRGCR/L2525M06	CSTB-2.5	-	-	-	T-8F
SRGCR/L2525M08	CSTB-3	-	-	-	T-9F
SRGCR/L2525M10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F

INSERT SELECTION

P	Application	Finishing to medium cutting	Heavy cutting	M	Application	Heavy cutting	K	Application	Heavy cutting
	Grade	T9215	T9215		Grade	T9215		Grade	T9215
	Chipbreaker shape				Chipbreaker shape			Chipbreaker shape	
	Cutting conditions	B016			Cutting conditions	B018		Cutting conditions	B020
N	Application	Finishing to medium cutting	S	Application	Finishing to medium cutting	Heavy cutting			
	Grade	KS05F		Grade	AH8015	AH8015			
	Chipbreaker shape			Chipbreaker shape					
	Cutting conditions	B022		Cutting conditions	B024				

Reference pages: SRGCR/L: Inserts → **B130 -**

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



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	Insert	Torque
SRGCR/L164-6F	1.000	1.000	6.000	0.690	1.000	1.250	RCMT1204M0-6RS/-6RM	2.21
Metric	H	B	LF	LH	HF	WF	Insert	Torque*
SRGCR/L2525M12-6F	25	25	150	18.6	25	32	RCMT1204M0-6RS/-6RM	3

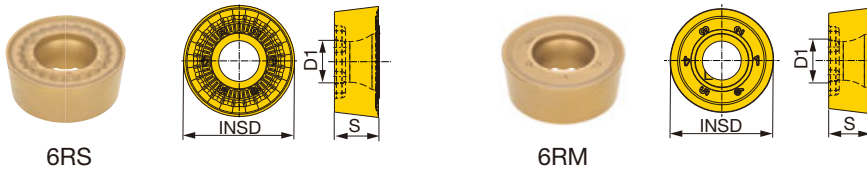
Torque: Recommended clamping torque: lb-ft (*N·m)

SPARE PARTS

Designation	Clamping screw	Lubricant	Wrench
SRGCR/L...	CSTB-4	M-1000	T-15F

INSERT

RCMT



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

★ : First choice
☆ : Second choice

Designation	Coated		Cermet		INSD (in)	S (in)	D1 (in)
	T9215	T9225	NS9530				
RCMT1204M0-6RS	●	●	●		0.472	0.187	0.203
RCMT1204M0-6RM	●	●	●		0.472	0.187	0.203

● : Line up

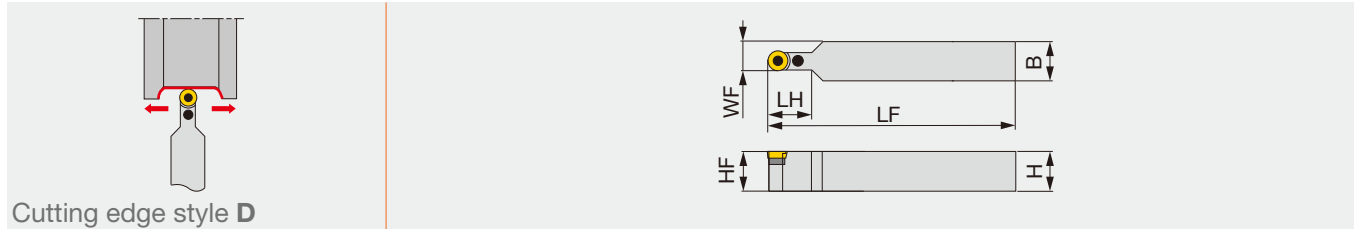
RC



Round,
with hole
Positive 7°

PRDCN

Lever-lock toolholder with 45° approach angle, for positive round inserts



Metric	H	B	LF	LH	HF	WF	Insert
PRDCN2020K10	20	20	125	22.5	20	15	RCMM1003...
PRDCN2525M12	25	25	150	24	25	18.5	RCM*1204...
PRDCN3225P12	32	25	170	24	32	18.5	RCM*1204...
PRDCN3225P16	32	25	170	28	32	20.5	RCM*1606...
PRDCN3232P20	32	32	170	32	32	26	RCM*2006...
PRDCN4040R25	40	40	200	42	40	32.5	RCM*2507...

SPARE PARTS	Shim	Clamping screw	Wrench	Spring pin	Lever
PRDCN2020K10	LSR32C	LCS2	P-2	LSP3	LCL3C
PRDCN**25**12	LSR42C	LCS3	P-2.5	LSP3	LCL4C
PRDCN3225P16	LSR53C	LCS5	P-3	LSP4	LCL5C
PRDCN3232P20	LSR63C	LCS5	P-3	LSP6C	LCL6C
PRDCN4040R25	LSR84C	LCS8C	P-4	LSP6	LCL8C

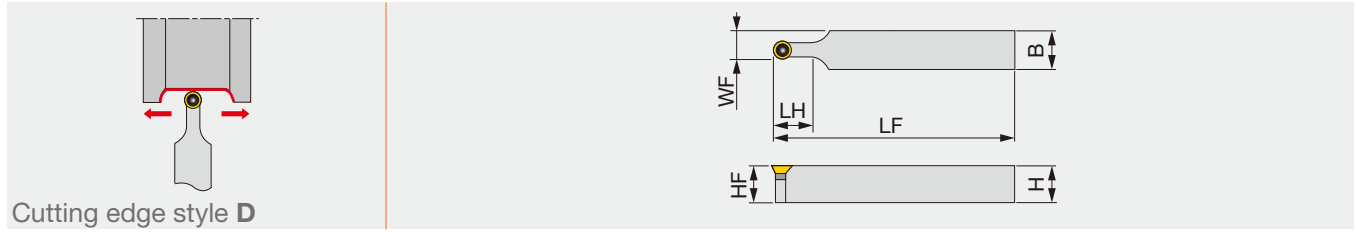
INSERT SELECTION

P	Application	Finishing to medium cutting	Heavy cutting	M	Application	Heavy cutting
	Grade	T9215	T9215		Grade	T9215
	Chipbreaker Shape				Chipbreaker Shape	
	Cutting conditions	B016			Cutting conditions	B018
K	Application	Heavy cutting		N	Application	Finishing to medium cutting
	Grade	T9215			Grade	KS05F
	Chipbreaker Shape				Chipbreaker Shape	
	Cutting conditions	B020			Cutting conditions	B022
S	Application	Finishing to medium cutting	Heavy cutting			
	Grade	AH8015	AH8015			
	Chipbreaker Shape					
	Cutting conditions	B024				

Reference pages: PRDCN: Inserts → **B130**

SRDCN

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



Metric	H	B	LF	LH	HF	WF	Insert
SRDCN2020K06	20	20	125	12	20	13	RC*T0602...
SRDCN2020K08	20	20	125	16	20	14	RC*T0803...
SRDCN2020K10	20	20	125	20.3	25	15	RC*T1003...
SRDCN2525M06	25	25	150	12	25	15.5	RC*T0602...
SRDCN2525M08	25	25	150	16	25	16.5	RC*T0803...
SRDCN2525M10	25	25	150	20.3	25	17.5	RC*T1003...

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SRDCN2020K06	CSTB-2.5	-	-	-	T-8F
SRDCN2020K08	CSTB-3	-	-	-	T-9F
SRDCN2020K10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F
SRDCN2525M06	CSTB-2.5	-	-	-	T-8F
SRDCN2525M08	CSTB-3	-	-	-	T-9F
SRDCN2525M10	CSTB-3.5L	DTS5-3.5	SSR32	P-3.5	T-15F

INSERT SELECTION

P Application: Finishing to medium cutting, Heavy cutting
 Grade: T9215, T9215
 Chipbreaker Shape:
 Cutting conditions: B016

M Application: Heavy cutting
 Grade: T9215
 Chipbreaker Shape:
 Cutting conditions: B018

K Application: Heavy cutting
 Grade: T9215
 Chipbreaker Shape:
 Cutting conditions: B020

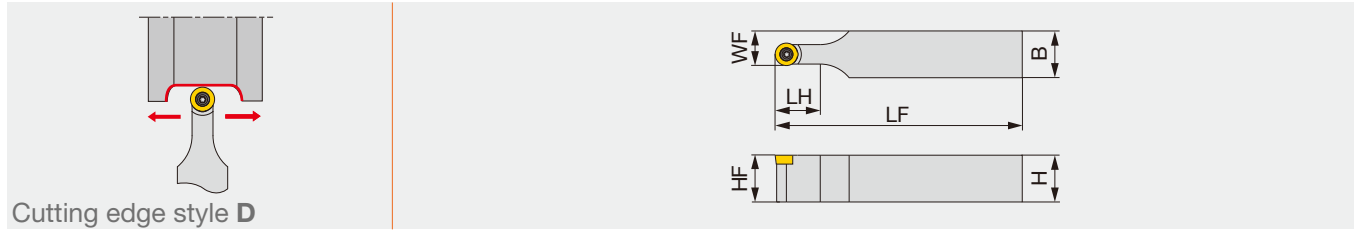
N Application: Finishing to medium cutting
 Grade: KS05F
 Chipbreaker Shape:
 Cutting conditions: B022

S Application: Finishing to medium cutting, Heavy cutting
 Grade: AH8015, AH8015
 Chipbreaker Shape:
 Cutting conditions: B024

Reference pages: SRDCN: Inserts → B130

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

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



Inch	H	B	LF	LH	HF	WF	Insert	Torque
SRDCN164-6F	1.000	1.000	6.000	0.950	1.000	0.740	RCMT1204M0-6RS/-6RM	2.21
Metric	H	B	LF	LH	HF	WF	Insert	Torque*
SRDCN2525M12-6F	25	25	150	24.1	25	18.5	RCMT1204M0-6RS/-6RM	3

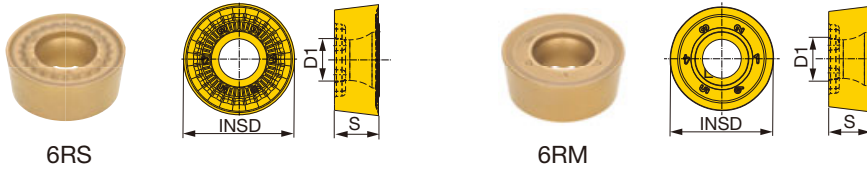
Torque: Recommended clamping torque: lb-ft (*N·m)

SPARE PARTS

Designation	Clamping screw	Lubricant	Wrench
SRDCN...	CSTB-4	M-1000	T-15F

INSERT

RCMT



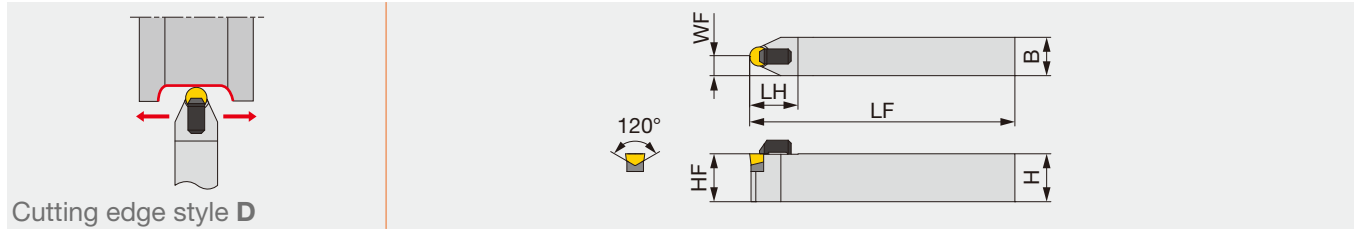
Designation	Coated		Cermet		INSD (in)	S (in)	D1 (in)
	T9215	T9225	NS9530				
RCMT1204M0-6RS	●	●	●		0.472	0.187	0.203
RCMT1204M0-6RM	●	●	●		0.472	0.187	0.203

★ : First choice
☆ : Second choice

● : Line up

TRDCN

Toolholder with carbide clamping plate, with 45° approach angle, for positive round ceramic inserts with V-bottom shape



Inch	H	B	LF	LH	HF	WF	RE**	Insert
CRDCN 85-3L-120	1.250	1.000	6.800	1.181	1.250	0.500	0.187	RCGX 350...
CRDCN 85-4L-120	1.250	1.000	6.800	1.260	1.250	0.500	0.250	RCGX 450...

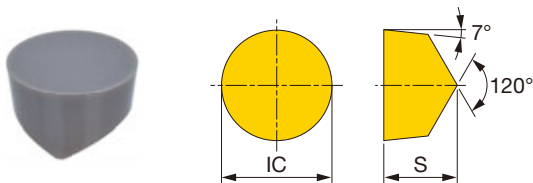
Metric	H	B	LF	LH	HF	WF	RE**	Insert
TRDCN3225P09-120	32	25	170	30	32	12.5	4.76	RCGX090700...
TRDCN3225P12-120	32	25	170	32	32	12.5	6.35	RCGX120700...

**RE: Standard corner radius

SPARE PARTS	Clamp	Clamp screw	Shim	Shim screw	Wrench 1	Wrench 2
TRDCN3225P09-120	BCL6-20A	BH-M6X1X25	CBRS-09	BH-M2.5X0.45X10	P-4	P-1.5
TRDCN3225P12-120	BCL6	BH-M6X1X25	CBRS-12	BH-M2.5X0.45X10	P-4	P-1.5

INSERT

RCGX-E/T1



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

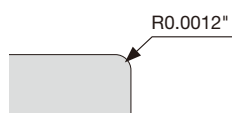
★ : First choice

Designation		Edge prep.*	Ceramic		RE (in)	IC (in)	S (in)
Inch	Metric		TS200	TS300			
RCGX 350-E	RCGX090700-E	E	●	●	-	0.375	0.313
RCGX 350-T1	RCGX090700-T1	T1	●	●	-	0.375	0.313
RCGX 450-E	RCGX120700-E	E	●	●	-	0.500	0.313
RCGX 450-T1	RCGX120700-T1	T1	●	●	-	0.500	0.313

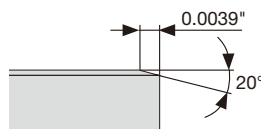
* Types of cutting edge preparations

● : Line up

E: Low cutting force



T1: Strong cutting edge



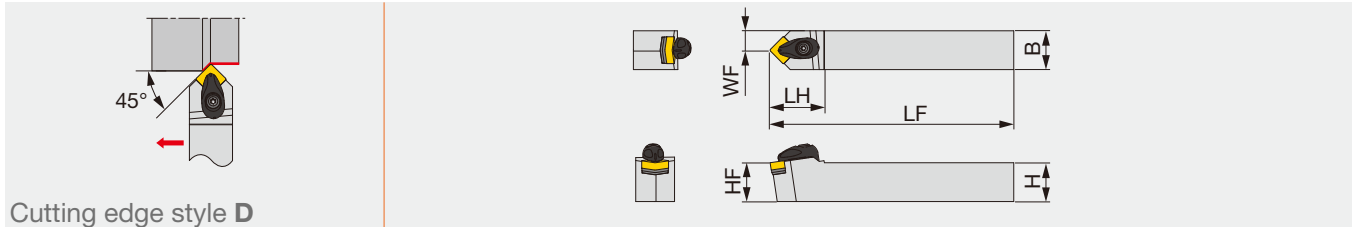
SN



Square with hole

TURNING ASDNN

Double-clamp toolholder with 45° approach angle, for negative square inserts



Cutting edge style D

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ASDNN124-A	0.750	0.750	4.500	1.380	0.750	0.375	0.031	SN** 43...	2.2
ASDNN164-A	1.000	1.000	6.000	1.380	1.000	0.500	0.031	SN** 43...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ASDNN2020K12-A	20	20	125	35	20	10	0.8	SN**1204...	3
ASDNN2525M12-A	25	25	150	35	25	12.5	0.8	SN**1204...	3

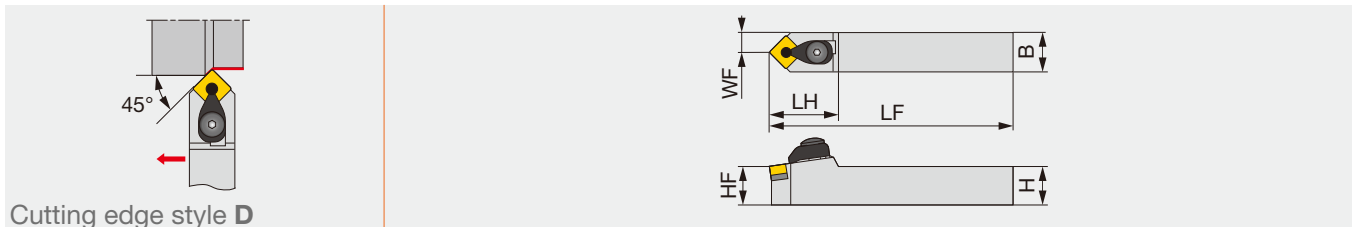
Torque: Recommended clamping torque: lbs-ft (*N-m) **RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ASDNN...	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F

DSDNN

One-Double toolholder with 45° approach angle, for negative square inserts



Cutting edge style D

Metric	H	B	LF	LH	HF	WF	RE**	Insert
DSDNN2020K12	20	20	125	36	20	10	0.8	SN**1204...
DSDNN2525M12	25	25	150	36	25	12.5	0.8	SN**1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts **RE: Standard corner radius

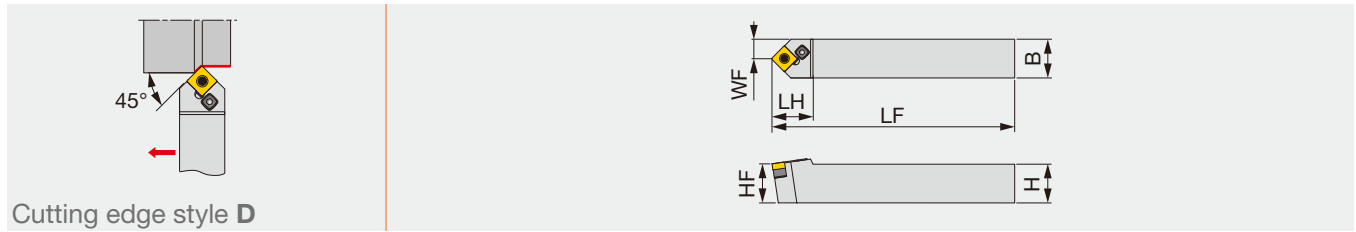
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSDNN...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

Reference pages: ASDNN, DSDNN: Inserts → **B077** -, CBN → **B180**, PCD → **B211**

PSDNN

Lever-lock toolholder with 45° approach angle, for negative square inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PSDNN1616	16	16	100	22	16	8	0.8	SN**0903...
PSDNN2020	20	20	125	30	20	10.3	0.8	SN**1204...
PSDNN2525	25	25	150	30	25	12.8	0.8	SN**1204...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSDNN1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSDNN2020	LSS42	LCS4	P-3	LSP4	LCL4
PSDNN2525	LSS42	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

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

M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Chipbreaker Shape	SF	SM	SH
	Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Chipbreaker Shape	All-round	All-round	All-round
	Cutting conditions	B008		

N	Application	Finishing	Medium cutting
	Grade	DX140	TH10
	Chipbreaker Shape	DIA	P
	Cutting conditions	B010	

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005	AH8005
	Chipbreaker Shape	CBN	HRF	HRM
	Cutting conditions	B012		

Reference pages: PSDNN: Inserts → **B077** -, CBN → **B180**, PCD → **B211**

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

SN

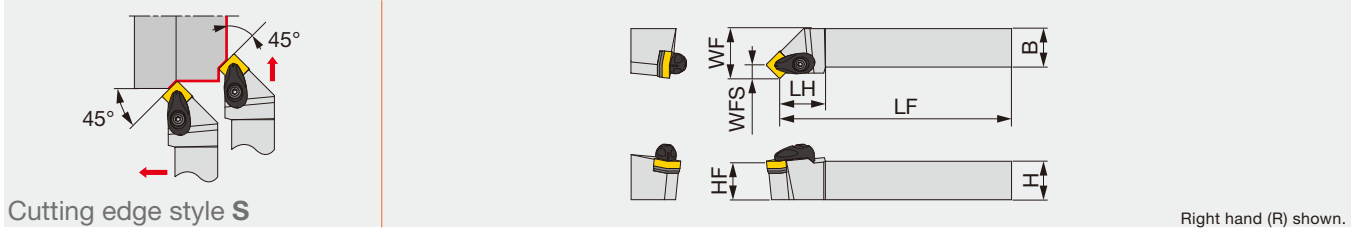


Square with hole

TURNING

ASSNR/L

Double-clamp toolholder with 45° approach angle (S-style), for negative square inserts



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	WFS	RE**	Insert	Torque
ASSNR/L124-A	0.750	0.750	4.500	1.250	0.750	1.000	0.327	0.031	SN** 43...	2.2
ASSNR/L164-A	1.000	1.000	6.000	1.250	1.000	1.250	0.327	0.031	SN** 43...	2.2
ASSNR/L205-A	1.250	1.250	7.000	1.500	1.250	1.500	0.406	0.031	SN** 54...	4.7
ASSNR/L206-A	1.250	1.250	7.000	1.500	1.250	1.500	0.492	0.031	SN** 64...	4.7
ASSNR/L245-A	1.500	1.500	8.000	1.500	1.500	1.750	0.406	0.031	SN** 54...	4.7
ASSNR/L246-A	1.500	1.500	8.000	1.500	1.500	1.750	0.492	0.031	SN** 64...	4.7

Metric	H	B	LF	LH	HF	WF	WFS	RE**	Insert	Torque*
ASSNR/L2020K12-A	20	20	125	30	20	25	8.3	0.8	SN**1204...	3
ASSNR/L2525M12-A	25	25	150	30	25	32	8.3	0.8	SN**1204...	3
ASSNR/L2525M15-A	25	25	150	25	25	32	10.3	1.2	SN**1506...	6.4
ASSNR/L3232P15-A	32	32	170	25	32	40	10.3	1.2	SN**1506...	6.4
ASSNR/L3232P19-A	32	32	170	27.5	32	40	12.5	1.2	SN**1906...	6.4
ASSNR/L4040S19-A	40	40	250	27.5	40	50	12.5	1.2	SN**1906...	6.4

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

**RE: Standard corner radius

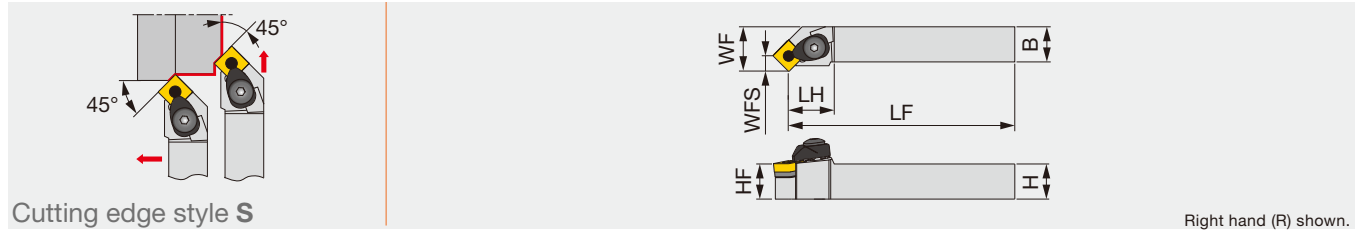
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench 1	Wrench 2
ASSNR/L**4-A, ASSNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	-
ASSNR/L**5-A, ASSNR/L**15-A	ACP5S	ACS-6W	BP-8.8	SP-2.5	ASS533	CSTB-5	-	KEYV-T20
ASSNR/L**6-A, ASSNR/L**19-A	ACP6S	ACS-6W	BP-8.8	SP-2.5	ASS634	CSTB-5	-	KEYV-T20

Reference pages: ASSNR/L: Inserts → **B077 -**, CBN → **B180**, PCD → **B211**

DSSNR/L

"One-Double" toolholder with 45° approach angle, for negative square inserts



Right hand (R) shown.

Metric	H	B	LF	LH	HF	WF	WFS	RE**	Insert
DSSNR/L2020K12	20	20	125	34.3	20	25	8.3	0.8	SN**1204...
DSSNR/L2525M12	25	25	150	34.3	25	32	8.3	0.8	SN**1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts

**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSSNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting	M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215		Grade	T6215	AH6225	AH6225
	Chipbreaker Shape	TF	TSF	TM	TH		Chipbreaker Shape	SF	SM	SH
	Cutting conditions	B004					Cutting conditions	B006		
K	Application	Finishing	Medium cutting	Medium to heavy cutting	N	Application	Finishing	Medium cutting		
	Grade	T515	T515	T515		Grade	DX140	TH10		
	Chipbreaker Shape	All-round	All-round	All-round		Chipbreaker Shape	DIA	P		
	Cutting conditions	B008				Cutting conditions	B010			
S	Application	Precision finishing	Finishing	Medium cutting	Index					
	Grade	BX480	AH8005	AH8005						
	Chipbreaker Shape	CBN	HRF	HRM						
	Cutting conditions	B012								

Reference pages: DSSNR/L: Inserts → **B077 -**, CBN → **B180**, PCD → **B211**



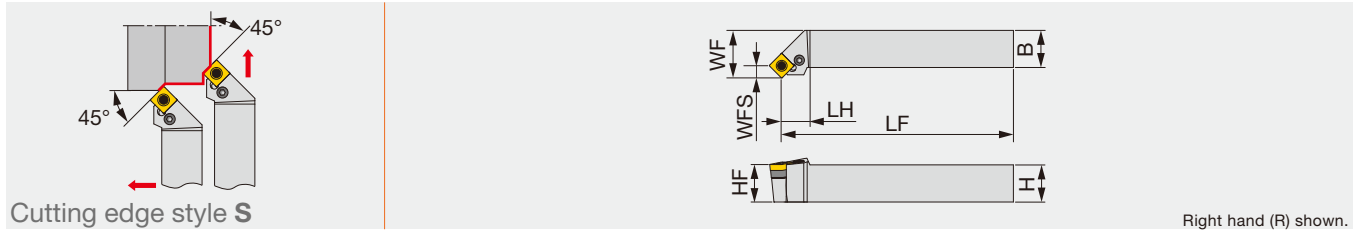
SN



Square with hole

PSSNR/L

Lever-lock toolholder with 45° approach angle, for negative square inserts



Metric	H	B	LF	LH	HF	WF	WFS	RE**	Insert
PSSNR/L1616	16	16	94	16	16	20	6.1	0.8	SN**0903...
PSSNR/L2020	20	20	116	21	20	25	8.3	0.8	SN**1204...
PSSNR/L2525	25	25	141	21	25	32	8.3	0.8	SN**1204...
PSSNR/L3225	32	25	161	21	32	32	8.3	0.8	SN**1204...
PSSNR/L3232	32	32	157.5	27.5	32	40	12.5	1.2	SN**1906...

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSSNR/L1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSSNR/L2020	LSS42	LCS4	P-3	LSP4	LCL4
PSSNR/L**25	LSS42	LCS4	P-3	LSP4	LCL4
PSSNR/L3232	LSS63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade	Grade
	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T6215	AH6225	AH6225
Chipbreaker Shape	SF	SM	SH
Cutting conditions	B006		


Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T515	T515	T515
Chipbreaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Finishing	Medium cutting
	Grade	Grade
	DX140	TH10
Chipbreaker Shape	DIA	P
Cutting conditions	B010	

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
	BX480	AH8005	AH8005
Chipbreaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

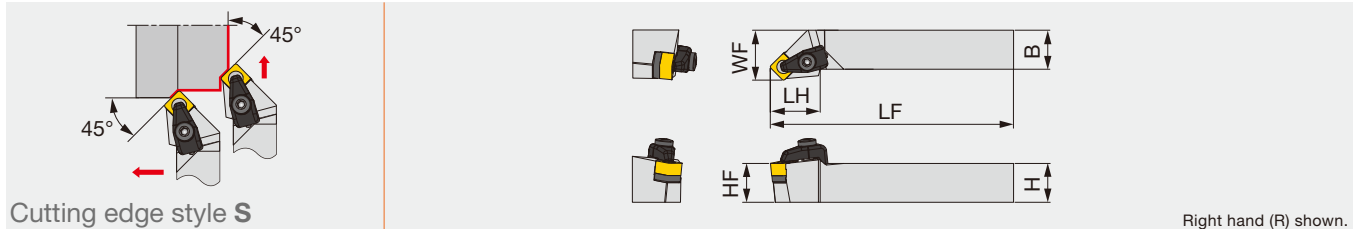
Reference pages: PSSNR/L: Inserts → **B077 -**, CBN → **B180**, PCD → **B211**

SN

 Square without hole

DIMPLEFX CSSNR/L-RD

Double-clamp toolholder with 45° approach angle, for negative square ceramic inserts with dimple




Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
CSSNR/L16M45-RD	1.000	1.000	6.000	1.260	1.000	1.250	0.047	SNGD 45...	3.0
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
CSSNR/L2525M1207-RD	25	25	150	32	25	32	1.2	SNGD1207...	4

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

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
CSSNR/L...	CCP4-A	CCS4-A	CS44-A	BH5-10-A	BP-5-A	P-3	P-4

INSERT SELECTION

K	Application	Finishing to medium cutting
	Grade	FX105
	Chipbreaker Shape	
	Cutting conditions	C136

Reference pages: CSSNR/L-RD: Insert → **B085**
Standard cutting conditions → **C136**

SN

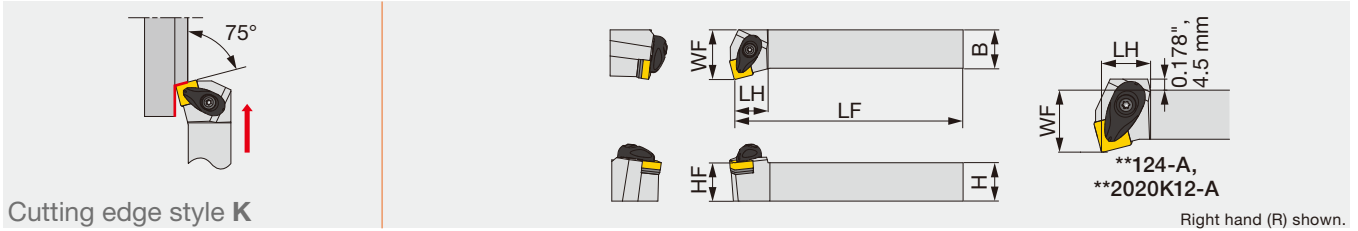


Square with hole

TURNING

ASKNR/L

Double-clamp toolholder with 75° approach angle, for negative square inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ASKNR/L124-A	0.750	0.750	4.500	0.875	0.750	1.000	0.031	SN** 43...	2.21
ASKNR/L164-A	1.000	1.000	6.000	1.000	1.000	1.260	0.031	SN** 43...	2.21

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ASKNR/L2020K12-A	20	20	125	20	20	25	0.8	SN**1204...	3
ASKNR/L2525M12-A	25	25	150	22	25	32	0.8	SN**1204...	3

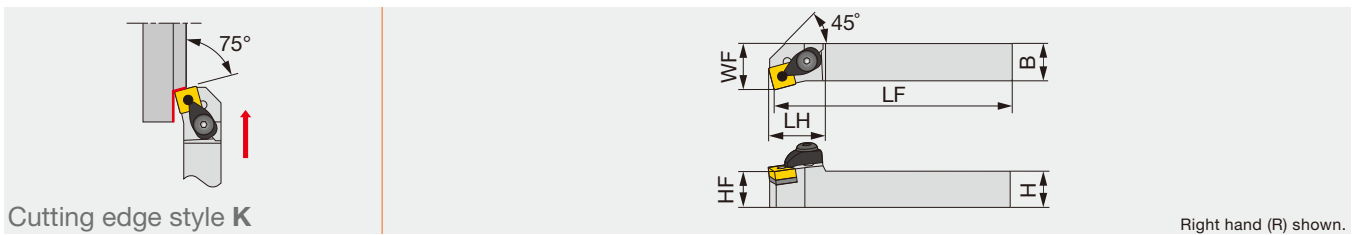
Torque: Recommended clamping torque: lbs-ft (*N-m)
 **RE : Standard corner radius

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ASKNR/L...	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F

- C
- D
- F
- G
- H
- R
- S
- T
- V
- W
- Y
- OTHERS

DSKNR/L

"One-Double" toolholder with 75° approach angle, for negative square inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
DSKNR/L2020K12	20	20	125	31	20	25	0.8	SN**1204...
DSKNR/L2525M12	25	25	150	31	25	32	0.8	SN**1204...

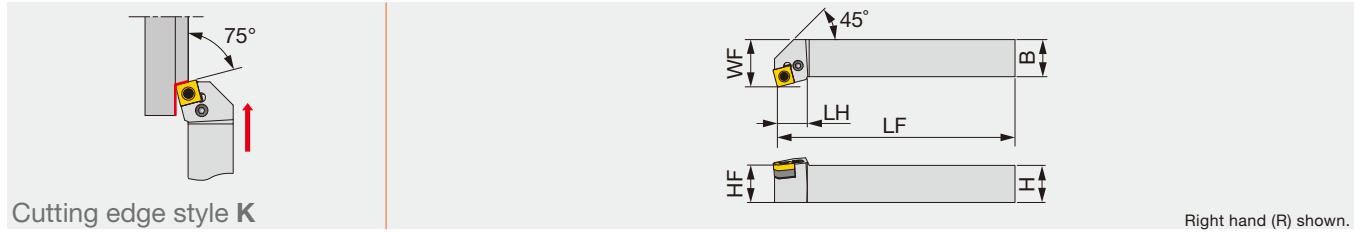
Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts
 **RE : Standard corner radius

SPARE PARTS									
Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSKNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

Reference pages: ASKNR/L, DSKNR/L: Inserts → **B077** -, CBN → **B180**, PCD → **B211**

PSKNR/L

Lever-lock toolholder with 75° approach angle, for negative square inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
PSKNR/L1616	16	16	100	17	16	25	0.8	SN**0903...
PSKNR/L2020	20	20	125	22	20	25	0.8	SN**1204...
PSKNR/L2525	25	25	150	22	25	32	0.8	SN**1204...
PSKNR3232	32	32	170	40	32	40	1.2	SN**1906...

**RE : Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSKNR/L1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSKNR/L2*2*	LSS42	LCS4	P-3	LSP4	LCL4
PSKNR3232	LSS63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade	Grade
Grade	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF	TSF	TM	TH
Chipbreaker Shape				
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
Grade	T6215	AH6225	AH6225
Chipbreaker Shape	SF	SM	SH
Chipbreaker Shape			
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
Grade	T515	T515	T515
Chipbreaker Shape	All-round	All-round	All-round
Chipbreaker Shape			
Cutting conditions	B008		

Application	Finishing	Medium cutting
	Grade	Grade
Grade	DX140	TH10
Chipbreaker Shape	DIA	P
Chipbreaker Shape		
Cutting conditions	B010	

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
Grade	BX480	AH8005	AH8005
Chipbreaker Shape	CBN	HRF	HRM
Chipbreaker Shape			
Cutting conditions	B012		

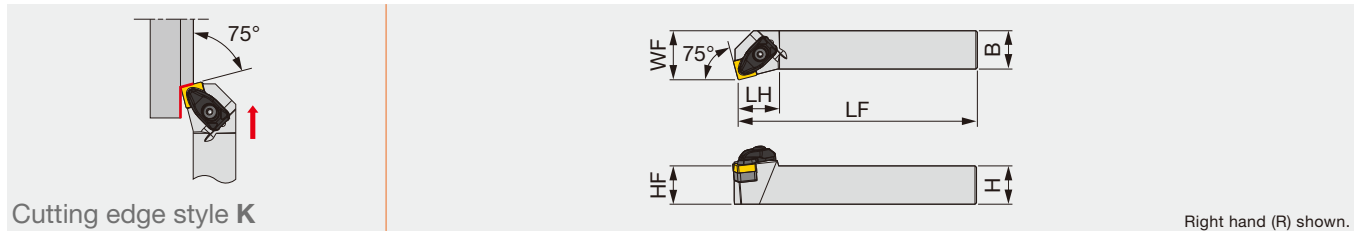
Reference pages: PSKNR/L: Inserts → **B077 -**, CBN → **B180**, PCD → **B211**

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



TSKNR/L-F

Toolholder with carbide clamping plate, with 75° approach angle, for negative square ceramic inserts without hole



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
TSKNR/L 16-45D-F	1.000	1.000	6.000	1.063	1.000	1.250	0.032	SNGN 453...
Metric	H	B	LF	LH	HF	WF	RE**	Insert
TSKNR/L2525M1207-F	25	25	150	27	25	32	0.8	SNGN1207...

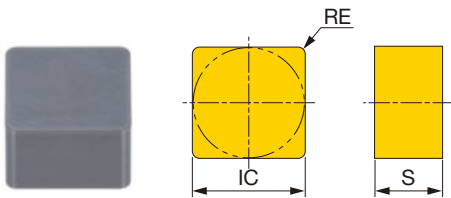
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench 1	Wrench 2
TSKNR/L2525M1207-F	DCLS-4F	DLS-4A	TSS-42	BH-40050-A	DSP-4A	T-15F	P-3

INSERT

SNGN-T1



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

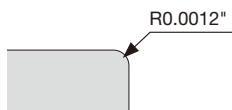
★ : First choice

Designation		Edge prep.*	Ceramic		RE (in)	IC (in)	S (in)
Inch	Metric		TS200	TS300			
SNGN 453-T1	SNGN120712-T1	T1	●		0.047	0.500	0.313

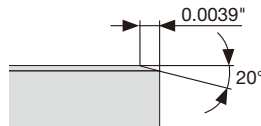
* Types of cutting edge preparations

● : Line up

E: Low cutting force



T1: Strong cutting edge



Reference pages: TSKNR/L-F: Standard cutting conditions → C136

SN

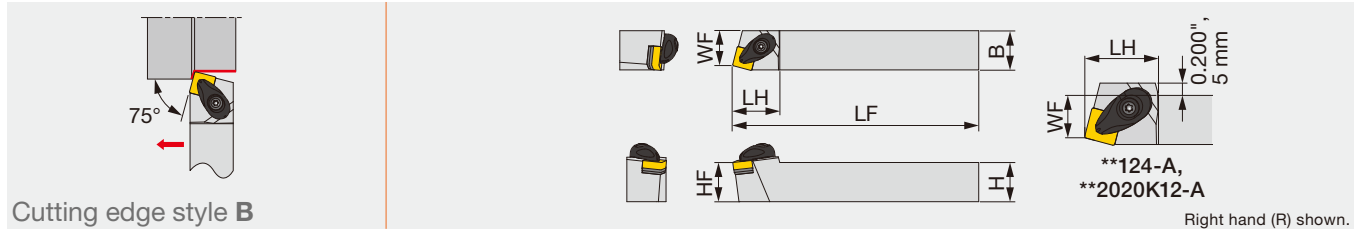


Square with hole

TURNING

ASBNR/L

Double-clamp toolholder with 75° approach angle, for negative square inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ASBNR/L124-A	0.750	0.750	4.500	1.180	0.750	0.625	0.031	SN** 43...	2.2
ASBNR/L164-A	1.000	1.000	6.000	1.180	1.000	0.875	0.031	SN** 43...	2.2
ASBNR/L205-A	1.250	1.250	7.000	1.500	1.250	1.100	0.031	SN** 54...	4.7
ASBNR/L206-A	1.250	1.250	7.000	1.625	1.250	1.100	0.031	SN** 64...	4.7
ASBNR/L245-A	1.500	1.500	8.000	1.500	1.500	1.350	0.031	SN** 54...	4.7
ASBNR/L246-A	1.500	1.500	8.000	1.625	1.500	1.350	0.031	SN** 64...	4.7

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ASBNR/L2020K12-A	20	20	125	30	20	17	0.8	SN**1204...	3
ASBNR/L2525M12-A	25	25	150	30	25	22	0.8	SN**1204...	3
ASBNR/L2525M15-A	25	25	150	42.5	25	22	1.2	SN**1506...	6.4
ASBNR/L3232P15-A	32	32	170	42.5	32	27	1.2	SN**1506...	6.4
ASBNR/L3232P19-A	32	32	170	47.5	32	27	1.2	SN**1906...	6.4
ASBNR/L4040S19-A	40	40	250	47.5	40	35	1.2	SN**1906...	6.4

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench 1	Wrench 2
ASBNR/L**4-A, ASBNR/L**12-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	CSTB-3.5	T-15F	-
ASBNR/L**5-A, ASBNR/L**15-A	ACP5S	ACS-6W	BP-8.8	SP-2.5	ASS533	CSTB-5	-	KEYV-T20
ASBNR/L**6-A, ASBNR/L**19-A	ACP6S	ACS-6W	BP-8.8	SP-2.5	ASS634	CSTB-5	-	KEYV-T20

INSERT SELECTION

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

M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
	Chipbreaker Shape	SF	SM	SH
	Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Chipbreaker Shape	All-round	All-round	All-round
	Cutting conditions	B008		

N	Application	Finishing	Medium cutting
	Grade	DX140	TH10
	Chipbreaker Shape	DIA	P
	Cutting conditions	B010	

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005	AH8005
	Chipbreaker Shape	CBN	HRF	HRM
	Cutting conditions	B012		

Reference pages: ASBNR/L: Inserts → **B077 -**, CBN → **B180**, PCD → **B211**

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



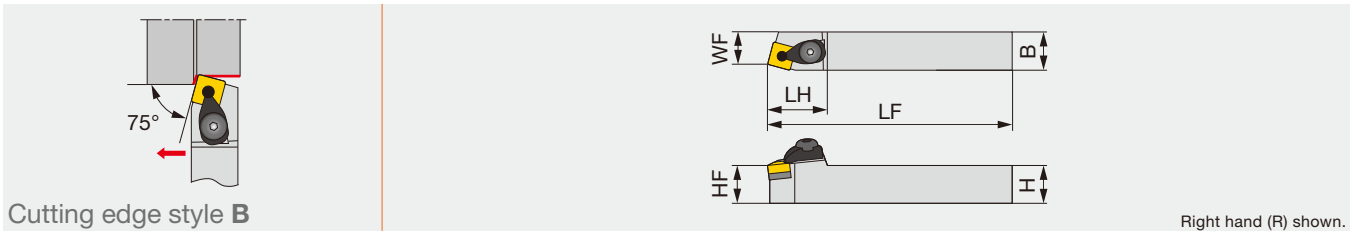
SN



Square with hole

DSBNR/L

"One-Double" toolholder with 75° approach angle, for negative square inserts



Cutting edge style B

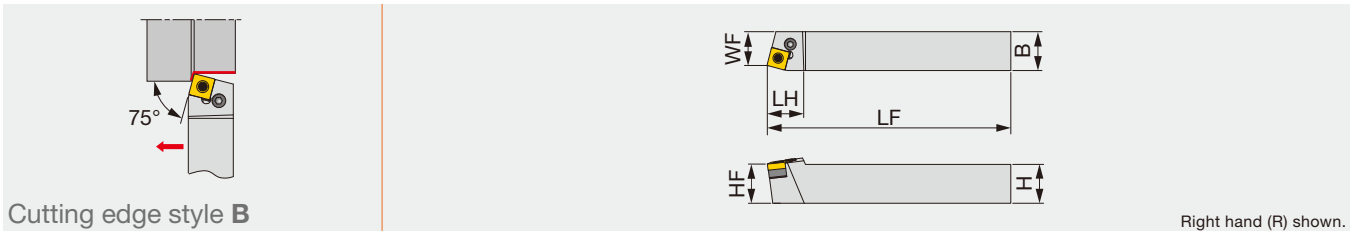
Metric	H	B	LF	LH	HF	WF	RE**	Insert
DSBNR/L2020K12	20	20	125	35	20	17	0.8	SN**1204...
DSBNR/L2525M12	25	25	150	35	25	22	0.8	SN**1204...

Note: Except for TRS, TU, TUS, 57, and 65-type chipbreaker inserts **RE: Standard corner radius

SPARE PARTS									
Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DSBNR/L...	DCPM-43	DLCL43	DPIS43	DLCS43	LSS42	BP-10	LSP4	P-3	P-4

PSBNR/L

Lever-lock toolholder with 75° approach angle, for negative square inserts



Cutting edge style B

Metric	H	B	LF	LH	HF	WF	RE**	Insert
PSBNR/L1616	16	16	100	22	16	13	0.8	SN**0903...
PSBNR/L2020	20	20	125	28	20	17	0.8	SN**1204...
PSBNR/L2525	25	25	150	24	25	22	0.8	SN**1204...
PSBNR/L3232	32	32	170	40	32	27	1.2	SN**1906...

**RE: Standard corner radius

SPARE PARTS					
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PSBNR/L1616	LSS33	LCS3	P-2.5	LSP3L	LCL3
PSBNR/L2*2*	LSS42	LCS4	P-3	LSP4	LCL4
PSBNR/L3232	LSS63	LCS6	P-4	LSP6	LCL6

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade	Grade
	NS9530	GT9530	T9215	T9215
Chipbreaker Shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T6215	AH6225	AH6225
Chipbreaker Shape	SF	SM	SH
Cutting conditions	B006		

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T515	T515	T515
Chipbreaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

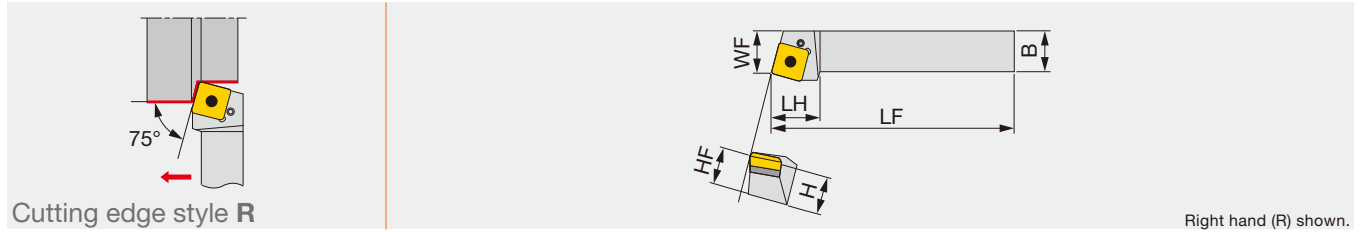
Application	Finishing	Medium cutting
	Grade	Grade
	DX140	TH10
Chipbreaker Shape	DIA	P
Cutting conditions	B010	

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
	BX480	AH8005	AH8005
Chipbreaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

Reference pages: DSBNR/L, PSBNR/L: Inserts → **B077 -**,
CBN → **B180 -**, PCD → **B211**

HSRNR/L

Retract-pin toolholder with 75° approach angle, for negative square inserts




Metric	H	B	LF	LH	HF	WF	RE**	Insert
HSRNR/L4040R	40	40	200	50	40	43	1.6	SNMM3109...
HSRNR/L5050S	50	50	250	60	50	53	1.6	SNMM3109...

**RE: Standard corner radius

SPARE PARTS				
Designation	Pin	Clamping screw	Shim	Wrench
HSRNR/L...	SW99	LS-8	NAS-04	P-4

INSERT SELECTION

P	Application	Heavy cutting
	Grade	T9225
	Chipbreaker Shape	65 
	Cutting conditions	B004

Reference pages: HSRNR/L: Inserts → **B083**

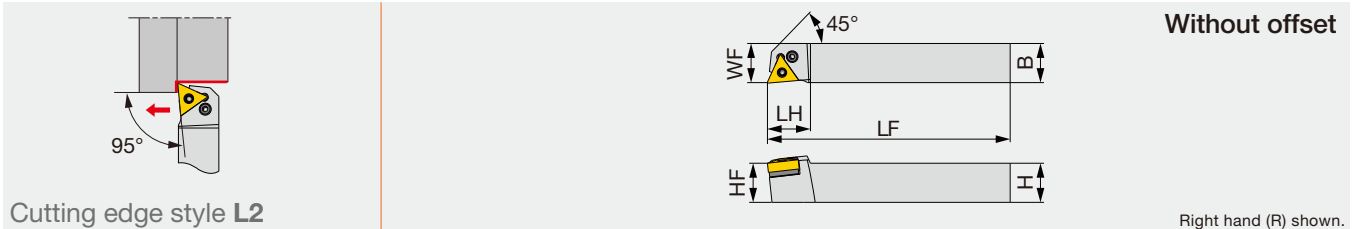
TN



Triangular with hole

PTL2NR/L

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



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

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

SPARE PARTS

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

C

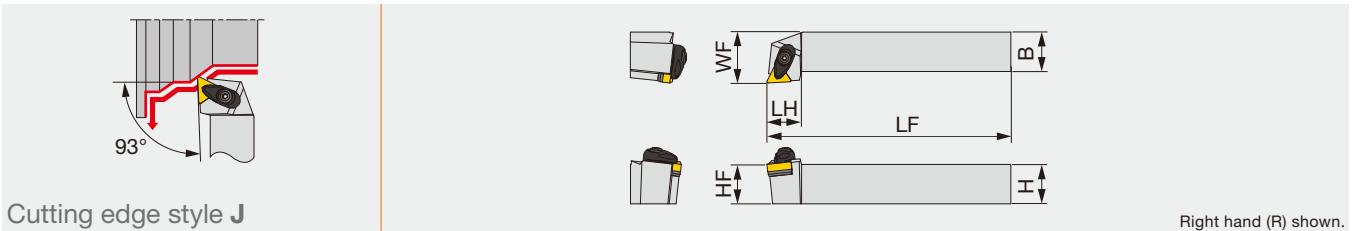
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F

TURNING

ATJNR/L

Double-clamp toolholder with 93° approach angle, for negative 60° triangular inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ATJNR/L123-A	0.750	0.750	4.500	0.875	0.750	1.000	0.031	TN** 33...	2.2
ATJNR/L163-A	1.000	1.000	6.000	0.875	1.000	1.250	0.031	TN** 33...	2.2
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATJNR/L2020K16-A	20	20	125	22	20	25	0.8	TN**1604...	3
ATJNR/L2525M16-A	25	25	150	22	25	32	0.8	TN**1604...	3

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATJNR/L...	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F

T

V

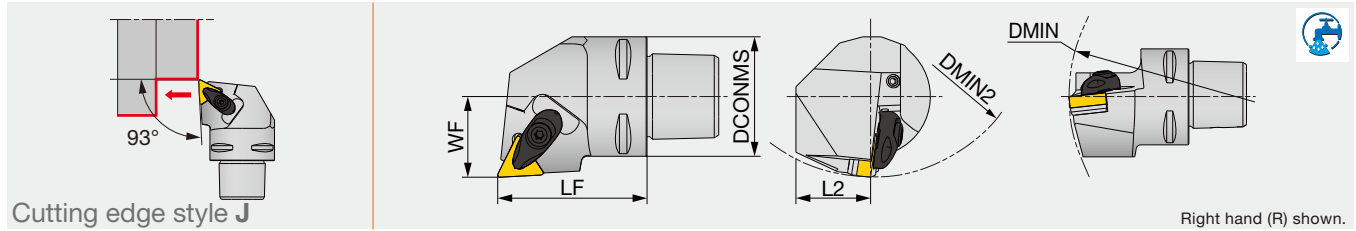
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OTHERS

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

Double-clamp toolholder, with 93° approach angle, for negative 60° triangular inserts



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C4ATJNR/L27050-16N	40	50	25	27	140	110	0.8	TN**1604...

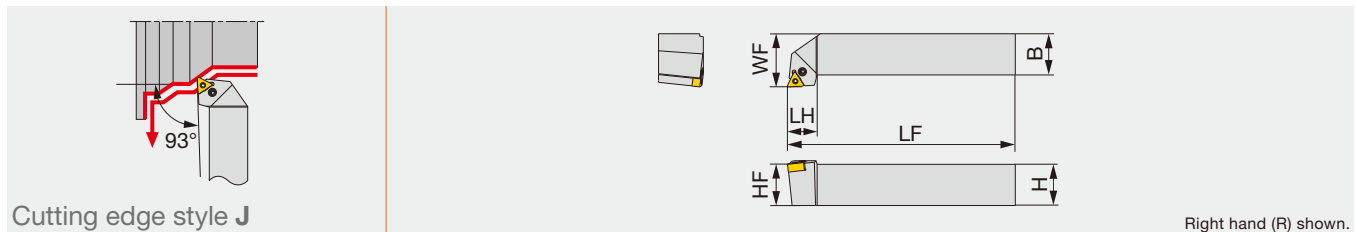
Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
C4ATJNR/L**16N	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F

ISO TURN

PTJNR/L-Eco

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



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PTJNR/L2525M1104	25	25	150	18	25	32	0.8	TN**1104...	2

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

SPARE PARTS			
Designation	Clamping screw	Wrench	Lever
PTJNR/L2525M1104	LCS23A	P-2.5	LCL23

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH	
Cutting conditions	B004				

M	Application	Finishing	Medium cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	
Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round	
Cutting conditions	B008			

N	Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140	TH10
Chipbreaker shape	DIA	with rake DIA	P	
Cutting conditions	B010			

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM	
Cutting conditions	B012			

H	Application	Precision finishing	Finishing
	Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN	
Cutting conditions	B014		

Reference pages: C-ATJNR/L: Inserts → B087 -, CBN → B182 -, PCD → B212
 PTJNR/L-Eco: Inserts → B087 -

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



TN

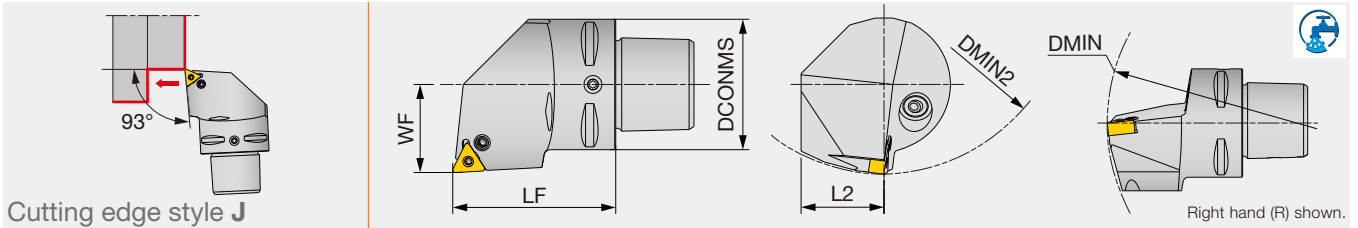


Triangular with hole

TUNGCAP

C-PTJNR/L

Lever-lock external turning toolholder (P type)



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE**	Insert
C4PTJNR/L27050-1104N	40	50	25	27	140	110	0.8	TN**1104...

**RE: The holder measurements are true with this insert radius
Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Coolant parts
C4PTJNR/L27050-1104N	LCS23A	P-2.5	LCL23	SATZ-M8X1-M3

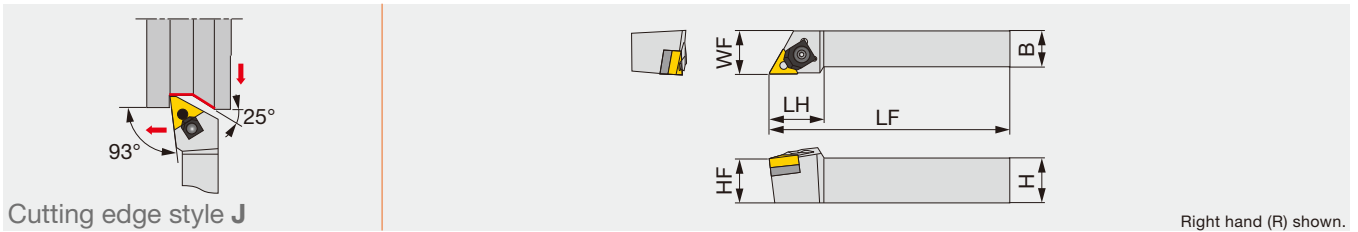
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F

WTJNR/L

Wedge-on toolholder with 93° approach angle, for negative 60° triangular inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
WTJNR2020	20	20	125	31	20	25	0.8	TN**1604...
WTJNR/L2525M3	25	25	150	31	25	32	0.8	TN**1604...

**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	E-ring	Nut	Pin	Clamping screw	Shim	Wrench
WTJNR2020	WCW3	5103-25	WCN3S	WCP3S	WCS3	WST33	P-3
WTJNR/L2525M3	WCW3	5103-25	WCN3	WCP3S	WCS3	WST33	P-3

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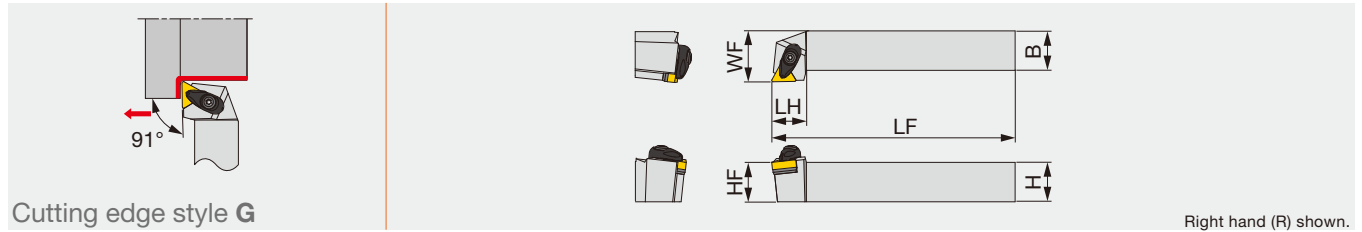
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W

Y

OTHERS

Reference pages: C-PTJNR/L: Inserts → **B087 -**
WTJNR/L: Inserts → **B087 -**, CBN → **B182 -**, PCD → **B212**



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ATGNR/L123-A	0.750	0.750	4.500	0.875	0.750	1.000	0.031	TN** 33...	2.2
ATGNR/L163-A	1.000	1.000	6.000	0.875	1.000	1.250	0.031	TN** 33...	2.2
ATGNR/L164-A	1.000	1.000	6.000	1.000	1.000	1.250	0.031	TN** 43...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATGNR/L2020K16-A	20	20	125	22	20	25	0.8	TN**1604...	3
ATGNR/L2525M16-A	25	25	150	22	25	32	0.8	TN**1604...	3
ATGNR/L2525M22-A	25	25	150	26	25	32	0.8	TN**2204...	3

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

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATGNR/L**3-A, ATGNR/L**16-A	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F
ATGNR/L**4-A, ATGNR/L**22-A	ACP4S	ACS-5W	BP-7	SP-2.5	AST422	CSTB-3.5	T-15F

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade	Grade
	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting
	Grade	Grade
	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade
	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
	DX120	DX140	TH10
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	Grade
	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

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



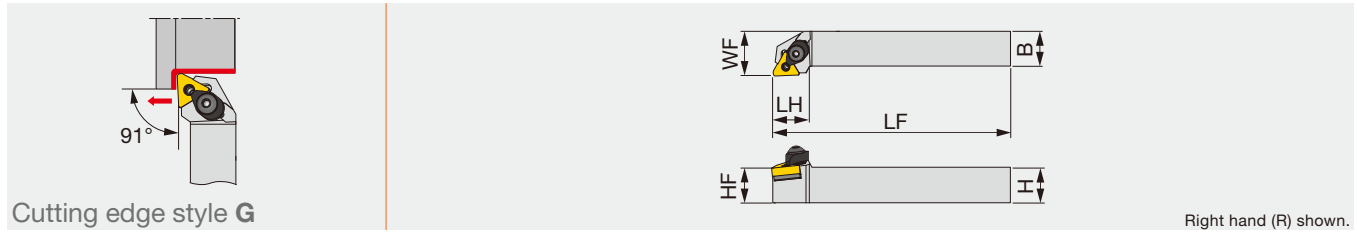
TN



Triangular with hole

DTGNR/L

"One-Double" toolholder with 91° approach angle, for negative 60° triangular inserts



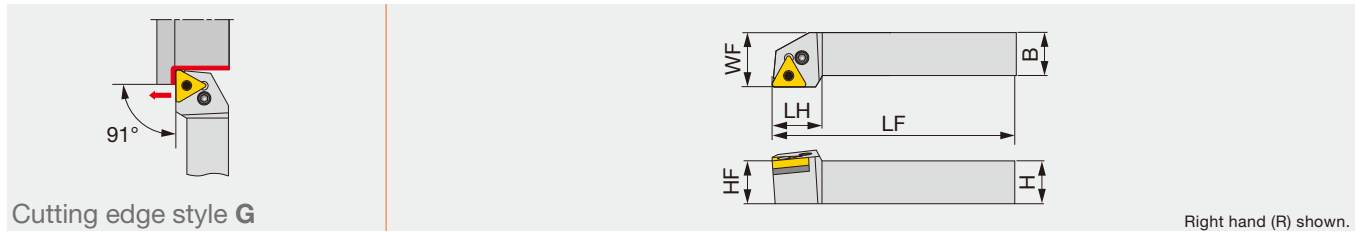
Metric	H	B	LF	LH	HF	WF	RE**	Insert
DTGNR/L2020K16	20	20	125	21	20	25	0.8	TN**1604...
DTGNR/L2525M16	25	25	150	21	25	32	0.8	TN**1604...
DTGNR/L2525M22	25	25	150	28	25	32	0.8	TN**2204...

Note: Except for 57-type chipbreaker inserts
**RE: Standard corner radius

SPARE PARTS	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DTGNR/L**16	DCPM-33	LCL33	DPIS33	DLCS33	LST317	BP-9	LSP3	P-2.5	P-3
DTGNR/L**22	DCPM-43	DLCL43	DPIS43	DLCS43	LST42	BP-10	LSP4	P-3	P-4

ISO TURN PTGNR/L

Lever-lock toolholder with 91° approach angle, for negative triangular inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PTGNR/L1223	0.750	0.750	4.500	0.750	0.750	1.000	0.031	TN** 23...	1.5
PTGNR/L1623	1.000	1.000	6.000	0.750	1.000	1.250	0.031	TN** 23...	1.5

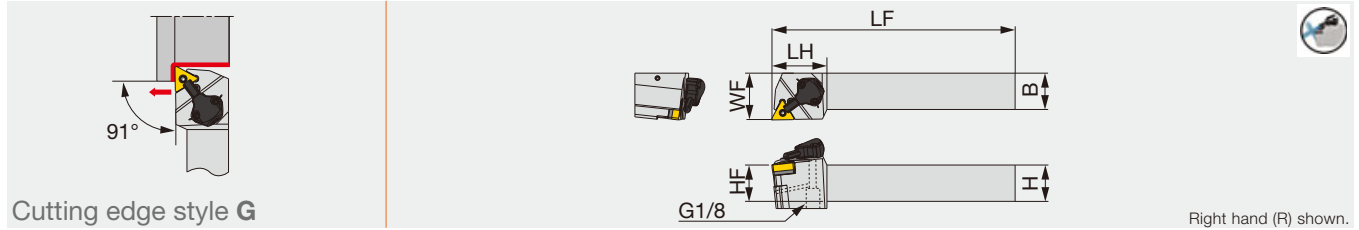
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTGNR/L1616	16	16	100	22	16	20	0.8	TN**1604...	2
PTGNR/L2020K1104	20	20	125	20	20	25	0.8	TN**1104...	2
PTGNR/L2020	20	20	125	22	20	25	0.8	TN**1604...	2
PTGNR/L2525M1104	25	25	150	20	25	32	0.8	TN**1104...	2
PTGNR/L2525M3	25	25	150	22	25	32	0.8	TN**1604...	2
PTGNR/L2525M4	25	25	150	28	25	32	0.8	TN**2204...	3
PTGNR3225P4	32	25	170	28	32	32	0.8	TN**2204...	3

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

SPARE PARTS	Shim	Clamping screw	Wrench	Spring pin	Lever
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PTGNR/L**23, PTGNR/L**1104	-	LCS23A	P-2.5	-	LCL23
PTGNR/L1616, 2020	LST317	LCS3	P-2.5	LSP3	LCL3
PTGNR/L2525M3	LST317	LCS3	P-2.5	LSP3	LCL3
PTGNR/L2525M4	LST42	LCS4	P-3	LSP4	LCL4
PTGNR3225P4	LST42	LCS4	P-3	LSP4	LCL4

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

Lever lock toolholders – 91° approach angle.
For negative triangle insert. High-pressure coolant capability.



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PTGNR/L1223-CHP	0.750	0.750	4.500	1.500	0.750	1.250	0.031	TN** 23...	1.48
PTGNR/L123-CHP	0.750	0.750	4.500	1.500	0.750	1.250	0.031	TN** 33...	1.48
PTGNR/L1623-CHP	1.000	1.000	6.000	1.500	1.000	1.250	0.031	TN** 23...	1.48
PTGNR/L163-CHP	1.000	1.000	6.000	1.500	1.000	1.250	0.031	TN** 33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PTGNR/L2020K1104-CHP	20	20	125	38	20	32	0.8	TN**1104...	2
PTGNR/L2020K16-CHP	20	20	125	38	20	32	0.8	TN**1604...	2
PTGNR/L2525M1104-CHP	25	25	150	38	25	32	0.8	TN**1104...	2
PTGNR/L2525M16-CHP	25	25	150	38	25	32	0.8	TN**1604...	2

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

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PTGNR/L**23-CHP, PTGNR/L**1104-CHP	-	LCS23A	P-2.5	LSP3	LCL23
PTGNR/L123, 163-CHP PTGNR/L**16-CHP	LST317	LCS3	P-2.5	LSP3	LCL3

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PTGNR/L**23-CHP, PTGNR/L**1104-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PTGNR/L123, 163-CHP PTGNR/L**16-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting
	Grade	T6215
Chipbreaker shape	SF	SM
Cutting conditions	B006	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	DIA with rake	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PTGNR/L-CHP: Inserts → **B087 -**, CBN → **B182 -**, PCD → **B212**
Parts for coolant hose → **C133**

TN

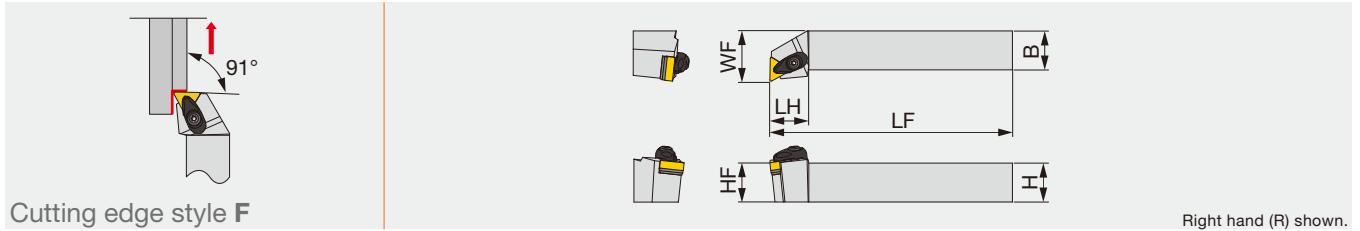


Triangular
with hole

TURNING

ATFNR/L

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



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ATFNR/L123-A	0.750	0.750	4.500	1.000	0.750	1.000	0.031	TN** 33...	2.2
ATFNR/L163-A	1.000	1.000	6.000	1.000	1.000	1.250	0.031	TN** 33...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATFNR/L2020K16-A	20	20	125	25	20	25	0.8	TN**1604...	3
ATFNR/L2525M16-A	25	25	150	25	25	32	0.8	TN**1604...	3
ATFNR/L2525M22-A	25	25	150	29	25	32	0.8	TN**2204...	3

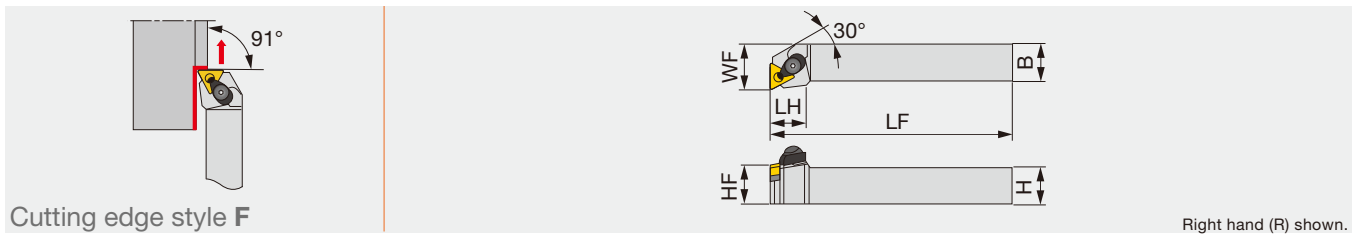
Torque: Recommended clamping torque: lbs-ft (*N-m)
**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATFNR/L**3-A, ATFNR/L**16-A	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F
ATFNR/L**22-A	ACP4S	ACS-5W	BP-7	SP-2.5	AST422	CSTB-3.5	T-15F

DTFNR/L

"One-Double" toolholder with 91° approach angle, for negative 60° triangular inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
DTFNR/L2020K16	20	20	125	23	20	25	0.8	TN**1604...
DTFNR/L2525M16	25	25	150	23	25	32	0.8	TN**1604...
DTFNR/L2525M22	25	25	150	31	25	32	0.8	TN**2204...

Note: Except for 57-type chipbreaker inserts
**RE : Standard corner radius

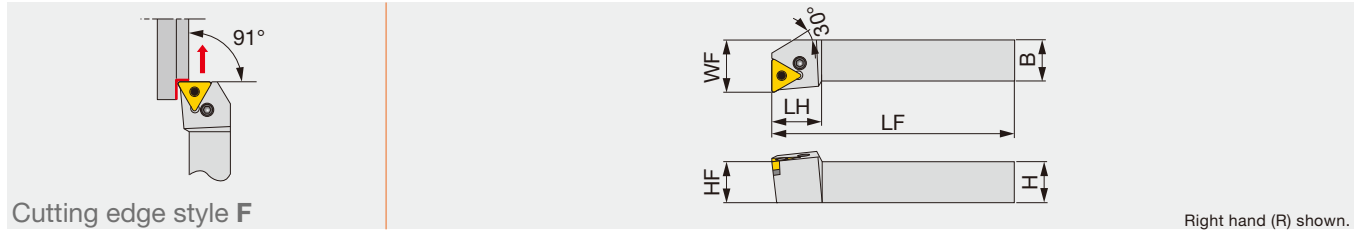
SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench 1	Wrench 2
DTFNR/L**16	DCPM-33	LCL33	DPIS33	DLCS33	LST317	BP-9	LSP3	P-2.5	P-3
DTFNR/L**22	DCPM-43	DLCL43	DPIS43	DLCS43	LST42	BP-10	LSP4	P-3	P-4

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

PTFNR/L

Lever-lock toolholder with 91° approach angle, for negative triangular inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PTFNR/L1616	16	16	100	22	16	20	0.8	TN**1604...	2
PTFNR/L2020K1104	20	20	125	16	20	25	0.8	TN**1104...	2
PTFNR/L2020	20	20	125	22	20	25	0.8	TN**1604...	2
PTFNR/L2525M1104	25	25	150	22	25	32	0.8	TN**1104...	2
PTFNR/L2525M3	25	25	150	22	25	32	0.8	TN**1604...	2
PTFNR/L2525M4	25	25	150	28	25	32	0.8	TN**2204...	3
PTFNR/L3225P4	32	25	170	28	32	32	0.8	TN**2204...	3

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

SPARE PARTS	Shim	Clamping screw 1	Clamping screw 2	Wrench	Spring pin	Lever
Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench	Spring pin	Lever
PTFNR/L1616, 2020	LST317	-	LCS3	P-2.5	LSP3	LCL3
PTFNR/L**1104	-	LCS23A	-	P-2.5	-	LCL23
PTFNR/L2525M3	LST317	-	LCS3	P-2.5	LSP3	LCL3
PTFNR/L**25*4	LST42	-	LCS4	P-3	LSP4	LCL4

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
Chipbreaker shape	TF	TSF	TM	TH	
Cutting conditions	B004				

M	Application	Finishing	Medium cutting
	Grade	T6215	AH6225
Chipbreaker shape	SF	SM	
Cutting conditions	B006		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round	
Cutting conditions	B008			

N	Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140	TH10
Chipbreaker shape	DIA	with rake DIA	P	
Cutting conditions	B010			

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM	
Cutting conditions	B012			

H	Application	Precision finishing	Finishing
	Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN	
Cutting conditions	B014		

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



TN

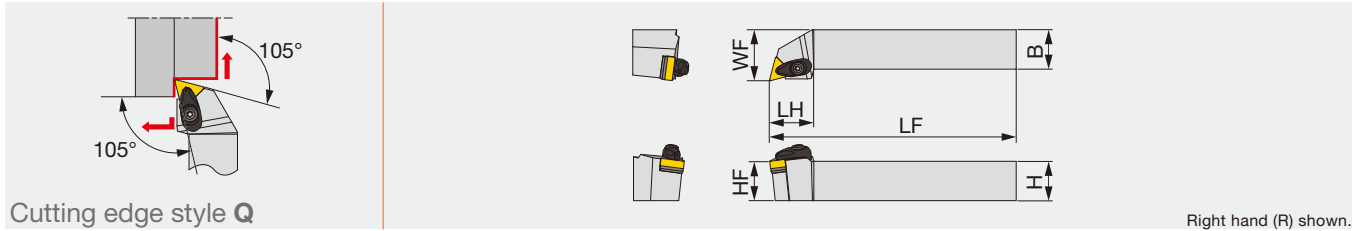


Triangular
with hole

TURNING

ATQNR/L

Double-clamp toolholder with 105° approach angle, for negative 60° triangular inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ATQNR/L123-A	0.750	0.750	4.500	1.125	0.750	1.000	0.031	TN** 33...	2.2
ATQNR/L163-A	1.000	1.000	6.000	1.125	1.000	1.250	0.031	TN** 33...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATQNR/L2020K16-A	20	20	125	28	20	25	0.8	TN**1604...	3
ATQNR/L2525M16-A	25	25	150	28	25	32	0.8	TN**1604...	3

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

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATQNR/L...	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	CSTB-3.5	T-15F

- C
- D
- F
- G
- H
- R
- S
- T
- V
- W
- Y
- OTHERS

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting
	Grade	T6215
Chipbreaker shape	SF	SM
Cutting conditions	B006	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

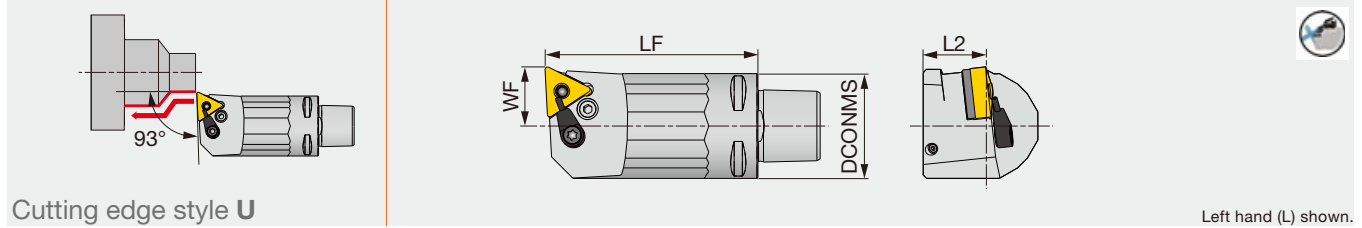
Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

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

Lever-lock toolholder, with 93° approach angle, for negative 60° triangular inserts, with high pressure coolant capability



Metric	DCONMS	LF	L2	WF	RE	Insert
C3PTUNL18040-16-CHP	32	40	19	18	0.8	TN**1604...
C3PTUNL18065-16-CHP	32	65	19	18	0.8	TN**1604...

Applicable for 14 MPa (2031 PSI) coolant
Cannot be used for boring

SPARE PARTS

Designation	Coolant unit	Shim	Lever	Clamping screw	Spring pin	Wrench
C3PTUNL...	S-CU-CHP	LST317	LCL3	LCS3	LSP3	P-2.5

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM	TH
Cutting conditions	B004			

Application	Finishing	Medium cutting
	Grade	T6215
Chipbreaker shape	SF	SM
Cutting conditions	B006	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	P
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-PTUNL-CHP: Inserts → **B087** -, CBN → **B182** -, PCD → **B212**
Parts for coolant hose → **C133**



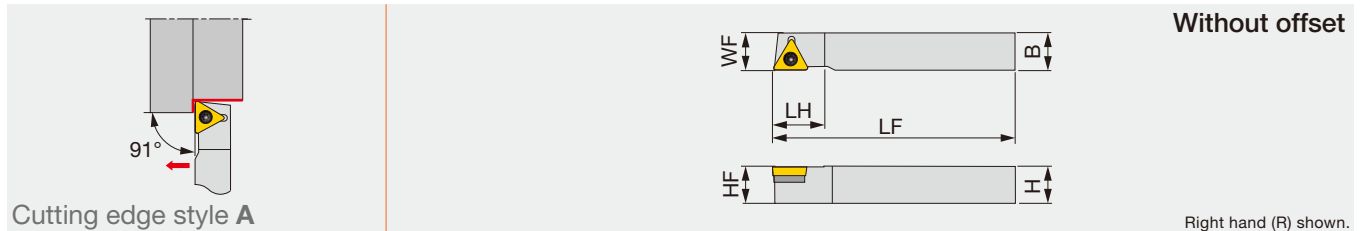
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Triangular with hole
Positive 7°

STACR/L

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



Metric	H	B	LF	LH	HF	WF	RE**	Insert
STACR/L1616H16	16	16	100	22.5	16	16	0.8	TC**16T3...

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench1	Wrench2
STACR/L...	CSTB-3.5L	DTS5-3.5	SST32	P-3.5	T-15F

C

D

F

G

H

R

S

T

V

W

Y

OTHERS

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B016		

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	AH725	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	B020

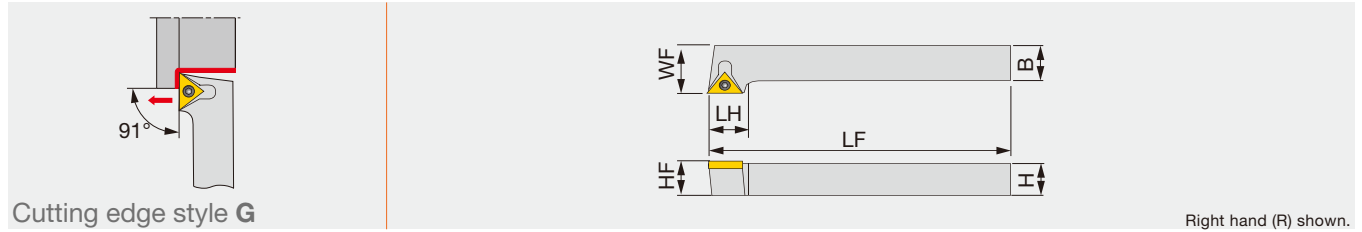
Application	Finishing to medium cutting
	Grade
Breaker Shape	AL with rake
Cutting conditions	B022

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	AH725	AH6225
Breaker Shape	PSS	PS	PM
Cutting conditions	B024		

Reference pages: STACR/L: Inserts → **B138 -**, CBN → **B198**

STGCR/L

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



Inch	H	B	LF	LH	HF	WF	Insert
STGCR/L062	0.375	0.375	2.500	0.625	0.375	0.500	TC** 21.5...
STGCR/L082	0.500	0.500	3.500	0.625	0.500	0.625	TC** 21.5...
STGCR/L103	0.625	0.625	4.000	0.750	4.000	0.750	TC** 32.5...
STGCR/L123	0.750	0.750	4.500	0.750	4.500	1.000	TC** 32.5...

Except for 57-type chipbreaker inserts

SPARE PARTS				
Designation	Shim	Shim screw	Clamp screw	Wrench
STGCR/L0...	-	-	CSTB2.5	T-7F
STGCR/L1...	SKTP-343	SRS-3	CSTB3.5	T-15F

INSERT SELECTION

P	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	SH725	T9215	T9215
	Breaker Shape	JP	JS	PS	PM
	Cutting conditions	B016			

M	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	SH725	AH6225	AH6225
	Breaker Shape	JP	JS	PS	PM
	Cutting conditions	B018			

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

N	Application	Precision finishing	Finishing to medium cutting
	Grade	DX120	KS05F
	Breaker Shape	DIA	with rake AL
	Cutting conditions	B022	

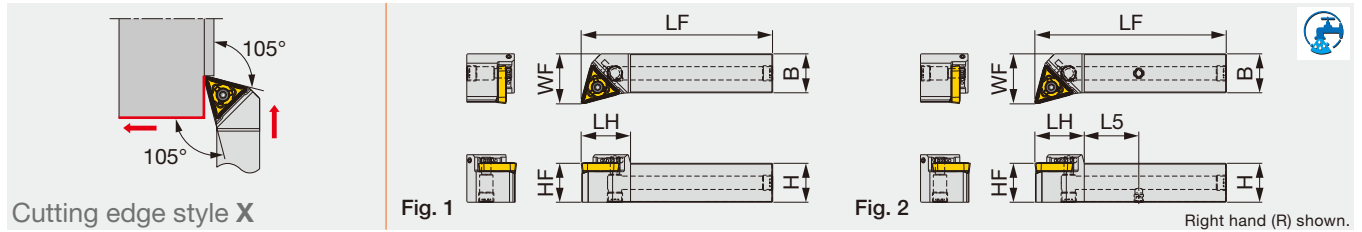
S	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	SH725	AH6225	AH6225
	Breaker Shape	JP	JS	PS	PM
	Cutting conditions	B024			

Reference pages: STGCR/L: Inserts → **B138** -, CBN → **B198**, PCD → **B216**

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



Screw-on toolholder with 105° approach angle, for positive triangular inserts



Inch	H	B	LF	LH	HF	WF	L5	Insert	Torque	Fig.
STXCR/L169-CHP-MC	1.000	1.000	6.000	1.250	1.000	1.250	-	3C-TCMT29X6...	3.69	1
Metric	H	B	LF	LH	HF	WF	L5	Insert	Torque*	Fig.
STXCR/L2525X29-CHP-MC	25	25	122	32	25	32	35	3C-TCMT29X6...	5	2

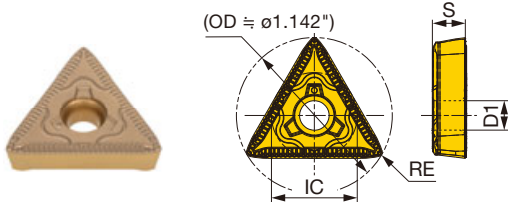
Torque: Recommended clamping torque: lb-ft (*N-m)

SPARE PARTS

Designation	Clamping screw	Grip	Torx bit	Coolant plug
STXCR/L...	CSTB-5	H-TB2W	BT20M	PLUGG1/8-6.5TL360

INSERT

3C-TCMT** - TM



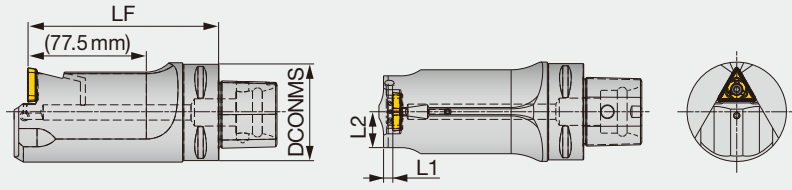
P	Steel	★							
M	Stainless	☆							
K	Cast iron	☆							
N	Non-ferrous								
S	Superalloys								
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	RE (in)	Coated								IC (in)	S (in)	D1 (in)
		T9215										
3C-TCMT29X608-TM	0.031	●								0.630	0.242	0.217

Please note that 3C-TCMT... insert is not recommended for pull face-turning method (pulling the insert away from the part center).

● : Line up



Cutting edge style E

Metric	SS	DCONMS	LF	L1	L2	RE	Insert	Torque
C6STECHN00125-29-Y-CHP	C6	63	125	6	23.5	0.8	3C-TCMT29X6...	5

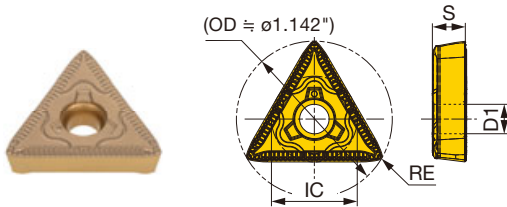
Torque: Recommended clamping torque: N·m

SPARE PARTS

Designation	Clamping screw	Grip	Torx bit
C6STECHN00125-29-Y-CHP	CSTB-5	H-TB2W	BT20M

INSERT

3C-TCMT**-TM



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

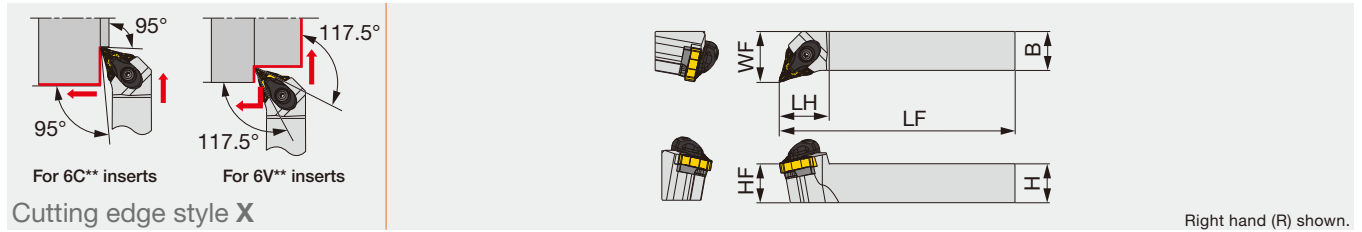
★ : First choice
☆ : Second choice

Designation	RE (in)	Coated								IC (in)	S (in)	D1 (in)
		T9215										
3C-TCMT29X608-TM	0.031	●								0.630	0.242	0.217

Please note that 3C-TCMT... insert is not recommended for pull face-turning method (pulling the insert away from the part center).

● : Line up

Double-clamp toolholder with 95°/117.5° approach angle, for negative 80°/35° triangular inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
ATXOR/L128-A	0.750	0.750	4.500	1.260	0.750	1.000	0.031	6C/6V-TOMG2506...	2.21
ATXOR/L168-A	1.000	1.000	6.000	1.260	1.000	1.250	0.031	6C/6V-TOMG2506...	2.21
ATXOR/L208-A	1.250	1.250	7.000	1.260	1.250	1.500	0.031	6C/6V-TOMG2506...	2.21

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
ATXOR/L2020K25-A	20	20	125	32	20	25	0.8	6C/6V-TOMG2506...	3
ATXOR/L2525M25-A	25	25	150	32	25	32	0.8	6C/6V-TOMG2506...	3
ATXOR/L3232P25-A	32	32	170	32	32	40	0.8	6C/6V-TOMG2506...	3

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
ATXOR/L**8-A, ATXOR/L**25-A	ACP4S	ACS-5W	BP-7	SP-2.5	LST33 KS15F	CSTB-3.5	T-15F

INSERT

6V-TOMG**F-TSF

6C-TOMG**M-TM



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

★ : First choice
☆ : Second choice

Designation	RE (in)	Coated			IC (in)	S (in)	D1 (in)
		T9215	T9225	AH8015			
6V-TOMG250604F-TSF	0.016	●	●	●	0.500	0.250	0.203
6V-TOMG250608F-TSF	0.031	●	●	●	0.500	0.250	0.203
6C-TOMG250608M-TM	0.031	●	●	●	0.476	0.250	0.203
6C-TOMG250612M-TM	0.047	●	●	●	0.476	0.250	0.203

Please note, when machining with pull face-turning method, that 6V-TOMG2506... insert may interfere with the workpiece whose external diameter is 2.756" or smaller and that 6C-TOMG2506... insert 1.181" or smaller. ● : Line up

Reference pages: Standard cutting conditions → C134

VN

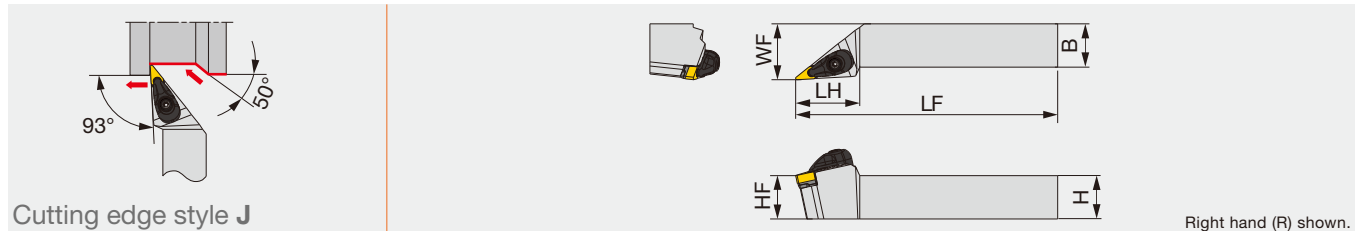
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TURNING

AVJNR/L

Double-clamp toolholder with 93° approach angle, for negative 35°/25° rhombic inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
AVJNR/L122.33-A	0.750	0.750	4.500	1.500	0.750	1.000	0.031	VN** 2.33...	2.2
AVJNR/L123-A	0.750	0.750	4.500	1.750	0.750	1.000	0.031	VN**/YN** 33...	2.2
AVJNR/L162.33-A	1.000	1.000	6.000	1.500	1.000	1.250	0.031	VN** 2.33...	2.2
AVJNR/L163-A	1.000	1.000	6.000	1.870	1.000	1.250	0.031	VN**/YN** 33...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AVJNR/L2020K1204-A	20	20	125	37	20	25	0.8	VN**1204...	3
AVJNR/L2020K16-A	20	20	125	43	20	25	0.8	VN**/YN**1604...	3
AVJNR/L2525M1204-A	25	25	150	37	25	32	0.8	VN**1204...	3
AVJNR/L2525M16-A	25	25	150	46	25	32	0.8	VN**/YN**1604...	3

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

SPARE PARTS	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AVJNR/L**2.33-A, AVJNR/L**1204-A	ACP3L-E	ACS-5W	BP-7	SP-2.5	ASV222	CSTB-3.0	T-15F
AVJNR/L123, 163-A, AVJNR/L**16-A	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	M	Application	Finishing	Medium cutting
	Grade	NS9530	GT9530	T9215		Grade	T6215	AH6225
	Chipbreaker shape	TF	TSF	TM		Chipbreaker shape	SF	SM
	Cutting conditions	B004				Cutting conditions	B006	

K	Application	Finishing	Medium cutting	Medium to heavy cutting	N	Application	Precision finishing
	Grade	T515	T515	T515		Grade	DX120
	Chipbreaker shape	All-round	All-round	All-round		Chipbreaker shape	DIA with rake
	Cutting conditions	B008				Cutting conditions	B010

S	Application	Precision finishing	Finishing	Medium cutting	H	Application	Precision finishing	Finishing
	Grade	BX470	AH8005	AH8005		Grade	BXA10	BXA20
	Chipbreaker shape	CBN	HRF	HRM		Chipbreaker shape	CBN	CBN
	Cutting conditions	B012				Cutting conditions	B014	

Reference pages: AVJNR/L: Inserts → **B098 - B110**, CBN → **B186 - B188**, PCD → **B212**
 Parts for coolant hose → **C133**

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

VN

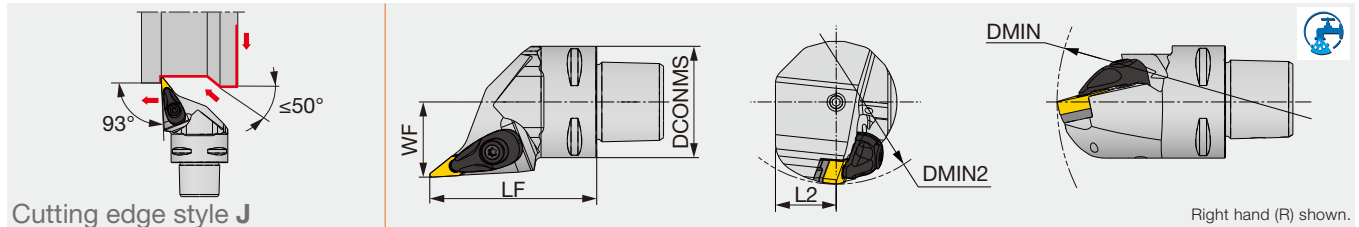
YN



TUNGCAP

C-AVJNR/L

Double-clamp toolholder, with 93° approach angle, for negative 35° rhombic inserts (TurningA)



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE**	Insert
C4AVJNR/L27060-1204N	40	60	20	27	140	55	0.8	VN**1204...
C6AVJNR/L45065-1204N	63	65	31.5	45	190	81	0.8	VN**1204...

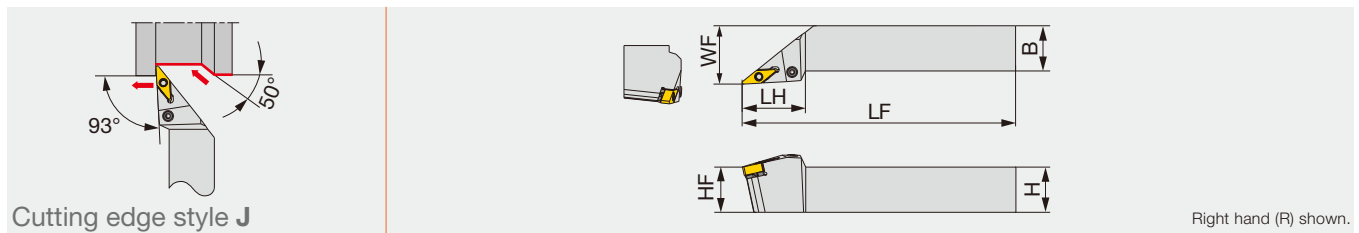
**RE: The holder measurements are true with this insert radius
 Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS									
Designation	Clamp	Clamp screw	Coolant parts	Shim	Shim screw	Spring	Spring pin	Wrench 1	Wrench 2
C4AVJNR/L...	ACP3L-E	ACS-5W	-	ASV222	CSTB-3	BP-7	SP-2.5	T-9F	T-15F
C6AVJNR/L...	ACP3L-E	ACS-5W	SATZ-M10X1-M5	ASV222	CSTB-3	BP-7	SP-2.5	T-9F	T-15F

ISO ETURN

PVJNR/L-Eco

Lever-lock toolholder with 93° approach angle, for negative 35° rhombic inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PVJNR/L102.33	0.625	0.625	4.000	1.380	0.625	0.875	0.031	VN** 2.33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVJNR/L1616H1204	16	16	100	35	16	20	0.8	VN**1204...	2
PVJNR/L2020K1204	20	20	125	35	20	25	0.8	VN**1204...	2
PVJNR/L2525M1204	25	25	150	35	25	32	0.8	VN**1204...	2

Torque: Recommended clamping torque: lb-ft (*N·m)
 **RE: The holder measurements are true with this insert radius

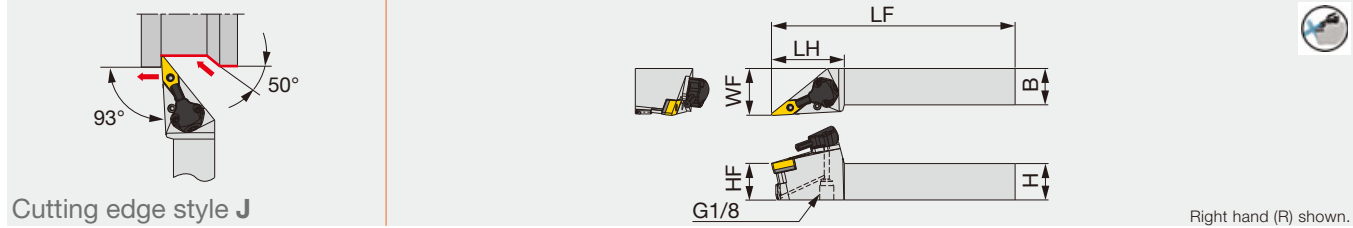
SPARE PARTS					
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PVJNR/L...	LSV212	LCS3V	P-2.5	LSP3	LCL3V

Reference pages: AVJNR/L: Inserts → **B098 -**, Parts for coolant hose → **C133**
 PVJNR/L-Eco: Inserts → **B098 -**

PVJNR/L-CHP

Tube connection

Lever lock toolholders – 93° approach angle.
For negative 35°/25° rhombic insert. High-pressure coolant capability.



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PVJNR/L123-CHP	0.750	0.750	4.500	1.969	0.750	1.250	0.031	VN**/YN** 33...	1.48
PVJNR/L122.33-CHP	0.750	0.750	4.500	2.000	0.750	1.250	0.031	VN** 2.33...	1.48
PVJNR/L163-CHP	1.000	1.000	6.000	1.969	1.000	1.250	0.031	VN**/YN** 33...	1.48
PVJNR/L162.33-CHP	1.000	1.000	6.000	2.000	1.000	1.250	0.031	VN** 2.33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVJNR/L2020K1204-CHP	20	20	125	50	20	32	0.8	VN**1204...	2
PVJNR/L2020K16-CHP	20	20	125	50	20	32	0.8	VN**/YN**1604...	2
PVJNR/L2525M1204-CHP	25	25	150	50	25	32	0.8	VN**1204...	2
PVJNR/L2525M16-CHP	25	25	150	50	25	32	0.8	VN**/YN**1604...	2

Torque: Recommended clamping torque: lbs-ft (*N·m)
**RE: Standard corner radius
20Mpa (2901 PSI)

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PVJNR/L**2.33-CHP, PVJNR/L**1204-CHP	LSV212	LCS3V	P-2.5	LSP3	LCL3V
PVJNR/L123, 163-CHP, PVJNR/L**16-CHP	LSV317	LCS3V	P-2.5	LSP3	LCL3V

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PVJNR/L**2.33-CHP, PVJNR/L**1204-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PVJNR/L123, 163-CHP, PVJNR/L**16-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting
	Grade	NS9530	GT9530
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

Application	Finishing	Medium cutting
	Grade	T6215
Chipbreaker shape	SF	SM
Cutting conditions	B006	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing
	Grade
Chipbreaker shape	DIA with rake
Cutting conditions	B010

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PVJNR/L-CHP: Inserts → **B098 - , B110**, CBN → **B186 - , B188**, PCD → **B212**
Parts for coolant hose → **C133**

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



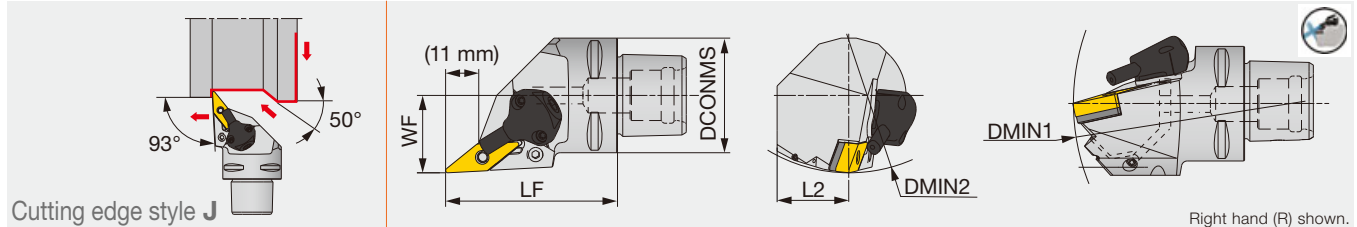
VN

YN



TUNGCAP C-PVJNR/L-CHP

Lever lock toolholders with TungCap connection – 93° approach angle.
For negative 35°/25° rhombic insert. High-pressure coolant capability.



Metric	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque
C4PVJNR/L27060-1204-CHP	40	60	20	27	140	90	0.8	VN**1204...	2
C4PVJNR/L27060-16-CHP	40	60	20	27	140	110	0.8	VN**/YN**1604...	2
C6PVJNR/L45065-1204-CHP	63	65	31.5	45	190	81	0.8	VN**1204...	2
C6PVJNR/L45065-16-CHP	63	65	31.5	45	190	81	0.8	VN**/YN**1604...	2

Torque: Recommended clamping torque: N·m
Applicable for 14 MPa (2031 PSI) pressure coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PVJNR/L**-1204-CHP	LSV212	LCS3V	P-2.5	LSP3	LCL3V
C*PVJNR/L**-16-CHP	LSV317	LCS3V	P-2.5	LSP3	LCL3V

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PVJNR/L**-1204-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N
C*PVJNR/L**-16-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting
	Grade	NS9530	GT9530
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

Application	Finishing	Medium cutting
	Grade	T6215
Chipbreaker shape	SF	SM
Cutting conditions	B006	

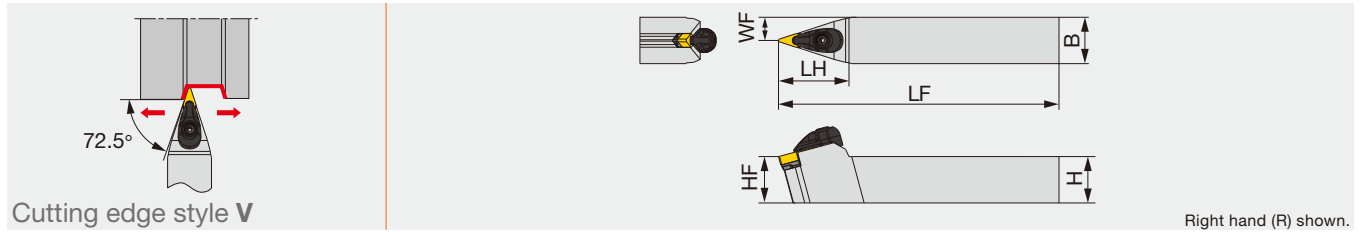
Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing
Grade	DX120 <small>with rake</small>
Chipbreaker shape	DIA
Cutting conditions	B010

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: C-PVJNR/L-CHP: Inserts → **B098 - B110**, CBN → **B186 - B188**, PCD → **B212**
Parts for coolant hose → **C133**



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
AVVNN122.33-A	0.750	0.750	4.500	1.500	0.750	0.375	0.031	VN** 2.33...	2.2
AVVNN123-A	0.750	0.750	4.500	1.870	0.750	0.375	0.031	VN**/YN** 33...	2.2
AVVNN162.33-A	1.000	1.000	6.000	1.500	1.000	0.500	0.031	VN** 2.33...	2.2
AVVNN163-A	1.000	1.000	6.000	1.870	1.000	0.500	0.031	VN**/YN** 33...	2.2

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AVVNN2020K1204-A	20	20	125	38	20	10	0.8	VN**1204...	3
AVVNN2020K16-A	20	20	125	46	20	10	0.8	VN**/YN**1604...	3
AVVNN2525M1204-A	25	25	150	38	25	13	0.8	VN**1204...	3
AVVNN2525M16-A	25	25	150	46	25	12.5	0.8	VN**/YN**1604...	3

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

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AVVNN**2.33-A, AVVNN**1204-A	ACP3L-E	ACS-5W	BP-7	SP-2.5	ASV222	CSTB-3.0	T-15F
AVVNN123, 163-A, AVVNN**16-A	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Medium cutting
Grade	NS9530	GT9530	T9215
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

M

Application	Finishing	Medium cutting
Grade	T6215	AH6225
Chipbreaker shape	SF	SM
Cutting conditions	B006	

K

Application	Finishing	Medium cutting	Medium to heavy cutting
Grade	T515	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

N

Application	Precision finishing
Grade	DX120
Chipbreaker shape	DIA with rake
Cutting conditions	B010

S

Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

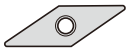
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Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: AVVNN: Inserts → B098 -, B110, CBN → B186 -, B188, PCD → B212



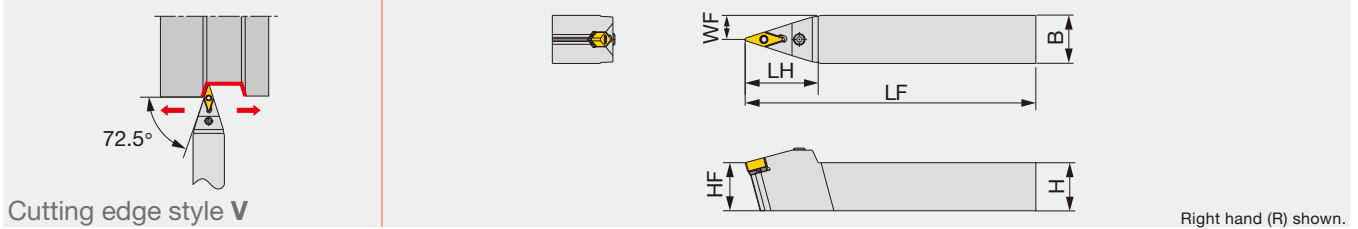
VN



**Rhombic, 35°
with hole**

ISO ETURN^{co} PVVNN-Eco

Lever-lock toolholder with 72.5° approach angle, for negative 35° rhombic inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PVVNN2020K1204	20	20	125	38	20	10	0.8	VN**1204...	2
PVVNN2525M1204	25	25	150	38	25	12.5	0.8	VN**1204...	2

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

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PVVNN**1204	LSV212	LCS3V	P-2.5	LSP3	LCL3V

C

D

F

G

H

R

S

T

V

W

Y

OTHERS

INSERT SELECTION

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

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

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	
Cutting conditions	B008

Reference pages: PVVNN-Eco: Inserts → **B098** -

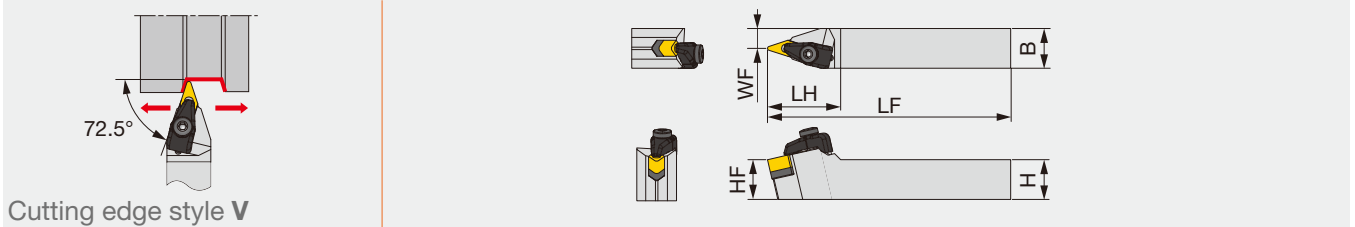
VN



Rhombic, 35°
without hole

DIMPLEFX CVVNN-RD

Double-clamp toolholder with 72.5° approach angle, for negative 35° rhombic ceramic inserts with dimple



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
CVVNN2525M1607-RD	25	25	150	46	25	12.5	1.2	VNGD160712	4

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

SPARE PARTS							
Designation	Clamp	Clamp screw	Shim	Shim screw	Spring	Wrench1	Wrench2
CVVNN2525M1607-RD	CCP4-A	CCS4-A	CV34-A	BH-4-10-A	BP-5-A	P-3	P-4

INSERT SELECTION

K	Application	Finishing to medium cutting
	Grade	FX105
	Chipbreaker shape	
	Cutting conditions	C136

Reference pages: CVVNN-RD: Inserts → **B101**
Standard cutting conditions → **C136**

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



VN

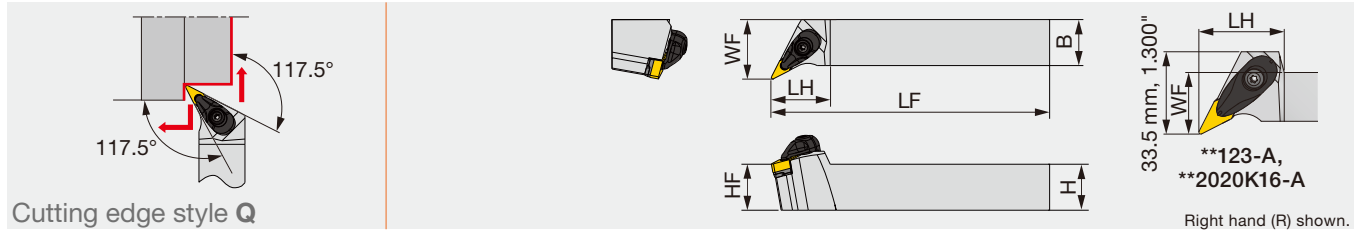
YN



TURNING

AVQNR/L

Double-clamp toolholder with 117.5° approach angle, for negative 35°/25° rhombic inserts



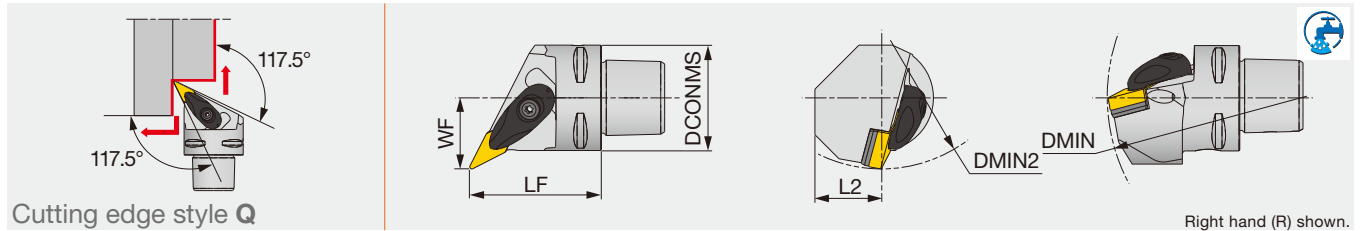
Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
AVQNR/L122.33-A	0.750	0.750	4.500	1.250	0.750	1.000	0.031	VN** 2.33...	2.21
AVQNR/L123-A	0.750	0.750	4.500	1.380	0.750	1.000	0.031	VN**/YN** 33...	2.21
AVQNR/L162.33-A	1.000	1.000	6.000	1.250	1.000	1.250	0.031	VN** 2.33...	2.21
AVQNR/L163-A	1.000	1.000	6.000	1.380	1.000	1.250	0.031	VN**/YN** 33...	2.21

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AVQNR/L2020K1204-A	20	20	125	32	20	25	0.8	VN**1204...	3
AVQNR/L2020K16-A	20	20	125	35	20	25	0.8	VN**/YN**1604...	3
AVQNR/L2525M1204-A	25	25	150	32	25	32	0.8	VN**1204...	3
AVQNR/L2525M16-A	25	25	150	35	25	32	0.8	VN**/YN**1604...	3

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

C-AVQNR/L

Double-clamp toolholder, with 117.5° approach angle, for negative 35°/25° rhombic inserts



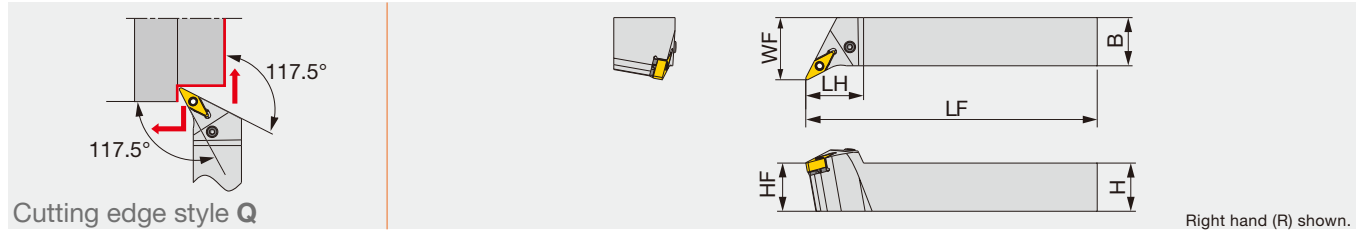
Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C4AVQNR/L27050-16N	40	50	25	27	145	110	0.8	VN**/YN**1604...

Applicable for 7 MPa (1015 PSI) coolant

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AVQNR/L**2.33-A, AVQNR/L**1204-A	ACP3L-E	ACS-5W	BP-7	SP-2.5	ASV222	CSTB-3.0	T-15F
AVQNR/L123, 163-A, AVQNR/L**16-A	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F
C4AVQNR/L**16N	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

Reference pages: AVQNR/L, C-AVQNR/L: Inserts → **B098 - , B110**, CBN → **B186 - , B188**, PCD → **B212**



Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PVQNR/L2020K1204	20	20	125	30	20	25	0.8	VN**1204...	2
PVQNR/L2525M1204	25	25	150	30	25	32	0.8	VN**1204...	2

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

SPARE PARTS					
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PVQNR/L**1204	LSV212	LCS3V	P-2.5	LSP3	LCL3V

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	M	Application	Finishing	Medium cutting
	Grade	NS9530	GT9530	T9215		Grade	T6215	AH6225
	Chipbreaker shape	TF	TSF	TM		Chipbreaker shape	SF	SM
	Cutting conditions	B004				Cutting conditions	B006	
K	Application	Finishing	Medium cutting	Medium to heavy cutting	N	Application	Precision finishing	
	Grade	T515	T515	T515		Grade	DX120	
	Chipbreaker shape	All-round	All-round	All-round		Chipbreaker shape	DIA	with rake
	Cutting conditions	B008				Cutting conditions	B010	
S	Application	Precision finishing	Finishing	Medium cutting	H	Application	Precision finishing	Finishing
	Grade	BX470	AH8005	AH8005		Grade	BXA10	BXA20
	Chipbreaker shape	CBN	HRF	HRM		Chipbreaker shape	CBN	CBN
	Cutting conditions	B012				Cutting conditions	B014	

Reference pages: PVQNR/L-Eco: Inserts → **B098 -**



VN

YN

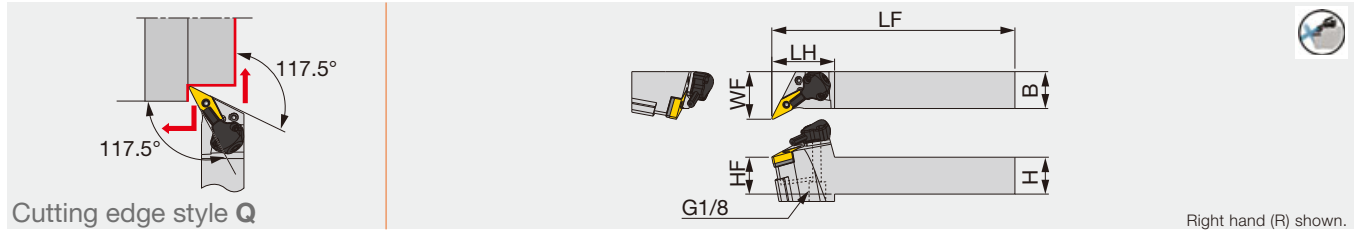


TUNG T^{URN} T^{JET}

PVQNR/L-CHP

Tube connection

Lever lock toolholders – 117.5° approach angle.
For negative 35°/25° rhombic insert. High-pressure coolant capability.



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PVQNR/L123-CHP	0.750	0.750	4.500	1.688	0.750	1.250	0.031	VN**/YN** 33...	1.48
PVQNR/L163-CHP	1.000	1.000	6.000	1.688	1.000	1.250	0.031	VN**/YN** 33...	1.48

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PVQNR/L2020K16-CHP	20	20	125	42.5	20	32	0.8	VN**/YN**1604...	2
PVQNR/L2525M16-CHP	25	25	150	42.5	25	32	0.8	VN**/YN**1604...	2

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

SPARE PARTS					
Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PVQNR/L**-CHP	LSV317	LCS3V	P-2.5	LSP3	LCL3V

SPARE PARTS						
Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PVQNR/L**-CHP	CU-V-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting
	Grade	NS9530	GT9530
Chipbreaker shape	TF	TSF	TM
Cutting conditions	B004		

Application	Finishing	Medium cutting
	Grade	T6215
Chipbreaker shape	SF	SM
Cutting conditions	B006	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Chipbreaker shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing
Grade	DX120 <small>with rake</small>
Chipbreaker shape	DIA
Cutting conditions	B010

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Chipbreaker shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B014	

Reference pages: PVQNR/L-CHP: Inserts → **B098 -**, CBN → **B186 -**, **B188 -**, PCD → **B212**
Parts for coolant hose → **C133**

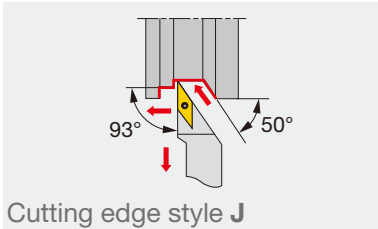
VC



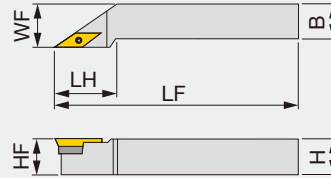
Rhombic, 35° with hole
Positive 7°

SVJCR/L

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



Cutting edge style J



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
SVJCR/L103	0.625	0.625	4.500	1.000	0.625	0.725	0.031	VC** 33...
SVJCR/L123	0.750	0.750	4.500	1.250	0.750	0.955	0.031	VC** 33...
SVJCR/L163	1.000	1.000	6.000	1.500	1.000	1.250	0.031	VC** 33...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SVJCR/L1616H16	16	16	100	32	16	20	0.8	VC**1604...
SVJCR/L2020K16	20	20	125	32	20	25	0.8	VC**1604...
SVJCR/L2525M16	25	25	150	40	25	32	0.8	VC**1604...

**RE: Standard corner radius

SPARE PARTS



Designation	Clamping screw	Shim	Shim screw	Wrench 1	Wrench 2
SVJCR/L...	CSTB-3.5L	SSV32	DTS5-3.5	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA	with rake DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	


H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: SVJCR/L: Inserts → B152 -, CBN → B209, PCD → B220

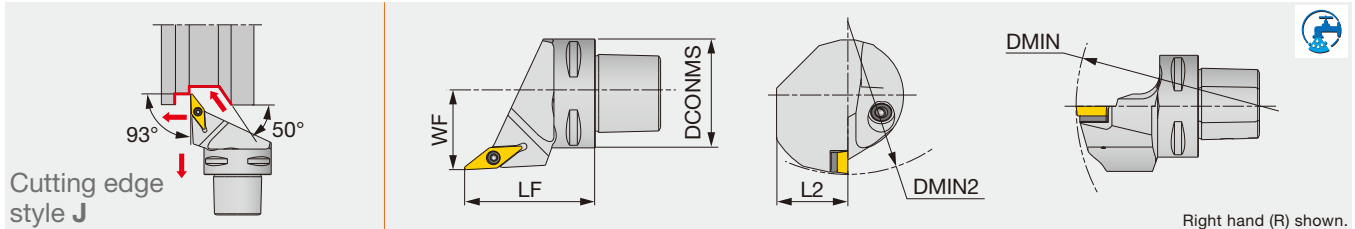


VC

 Rhombic, 35° with hole
Positive 7°

TUNGCAP C-SVJCR/L

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



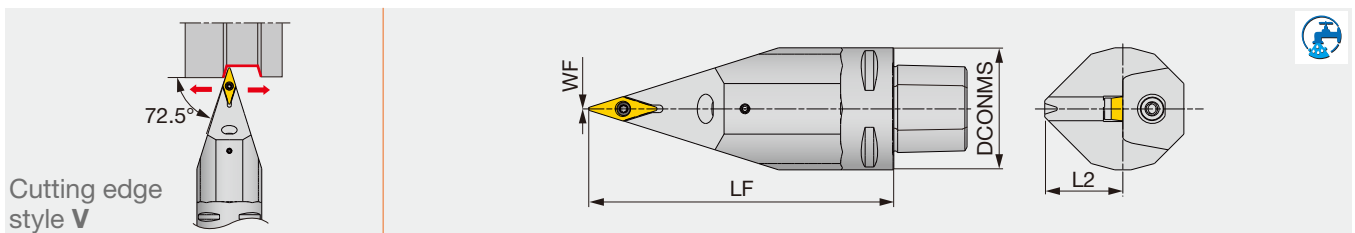
Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C3SVJCR/L22040-11N ⁽²⁾	32	40	20	22	-	-	0.4	VC**1103...
C5SVJCL35060-16 ⁽¹⁾	50	60	32	35	-	-	0.8	VC**1604...
C5SVJCR/L35060-16N ⁽²⁾	50	60	32	35	170	160	0.8	VC**1604...
C6SVJCR/L45065-16 ⁽¹⁾	63	65	41	45	-	-	0.8	VC**1604...
C6SVJCR/L45065-16N ⁽²⁾	63	65	41	45	170	190	0.8	VC**1604...

The items without DMIN and DMIN2 cannot be used for boring.
(1) Applicable for 3 MPa (435 PSI) coolant (2) Applicable for 7 MPa (1015 PSI) coolant

Designation	Clamping screw	Coolant parts	Shim	Shim screw	Wrench 1	Wrench 2
C3SVJC*22040-11N	CSTB-2.5	SATZ-M8X1-M3	-	-	-	T-8F
C5SVJC*35060-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVJC*35060-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVJC*45065-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVJC*45065-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F

C-SVVCN

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



Metric	DCONMS	LF	L2	WF	RE	Insert
C5SVVCN00090-16 ⁽¹⁾	50	90	32	0	0.8	VC**1604...
C5SVVCN00090-16N ⁽²⁾	50	90	32	0	0.8	VC**1604...
C5SVVCN00125-16 ⁽¹⁾	50	125	32	0	0.8	VC**1604...
C5SVVCN00125-16N ⁽²⁾	50	125	32	0	0.8	VC**1604...
C6SVVCN00100-16N ⁽²⁾	63	100	37.5	0	0.8	VC**1604...
C6SVVCN00140-16N ⁽²⁾	63	140	37.5	0	0.8	VC**1604...

(1) Applicable for 3 MPa (435 PSI) coolant (2) Applicable for 7 MPa (1015 PSI) coolant

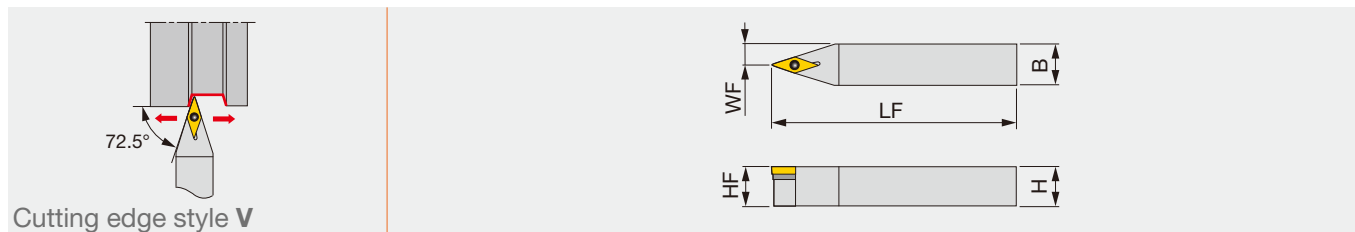
Designation	Clamping screw	Coolant parts	Shim	Shim screw	Wrench 1	Wrench 2
C5SVVCN00090-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00090-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00125-16	CSTB-3.5L	EZ104	SSV32	DTS5-3.5	P-3.5	T-15F
C5SVVCN00125-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00100-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F
C6SVVCN00140-16N	CSTB-3.5L	SATZ-M10X1-M5	SSV32	DTS5-3.5	P-3.5	T-15F

Reference pages: C-SVJCR/L, C-SVVCN: Inserts → **B152** -, CBN → **B209**, PCD → **B220**

TUNGCAP






SVVCN

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






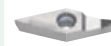








Metric	H	B	LF	HF	WF	RE**	Insert
SVVCN2020K16	20	20	125	20	10	0.8	VC**1604...
SVVCN2525M16	25	25	150	25	12.5	0.8	VC**1604...

**RE: Standard corner radius

SPARE PARTS					
Designation	Clamping screw	Shim	Shim screw	Wrench 1	Wrench 2
SVVCN...	CSTB-3.5L	SSV32	DTS5-3.5	P-3.5	T-15F

INSERT SELECTION

P	Application	Finishing	Finishing to medium cutting	M	Application	Finishing	Finishing to medium cutting
	Grade	NS9530	T9215		Grade	AH6225	AH6225
	Chipbreaker shape				Chipbreaker shape		
Cutting conditions		B016		Cutting conditions		B018	
K	Application	Finishing to medium cutting	N	Application	Precision finishing	Finishing	Medium cutting
	Grade	T515		Grade	DX120	DX140	KS05F
	Chipbreaker shape			Chipbreaker shape			
Cutting conditions		B020		Cutting conditions		B022	
S	Application	Finishing	Finishing to medium cutting	H	Application	Precision finishing	Finishing
	Grade	AH8015	AH8015		Grade	BXA10	BXA20
	Chipbreaker shape				Chipbreaker shape		
Cutting conditions		B024		Cutting conditions		B026	

Reference pages: SVVCN: Inserts → **B152** -, CBN → **B209**, PCD → **B220**

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



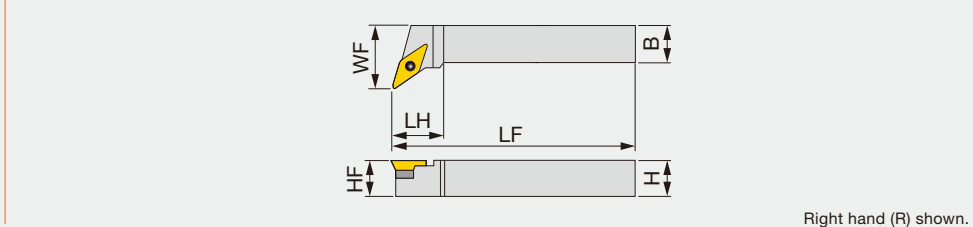
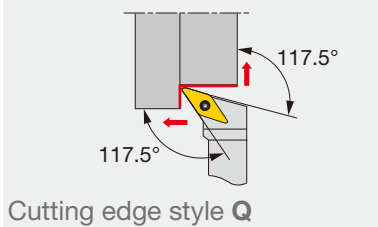
VC



Rhombic, 35° with hole
Positive 7°

SVQCR/L

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



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
SVQCR163	1.000	1.000	6.000	1.500	1.000	1.250	0.031	VC** 33...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SVQCR/L2020K16	20	20	125	35	20	27	0.8	VC**1604...
SVQCR/L2525M16	25	25	150	35	25	32	0.8	VC**1604...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SVQCR/L...	CSTB-3.5L	DTS5-3.5	SSV32	P-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

M

Application	Finishing	Finishing to medium cutting
Grade	AH6225	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

K

Application	Finishing to medium cutting
Grade	T515
Chipbreaker shape	CM
Cutting conditions	B020

N

Application	Precision finishing	Finishing	Medium cutting
Grade	DX120	DX140	KS05F
Chipbreaker shape	DIA	with rake DIA	AL
Cutting conditions	B022		

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

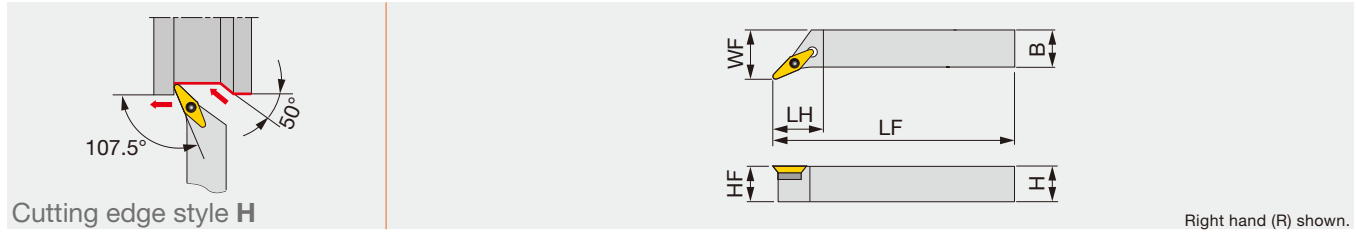
H

Application	Precision finishing	Finishing
Grade	BXA10	BXA20
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: SVQCR/L: Inserts → B152 -, CBN → B209, PCD → B220

SVHCR/L

Screw-on toolholder with 107.5° approach angle, for positive 35° rhombic inserts



Right hand (R) shown.

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SVHCR/L2525M22	25	25	150	33.8	25	32	0.8	VCG*2205...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Wrench 1	Wrench 2
SVHCR/L2525M22	CSTB-4.5L110P	DTS6-4.5	SSV42	P-4.5	T-15F

INSERT SELECTION

K	Application	Finishing to medium cutting	N	Application	Finishing to medium cutting
	Grade	KS05F		Grade	KS05F
	Chipbreaker Shape	AL		Chipbreaker Shape	AL
	Cutting conditions	B020		Cutting conditions	B022
S	Application	Finishing to medium cutting			
	Grade	KS05F			
	Chipbreaker Shape	AL			
	Cutting conditions	B024			

Reference pages: SVHCR/L: Inserts → **B153**

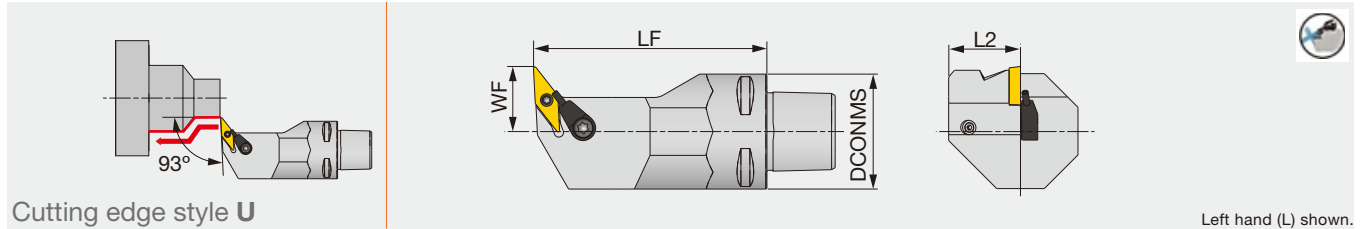
VC



Rhombic, 35° with hole
Positive 7°

TUNGCAP C-SVUCL-CHP

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



Left hand (L) shown.

Metric	DCONMS	LF	L2	WF	RE	Insert
C3SVUCL18065-11-CHP	32	65	20	18	0.4	VC**1103...

Applicable for 14 MPa (2031 PSI) coolant
Cannot be used for boring

SPARE PARTS



Designation	Clamping screw	Coolant unit	Wrench
C3SVUCL18065-11-CHP	CSTB-2.5	S-CU-CHP	T-8F

C

D

F

G

H

R

S

T

V

W

Y

OTHERS

INSERT SELECTION

Application	Finishing	Finishing to medium cutting
	Grade	NS9530
Chipbreaker shape	PSS	PS
Cutting conditions	B016	

Application	Finishing	Finishing to medium cutting
	Grade	AH6225
Chipbreaker shape	PSS	PS
Cutting conditions	B018	

Application	Finishing to medium cutting
	Grade
Chipbreaker shape	CM
Cutting conditions	B020

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Chipbreaker shape	DIA	with rake DIA	AL
Cutting conditions	B022		

Application	Finishing	Finishing to medium cutting
	Grade	AH8015
Chipbreaker shape	PSS	PS
Cutting conditions	B024	

Application	Precision finishing	Finishing
	Grade	BXA10
Chipbreaker shape	CBN	CBN
Cutting conditions	B026	

Reference pages: C-SVUCL-CHP: Inserts → **B152**

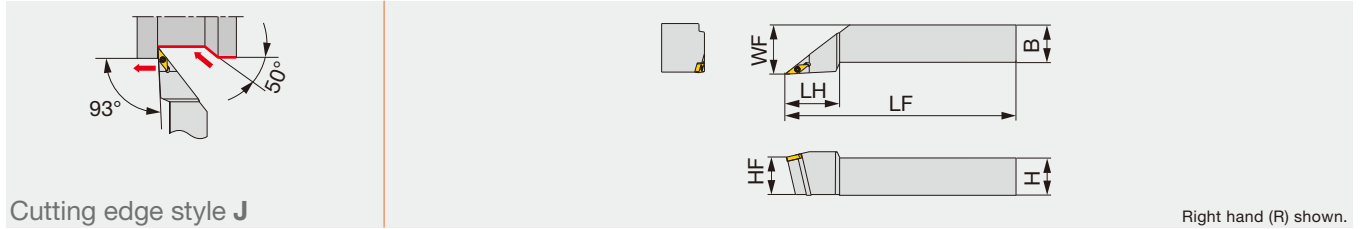
Parts for coolant hose → **C133**

VX

Rhombic, 35°
with hole

MINIFORCE JSVJXR/L

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

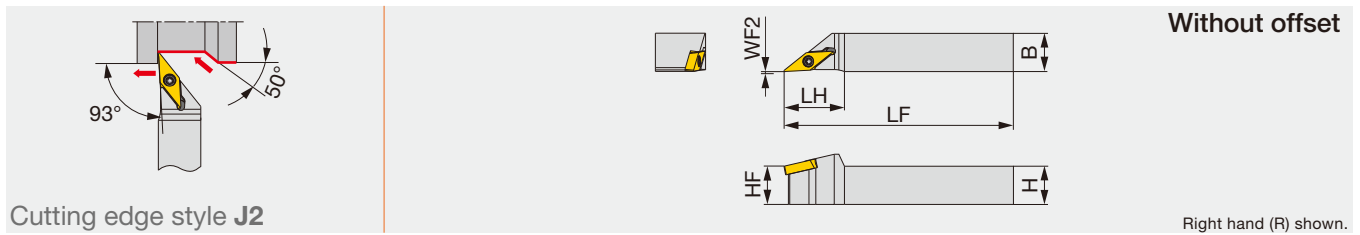


Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSVJXR/L127	0.750	0.750	4.500	1.500	0.750	1.000	0.008	VXGU 73.5**/L/R...	0.66
JSVJXR/L167	1.000	1.000	6.000	1.500	1.000	1.250	0.008	VXGU 73.5**/L/R...	0.66
Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSVJXR/L2020K09	20	20	125	35	20	25	0.4	VXGU09T2**/L/R...	0.9
JSVJXR/L2525M09	25	25	150	35	25	32	0.4	VXGU09T2**/L/R...	0.9

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

JSVJ2XR/L

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



Inch	H	B	LF	LH	HF	WF2	RE**	Insert	Torque
JSVJ2XR/L067	0.375	0.375	4.750	0.669	0.375	0	0.008	VXGU 73.5**/L/R...	0.66
JSVJ2XR/L087	0.500	0.500	4.750	0.748	0.500	0	0.008	VXGU 73.5**/L/R...	0.66
JSVJ2XR/L107	0.625	0.625	4.750	0.748	0.625	0	0.008	VXGU 73.5**/L/R...	0.66
Metric	H	B	LF	LH	HF	WF2	RE**	Insert	Torque*
JSVJ2XR/L1010X09	10	10	120	17	10	0	0.2	VXGU09T2**/L/R...	0.9
JSVJ2XR/L1212F09	12	12	85	19	12	0	0.2	VXGU09T2**/L/R...	0.9
JSVJ2XR/L1212X09	12	12	120	19	12	0	0.2	VXGU09T2**/L/R...	0.9
JSVJ2XR/L1616X09	16	16	120	19	16	0	0.2	VXGU09T2**/L/R...	0.9
JSVJ2XR/L2020H09	20	20	100	19	20	0	0.2	VXGU09T2**/L/R...	0.9

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

SPARE PARTS

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

INSERT SELECTION

P	Application	Finishing	M	Application	Finishing
	Grade	SH725		Grade	SH725
	Chipbreaker shape	JRP		Chipbreaker shape	JRP
	Cutting conditions	C136		Cutting conditions	C136

Reference pages: JSVJXR/L, JSVJ2XR/L: Inserts → **B155**
Standard cutting conditions → **C136**

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

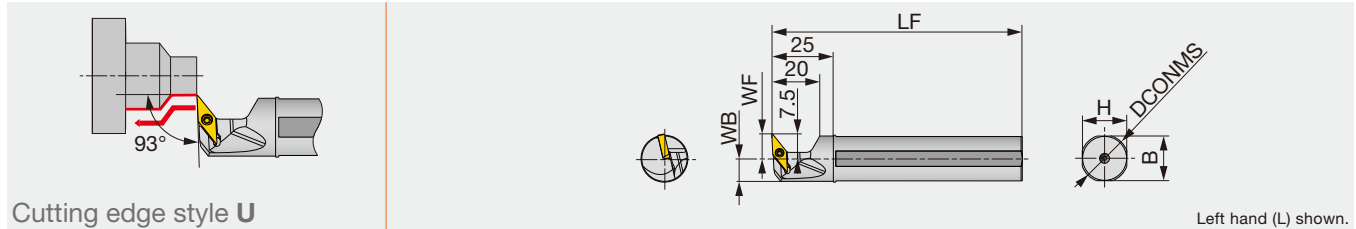
A
B
C
D
E
F
G
H
I
J
K
L
M

VX

 **Rhombic, 35° with hole**

MINIFORCE TURN JS-SVUXL

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



Cutting edge style **U**

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

Torque: Recommended clamping torque: N·m



**RE: Standard corner radius

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

SPARE PARTS

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

INSERT SELECTION

P	Application	Finishing	M	Application	Finishing
	Grade	SH725		Grade	SH725
	Chipbreaker shape	JRP 		Chipbreaker shape	JRP 
	Cutting conditions	C136		Cutting conditions	C136

Reference pages: JS-SVUXL: Inserts → **B155**

Standard cutting conditions → **C136**

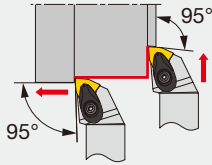
WN

Trigon, 80°
with hole

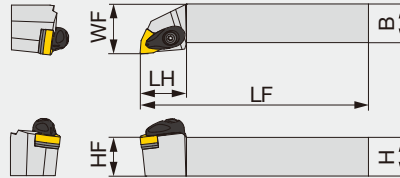
TURNING A

AWLNR/L

Double-clamp toolholder with 95° approach angle, for negative 80° trigon inserts



Cutting edge style L



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
AWLNR/L1233-A	0.750	0.750	4.500	1.125	0.750	1.000	0.031	WN** 33...	2.21
AWLNR/L123-A	0.750	0.750	4.500	1.125	0.750	1.000	0.031	WN** 33...	2.21
AWLNR/L124-A	0.750	0.750	4.500	1.250	0.750	1.000	0.031	WN** 43...	2.21
AWLNR/L1633-A	1.000	1.000	6.000	1.125	1.000	1.250	0.031	WN** 33...	2.21
AWLNR/L163-A	1.000	1.000	6.000	1.125	1.000	1.250	0.031	WN** 33...	2.21
AWLNR/L164-A	1.000	1.000	6.000	1.250	1.000	1.250	0.031	WN** 43...	2.21
AWLNR/L204-A	1.250	1.250	7.000	1.250	1.250	1.500	0.031	WN** 43...	2.21

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
AWLNR/L2020K0604-A	20	20	125	27	20	25	0.8	WN**0604...	3
AWLNR/L2020H08-A	20	20	100	30	20	25	0.8	WN**0804...	3
AWLNR/L2020K08-A	20	20	125	30	20	25	0.8	WN**0804...	3
AWLNR/L2525M0604-A	25	25	150	27	25	32	0.8	WN**0604...	3
AWLNR/L2525K08-A	25	25	125	30	25	32	0.8	WN**0804...	3
AWLNR/L2525M08-A	25	25	150	30	25	32	0.8	WN**0804...	3
AWLNR/L3225P08-A	32	25	170	30	32	32	0.8	WN**0804...	3

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

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
AWLNR/L**33-A, AWLNR/L**0604-A	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F
AWLNR/L**3-A	ACP3S	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F
AWLNR/L**4-A, AWLNR/L**08-A	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F

INSERT SELECTION

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

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

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B008		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions	B012		

Application	Precision finishing	Finishing
	Grade	BXA10
Breaker Shape	CBN	CBN
Cutting conditions	B014	

Reference pages: AWLNR/L: Inserts → **B102 -**, CBN → **B187**
Parts for coolant hose → **C133**



WN

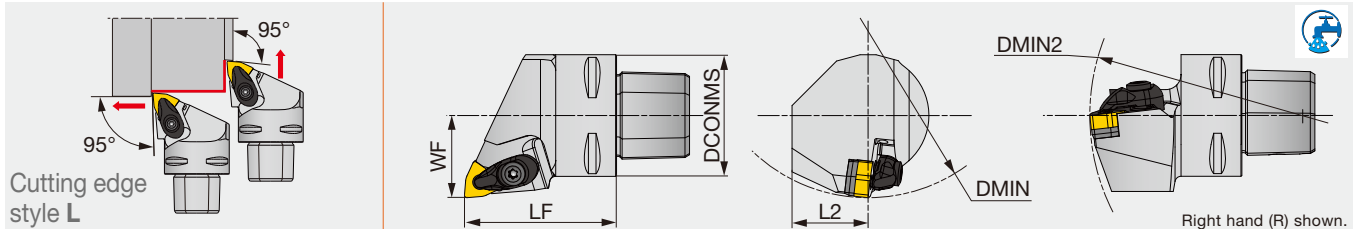


Trigon, 80°
with hole

TURNING

C-AWLNR/L

Double-clamp toolholder, with 95° approach angle, for negative 80° trigon inserts



Metric	DCONMS	LF	L2	WF	DMIN	DMIN2	RE	Insert
C4AWLNR/L27050-0604N	40	50	25	27	140	110	0.8	WN**0604...
C4AWLNR/L27050-08N	40	50	25	27	-	-	0.8	WN**0804...
C6AWLNR/L45065-08N	63	65	35	45	190	110	0.8	WN**0804...

Applicable for 7 MPa (1015 PSI) coolant

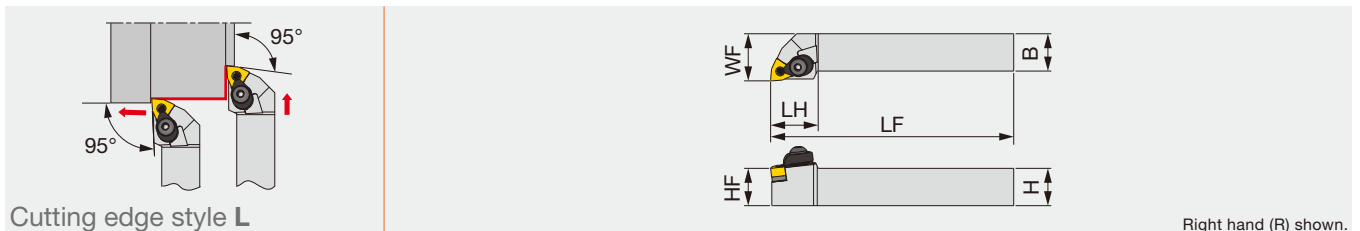
The items without DMIN and DMIN2 cannot be used for boring.

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench	Coolant parts
C4AWLNR/L**0604N	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F	-
C4AWLNR/L**08N	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F	-
C6AWLNR/L**08N	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F	SATZ-M8X1-M3

DWLNR/L

One-Double toolholder with 95° approach angle, for negative 80° trigon inserts



Metric	H	B	LF	LH	HF	WF	RE**	Insert
DWLNR/L2020K06	20	20	125	25.5	20	25	0.8	WN**0604...
DWLNR/L2020K08	20	20	125	31	20	25	0.8	WN**0804...
DWLNR/L2525M06	25	25	150	26	25	32	0.8	WN**0604...
DWLNR/L2525M08	25	25	150	31	25	32	0.8	WN**0804...
DWLNR/L3225P08	32	25	170	30	32	32	0.8	WN**0804...

Note: Except for 57-type chipbreaker inserts

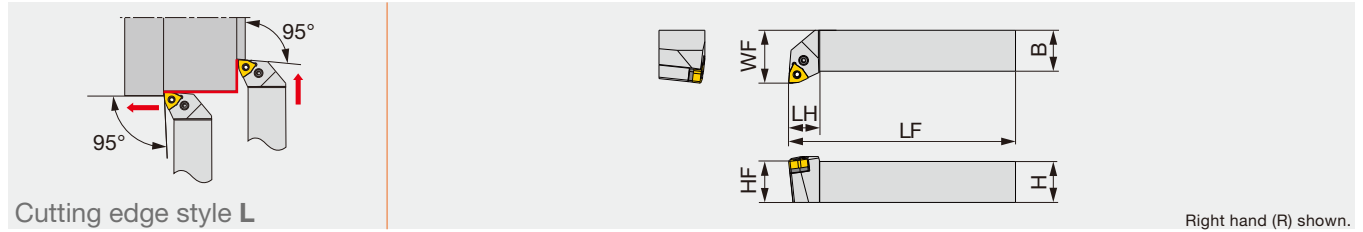
**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Lever	Piston	Clamp screw	Shim	Spring	Spring pin	Wrench1	Wrench2
DWLNR/L**06	DCPM-33	LCL33	DPIS33	DLCS33	LSW312	BP-9	LSP3	P-2.5	P-3
DWLNR/L**08	DCPM-43	DLCL43	DPIS43	DLCS43	LSW42	BP-10	LSP4	P-3	P-4

Reference pages: C-AWLNR/L, DWLNR/L: Inserts → **B102 -**, CBN → **B187**
Parts for coolant hose → **C133**

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



Inch		H	B	LF	LH	HF	WF	RE**	Insert	Torque
PWLNR/L1233		0.750	0.750	4.500	0.625	0.750	1.000	0.031	WN** 33...	1.48
PWLNR/L1633		1.000	1.000	6.000	0.719	1.000	1.250	0.031	WN** 33...	1.48
Metric		H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PWLNR/L2020K0604		20	20	125	15	20	25	0.8	WN**0604...	2
PWLNR/L2525M0604		25	25	150	19	25	32	0.8	WN**0604...	2

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

SPARE PARTS					
Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
PWLNR/L...	LSW312	LCS3	P-2.5	LSP3	LCL3

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
Breaker Shape					
Cutting conditions	B004				

M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225	AH6225
Breaker Shape				
Cutting conditions	B006			

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
Breaker Shape				
Cutting conditions	B008			

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005	AH8005
Breaker Shape				
Cutting conditions	B012			

H	Application	Precision finishing	Finishing
	Grade	BXA10	BXA20
Breaker Shape			
Cutting conditions	B014		

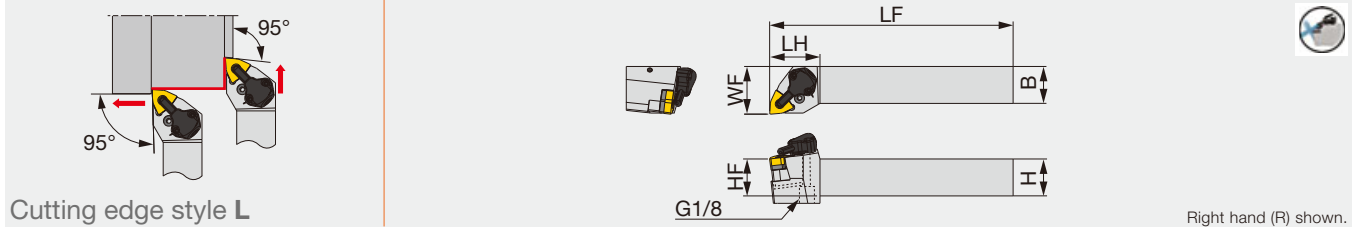
Reference pages: PWLNR/L-Eco: Inserts → **B102 -**



PWLNLR/L-CHP

Tube connection

Lever lock toolholders – 95° approach angle.
For negative 80° trigon insert. High-pressure coolant capability.



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
PWLNLR/L1233-CHP	0.750	0.750	4.500	1.344	0.750	1.250	0.031	WN** 33...	1.48
PWLNLR/L124-CHP	0.750	0.750	4.500	1.344	0.750	1.250	0.031	WN** 43...	2.22
PWLNLR/L1633-CHP	1.000	1.000	6.000	1.344	1.000	1.250	0.031	WN** 33...	1.48
PWLNLR/L164-CHP	1.000	1.000	6.000	1.344	1.000	1.250	0.031	WN** 43...	2.22

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
PWLNLR/L2020K0604-CHP	20	20	125	34	20	32	0.8	WN**0604...	2
PWLNLR/L2020K08-CHP	20	20	125	34	20	32	0.8	WN**0804...	3
PWLNLR/L2525M0604-CHP	25	25	150	34	25	32	0.8	WN**0604...	2
PWLNLR/L2525M08-CHP	25	25	150	34	25	32	0.8	WN**0804...	3

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

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
PWLNLR/L**33-CHP, PWLNLR/L**0604-CHP	LSW312	LCS3	P-2.5	LSP3	LCL3
PWLNLR/L**4-CHP, PWLNLR/L**08-CHP	LSW42	LCS4	P-2.5	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring	Coolant screw	Wrench 3
PWLNLR/L**33-CHP, PWLNLR/L**0604-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2
PWLNLR/L**4-CHP, PWLNLR/L**08-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N	SRM4X4TL360	P-2

INSERT SELECTION

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

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

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

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005	AH8005
	Breaker Shape	CBN	HRF	HRM
	Cutting conditions	B012		

H	Application	Precision finishing	Finishing
	Grade	BXA10	BXA20
	Breaker Shape	CBN	CBN
	Cutting conditions	B014	

Reference pages: PWLNLR/L-CHP: Inserts → **B102 -**, CBN → **B187**
Parts for coolant hose → **C133**

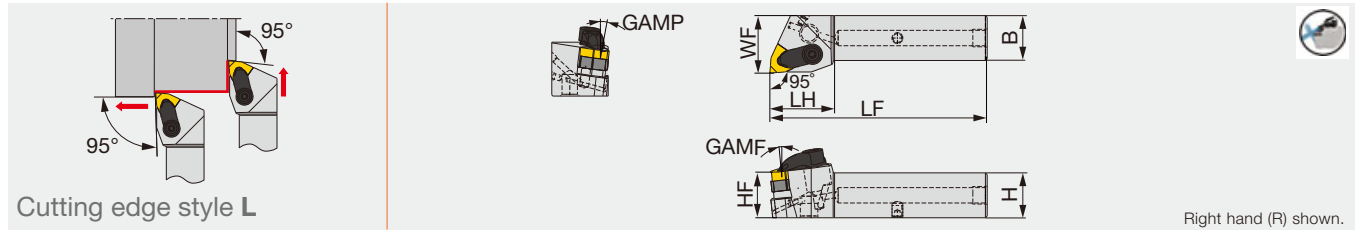
AWLNR/L-CHP-MC

Direct connection

Tube connection

Double clamping tool holders-95° approach angle

For negative 80° trigon insert. High-pressure coolant capability with tube and direct connections



Inch	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque
AWLNR/L12-4-CHP-MC	0.750	0.75	4.173	1.417	0.750	1.000	6°	6°	WN** 43...	2.95
AWLNR/L16-4-CHP-MC	1.000	1.000	4.716	1.417	1.000	1.250	6°	6°	WN** 43...	2.95

Metric	H	B	LF	LH	HF	WF	GAMP	GAMF	Insert	Torque*
AWLNR/L2020X-08-CHP-MC	20	20	106	36	20	25	6°	6°	WN**0804...	4
AWLNR/L2525X-08-CHP-MC	25	25	121	36	25	32	6°	6°	WN**0804...	4

Torque: Recommended clamping torque: lbs-ft (*N-m)
Applicable for 14 MPa (2031 PSI) pressure coolant

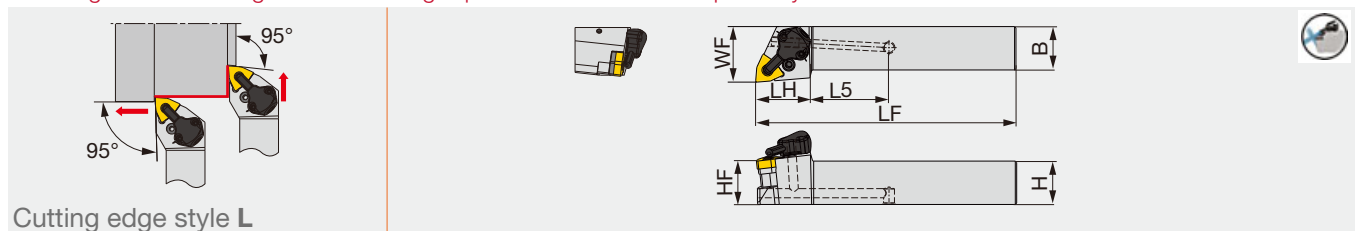
SPARE PARTS	Clamp set	Shim	Shim screw	Screw for tube connection	Coolant plug	O-ring	Wrench
AWLNL...	LCGL-4JCSET	RWT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20
AWLNR...	LCGR-4JCSET	RWT443	SR14-506	PLUGG1/8-6.5TL360	SRM5X5 DIN913TL360	OR4X3NBR70	KEYV-T20

PWLNR/L2020X-CHP-MC

Direct connection

Lever lock toolholders – 95° approach angle.

For negative 80° trigon insert. High-pressure coolant capability with bottom direct connection



Metric	H	B	LF	LH	HF	L5	WF	Insert	Torque
PWLNR/L2020X06-CHP-MC	20	20	97	27	20	29	25	WN**0604...	2
PWLNR/L2020X08-CHP-MC	20	20	97	27	20	29	25	WN**0804...	3

Torque: Recommended clamping torque: N-m
Applicable for 30 MPa (4351 PSI) pressure coolant

SPARE PARTS	Shim	Spring	Lever	Spring	Spring pin	Wrench	Coolant unit	Wrench	Coolant plug	Wrench
PWLNR/L2020X06-CHP-MC	TWN3	SP3	LR3	SR117-2014	PN3-4	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	-
PWLNR/L2020X08-CHP-MC	TWN443	SP4	LR4DH	SR117-2010	PN3-4L	HW2.5	CU-CW-CHP	T-8/5	SRM5X5 DIN913TL360	HW3.0

Reference pages: AWLNR/L-CHP-MC, PWLNR/L2020X-CHP-MC:

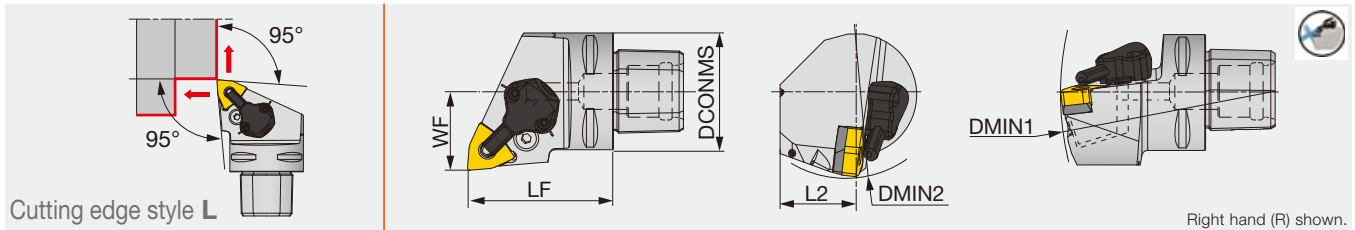
Inserts → **B102** -, CBN → **B187**, Parts for coolant hose → **C133**

WN



TUNGCAP C-PWLN/L-CHP

Lever lock toolholders with TungCap connection – 95° approach angle.
For negative 80° trigon insert. High-pressure coolant capability.



Metric	DCONMS	LF	L2	WF	DMIN1	DMIN2	RE**	Insert	Torque
C4PWLN/L27050-0604-CHP	40	50	25	27	140	110	0.8	WN**0604...	2
C4PWLN/L27050-08-CHP	40	50	25	27	140	110	0.8	WN**0804...	3
C6PWLN/L45065-08-CHP	63	65	41	45	190	110	0.8	WN**0804...	3

Torque: Recommended clamping torque: N·m
Applicable for 14 MPa (2031 PSI) pressure coolant
**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench 1	Spring pin	Lever
C*PWLN/L**0604-CHP	LSW312	LCS3	P-2.5	LSP3	LCL3
C*PWLN/L**-08-CHP	LSW42BL	LCS4	P-3	LSP4	LCL4

SPARE PARTS

Designation	Coolant unit	Mounting screw	Wrench 2	O-ring
C*PWLN/L**0604-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N
C*PWLN/L**-08-CHP	CU-CW-CHP	SRM3	T-8F	OR6.4X0.9N

INSERT SELECTION

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

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6215	AH6225
Breaker Shape	SF	SM	SH
Cutting conditions: B006			

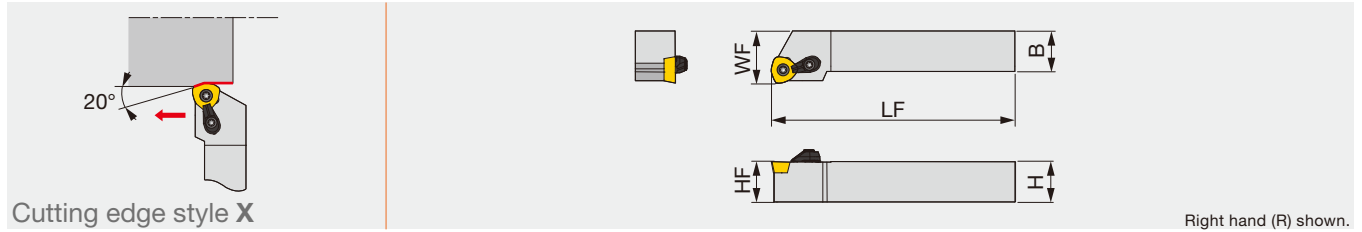
Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions: B008			

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005
Breaker Shape	CBN	HRF	HRM
Cutting conditions: B012			

Application	Precision finishing	Finishing
	Grade	BXA10
Breaker Shape	CBN	CBN
Cutting conditions: B012		

Reference pages: C-PWLN/L-CHP: Inserts → **B102 -**, CBN → **B187**
Parts for coolant hose → **C133**

Double-clamp toolholder for roughing with 20° approach angle, for positive 80° trigon inserts



Inch	H	B	LF	HF	WF	Insert
XWXPR/L16-09	1.000	1.000	6.000	1.000	1.250	WPMT090725ZPR/L-ML
XWXPR/L20-09	1.250	1.250	7.000	1.250	1.500	WPMT090725ZPR/L-ML
XWXPR/L24-09	1.500	1.500	7.000	1.500	2.000	WPMT090725ZPR/L-ML

Metric	H	B	LF	HF	WF	Insert
XWXPR/L2525M09	25	25	150	25	32	WPMT090725ZPR/L-ML
XWXPR/L3232P09	32	32	170	32	40	WPMT090725ZPR/L-ML
XWXPR/L4040S09	40	40	250	40	50	WPMT090725ZPR/L-ML

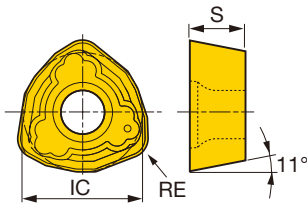
SPARE PARTS

Designation	Clamp set	Clamping screw	Wrench
XWXPR/L...	CSY-20	CSPB-5	IP-20T

Note: Each insert is either right- or left-handed. Please be sure not to use a wrong insert.

INSERT

WPMT09-ML



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

★ : First choice
☆ : Second choice

Designation	RE (in)	Max. ap (in)	Coated							IC (in)	S (in)	
			T9215	T9225	AH120							
WPMT090725ZPR-ML	0.098	0.118	●	●	●						0.591	0.276
WPMT090725ZPL-ML	0.098	0.118	●	●	●						0.591	0.276

● : Line up



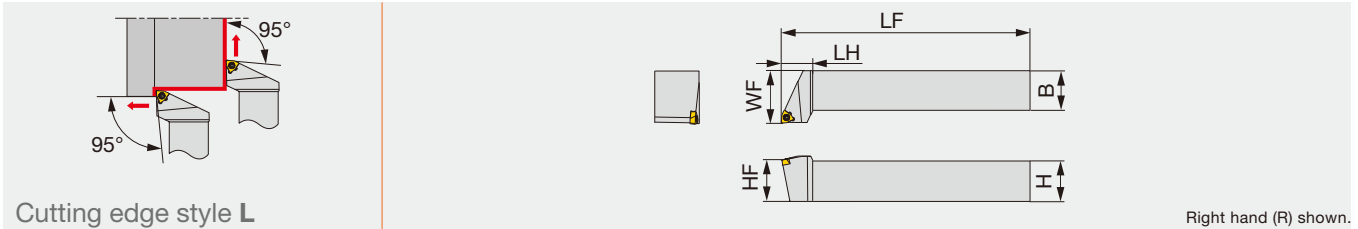
WX



Trigon, 80°
with hole

MINIFORCE JSWLXR/L

Screw-on toolholder with 95° approach angle, for negative 80° trigon inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert	Torque
JSWLXR/L122	0.750	0.750	4.500	0.625	0.750	1.000	0.008	WXGU 22**L/R...	0.66
JSWLXR/L162	1.000	1.000	6.000	0.750	1.000	1.250	0.008	WXGU 22**L/R...	0.66

Metric	H	B	LF	LH	HF	WF	RE**	Insert	Torque*
JSWLXR/L2020K04	20	20	125	15	20	25	0.4	WXGU0403**L/R...	0.9
JSWLXR/L2525M04	25	25	150	19	25	32	0.4	WXGU0403**L/R...	0.9

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

**RE: Standard corner radius

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

Application	Finishing	Medium cutting
	Grade	SH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	SH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

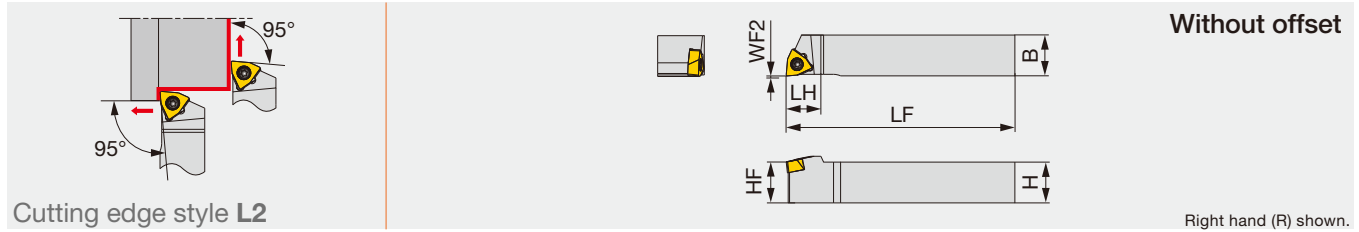
Small CNC lathes

Application	Finishing	Medium cutting
	Grade	AH725
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Reference pages: JSWLXR/L: Inserts → **B157 -**, CBN → **B210**
Standard cutting conditions → **C136**

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



Inch	H	B	LF	LH	HF	WF2	RE**	Insert	Torque
JSWL2XR/L062	0.375	0.375	4.750	0.500	0.375	0	0.008	WXGU 22**L/R...	0.66
JSWL2XR/L082	0.500	0.500	4.750	0.500	0.500	0	0.008	WXGU 22**L/R...	0.66
JSWL2XR/L102	0.625	0.625	4.750	0.500	0.625	0	0.008	WXGU 22**L/R...	0.66

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

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

**RE: Standard corner radius

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

SPARE PARTS

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

INSERT SELECTION

Swiss lathes

Application	Finishing	Medium cutting
	Grade	SH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	SH725
Chipbreaker shape	JSS	JTS
Cutting conditions	C136	

Small CNC lathes

Application	Finishing	Medium cutting
	Grade	AH725
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Application	Finishing	Medium cutting
	Grade	AH8015
Chipbreaker shape	SS	TS
Cutting conditions	C136	

Reference pages: JSWL2XR/L: Inserts → **B157 -**, CBN → **B210**
Standard cutting conditions → **C136**

YW

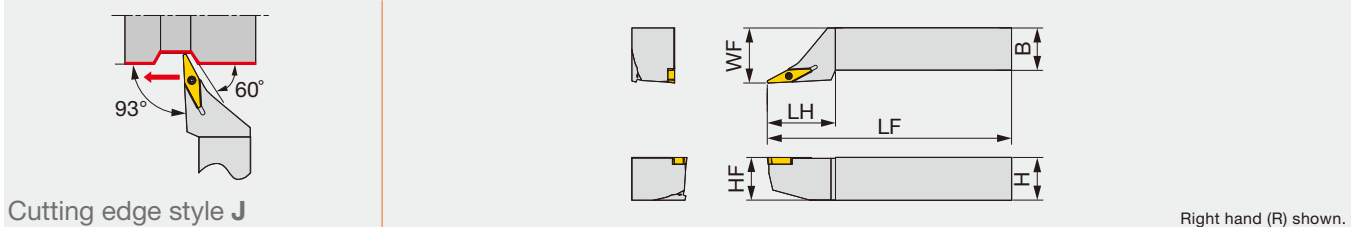


Rhombic, 25°
with hole
Positive 7°

Y-PRO SERIES

SYJBR/L

Screw-on toolholder with 93° approach angle, for positive 25° rhombic inserts



Inch	H	B	LF	LH	HF	WF	RE**	Insert
SYJBR/L123	0.750	0.750	4.500	1.350	0.750	1.000	0.031	YWMT16T3...
SYJBR/L163	1.000	1.000	6.000	1.500	1.000	1.250	0.031	YWMT16T3...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SYJBR/L2020K16	20	20	125	35	20	25	0.8	YWMT16T3...
SYJBR/L2525M16	25	25	150	40	25	32	0.8	YWMT16T3...

**RE: Standard corner radius

SPARE PARTS

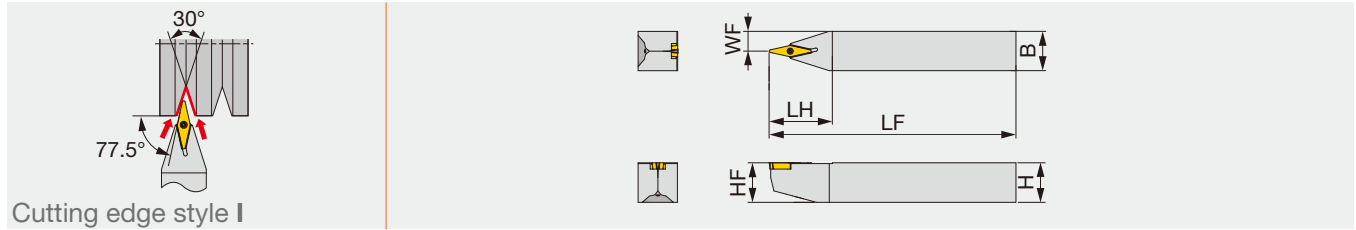
Designation	Clamping screw	Wrench
SYJBR/L...	CSTB-2.5L080	T-8F

INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting	K	Application	Finishing to medium cutting	S	Application	Finishing to medium cutting
	Grade	T9225		Grade	AH8015		Grade	GT9530		Grade	AH8015
	Breaker Shape	ZM		Breaker Shape	ZM		Breaker Shape	ZM		Breaker Shape	ZM
	Cutting conditions	B016		Cutting conditions	B018		Cutting conditions	B020		Cutting conditions	B024

Reference pages: SYJBR/L: Inserts → **B159**

Screw-on toolholder with 77.5° approach angle, for positive 25° rhombic inserts



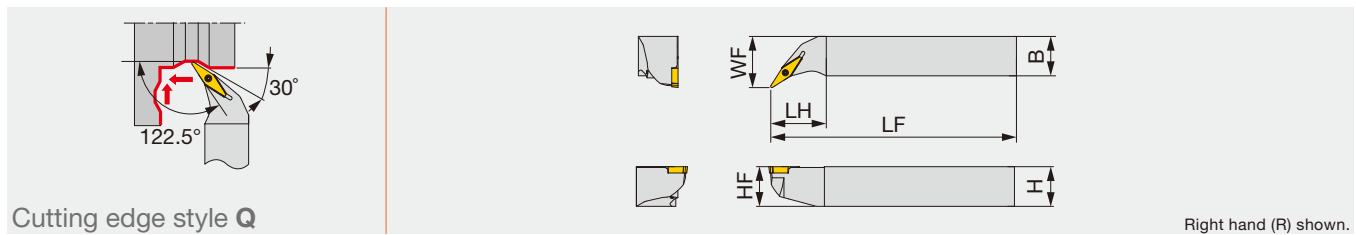
Inch	H	B	LF	LH	HF	WF	RE**	Insert
SYIBN123	0.750	0.750	4.500	1.250	0.750	0.375	0.031	YWMT16T3...
SYIBN163	1.000	1.000	6.000	1.500	1.000	0.500	0.031	YWMT16T3...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SYIBN2020K16	20	20	125	32	20	10	0.8	YWMT16T3...
SYIBN2525M16	25	25	150	40	25	12.5	0.8	YWMT16T3...

**RE : Standard corner radius

SYQBR/L

Screw-on toolholder with 122.5° approach angle, for positive 25° rhombic inserts



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
SYQBR/L123	0.750	0.750	4.500	1.350	0.750	1.000	0.031	YWMT16T3...
SYQBR/L163	1.000	1.000	6.000	1.500	1.000	1.250	0.031	YWMT16T3...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SYQBR/L2020K16	20	20	125	35	20	27	0.8	YWMT16T3...
SYQBR/L2525M16	25	25	150	35	25	32	0.8	YWMT16T3...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
SYIBN... SYQBR/L...	CSTB-2.5L080	T-8F



YW

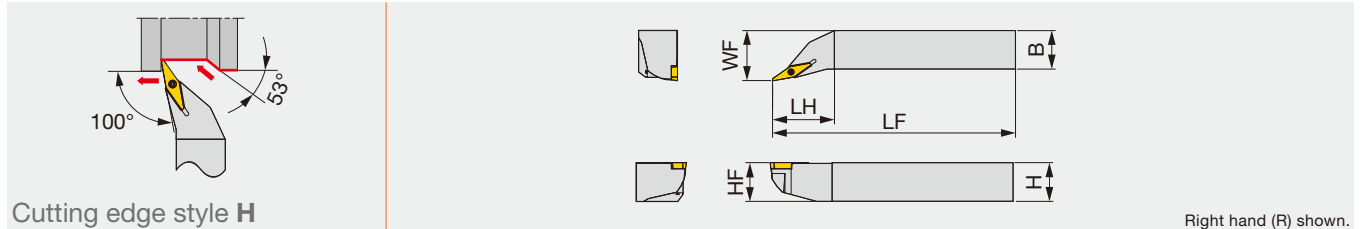


Rhombic, 25°
with hole
Positive 7°

Y-PRO SERIES

SYHBR/L

Screw-on toolholder with 100° approach angle, for positive 25° rhombic inserts



Right hand (R) shown.

Inch	H	B	LF	LH	HF	WF	RE**	Insert
SYHBR/L123	0.750	0.750	4.500	1.350	0.750	1.000	0.031	YWMT16T3...
SYHBR/L163	1.000	1.000	6.000	1.500	1.000	1.250	0.031	YWMT16T3...

Metric	H	B	LF	LH	HF	WF	RE**	Insert
SYHBR/L2020K16	20	20	125	35	20	27	0.8	YWMT16T3...
SYHBR/L2525M16	25	25	150	40	25	32	0.8	YWMT16T3...

**RE : Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench
SYHBR/L...	CSTB-2.5L080	T-8F

INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting	K	Application	Finishing to medium cutting	S	Application	Finishing to medium cutting
	Grade	T9225		Grade	AH8015		Grade	GT9530		Grade	AH8015
	Breaker Shape	ZM		Breaker Shape	ZM		Breaker Shape	ZM		Breaker Shape	ZM
	Cutting conditions	B016		Cutting conditions	B018		Cutting conditions	B020		Cutting conditions	B024

Reference pages: SYHBR/L: Inserts → **B159**



PARTS FOR COOLANT HOSE

Connecting hose

Fig. 1

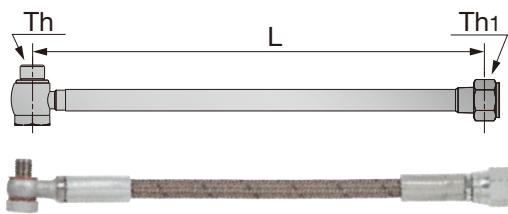
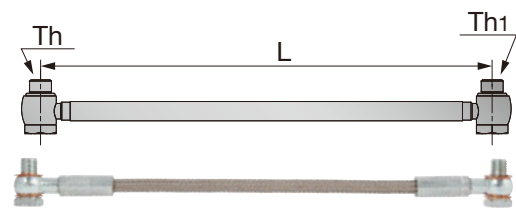
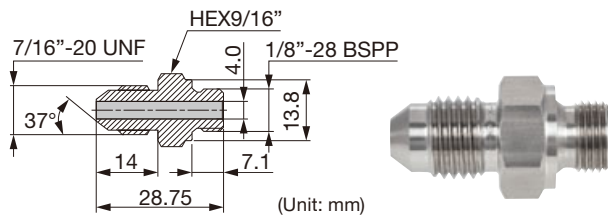


Fig. 2



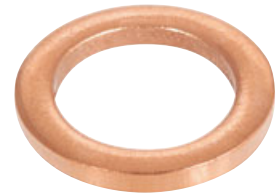
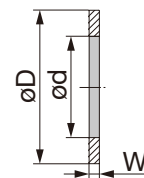
Metric	L	Th	Th1	Max. pressure Mpa (PSI)	Fig.
CHP-HOSE-G1/8-7/16-200BS	200	G1/8"-28 BSPP	7/16"-20 UNF	26 (3771)	1
CHP-HOSE-G1/8-7/16-250BS	250	G1/8"-28 BSPP	7/16"-20 UNF	26 (3771)	1
CHP-HOSE-5/16-7/16-200BS	200	5/16"-24UNF	7/16"-20 UNF	20 (2901)	1
CHP-HOSE-5/16-G1/8-200BS	200	5/16"-24UNF	G1/8"-28 BSPP	20 (2901)	1
CHP-HOSE-G1/8-G1/8-200BB	200	G1/8"-28 BSPP	G1/8"-28 BSPP	26 (3771)	2
CHP-HOSE-G1/8-G1/8-250BB	250	G1/8"-28 BSPP	G1/8"-28 BSPP	26 (3771)	2

Connector



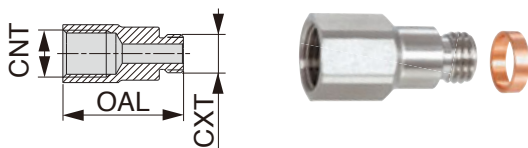
Metric
CHP-NIPPLE-G1/8-7/16UNF

Seal washer



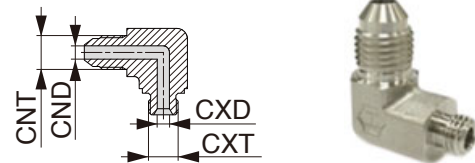
Metric	øD	ød	W
CHP-COPPER-SEAL1/8	15	10	1
CHP-COPPER-SEAL5/16	11.9	8.15	1.35
CHP-COPPER-SEAL5/16-2.5	9.4	8	2.5

Connector for small lathe with seal washer



Metric	CNT	CXT	OAL
CHP-CONNECTOR5/16-G1/8	G1/8"-28 BSPP	5/16"-24 UNF	25
CHP-CONNECTOR-G1/8-R1/8	G1/8"-28 BSPP	R1/8"-28 BSPT	25

Connector elbow



Metric	CNT	CND	CXT	CXD
CHP-ELBOW-90-G1/8-7/16UNF	7/16"-20 UNF	4.4	1/8"-28 BSPP	4
CHP-ELBOW-90-5/16-7/16UNF	7/16"-20 UNF	4.4	5/16"-24 UNF	4

Technical Guide

STANDARD CUTTING CONDITIONS

ADDM^{ULTI}TURN

Double-sided 6-corner insert

ISO	Operation	Chipbreaker	Grade	Depth of cut: a_p (in)		Feed: f (ipr)		Cutting speed
				Front turning	Back turning	Front turning	Back turning	V_c (sfm)
P	Finishing	TSF	T9215	0.008 - 0.059	0.008 - 0.059	0.003 - 0.016	0.008 - 0.047	492 - 1312
		TSF	T9225	0.008 - 0.059	0.008 - 0.059	0.003 - 0.016	0.008 - 0.047	262 - 984
	Medium to heavy cutting	TM	T9215	0.02 - 0.098	0.02 - 0.098	0.008 - 0.024	0.016 - 0.047	492 - 1312
		TM	T9225	0.02 - 0.098	0.02 - 0.098	0.008 - 0.024	0.016 - 0.047	262 - 984
M	Finishing	TSF	T9215	0.008 - 0.059	0.008 - 0.059	0.003 - 0.016	0.008 - 0.047	328 - 820
		TSF	AH8015	0.008 - 0.059	0.008 - 0.059	0.003 - 0.016	0.008 - 0.047	295 - 623
	Medium to heavy cutting	TM	T9215	0.02 - 0.098	0.02 - 0.098	0.008 - 0.024	0.016 - 0.047	328 - 820
		TM	AH8015	0.02 - 0.098	0.02 - 0.098	0.008 - 0.024	0.016 - 0.047	295 - 623
K	Finishing	TSF	T9215	0.008 - 0.059	0.008 - 0.059	0.003 - 0.016	0.008 - 0.047	459 - 1640
	Medium to heavy cutting	TM	T9215	0.02 - 0.098	0.02 - 0.098	0.008 - 0.024	0.016 - 0.047	459 - 1640
S	Finishing	TSF	AH8015	0.008 - 0.059	0.008 - 0.059	0.003 - 0.016	0.008 - 0.047	66 - 262
	Medium to heavy cutting	TM	AH8015	0.02 - 0.098	0.02 - 0.098	0.008 - 0.024	0.016 - 0.047	66 - 262

Single-sided 3-corner insert

ISO	Operation	Chipbreaker	Grade	Depth of cut: a_p (in)		Feed: f (ipr)		Cutting speed
				Front turning	Back turning	Front turning	Back turning	V_c (sfm)
P	Medium to heavy cutting	TM	T9215	0.02 - 0.157	0.02 - 0.079	0.008 - 0.024	0.016 - 0.079	492 - 1312
M	Medium to heavy cutting	TM	T9215	0.02 - 0.157	0.02 - 0.079	0.008 - 0.024	0.016 - 0.079	328 - 820
K	Medium to heavy cutting	TM	T9215	0.02 - 0.157	0.02 - 0.079	0.008 - 0.024	0.016 - 0.079	459 - 1640

ADDY^{AXIS}TURN

ISO	Operation	Chipbreaker	Grade	Cutting speed
				V_c (sfm)
P	Finishing	ZF	T9215	492 - 1312
	Medium to heavy cutting	TM	T9215	492 - 1312
M	Finishing	ZF	T9215	328 - 820
	Medium to heavy cutting	TM	T9215	328 - 820
K	Finishing	ZF	T9215	459 - 1640
	Medium to heavy cutting	TM	T9215	459 - 1640

Reference pages: C6SDNCN-Y-CHP → C056, STXCR/L-CHP-MC → C100
 C6STECN-Y-CHP → C101, ATXOR/L → C102

STANDARD CUTTING CONDITIONS

TURN^{TEN}FEED

For HD holder
(High Depth of Cut)

ISO	Insert Designation		Depth of cut ap (in)	Feed f (ipr)	Cutting speed: Vc (sfm)	
	Inch	Metric			T9215	T9225
P	POMG 543 MNW	POMG110612-MNW	0.031 - 0.217	0.016 - 0.047	492 - 1312	394 - 984
	POMG 643 MNW	POMG130612-MNW	0.039 - 0.276	0.016 - 0.051	492 - 1312	394 - 984

ISO	Insert Designation		Depth of cut ap (in)	Feed f (ipr)	Cutting speed: Vc (sfm)	
	Inch	Metric			AH8015	
M	POMG 543 MNW	POMG110612-MNW	0.031 - 0.217	0.016 - 0.047	164 - 492	
	POMG 643 MNW	POMG130612-MNW	0.039 - 0.276	0.016 - 0.051	164 - 492	
S	POMG 543 MNW	POMG110612-MNW	0.031 - 0.217	0.016 - 0.047	66 - 262	
	POMG 643 MNW	POMG130612-MNW	0.039 - 0.276	0.016 - 0.051	66 - 262	

For HF holder
(High Feed)

ISO	Insert Designation		Depth of cut ap (in)	Feed f (ipr)	Cutting speed: Vc (sfm)	
	Inch	Metric			T9215	T9225
P	POMG 543 MNW	POMG110612-MNW	0.039 - 0.098	0.020 - 0.059	492 - 1312	394 - 984
	POMG 643 MNW	POMG130612-MNW	0.039 - 0.118	0.020 - 0.079	492 - 1312	394 - 984

ISO	Insert Designation		Depth of cut ap (in)	Feed f (ipr)	Cutting speed: Vc (sfm)	
	Inch	Metric			AH8015	
M	POMG 543 MNW	POMG110612-MNW	0.039 - 0.098	0.020 - 0.059	164 - 492	
	POMG 643 MNW	POMG130612-MNW	0.039 - 0.118	0.020 - 0.079	164 - 492	
S	POMG 543 MNW	POMG110612-MNW	0.039 - 0.098	0.020 - 0.059	66 - 262	
	POMG 643 MNW	POMG130612-MNW	0.039 - 0.118	0.020 - 0.079	66 - 262	

Reference pages: PPXOR/L-HD → C063

Technical Guide

STANDARD CUTTING CONDITIONS

MINIFORCE TURN

Applications	ISO	Workpiece material	Priority	Chipbreaker	Grade	Cutting speed Vc (sfm)	Depth of cut ap (in)	Feed f (ipr)
Swiss lathes	P	Low carbon steels, Carbon steels 1045, etc. Low alloy steels, Alloy steels 4140, etc.	First choice	JS	SH725	164 - 590	0.004 - 0.118	0.001 - 0.004
			Sharpness	JSS	SH725	164 - 590	0.004 - 0.059	0.001 - 0.004
	M	Stainless steels (Austenitic) 304, etc. Stainless steels (Martensitic and ferritic) 430, etc. Stainless steels (Precipitation hardened) 174, etc.	First choice	JS	SH725	164 - 590	0.004 - 0.049	0.001 - 0.004
			Sharpness	JSS	SH725	164 - 590	0.004 - 0.059	0.001 - 0.004
Small CNC lathes	P	Low carbon steels, Carbon steels 1045, etc. Low alloy steels, Alloy steels 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
			Surface quality	SS	NS9530	164 - 656	0.006 - 0.059	0.002 - 0.008
				TS	NS9530	164 - 656	0.012 - 0.079	0.003 - 0.012
	Wear resistance	SS	GT9530	164 - 820	0.006 - 0.059	0.002 - 0.008		
		TS	GT9530	164 - 820	0.012 - 0.079	0.003 - 0.012		
M	Stainless steels (Austenitic) 304, etc. Stainless steels (Martensitic and ferritic) 430, etc. Stainless steels (Precipitation hardened) 174, etc.	First choice	SS	AH725	164 - 492	0.006 - 0.059	0.002 - 0.008	
		Fracture resistance	TS	AH725	164 - 492	0.012 - 0.079	0.003 - 0.012	

DIMPLEFX

ISO	Workpiece material	Grade	Cutting speed Vc (sfm)	Depth of cut ap (in)	Feed f (ipr)
K	Gray cast irons	FX105	2300 (1000 - 3300)	0.040 (0.002 - 0.120)	0.012 (0.002 - 0.024)
	Ductile cast irons	FX105	650 (330 - 1000)	0.040 (0.002 - 0.120)	0.008 (0.002 - 0.016)

TS200 & TS300

ISO	Workpiece materials	Grades	Cutting speed Vc (sfm)	Feed f (ipr)	Depth of cut ap (in)
S	Ni-based super alloys	TS200	656 - 1148	0.004 - 0.016	0.004 - 0.079
		TS300	492 - 820	0.004 - 0.008	0.004 - 0.079
	Co-based super alloys	TS200	656 - 1148	0.004 - 0.016	0.004 - 0.079
		TS300	492 - 820	0.004 - 0.008	0.004 - 0.079

Reference pages: CCLNR/L-RD → **C027**, TCLNR/L-F → **C028**, CDJNR/L-RD → **C042**
 CDNNN-RD → **C044**, JSVJXR/L, JSVJ2XR/L → **C047**,
 JSDJXR/L, JSDJ2XR/L → **C057**, JS-SDUXL, JS-SVUXL → **C058**
 CHSNR/L → **C059**, TRGNR/L-F → **C067**, TRDCN → **C075**,
 CSSNR/L → **C081**, TSKNR/L-F → **C084**, CVVNN-RD → **C119**
 JSWLXR/L, JSWL2XR/L → **C128**



STANDARD CUTTING CONDITIONS

TURNTEC

LNMX1204

*Values in red are for facing.

ISO	Workpiece material	Chip breaker	Grade	Cutting speed Vc (sfm)	Depth of cut: ap (in)		Feed: f (ipr)	
					RE : 0.031	RE : 0.047	RE : 0.031	RE : 0.047
P	Steels 1045, 4130, etc.	TDR	T9115	390 - 820	0.020 - 0.195 0.020 - 0.086	0.031 - 0.195 0.031 - 0.086	0.006 - 0.024	0.010 - 0.031
		TDR	T9125	260 - 590	0.020 - 0.195 0.020 - 0.086	0.031 - 0.195 0.031 - 0.086	0.006 - 0.024	0.010 - 0.031
M	Stainless steels 304, 316, etc.	TDR	T9115	330 - 590	0.020 - 0.195 0.020 - 0.086	0.031 - 0.195 0.031 - 0.086	0.006 - 0.024	0.010 - 0.031
		TDR	T9125	260 - 590	0.020 - 0.195 0.020 - 0.086	0.031 - 0.195 0.031 - 0.086	0.006 - 0.024	0.010 - 0.031

LNMX1606

ISO	Workpiece material	Chip breaker	Grade	Cutting speed Vc (sfm)	Depth of cut: ap (in)			Feed: f (ipr)		
					RE : 0.031	RE : 0.047	RE : 0.063	RE : 0.031	RE : 0.047	RE : 0.063
P	Steels 1045, 4130, etc.	TDR	T9115	390 - 820	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	0.039 - 0.315 0.039 - 0.126	0.006 - 0.024	0.010 - 0.031	0.012 - 0.039
		TDR	T9125	260 - 590	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	0.039 - 0.315 0.039 - 0.126	0.006 - 0.024	0.010 - 0.031	0.012 - 0.039
		TWR	T9115	390 - 820	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	-	0.006 - 0.024	0.010 - 0.031	-
		TWR	T9125	260 - 590	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	-	0.006 - 0.024	0.010 - 0.031	-
M	Stainless steels 304, 316, etc.	TDR	T9115	330 - 590	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	0.039 - 0.315 0.039 - 0.126	0.006 - 0.024	0.010 - 0.031	0.012 - 0.039
		TDR	T9125	260 - 590	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	0.039 - 0.315 0.039 - 0.126	0.006 - 0.024	0.010 - 0.031	0.012 - 0.039
		MDR	T9115	330 - 490	0.059 - 0.236 0.020 - 0.126	0.059 - 0.276 0.031 - 0.126	-	0.004 - 0.020	0.006 - 0.028	-
		MDR	AH725	160 - 490	0.059 - 0.236 0.020 - 0.126	0.059 - 0.276 0.031 - 0.126	-	0.004 - 0.020	0.006 - 0.028	-
		TWR	T9115	330 - 590	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	-	0.006 - 0.024	0.010 - 0.031	-
		TWR	T9125	260 - 590	0.020 - 0.197 0.020 - 0.126	0.031 - 0.236 0.031 - 0.126	-	0.006 - 0.024	0.010 - 0.031	-

LNMX2410

ISO	Workpiece material	Chip breaker	Grade	Cutting speed Vc (sfm)	Depth of cut: ap (in)		Feed: f (ipr)	
					RE : 0.063	RE : 0.094	RE : 0.063	RE : 0.094
P	Steels 1045, 4130, etc.	TDR	T9115	390 - 820	0.156 - 0.585 0.039 - 0.176	0.195 - 0.585 0.039 - 0.176	0.012 - 0.039	0.012 - 0.043
		TDR	T9125	260 - 490	0.156 - 0.585 0.039 - 0.176	0.195 - 0.585 0.039 - 0.176	0.012 - 0.039	0.012 - 0.043
M	Stainless steels 304, 316, etc.	TDR	T9115	330 - 590	0.156 - 0.585 0.039 - 0.176	0.195 - 0.585 0.039 - 0.176	0.012 - 0.039	0.012 - 0.043
		TDR	T9125	260 - 490	0.156 - 0.585 0.039 - 0.176	0.195 - 0.585 0.039 - 0.176	0.012 - 0.039	0.012 - 0.043

TURNFEED

ISO	Workpiece material	Grade	Chipbreaker	Cutting speed Vc (sfm)	Depth of cut ap (in)	Feed f (ipr)
P	Mild and low carbon steels 400SS, 1025, etc. < 180 HB	T9225	ML	330 - 990	0.025 - 0.100	0.025 - 0.100
	Carbon and alloy steels 1049, 4142, etc. < 300HB	T9215	ML	390 - 1150	0.025 - 0.100	0.025 - 0.100
M	Stainless steels 304, 316, etc. < 250 HB	T9225	ML	330 - 990	0.025 - 0.100	0.025 - 0.100
K	Gray and ductile cast irons No35B, 60-40-18, etc.	AH120	ML	330 - 820	0.025 - 0.100	0.025 - 0.100

When the side cutting edge is used for facing, the maximum feed is limited to within 0.040 ipr.

Reference pages: TLANR/L → **C060**, TLFNR/L, TLBNR/L → **C061**
XWXPR/L → **C127**

Technical Guide

STANDARD CUTTING CONDITIONS

Y-PRO SERIES

For negative insert

ISO	Operation	Chipbreaker	Grades	Depth of cut ap (in)	Feed f (ipr)	Cutting speed: Vc (sfm)		
						Low carbon steels, alloy steels	Medium carbon steels, alloy steels	High carbon steels, alloy steels
P	Finishing	ZF	GT9530	0.008 - 0.059	0.001 - 0.008	490 - 980	490 - 980	490 - 980
			NS9530	0.008 - 0.059	0.001 - 0.008	490 - 980	490 - 980	490 - 984
			T9225	0.008 - 0.059	0.001 - 0.008	390 - 980	390 - 980	330 - 820
	Finishing to medium	ZM	GT9530	0.028 - 0.079	0.006 - 0.016	164 - 660	164 - 660	164 - 490
			NS9530	0.028 - 0.079	0.006 - 0.016	490 - 980	490 - 980	490 - 980
			T9225	0.028 - 0.079	0.006 - 0.016	490 - 980	490 - 980	330 - 820
			T9235	0.028 - 0.079	0.006 - 0.016	164 - 660	164 - 660	164 - 490
Stainless steels								
M	Finishing	ZF	AH8015	0.008 - 0.059	0.001 - 0.008	164 - 490	164 - 490	164 - 490
	Finishing to medium	ZM	AH8015	0.028 - 0.079	0.006 - 0.016	164 - 490	164 - 490	164 - 490
Cast iron								
K	Finishing	ZF	T9225	0.008 - 0.059	0.001 - 0.008	460 - 1640	460 - 1640	460 - 1640
	Finishing to medium	ZM	T9225	0.028 - 0.079	0.006 - 0.016	460 - 1640	460 - 1640	460 - 1640
Heat-resistant alloys								
S	Finishing	ZF	AH8015	0.008 - 0.059	0.001 - 0.008	66 - 260	66 - 260	66 - 260
	Finishing to medium	ZM	AH8015	0.028 - 0.079	0.006 - 0.016	66 - 260	66 - 260	66 - 260

For positive insert

ISO	Operation	Chipbreaker	Grades	Depth of cut ap (in)	Feed f (ipr)	Cutting speed: Vc (sfm)		
						Low carbon steels, alloy steels	Medium carbon steels, alloy steels	High carbon steels, alloy steels
P	Finishing to medium	ZF	GT9530	0.008 - 0.059	0.002 - 0.010	490 - 980	490 - 980	490 - 980
			T9225	0.008 - 0.059	0.002 - 0.010	330 - 980	260 - 980	260 - 820
		ZM	GT9530	0.020 - 0.079	0.002 - 0.012	490 - 980	490 - 980	490 - 980
			T9225	0.020 - 0.079	0.002 - 0.012	330 - 980	260 - 980	260 - 820
Stainless steels								
M	Finishing to medium	ZF	AH8015	0.008 - 0.059	0.002 - 0.010	164 - 490	164 - 490	164 - 490
		ZM	AH8015	0.020 - 0.079	0.002 - 0.012	164 - 490	164 - 490	164 - 490
Cast iron								
K	Finishing to medium	ZF	T9225	0.008 - 0.059	0.002 - 0.010	460 - 1640	460 - 1640	460 - 1640
		ZM	T9225	0.020 - 0.079	0.002 - 0.012	460 - 1640	460 - 1640	460 - 1640
Heat-resistant alloys								
S	Finishing to medium	ZF	AH8015	0.008 - 0.059	0.002 - 0.010	66 - 260	66 - 260	66 - 260
		ZM	AH8015	0.020 - 0.079	0.002 - 0.012	66 - 260	66 - 260	66 - 260

FIXTURN

ISO	Workpiece material	Chipbreaker	Grade	Cutting Speed Vc (sfm)	Depth of cut ap (in)	Feed f (ipr)
P	Steels 1045, etc.	6RS	T9215	394 - 1148	0.020 - 0.079	0.020 - 0.039
		6RS	T9225	328 - 984	0.020 - 0.079	0.020 - 0.039
		6RS	NS9530	492 - 820	0.020 - 0.079	0.020 - 0.039
		6RM	T9215	394 - 1148	0.039 - 0.118	0.020 - 0.039
		6RM	T9225	328 - 984	0.039 - 0.118	0.020 - 0.039
		6RM	NS9530	492 - 820	0.039 - 0.118	0.020 - 0.039

Reference pages: SRGCR/L-6F → **C070**, SRDCN-6F → **C074**, SVHCR/L → **C117**
 SYJBR/L → **C130**, SYIB, SYQBR/L → **C131**