

Internal Toolholder



Internal Toolholder - Content structure

- Indexable toolholders are listed by cutting edge shape.
- In the same cutting edge shape, the inserts are sorted alphabetically.
 - The order of the list: CN□□ insert → DN□□ insert → RN□□ insert → SN□□ insert → TN□□ insert → VN□□ insert → WN□□ insert
- Toolholders in the catalog are our standard stock items.

How to use the page

- Method ①** Select the cutting edge shape described at the left end of each page, jump to the page on the left index, and choose a designation you need ④ in the dimension table ③. Applicable inserts are shown in ⑥ and ⑧.
- Method ②** Select the cutting edge on **D003** and check the details on the product page.
- Method ③** Select the series name of a toolholder on **D003** and check the details on each page.
- Method ④** Select an item from Quick Guide on **D006-D011**.

2 **ISO TURN**
A-ACLNR/L-Eco
Lever-clamp boring bar, for negative 80° rhombic inserts

Cutting edge style L

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

Designation	Material	DMIN	DCONIS	WF	LF	LH	H	I2	GAMP	GAMP RE	Insert	Torque*
A25R-ACLNR/L0904-D320	Steel	32	25	17	200	45	23	4.5	4°	-13°	CN*0904..	3
A25R-ACLNR/L0904-D400	Steel	40	32	23	250	50	29	6	4°	-13°	CN*0904..	3

SPARE PARTS

Clamp	Clamp screw	Spring	Sanding pin	Shim	Slit screw	Wrench	
A**ACLNR/L0904..	ACP38-E	ACS-SW	BR-7	SP-2.5	SD32	CSTR-3.5	T-15F

INSERT SELECTION

Application	Grade	Breaker Shape	Finishing	Medium cutting	Medium to heavy cutting
P	T9110, T9115	SD	T9120, T9125	SM, SH	SM, SH
K	T915	SD	T915	SM, SH	SM, SH

Reference pages: A-ACLNR/L-Eco: Insert → B054

D020 www.tungaloy.com

5 **STREAMJET BAR**
A-PCLNR/L
Lever-lock boring bar, for negative 80° rhombic inserts

Cutting edge style L

7 **SPARE PARTS**

Designation	Shim	Clamping pin	Wrench 1	Wrench 2	Spring	Lever	Oil supply adjustment	Screw for oil hole
A**PCLNR/L09-D110	-	LCS2A	-	P-2F	-	LCL3N	EA-25	SSHMS-6
A25R-PCLNR/L09-D320	-	LCS4	-	P-2.5	-	LCL4N	EA-32	SSHMS-6
A25R-PCLNR/L09-D400	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	SSHMS-6
A25R-PCLNR/L12-D400	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	SSHMS-6
A25R-PCLNR/L12-D500	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	SSHMS-6
A25R-PCLNR/L12-D630	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	SSHMS-6
A50U-PCLNR/L12-D630	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	SSHMS-6

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

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

8 **INSERT SELECTION**

Application	Grade	Breaker Shape	Finishing	Medium cutting	Medium to heavy cutting
P	T9110, T9115	SD	T9120, T9125	SM, SH	SM, SH
K	T915	SD	T915	SM, SH	SM, SH
S	BX350, AH805	SD	AH805	SM, SH	SM, SH

Reference pages: A-PCLNR/L: Insert → B054, CBN → B170, PCD → B188

Tungaloy D021









- 1** : Cutting edge shape
- 2** : Series name of indexable boring bars
- 3** : Dimension table
- 4** : Toolholder designation
e.g. To select right-handed steel shank for minimum machining diameter ø13
→ **A10K-SDXXR07-D130**
- 5** : Dimension drawing (conforming to ISO13399)
- 6** : Applicable insert
- 7** : Spare parts
- 8** : Insert selection
- 9** : Reference pages

When ordering

- Please specify the designation and quantity.
e.g. **A12M-SDZXR/L07-D140 ... 1** (one boring bar per package)
- * Inserts are not included. Please order those separately.

D002 www.tungaloy.com

Main products

L		D014
X		D033
J		D036
K		D038
F		D042
U		D048
Q		D077
Z		D085
OTHERS		D091



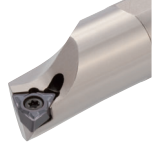
BOREMEISTER

Boring head suitable for L/D=10



Shank \varnothing 16 - 60 mm

D012



MINIFORCE

Economical double-sided inserts with excellent sharpness



Shank \varnothing 10 - 20 mm

D028, D035, D085



ISOETURN

Small-sized "Eco" insert series for maximized profits



Shank \varnothing 16 - 32 mm

D021 - D022
D029 - D030, D045
D054, D061, D072



STREAMJETBAR

Highly rigid toolholders providing good chip evacuation



Shank \varnothing 4 - 50 mm

D013



Y-PRO SERIES

Inserts with 25° corner angle for profiling



Shank \varnothing 12 - 16 mm

D076, D084



TURNINGA

Highly rigid clamping system with excellent repeatability



Shank \varnothing 25 - 50 mm

D025, D032, D041
D047, D057, D074



TUNG T^{URN}JET

Toolholders for high pressure coolant supply

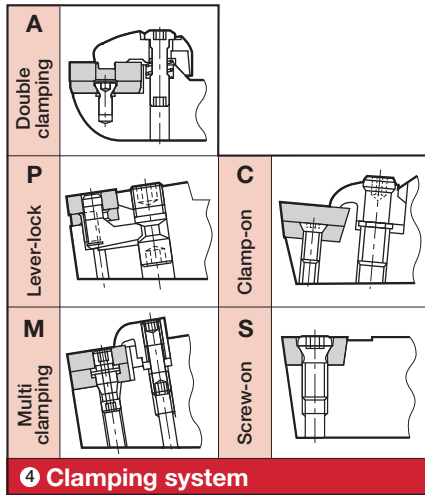


D025, D057

Sleeve

D092 - D094

Designation system for Toolholders



C		80° Rhombic
D		55° Rhombic
K		55° Parallelogram
R		Round
S		Square
T		Triangular
V		35° Rhombic
Y		25° Rhombic (Non ISO)
W		Trigon

5 Insert shape



1 Bar composition	
A	Steel shank with oil hole
E	Carbide shank with steel head & oil hole
C	Carbide shank with steel head
S	Steel shank
T	Steel shank reinforced with carbide plates ("Tsuppari-Ichiban")
JS	J series Steel shank

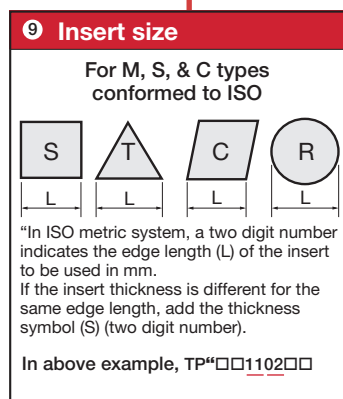
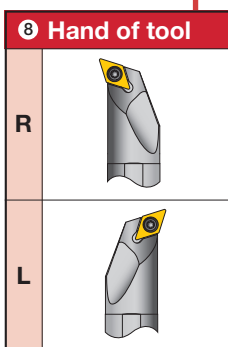
2 Bar diameter
Bar diameter is shown in mm.

3 Toolholder length (mm)	
F	80
G	90
H	100
J	110
K	125
L	130
M	150
P	170
Q	180
R	200
S	250
T	300
U	350

Symbol	Style	Offset						
A		Without	G		With	S		With
			J			V		Without
B		Without	K		With	X*		With
C		Without	L		With	Y		With
D		Without	N		Without	Z		Without
E		Without	P*		Without	Note *mark: Tungaloy standard No mark: ISO standard		
F		With	Q*		With			

C	
B	
N	
P	
X	Special

6 **U**
7 **P**
8 **R**
9 **1102**
10 **C** - **D140**
11



10 Oil hole

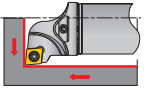
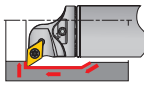
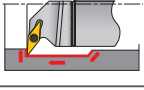
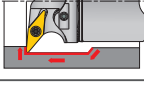
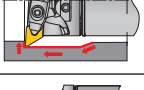

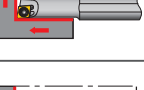
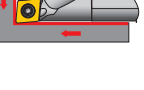
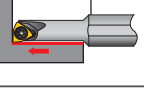
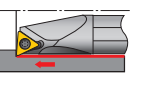
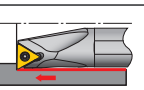
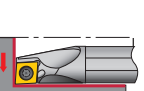
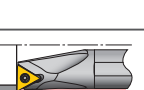
Only "Tsuppari-Ichiban" holder

11 Min. bore diameter (mm)


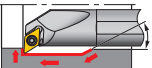
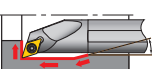



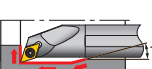


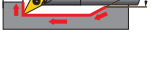
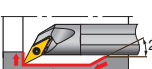
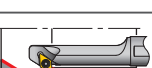
	Stream Jet Bar	Tsuppari-Ichiban
D140	ø14.0	D14 ø14.0

Internal Toolholder - Quick Guide

Positive type

Style	Designation & Application	ISO Insert	Y-PRO SERIES	Material	BOREMEISTER	STREAMJETBAR	MINIFÜRN	Min. bore diameter DMIN (mm)						Page
								0	10	20	30	40	50	
	S-SCLCR/L-H Boring & internal facing Insert : CC□□	✓		Steel	✓			0	10	20	30	40	50	D014
	S-SDUCR/L-H Boring & internal profiling Insert : DC□□	✓		Steel	✓			0	10	20	30	40	50	D048
	S-SVUCR/L-H Boring & internal profiling Insert : VC□□	✓		Steel	✓			0	10	20	30	40	50	D066
	S-SVLCR/L-H Boring & internal profiling Insert : VC□□	✓		Steel	✓			0	10	20	30	40	50	D026
	S-DDUNR/L-H Boring & internal profiling Insert : DN□□	✓		Steel	✓			0	10	20	30	40	50	D052
	S-DVUNR/L-H Boring & internal profiling Insert : VN□□	✓		Steel	✓			0	10	20	30	40	50	D070
	SEXPR/L Boring & internal facing Insert : EP□□	✓		Steel Carbide	✓			0	10	20	30	40	50	D033 D034
	SCLCR/L Boring & internal facing Insert : Cc□□	✓		Steel Carbide Reinforced	✓			0	10	20	30	40	50	D016 - D018
	SWUBR/L Boring Insert : WB□□	✓		Steel Carbide	✓			0	10	20	30	40	50	D075
	STUPR/L Boring Insert : TP□□	✓		Steel Carbide Reinforced	✓			0	10	20	30	40	50	D058 - D060
	STFPR/L Blind hole boring Insert : TP□□	✓		Steel Carbide	✓			0	10	20	30	40	50	D043
	SCLPR/L Boring & internal facing Insert : CP□□	✓		Steel Carbide Reinforced	✓			0	10	20	30	40	50	D019 D020
	STFCR/L Blind hole boring Insert : TC□□	✓		Steel Carbide	✓			0	10	20	30	40	50	D042

Positive type

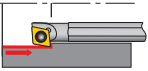
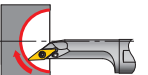
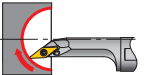
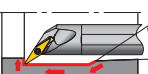
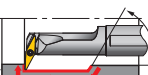
Style	Designation & Application	ISO Insert	Material	Y-PRO SERIES	BOREMEISTER STREAMJETBAR MINIFÜRN	Min. bore diameter DMIN (mm)					Page	
						0	10	20	30	40		50
	SSKPR Through boring Insert : SP□□	✓	Steel	✓	✓	0	10	20	30	40	50	D038
	SDUCR/L Boring & internal profiling Insert : DC□□	✓	Steel Carbide	✓	✓	0	10	20	30	40	50	D050
	SDUPR/L Boring & internal profiling Insert : DPMT□□	✓	Steel Carbide	✓	✓	0	10	20	30	40	50	D051
	SVUCR/L Boring & internal profiling Insert : VC□□	✓	Steel Carbide Reinforced	✓	✓	0	10	20	30	40	50	D068 D069
	SVUBR/L Boring & internal profiling Insert : VB□□	✓	Steel Carbide Reinforced	✓	✓	0	10	20	30	40	50	D064 D065
	SDQCR/L Boring & internal profiling Insert : DC□□	✓	Steel Carbide Reinforced	✓	✓	0	10	20	30	40	50	D077 D078
	SDQPR/L Boring & internal profiling Insert : DPMT□□	✓	Steel Carbide	✓	✓	0	10	20	30	40	50	D079
	SVQCR/L Boring & internal profiling Insert : VC□□	✓	Steel Carbide Reinforced	✓	✓	0	10	20	30	40	50	D082 D083
	SVQBR/L Boring & internal profiling Insert : VB□□	✓	Steel Carbide Reinforced	✓	✓	0	10	20	30	40	50	D080 D081
	SDZCR/L Back boring Insert : DC□□	✓	Steel Carbide	✓	✓	0	10	20	30	40	50	D086
	SVZCR/L Back boring Insert : VC□□	✓	Steel	✓	✓	0	10	20	30	40	50	D090
	SVZBR/L Back boring Insert : VB□□	✓	Steel	✓	✓	0	10	20	30	40	50	D089

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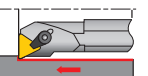
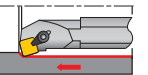


Internal Toolholder - Quick Guide

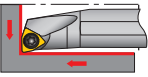
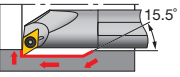
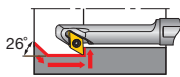
Positive type

Style	Designation & Application	ISO Insert	Material	Y-PRO SERIES	BOREMEISTER	STREAMJETBAR	MINIFÜRN	Min. bore diameter DMIN (mm)						Page
								0	10	20	30	40	50	
	SEZPR/L Back boring Insert : EP□□	✓	Steel Carbide		✓			0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D088
	SVJCR/L Internal sphere cutting Insert : VC□□	✓	Steel		✓			0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D037
	SVJBR/L Internal sphere cutting Insert : VB□□	✓	Steel		✓			0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D036
	SYQBR/L Boring, undercutting & profiling Insert : YW□□	✓	Steel Carbide		✓			0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D084
	SYUBR/L Boring & internal profiling Insert : YW□□	✓	Steel Carbide		✓			0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D076

Clamp on

Style	Designation & Application	ISO Insert	Material	BOREMEISTER	STREAMJETBAR	MINIFÜRN	Min. bore diameter DMIN (mm)						Page	
							0	10	20	30	40	50		
	CTFPR/L Blind hole boring Insert : TP□□ (without hole)	✓	Steel Carbide					0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D044
	CSKPR/L Through boring Insert : SP□□ (without hole)	✓	Steel					0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	0 10 20 30 40 50	D039

Positive double side

Style	Designation & Application	ISO Insert	MINIFURN	Material	MINIFURN	Min. bore diameter DMIN (mm)						Page
						0	10	20	30	40	50	
	SWLXR/L Boring & internal facing Insert : WXGU		✓	Steel Carbide	✓	ø12	ø22					D028
	SDXXR/L Boring & internal profiling Insert : DXGU		✓	Steel Carbide	✓	ø13	ø24					D035
	SDZXR/L Back boring Insert : DXGU		✓	Steel Carbide	✓	ø14	ø20	ø18	ø22			D085

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

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Internal Toolholder - Quick Guide

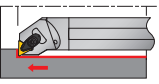
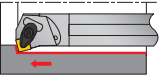

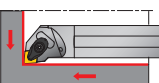
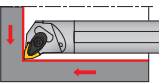
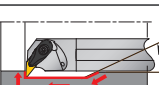
Negative type

Lever lock

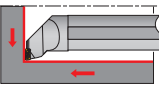
Style	Designation & Application	ISO Insert	ISO TURN	Material	STREAMJET BAR	TUNGJET	Min. bore diameter DMIN (mm)						Page
							20	30	40	50	60	70	
	PTUNR/L Boring Insert : TN□□	✓	✓	Steel Reinforced	✓		✓	✓	✓	✓	✓	✓	D061 - D063
	PTFNR/L Boring Insert : TN□□	✓	✓	Steel	✓			✓	✓	✓	✓		D045 D046
	PSKNR/L Through boring Insert : SN□□	✓		Steel	✓			✓	✓	✓	✓		D040
	PDUNR/L Boring & internal profiling Insert : DN□□	✓	✓	Steel Reinforced	✓	✓		✓	✓	✓	✓		D054 - D057
	PCLNR/L Boring & internal facing Insert : CN□□	✓	✓	Steel Reinforced	✓	✓		✓	✓	✓	✓		D021 D023- D025
	PWLNR/L Boring & internal facing Insert : WN□□	✓	✓	Steel	✓			✓	✓	✓	✓		D029 D031 D032
	PVUNR/L Boring & internal profiling Insert : V/YN□□	✓	✓	Steel	✓			✓	✓	✓	✓		D072 D073
	PDZNR/L Back boring Insert : DN□□	✓		Steel	✓			✓	✓	✓	✓		D087

Negative type

Double clamp

Style	Designation & Application	ISO Insert	ISO TURN	Material	STREAMJETBAR TURNING A	Min. bore diameter DMIN (mm)						Page
						20	30	40	50	60	70	
	ATFNR/L Boring Insert : TN□□	✓		Steel	✓	ø32	ø40					D047
	ASKNR/L Boring Insert : SN□□	✓		Steel	✓	ø32	ø40					D041
	ADUNR/L Boring & internal profiling Insert : DN□□	✓	✓	Steel	✓	ø32	ø63					D054 D057
	ACLNR/L Boring & internal facing Insert : CN□□, GN□□	✓	✓	Steel	✓	ø32	ø63					D022 D025
	AWLNR/L Boring & internal facing Insert : WN□□	✓	✓	Steel	✓	ø32	ø63					D030 D032
	AVUNR/L Boring & internal profiling Insert : VN□□	✓		Steel	✓	ø40	ø50					D074

Screw-on

Style	Designation & Application	ISO Insert	TURNTEC	Material	TURNTEC	Min. bore diameter DMIN (mm)						Page
						40	50	60	70	80	90	
	S-TLANR/L Boring & internal facing Insert : LNMX□□		✓	Steel	✓	ø53	ø85					D091

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

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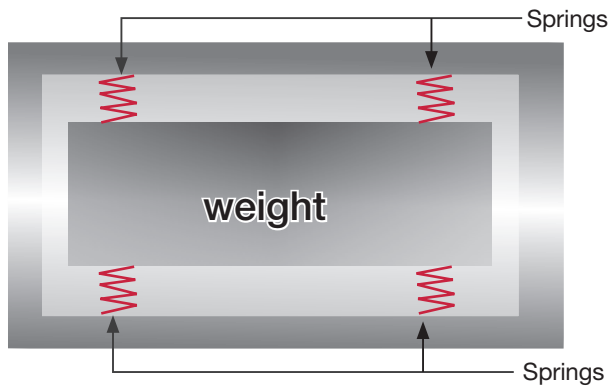


Unique anti-vibration mechanism in the tool body reduces vibration during deep hole boring with long overhangs of up to **L/D = 10**

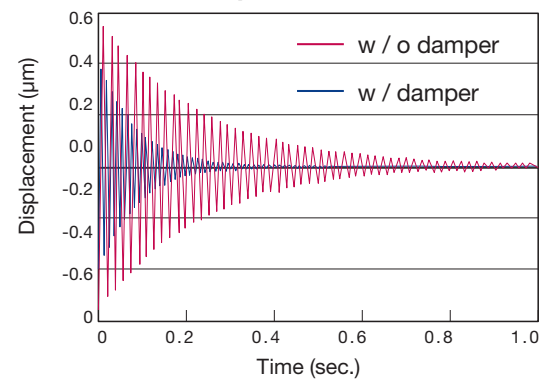
Vibration Dampening Mechanism

When cutting forces create vibration on boring bar set up with long overhangs, the bar's dampening mechanism counters the tool's motion and cancels the vibration. The dampening mechanism consists of a weight supported by spring elements. The vibrations die out quickly eliminating noise and chatter marks.

- Concept image of dampening



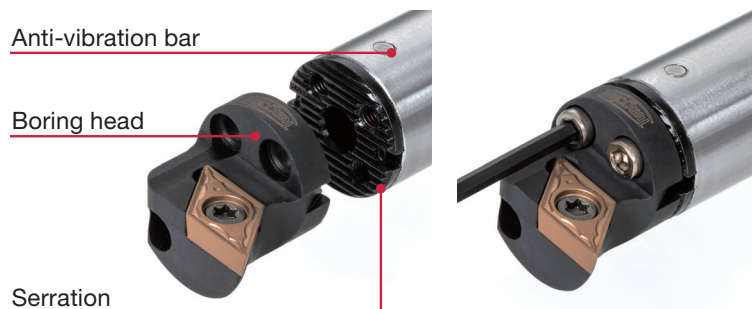
- Tool vibrations with and without vibration damper



Standard Lineup

BoreMeister is comprised of the anti-vibration bar and interchangeable boring head, featuring serrated interfaces for high precision indexing. They are connected by screws, allowing the fitting of a wide range of cutting heads for great flexibility.

- Minimum bore diameter : ø20 mm

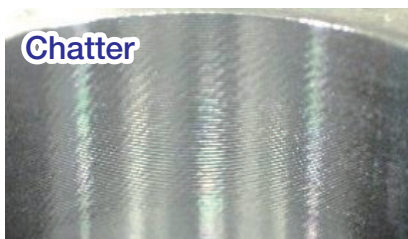


STREAMJETBAR



Engineered for tool strength and optimal chip evacuation

■ Tool body of special alloy steel, designed to reduce chatter !



Competitor

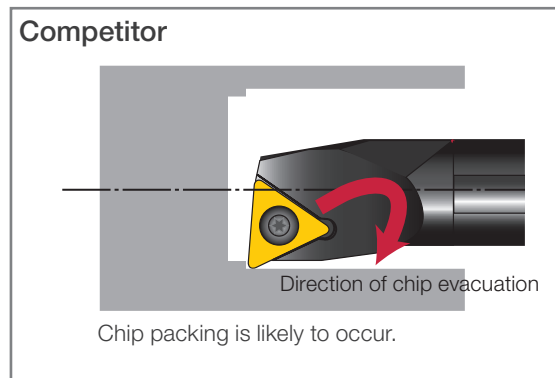
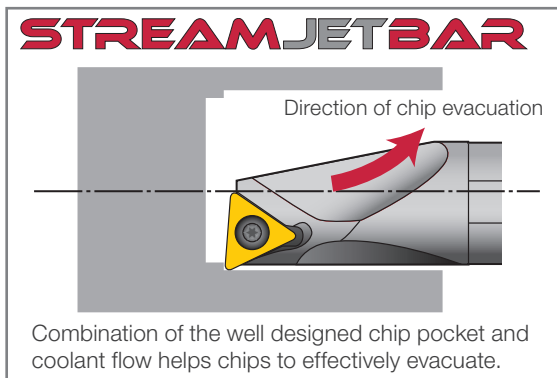


STREAMJETBAR

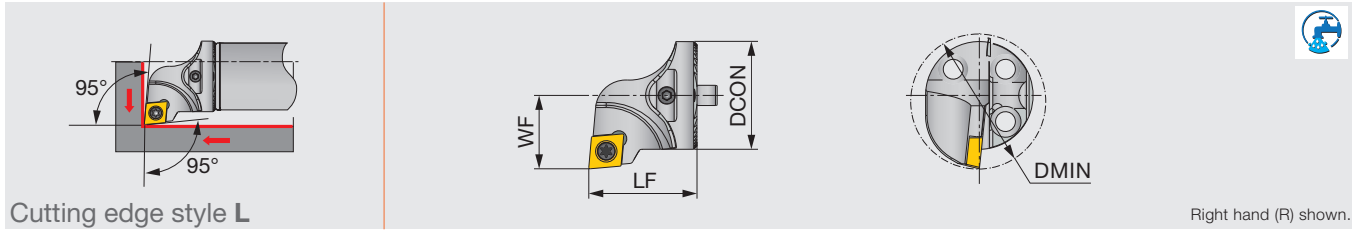
- Minimum bore diameter from $\varnothing 4.5$ mm
- Steel and carbide shank available
- New pocket design for excellent chip evacuation

Cutting performance

The excellent chip evacuation minimizes tool failure caused by recutting chips and poor chip control. Damage to the work surface from chips is also eliminated.



Reference pages: **D016 - D020, D023 - D024, D031 - D034, D036 - D040, D042 - D044, D046, D050 - D051, D055 - D056, D058 - D060, D062 - D065, D068 - D069, D073, D075, D077 - D083, D086 - D090**



Designation	DMIN	DCON	WF	LF	Shank	Insert
S16-SCLCR/L06-H	20	16	11	20	D/G16	CC**0602...
S20-SCLCR/L09-H	25	20	13	20	D/G20	CC**09T3...
S25-SCLCR/L09-H	32	25	17	22	D25	CC**09T3...
S32-SCLCR/L09-H	40	32	22	32	D32	CC**09T3...
S40-SCLCR/L12T-H	50	40	27	38	D40, D50, D60	CC**1204...

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

Designation	Clamping screw	Wrench	Shim	Shim screw
S16-SCLCR/L06-H	SR14-548	T-7/5	-	-
S20-SCLCR/L09-H	SR16-236	T-15/5	-	-
S25-SCLCR/L09-H	SR16-236	T-15/5	-	-
S32-SCLCR/L09-H	SR16-236	T-15/5	-	-
S40-SCLCR/L12T-H	SR16-212	T-20/5	TCC4-2	SRTC-4

INSERT SELECTION

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	NS9530	T9215	T9215
Breaker Shape	01	PSS	PS	PM
Cutting conditions	B018			

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH725	AH630	T6130
Breaker Shape	W**	PSF	PSS	PM
Cutting conditions	B020			

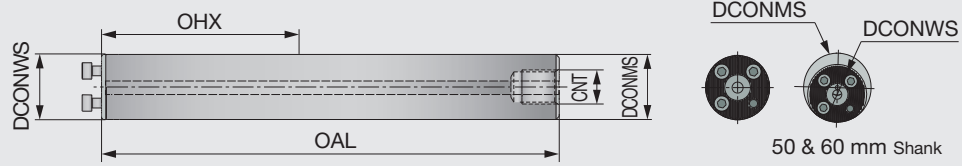
Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	B022

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

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: S-SCLCR/L-H: Insert → **B109 -**, CBN → **B180**, PCD → **B194 -**



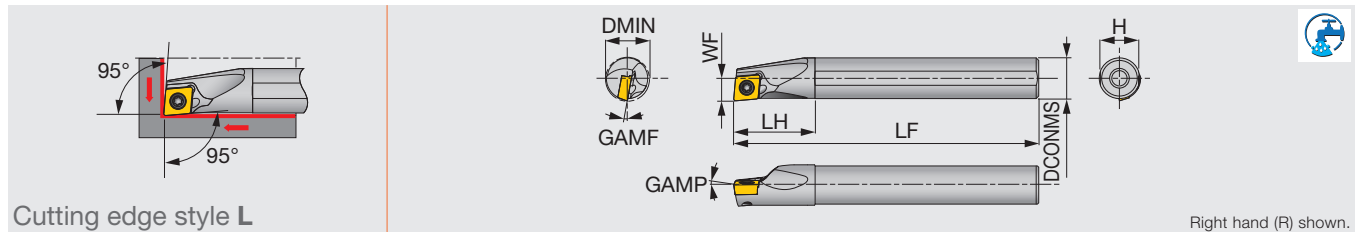
Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS



Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SRM3.5X10DIN912	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L...	SRM6X16DIN912-12.9	HW5.0





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A04F-SCLCR/L03-D050	Steel	5	4	2.5	80	8	3.8	0°	-15°	0.2	CC**03X1...	0.6
A05F-SCLCR/L03-D060	Steel	6	5	3	80	9	4.8	0°	-13°	0.2	CC**03X1...	0.6
A06G-SCLCR/L04-D070	Steel	7	6	3.5	90	11	5.75	0°	-13°	0.2	CC**04T1...	0.6
A07G-SCLCR/L04-D080	Steel	8	7	4	90	12	6.75	0°	-11°	0.2	CC**04T1...	0.6
A08H-SCLCR/L06-D100	Steel	10	8	5.5	100	16	7.5	0°	-13°	0.4	CC**0602...	1.2
A10F-SCLCR06-D120	Steel	12	10	6	80	20	9	0°	-10°	0.4	CC**0602...	1.2
A10K-SCLCR/L06-D120	Steel	12	10	6	125	20	9	0°	-10°	0.4	CC**0602...	1.2
A12H-SCLCR06-D140	Steel	14	12	7	100	24	11	0°	-8°	0.4	CC**0602...	1.2
A12M-SCLCR/L06-D140	Steel	14	12	7	150	24	11	0°	-8°	0.4	CC**0602...	1.2
A12H-SCLCR06-D160	Steel	16	12	9	100	24	11	0°	-7°	0.4	CC**0602...	1.2
A12M-SCLCR/L06-D160	Steel	16	12	9	150	24	11	0°	-7°	0.4	CC**0602...	1.2
A16K-SCLCR09-D180	Steel	18	16	9	125	32	15	0°	-9°	0.8	CC**09T3...	3
A16Q-SCLCR/L09-D180	Steel	18	16	9	180	32	15	0°	-10°	0.8	CC**09T3...	3
A16K-SCLCR09-D200	Steel	20	16	11	125	32	15	0°	-9°	0.8	CC**09T3...	3
A16Q-SCLCR/L09-D200	Steel	20	16	11	180	32	15	0°	-9°	0.8	CC**09T3...	3
A20R-SCLCR/L09-D220	Steel	22	20	11	200	32	18	0°	-8°	0.8	CC**09T3...	3
A25S-SCLCR/L09-D270	Steel	27	25	13.5	250	45	23	0°	-6°	0.8	CC**09T3...	3
E04G-SCLCR/L03-D050	Carbide	5	4	2.5	90	9	3.8	0°	-15°	0.2	CC**03X1...	0.6
E05G-SCLCR/L03-D060	Carbide	6	5	3	90	10	4.8	0°	-13°	0.2	CC**03X1...	0.6
E06H-SCLCR/L04-D070	Carbide	7	6	3.5	100	12	5.75	0°	-13°	0.2	CC**04T1...	0.6
E07H-SCLCR/L04-D080	Carbide	8	7	4	100	14	6.75	0°	-11°	0.2	CC**04T1...	0.6
E08G-SCLCR06-D100	Carbide	10	8	5.5	90	22	7.5	0°	-13°	0.4	CC**0602...	1.2
E08K-SCLCR/L06-D100	Carbide	10	8	5.5	125	22	7.5	0°	-13°	0.4	CC**0602...	1.2
E10F-SCLCR06-D120	Carbide	12	10	6	80	25	9	0°	-10°	0.4	CC**0602...	1.2
E10H-SCLCR06-D120	Carbide	12	10	6	100	25	9	0°	-10°	0.4	CC**0602...	1.2
E10M-SCLCR/L06-D120	Carbide	12	10	6	150	25	9	0°	-10°	0.4	CC**0602...	1.2
E12G-SCLCR06-D140	Carbide	14	12	7	90	27	11	0°	-8°	0.4	CC**0602...	1.2
E12J-SCLCR06-D140	Carbide	14	12	7	110	27	11	0°	-8°	0.4	CC**0602...	1.2
E12Q-SCLCR/L06-D140	Carbide	14	12	7	180	27	11	0°	-8°	0.4	CC**0602...	1.2
E12G-SCLCR06-D160	Carbide	16	12	9	90	27	11	0°	-7°	0.4	CC**0602...	1.2
E12J-SCLCR06-D160	Carbide	16	12	9	110	27	11	0°	-7°	0.4	CC**0602...	1.2
E12Q-SCLCR/L06-D160	Carbide	16	12	9	180	27	11	0°	-7°	0.4	CC**0602...	1.2
E16H-SCLCR09-D180	Carbide	18	16	9	100	32	15	0°	-10°	0.8	CC**09T3...	3
E16L-SCLCR09-D180	Carbide	18	16	9	130	32	15	0°	-10°	0.8	CC**09T3...	3
E16R-SCLCR/L09-D180	Carbide	18	16	9	200	32	15	0°	-10°	0.8	CC**09T3...	3
E16H-SCLCR09-D200	Carbide	20	16	11	100	32	15	0°	-9°	0.8	CC**09T3...	3
E16L-SCLCR09-D200	Carbide	20	16	11	130	32	15	0°	-9°	0.8	CC**09T3...	3
E16R-SCLCR/L09-D200	Carbide	20	16	11	200	32	15	0°	-9°	0.8	CC**09T3...	3
E20S-SCLCR09-D220	Carbide	22	20	11	250	36	18	0°	-8°	0.8	CC**09T3...	3
E25T-SCLCR09-D270	Carbide	27	25	13.5	300	45	23	0°	-6°	0.8	CC**09T3...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

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

SPARE PARTS



Designation	Clamping screw	Wrench
A**-SCLCR/L03-D...	CSTA-1.6	T-6F
A**-SCLCR/L04-D...	CSTB-2	T-6F
A**-SCLCR/L06-D...	CSTB-2.5S	T-8F
A**-SCLCR/L09-D...	CSTB-4S	T-15F
E**-SCLCR/L03-D...	CSTA-1.6	T-6F
E**-SCLCR/L04-D...	CSTB-2	T-6F
E**-SCLCR/L06-D...	CSTB-2.5S	T-8F
E16*-SCLCR/L09-D...	CSTB-4L060	T-15F
E2*-SCLCR/L09-D...	CSTB-4S	T-15F

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

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INSERT SELECTION

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	NS9530	T9215
Breaker Shape	01	PSS	PS	PM
Cutting conditions	B018			

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

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

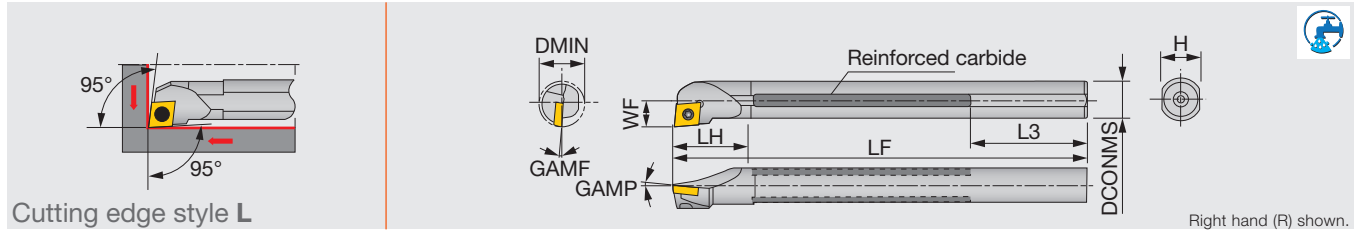
Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH725	AH630	T6130
Breaker Shape	W**	PSF	PSS	PM
Cutting conditions	B020			

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

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

T-SCLCR/L

Screw-on boring bar, for positive 80° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMF	GAMP	RE**	Insert	Torque*
T12M-SCLCR/L06	Reinforced	16	—	12	9	150	22	59	11	-10°	0°	0.4	CC**0602...	1.2
T16Q-SCLCR/L09	Reinforced	20	—	16	11	180	27	59	15	-10°	0°	0.8	CC**09T3...	3
T20R-SCLCR/L09C	Reinforced	25	Rc1/4	20	13	200	35	49	18	-8°	0°	0.8	CC**09T3...	3
T25S-SCLCR/L09C	Reinforced	32	Rc1/4	25	17	250	40	64	23	-6°	0°	0.8	CC**09T3...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

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

SPARE PARTS

Designation	Clamping screw	Wrench
T12M-SCLCR/L06	CSTB-2.5	T-8F
T16Q-SCLCR/L09	CSTB-4S	T-15F
T20R-SCLCR/L09C	CSTB-4S	T-15F
T25S-SCLCR/L09C	CSTB-4S	T-15F

INSERT SELECTION

P

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	SH725	SH725	T9215	T9215
Breaker Shape	01	JS	PS	PM
Cutting conditions	B018			

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	SH725	SH725	T9215	T9215
Breaker Shape	01	JS	PS	PM
Cutting conditions	B020			

K

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

N

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

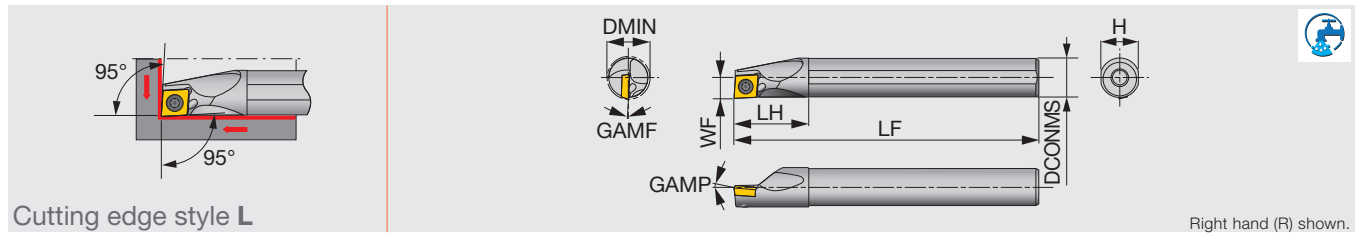
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Application	Precision finishing	Finishing to medium cutting
Grade	BX470	AH8005
Breaker Shape	T-CBN	PS
Cutting conditions	B026	

H

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: T-SCLCR/L: Insert → B109 -, CBN → B180, PCD → B194 -



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A08H-SCLPR/L06-D100	Steel	10	8	5.5	100	16	7.5	5°	-8°	0.4	CP**0602...	1.2
A10K-SCLPR/L06-D120	Steel	12	10	6	125	20	9	5°	-5°	0.4	CP**0602...	1.2
A10K-SCLPR/L08-D120	Steel	12	10	6	125	20	9	5°	-5°	0.4	CP**0802...	1.4
A12M-SCLPR/L06-D140	Steel	14	12	7	150	24	11	5°	-4°	0.4	CP**0602...	1.2
A12M-SCLPR/L08-D140	Steel	14	12	7	150	24	11	5°	-4°	0.4	CP**0802...	1.4
A12M-SCLPR/L08-D160	Steel	16	12	9	150	24	11	5°	-3°	0.4	CP**0802...	1.4
A16Q-SCLPR/L09-D180	Steel	18	16	9	180	32	15	5°	-3.5°	0.8	CP**0903...	3
A16Q-SCLPR/L09-D200	Steel	20	16	11	180	32	15	5°	-3°	0.8	CP**0903...	3
A20R-SCLPR/L09-D220	Steel	22	20	11	200	36	18	5°	-2°	0.8	CP**0903...	3
A25S-SCLPR/L09-D270	Steel	27	25	13.5	250	45	23	5°	-1°	0.8	CP**0903...	3
E08K-SCLPR/L06-D100	Carbide	10	8	5.5	125	22	7.5	5°	-8°	0.4	CP**0602...	1.2
E10M-SCLPR/L06-D120	Carbide	12	10	6	150	25	9	5°	-5°	0.4	CP**0602...	1.2
E10H-SCLPR08-D120	Carbide	12	10	6	100	25	9	5°	-5°	0.4	CP**0802...	1.4
E10M-SCLPR/L08-D120	Carbide	12	10	6	150	25	9	5°	-5°	0.4	CP**0802...	1.4
E12Q-SCLPR/L06-D140	Carbide	14	12	7	180	27	11	5°	-4°	0.4	CP**0602...	1.2
E12G-SCLPR08-D140	Carbide	14	12	7	90	27	11	5°	-4°	0.4	CP**0802...	1.4
E12J-SCLPR08-D140	Carbide	14	12	7	110	27	11	5°	-4°	0.4	CP**0802...	1.4
E12Q-SCLPR/L08-D140	Carbide	14	12	7	180	27	11	5°	-4°	0.4	CP**0802...	1.4
E12G-SCLPR08-D160	Carbide	16	12	9	90	27	11	5°	-3°	0.4	CP**0802...	1.4
E12J-SCLPR08-D160	Carbide	16	12	9	110	27	11	5°	-3°	0.4	CP**0802...	1.4
E12Q-SCLPR/L08-D160	Carbide	16	12	9	180	27	11	5°	-3°	0.4	CP**0802...	1.4
E16H-SCLPR09-D180	Carbide	18	16	9	100	32	15	5°	-3.5°	0.8	CP**0903...	3
E16L-SCLPR09-D180	Carbide	18	16	9	130	32	15	5°	-3.5°	0.8	CP**0903...	3
E16R-SCLPL09-D180	Carbide	18	16	9	200	32	15	5°	-3.5°	0.8	CP**0903...	3
E16H-SCLPR09-D200	Carbide	20	16	11	100	32	15	5°	-3°	0.8	CP**0903...	3
E16L-SCLPR09-D200	Carbide	20	16	11	130	32	15	5°	-3°	0.8	CP**0903...	3
E16R-SCLPL09-D200	Carbide	20	16	11	200	32	15	5°	-3°	0.8	CP**0903...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A*-SCLPR/L06-D...	CSTB-2.5S	T-8F
A10K-SCLPR/L08-D120	CSTB-3L042	T-9F
A12M-SCLPR/L08-D...	CSTB-3L050	T-9F
A*-SCLPR/L09-D...	CSTB-4L060	T-15F
E*-SCLPR/L06-D...	CSTB-2.5S	T-8F
E10*-SCLPR/L08-D...	CSTB-3L042	T-9F
E12*-SCLPR/L08-D...	CSTB-3L050	T-9F
E16*-SCLPR/L09-D...	CSTB-4L060	T-15F

INSERT SELECTION

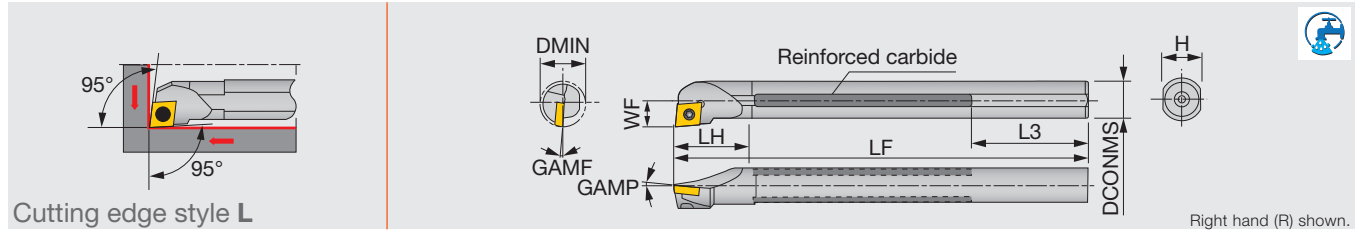
P	Application	Finishing to medium cutting	Medium cutting	M	Application	Finishing to medium cutting	Medium cutting	K	Application	Finishing to medium cutting
	Grade	T9215	T9215		Grade	T9215	T9215		Grade	T515
	Breaker Shape				Breaker Shape				Breaker Shape	
	Cutting conditions	B018			Cutting conditions	B020			Cutting conditions	B022

Reference pages: A/E-SCLPR/L: Insert → **B116** -



T-SCLPR/L

Screw-on boring bar, for positive 80° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMF	GAMP	RE**	Insert	Torque*
T12M-SCLPR08-D14	Reinforced	14	-	12	7	150	22	59	11	-4°	5°	0.4	CP**0802...	1.4
T12M-SCLPR/L08	Reinforced	16	-	12	9	150	25	59	11	-3°	5°	0.4	CP**0802...	1.4
T16Q-SCLPR09-D18	Reinforced	18	-	16	9	180	27	59	15	-3.5°	5°	0.8	CP**0903...	3
T16Q-SCLPR/L09	Reinforced	20	-	16	11	180	30	59	15	-4°	5°	0.8	CP**0903...	3
T20R-SCLPR09C-D22	Reinforced	22	Rc1/4	20	11	200	35	49	18	-2°	5°	0.8	CP**0903...	3
T20R-SCLPR/L09	Reinforced	25	-	20	13	200	35	49	18	-2°	5°	0.8	CP**0903...	3
T25S-SCLPR09C-D27	Reinforced	27	Rc1/4	25	13.5	250	40	64	23	-1°	5°	0.8	CP**0903...	3
T25S-SCLPR/L09	Reinforced	32	-	25	17	250	40	64	23	0°	5°	0.8	CP**0903...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

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

SPARE PARTS		
Designation	Clamping screw	Wrench
T12M-SCLPR/L08...	CSTB-3L050	T-9F
T16Q-SCLPR09-D18	CSTB-4L060	T-15F
T16Q-SCLPR/L09	CSTB-4S	T-15F
T20R-SCLPR09C-D22	CSTB-4L060	T-15F
T20R-SCLPR/L09	CSTB-4S	T-15F
T25S-SCLPR09C-D27	CSTB-4L060	T-15F
T25S-SCLPR/L09	CSTB-4S	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

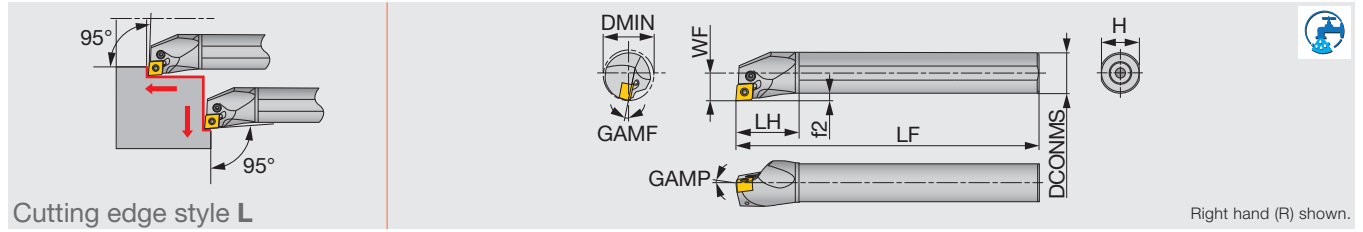
Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	AH725	AH630
Breaker Shape	PSF	PSS	PM
Cutting conditions	B020		

Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	B022

Application	Finishing
	Grade
Breaker Shape	T-DIA
Cutting conditions	B024

Application	Finishing	Finishing to medium cutting
	Grade	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

Reference pages: T-SCLPR/L: Insert → **B116 -**



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMF	GAMF	RE**	Insert	Torque*
A16M-PCLNR/L0904-D200	Steel	20	16	11	150	32	15	3	-6°	-16°	0.8	CN**0904...	1.7
A20Q-PCLNR/L0904-D250	Steel	25	20	13	180	36	18	3	-6°	-12°	0.8	CN**0904...	1.7

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Oil supply attachment*	Screw for oil hole*
A16M-PCLNR/L0904-D200	LCS33	P-2F	LCL33N	-	SSHM3-4
A20Q-PCLNR/L0904-D250	LCS33	P-2F	LCL33N	EA-20	SSHM3-4

*Optional

INSERT SELECTION

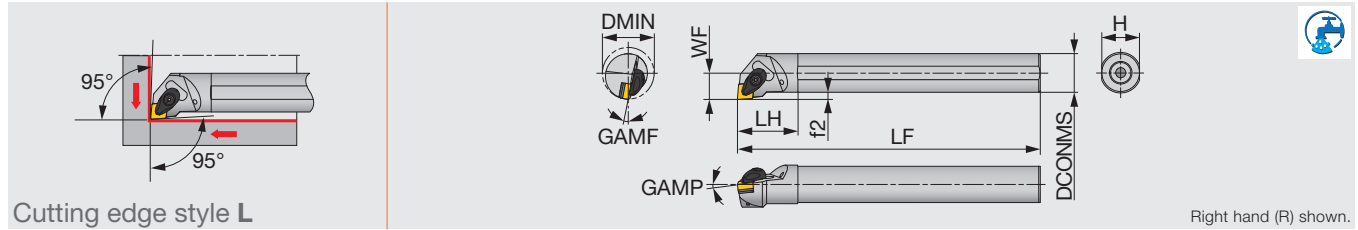
P	Application	Finishing	Medium cutting
	Grade	T9215	
Breaker Shape	TSF	TM	
Cutting conditions	B018		

M	Application	Finishing	Medium cutting
	Grade	SS	T6120
Breaker Shape			SM
Cutting conditions	B020		

K	Application	Medium cutting
	Grade	T515
Breaker Shape	TM	
Cutting conditions	B022	

S	Application	Medium cutting
	Grade	AH8015
Breaker Shape	TM	
Cutting conditions	B026	





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ACLNR/L0904-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	CN**0904...	3
A32S-ACLNR/L0904-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	CN**0904...	3

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

SPARE PARTS							
Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ACLNR/L0904...	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASC322	CSTB-3.5	T-15F

INSERT SELECTION

P

Application	Finishing	Medium cutting
Grade	T9215	T9215
Breaker Shape	TSF	TM
Cutting conditions	B018	

M

Application	Finishing	Medium cutting
Grade	T6120	T6130
Breaker Shape	SS	SM
Cutting conditions	B020	

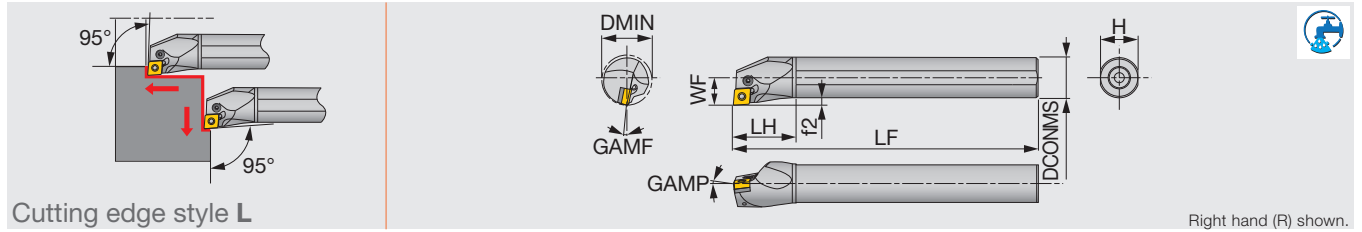
K

Application	Medium cutting
Grade	T515
Breaker Shape	TM
Cutting conditions	B022

S

Application	Medium cutting
Grade	AH8015
Breaker Shape	TM
Cutting conditions	B026

Reference pages: A-ACLNR/L-Eco: Insert → **B054** -



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16M-PCLNR/L09-D200	Steel	20	16	11	150	32	15	3	-6°	-14°	0.8	CN**0903...	1.7
A20Q-PCLNR/L09-D250	Steel	25	20	13	180	36	18	3	-6°	-12°	0.8	CN**0903...	1.7
A25R-PCLNR/L09-D320	Steel	32	25	17	200	45	23	4.5	-6°	-11°	0.8	CN**0903...	1.7
A25R-PCLNR/L12-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	CN**1204...	2.7
A32S-PCLNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	CN**1204...	4.8
A40T-PCLNR/L12-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	CN**1204...	4.8
A50U-PCLNR/L12-D630	Steel	63	50	35	350	65	47	10	-6°	-8°	0.8	CN**1204...	4.8

*Torque: Recommended clamping torque (N·m)

**RE: Standard corner radius

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

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A**-PCLNR/L09-D**0	-	LCS22A	-	P-2F	-	-	LCL32N	EA-25	SSHM5-6
A25R-PCLNR/L12-D320	-	LCS43	-	-	P-2.5	-	LCL43N	EA-32	SSHM5-6
A32S-PCLNR12-D400	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4	EA-32	SSHM5-6
A32S-PCLNL12-D400	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A40T-PCLNR12-D500	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A40T-PCLNL12-D500	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PCLNR12-D630	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PCLNL12-D630	LSC42BL	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6

*Optional

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B006			

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

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

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

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

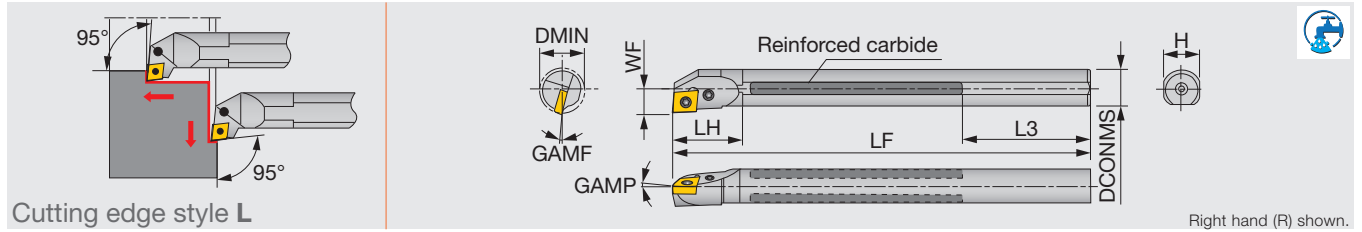
Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

Reference pages: A-PCLNR/L: Insert → B054 -, CBN → B170 -, PCD → B192 -



T-PCLNR

Lever-lock boring bar, for negative 80° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMP	GAMF	RE**	Insert	Torque*
T16Q-PCLNR09	Reinforced	20	-	16	11	180	27	59	15	-6°	-14°	0.8	CN**0903...	1.7
T20R-PCLNR09C	Reinforced	25	Rc1/4	20	13	200	35	49	18	-6°	-12°	0.8	CN**0903...	1.7
T25S-PCLNR09C	Reinforced	32	Rc1/4	25	17	250	40	64	23	-6°	-11°	0.8	CN**0903...	1.7
T32U-PCLNR12C	Reinforced	40	Rc1/2	32	22	350	50	103	30	-6°	-11°	0.8	CN**1204...	4.8
T40V-PCLNR12C	Reinforced	50	Rc1/2	40	27	400	55	88	37	-6°	-10°	0.8	CN**1204...	4.8
T50W-PCLNR12C	Reinforced	63	Rc1/2	50	35	450	65	63	47	-6°	-8°	0.8	CN**1204...	4.8

*Torque: Recommended clamping torque (N-m)

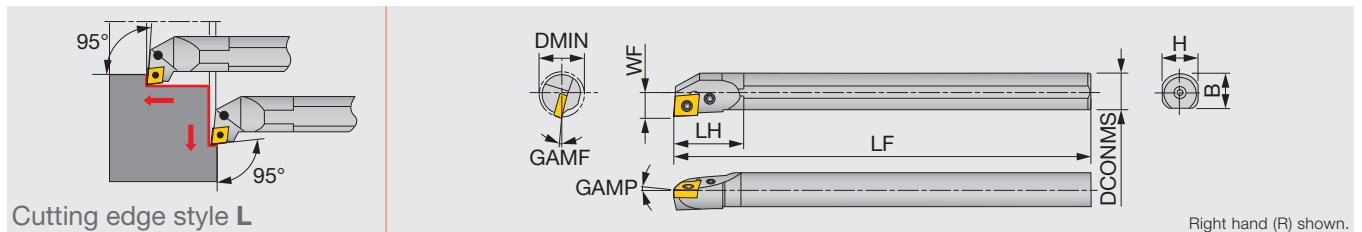
**RE: Standard corner radius

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

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
T**-PCLNR09...	-	LCS22A	-	P-2F	-	-	LCL32N
T**-PCLNR12C	LSC42BR	-	LCS4	-	P-3	LSP4	LCL4

S-PCLNR/L

Lever-lock boring bar, for negative 80° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMP	GAMF	RE**	Insert	Torque*
S16M-PCLNR/L09	Steel	20	16	11	150	30	15	15.5	-6°	-14°	0.8	CN**0903...	1.7
S20Q-PCLNR/L09	Steel	25	20	13	180	35	18	19	-6°	-12°	0.8	CN**0903...	1.7
S25R-PCLNR/L09	Steel	32	25	17	200	40	23	24	-6°	-11°	0.8	CN**0903...	1.7
S32S-PCLNR/L12	Steel	40	32	22	250	50	30	29.5	-6°	-11°	0.8	CN**1204...	4.8
S40T-PCLNR/L12	Steel	50	40	27	300	55	37	37.5	-6°	-10°	0.8	CN**1204...	4.8
S50U-PCLNR/L12	Steel	63	50	35	350	65	47	47.5	-6°	-8°	0.8	CN**1204...	4.8

*Torque: Recommended clamping torque (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).

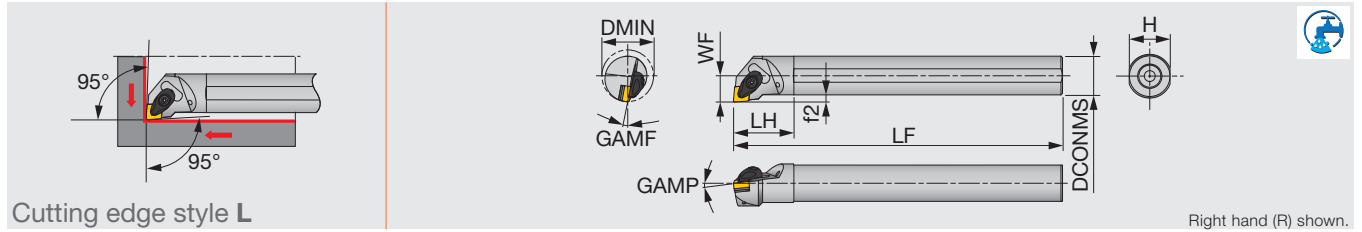
Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
S**-PCLNR/L09	-	LCS22A	-	P-2F	-	-	LCL32N
S32S-PCLNR/L12	LSC42BR/L	-	LCS4	-	P-3	LSP4	LCL4
S40T-PCLNR/L12	LSC42BR/L	-	LCS4	-	P-3	LSP4	LCL4
S50U-PCLNR/L12	LSC42BR/L	-	LCS4	-	P-3	LSP4	LCL4

Reference pages: T-PCLNR, S-PCLNR/L: Insert → B054 -, CBN → B170 -, PCD → B192 -

TURNINGA

A-ACLNR/L

Double-clamp boring bar, for negative 80° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ACLNR/L12-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	CN**1204...	3
A32S-ACLNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	CN**1204...	3
A40T-ACLNR/L12-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	0.8	CN**1204...	3
A50U-ACLNR12-D630	Steel	63	50	35	350	65	47	10	-6°	-7°	0.8	CN**1204...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

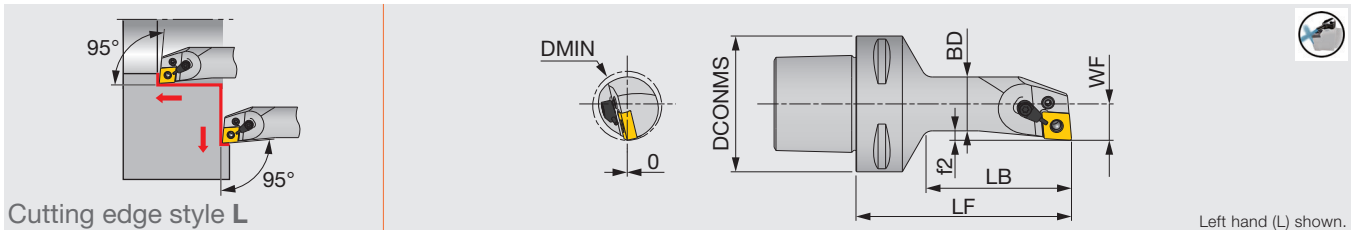
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ACLNR/L12-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASC422	CSTB-3.5	T-15F

TUNG TJET

C-PCLNL-CHP

Lever-lock boring bar with TungCap connection, with 95° approach angle, for negative 80° rhombic inserts, with high pressure coolant capability



Designation	DMIN	DCONMS	BD	LF	LB	WF	f2	RE**	Insert
C6PCLNL17100-12-CHP	32	63	25	100	67.5	17	4.5	0.8	CN**1204...

Applicable for 14 MPa coolant

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Coolant unit	Wrench	Lever
C6PCLNL17100-12-CHP	LCS43	S-CU-CHP	P-2.5F	LCL43N

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B006			

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

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

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

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

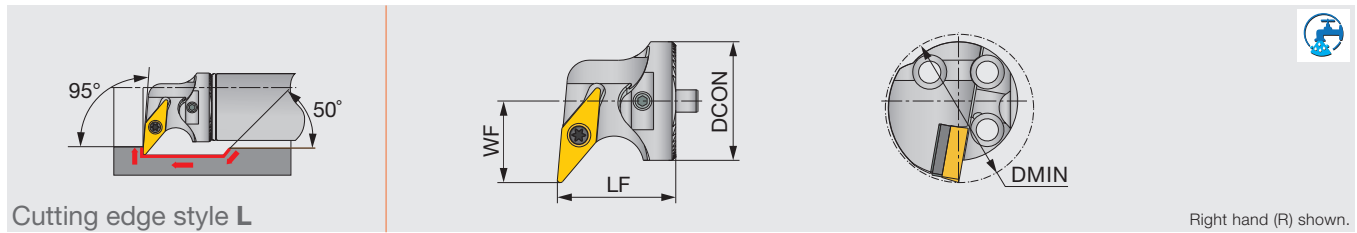
Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

Reference pages: A-ACLNR/L, C-PCLNL-CHP: Insert → B054 -, CBN → B170 -, PCD → B192 -

BOREMEISTER

S-SVLCR/L-H

Screw-on exchangeable boring head, for positive 35° rhombic inserts



Right hand (R) shown.

Designation	DMIN	DCON	WF	LF	Shank	Insert
S32-SVLCR/L16T-H	40	32	22	32	D32	VC**1604...
S40-SVLCR/L16T-H	50	40	27	32	D40, D50, D60	VC**1604...

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

SPARE PARTS					
Designation	Clamping screw	Wrench	Shim	Shim screw	
S32-SVLCR/L16T-H	SR16-236P	T-15/5	TVC 3-1P	SRTC-3P	
S40-SVLCR/L16T-H	SR16-236P	T-15/5	TVC 3-1P	SRTC-3P	

INSERT SELECTION

Application	Finishing	Finishing to medium cutting
	Grade	NS9530
Breaker Shape	PSS	PS
Cutting conditions	B018	

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	AH725	AH630
Breaker Shape	PSF	PSS	PM
Cutting conditions	B020		

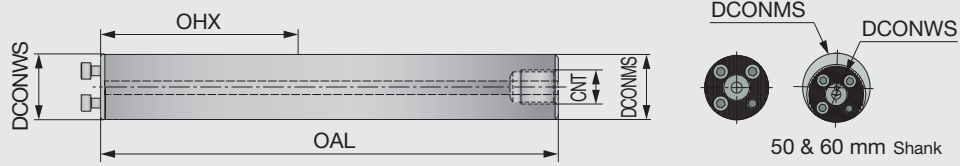
Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	B022

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

Application	Finishing	Finishing to medium cutting
	Grade	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: S-SVLCR/L-H: Insert → B153 -, CBN → B190, PCD → B194 -



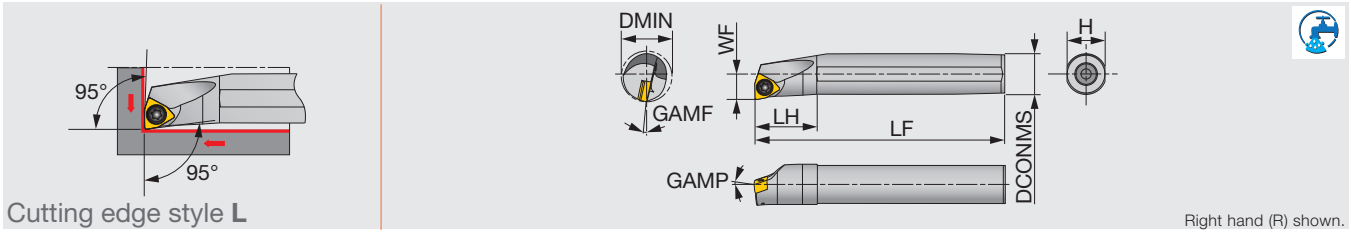
Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS



Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SRM3.5X10DIN912	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L...	SRM6X16DIN912-12.9	HW5.0





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A10K-SWLXR/L04-D120	Steel	12	10	6	125	20	9	-10°	-16°	0.4	WXGU0403**L/R...	0.9
A12M-SWLXR/L04-D140	Steel	14	12	7	150	24	11	-10°	-14°	0.4	WXGU0403**L/R...	0.9
A16Q-SWLXR/L04-D180	Steel	18	16	9	180	32	15	-10°	-11°	0.4	WXGU0403**L/R...	0.9
A20R-SWLXR/L04-D220	Steel	22	20	11	200	36	18	-10°	-10°	0.4	WXGU0403**L/R...	0.9
E10M-SWLXR/L04-D120	Carbide	12	10	6	150	25	9	-10°	-16°	0.4	WXGU0403**L/R...	0.9
E12Q-SWLXR/L04-D140	Carbide	14	12	7	180	27	11	-10°	-14°	0.4	WXGU0403**L/R...	0.9
E16R-SWLXR/L04-D180	Carbide	18	16	9	200	32	15	-10°	-11°	0.4	WXGU0403**L/R...	0.9
E20S-SWLXR/L04-D220	Carbide	22	20	11	250	36	18	-10°	-10°	0.4	WXGU0403**L/R...	0.9

*Torque: Recommended clamping torque (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
A/E**-SWLXR/L...	SR34-514	T-7F

INSERT SELECTION

P

Application	Finishing	Medium cutting
Grade	NS9530	AH725
Breaker Shape	SS	TS
Cutting conditions	D095	

M

Application	Finishing	Medium cutting
Grade	AH8015	AH8015
Breaker Shape	SS	TS
Cutting conditions	D095	

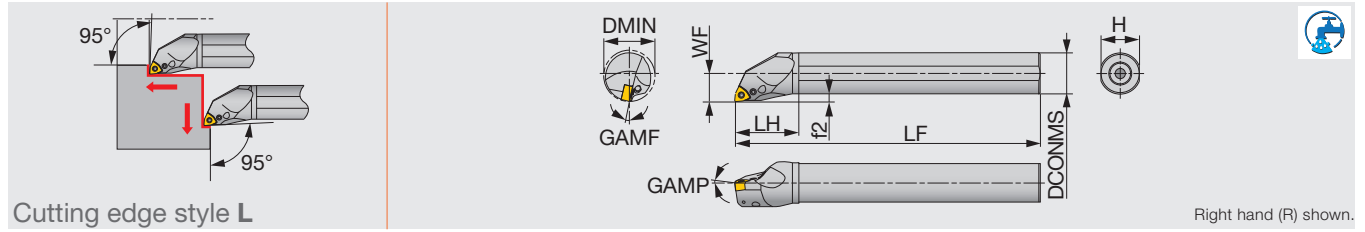
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Application	Finishing	Medium cutting
Grade	NS9530	AH725
Breaker Shape	SS	TS
Cutting conditions	D095	

N

Application	Finishing	Medium cutting
Grade	KS05F	KS05F
Breaker Shape	SS	TS
Cutting conditions	D095	

Reference pages: A/E-SWLXR/L: Insert → **B158** -
 Standard cutting conditions → **D095**



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16M-PWLNR/L0604-D200	Steel	20	16	11	150	32	15	3	-8°	-17°	0.8	WN**0604...	1.7
A20Q-PWLNR/L0604-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	WN**0604...	1.7

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Oil supply attachment*	Screw for oil hole*
A16M-PWLNR/L0604-D200	LCS33	P-2F	LCL33N	-	SSHM3-4
A20Q-PWLNR/L0604-D250	LCS33	P-2F	LCL33N	EA-20	SSHM3-4

*Optional

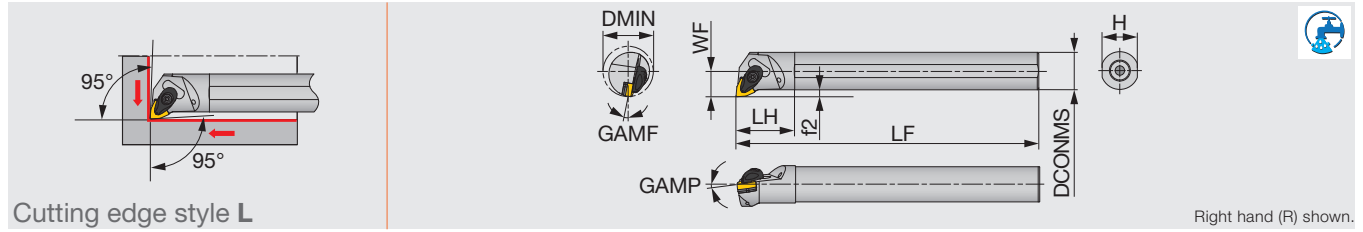
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Application	Finishing	Medium cutting
	Grade	T9215
Breaker Shape	TSF	TM
Cutting conditions	B006	

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SS	SM
Cutting conditions	B008	

Application	Medium cutting
Grade	T515
Breaker Shape	TM
Cutting conditions	B010





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-AWLNR/L0604-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0604...	3
A32S-AWLNR/L0604-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	WN**0604...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-AWLNR/L...	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F

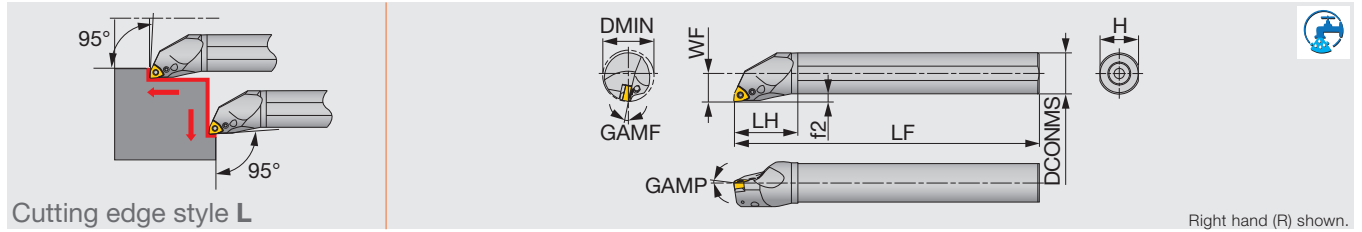
INSERT SELECTION

Application	Finishing	Medium cutting
	Grade	T9215
Breaker Shape	TSF	TM
Cutting conditions	B006	

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SS	SM
Cutting conditions	B008	

Application	Medium cutting
Grade	T515
Breaker Shape	TM
Cutting conditions	B010

Reference pages: A-AWLNR/L-Eco: Insert → **B099** -



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16M-PWLN/L06-D200	Steel	20	16	11	150	32	15	3	-8°	-17°	0.8	WN**0604...	1.7
A20Q-PWLN/L06-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	WN**0604...	1.7
A25R-PWLN/L06-D320	Steel	32	25	17	200	45	23	4.5	-6°	-12°	0.8	WN**0604...	2.7
A32S-PWLN/L06-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	WN**0604...	2.7
A25R-PWLN/L08-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0804...	2.7
A32S-PWLN/L08-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	WN**0804...	4.8
A40T-PWLN/L08-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	WN**0804...	4.8

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

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

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A16M-PWLN/L06-D200	-	LCS33	-	P-2F	-	-	LCL33N	-	SSHM3-4
A20Q-PWLN/L06-D250	-	LCS33	-	P-2F	-	-	LCL33N	EA-20	SSHM3-4
A25R-PWLN/L06-D320	LSW312BR/L	-	LCS3B	-	P-2.5	LSP3	LCL3	EA-25	SSHM4-5
A32S-PWLN/L06-D400	LSW312BR/L	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32	SSHM4-5
A25R-PWLN/L08-D320	-	LCS43	-	P-2.5	-	-	LCL43N	EA-25	SSHM4-5
A32S-PWLN/L08-D400	LSW42BR/L	-	LCS4	-	P-3	LSP4	LCL4	EA-32	SSHM4-5
A40T-PWLN/L08-D500	LSW42BR/L	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM4-5

*Optional

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	Grade	Grade	Grade
Grade	NS9530	GT9530	T9215	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B006			

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

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

Application	Precision finishing	Finishing	Medium cutting
	Grade	Grade	Grade
Grade	BX480	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

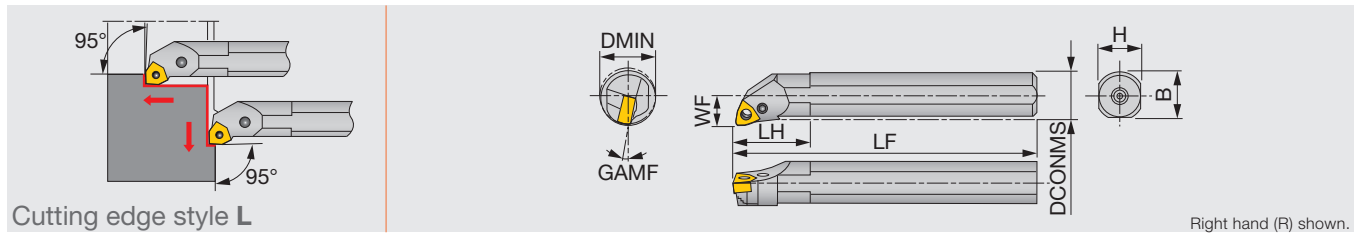
Application	Precision finishing	Finishing
	Grade	Grade
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

Reference pages: A-PWLN/L: Insert → B099 -, CBN → B179



S-PWLNR/L

Lever-lock boring bar, for negative 80° trigon inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S16M-PWLNR/L06	Steel	20	16	11	150	30	15	15.5	-17°	0.8	WN**0604...
S20Q-PWLNR/L06	Steel	25	20	13	180	35	18	19	-14°	0.8	WN**0604...
S25R-PWLNR/L06	Steel	32	25	17	200	40	23	24	-12°	0.8	WN**0604...

SPARE PARTS

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench	Spring pin	Lever
S**-PWLNR/L06	-	LCS33	-	P-2F	-	-	LCL33N
S25R-PWLNR06	LSW312BR	-	LCS3B	-	P-2.5	LSP3	LCL3
S25R-PWLN06	LSW312BL	-	LCS3B	-	P-2.5	LSP3	LCL3

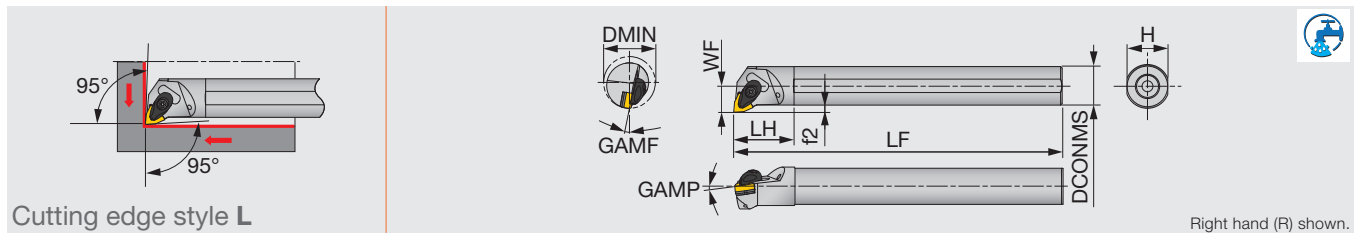
**RE : Standard corner radius

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

TURNING

A-AWLNR/L

Double-clamp boring bar, for negative 80° trigon inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-AWLNR/L06-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0604...	3
A32S-AWLNR/L06-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	WN**0604...	3
A25R-AWLNR/L08-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	WN**0804...	3
A32S-AWLNR/L08-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	WN**0804...	3
A40T-AWLNR/L08-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	0.8	WN**0804...	3
A50U-AWLNR/L08-D630	Steel	63	50	35	350	65	47	10	-6°	-7°	0.8	WN**0804...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-AWLNR/L06-D...	ACP3S	ACS-5W	BP-7	SP-2.5	ASW322	CSTB-3.5	T-15F
A**-AWLNR/L08-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASW422	CSTB-3.5	T-15F

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	B006			

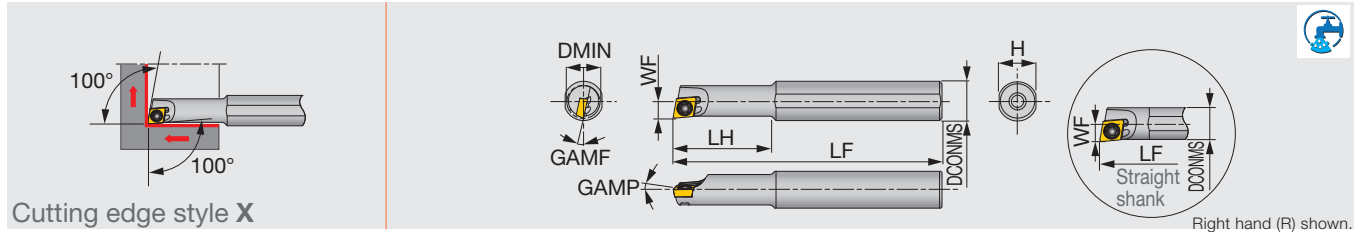
M	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T6120	T6130	T6130
	Breaker Shape	SF	SM	SH
	Cutting conditions	B008		

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
	Breaker Shape	All-round	All-round	All-round
	Cutting conditions	B010		

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005	AH8005
	Breaker Shape	T-CBN	HRF	HRM
	Cutting conditions	B014		

H	Application	Precision finishing	Finishing
	Grade	BXM10	BXM20
	Breaker Shape	T-CBN	T-CBN
	Cutting conditions	B016	

Reference pages: S-PWLNR/L, A-AWLNR/L:
Insert → B099 -, CBN → B179



Cutting edge style X

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A04F-SEXPR/L03-D045	Steel	4.5	4	2.3	80	8	3.8	0°	-15°	0.2	EP**03X1...	0.6
A04F-SEXPR/L03-D050	Steel	5	4	2.5	80	8	3.8	0°	-13°	0.2	EP**03X1...	0.6
A05F-SEXPR/L04-D055	Steel	5.5	5	2.75	80	9	4.8	0°	-12°	0.4	EP**0401...	0.6
A06G-SEXPR/L04-D070	Steel	7	6	3.6	90	11	5.75	0°	-12°	0.4	EP**0401...	0.6
A08H-SEXPR/L04-D055	Steel	5.5	8	2.75	100	16	7.5	0°	-12°	0.4	EP**0401...	0.6
A08H-SEXPR/L04-D070	Steel	7	8	3.6	100	20	7.5	0°	-12°	0.4	EP**0401...	0.6
E04G-SEXPR/L03-D045	Carbide	4.5	4	2.3	90	9	3.8	0°	-15°	0.2	EP**03X1...	0.6
E04G-SEXPR/L03-D050	Carbide	5	4	2.5	90	9	3.8	0°	-13°	0.2	EP**03X1...	0.6
E05G-SEXPR/L04-D055	Carbide	5.5	5	2.75	90	10	4.8	0°	-12°	0.4	EP**0401...	0.6
E06H-SEXPR/L04-D070	Carbide	7	6	3.6	100	12	5.75	0°	-12°	0.4	EP**0401...	0.6
E08K-SEXPR/L04-D055	Carbide	5.5	8	2.75	125	28	7.5	0°	-12°	0.4	EP**0401...	0.6
E08K-SEXPR/L04-D070	Carbide	7	8	3.6	125	40	7.5	0°	-12°	0.4	EP**0401...	0.6

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SEXPR/L03-D...	CSTA-1.6	T-6F
A**-SEXPR/L04-D...	CSTB-2	T-6F
E**-SEXPR/L03-D...	CSTA-1.6	T-6F
E**-SEXPR/L04-D...	CSTB-2	T-6F

INSERT SELECTION

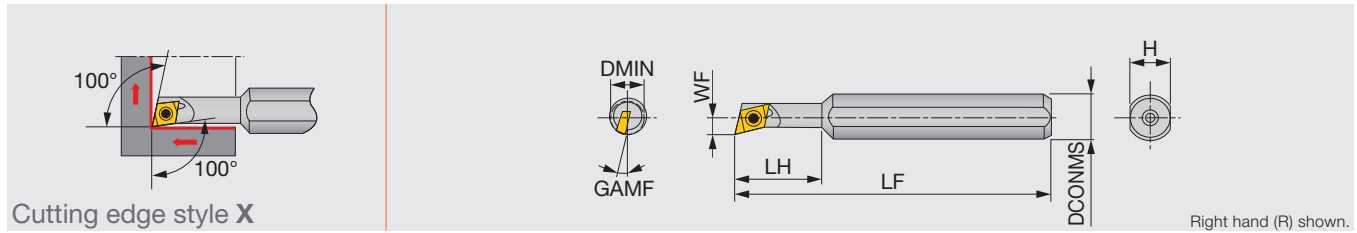
P	Application	Finishing	M	Application	Finishing	K	Application	Finishing
	Grade	SH725		Grade	SH725		Grade	SH725
	JS			JS			JS	
	Breaker Shape			Breaker Shape			Breaker Shape	
	Cutting conditions	B018		Cutting conditions	B020		Cutting conditions	B022
N	Application	Precision finishing	Finishing	H	Application	Precision finishing		
	Grade	DX140	GH110		Grade	BX310		
	T-DIA	W08			T-CBN			
	Breaker Shape							
	Cutting conditions	B024			Cutting conditions	B028		



J-SERIES

JS-SEXPR/L

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



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMF	RE**	Insert	Torque*
JS08H-SEXPR045	Steel	5.5	8	2.7	100	16	7	12°	0.4	EP**0401...	0.6
JS08H-SEXPR047	Steel	7	8	3.6	100	20	7	12°	0.4	EP**0401...	0.6

SPARE PARTS

Designation	Clamping screw	Wrench
JS08H-SEXPR04...	CSTB-2	T-6F

*Torque: Recommended clamping torque (N·m)

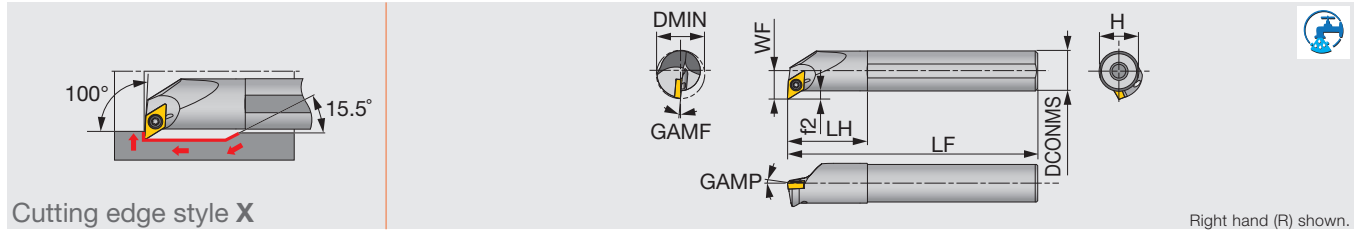
**RE : Standard corner radius

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

INSERT SELECTION

P	Application	Finishing	M	Application	Finishing	K	Application	Finishing
	Grade	SH725		Grade	SH725		Grade	SH725
	JS			JS			JS	
	Breaker Shape			Breaker Shape			Breaker Shape	
	Cutting conditions	B018		Cutting conditions	B020		Cutting conditions	B022
N	Application	Precision finishing	Finishing	H	Application	Precision finishing		
	Grade	DX140	GH110		Grade	BX310		
	T-DIA	W08			T-CBN			
	Breaker Shape				Breaker Shape			
	Cutting conditions	B024			Cutting conditions	B028		

Reference pages: JS-SEXPR/L: Insert → **B127** -, CBN → **B184**, PCD → **B195**



Cutting edge style X

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SDXXR/L07-D130	Steel	13	10	7.6	125	20	9	2.6	-14°	-16°	0.4	DXGU0703**L/R...	0.9
A12M-SDXXR/L07-D160	Steel	16	12	8.6	150	24	11	2.6	-14°	-14°	0.4	DXGU0703**L/R...	0.9
A16Q-SDXXR/L07-D200	Steel	20	16	10.6	180	32	15	2.6	-13°	-13°	0.4	DXGU0703**L/R...	0.9
A20R-SDXXR/L07-D240	Steel	24	20	12.6	200	36	18	2.6	-13°	-12°	0.4	DXGU0703**L/R...	0.9
E10M-SDXXR/L07-D130	Carbide	13	10	7.6	150	25	9	2.6	-14°	-16°	0.4	DXGU0703**L/R...	0.9
E12Q-SDXXR/L07-D160	Carbide	16	12	8.6	180	27	11	2.6	-14°	-14°	0.4	DXGU0703**L/R...	0.9
E16R-SDXXR/L07-D200	Carbide	20	16	10.6	200	32	15	2.6	-13°	-13°	0.4	DXGU0703**L/R...	0.9
E20S-SDXXR/L07-D240	Carbide	24	20	12.6	250	36	18	2.6	-13°	-12°	0.4	DXGU0703**L/R...	0.9

*Torque: Recommended clamping torque (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
A/E**-SDXXR/L...	SR34-514	T-7F

INSERT SELECTION

Swiss lathes

Application	Finishing	Medium cutting
	Grade	SH725
Breaker Shape	JSS	JTS
Cutting conditions	D095	

Application	Finishing	Medium cutting
	Grade	SH725
Breaker Shape	JSS	JTS
Cutting conditions	D095	

Small CNC lathes

Application	Finishing	Medium cutting
	Grade	AH725
Breaker Shape	SS	TS
Cutting conditions	D095	

Application	Finishing	Medium cutting
	Grade	AH8015
Breaker Shape	SS	TS
Cutting conditions	D095	

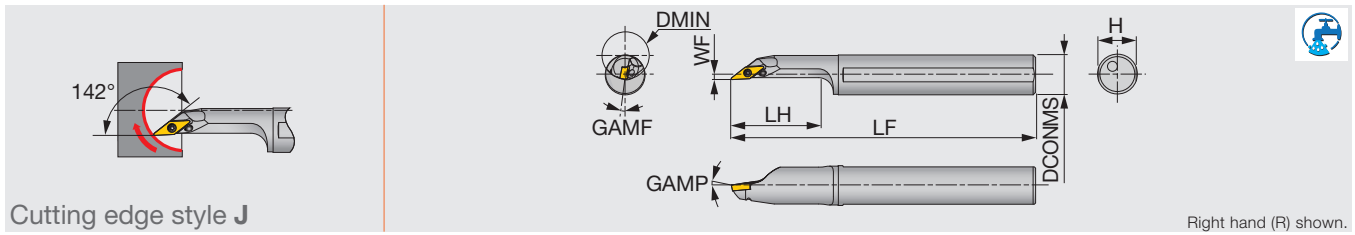
Reference pages: A/E-SDXXR/L: Insert → **B125** -
Standard cutting conditions → **D095**



STREAMJETBAR

A-SVJBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style J

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A20R-SVJBR/L11-D250	Steel	25	20	2	200	40	18	-5°	-5°	0.4	VB**1103...	1.2
A25S-SVJBR/L11-D300	Steel	30	25	3.5	250	50	23	-5°	-5°	0.4	VB**1103...	1.2

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVJB*11-D...	CSTB-2.5	T-8F

INSERT SELECTION

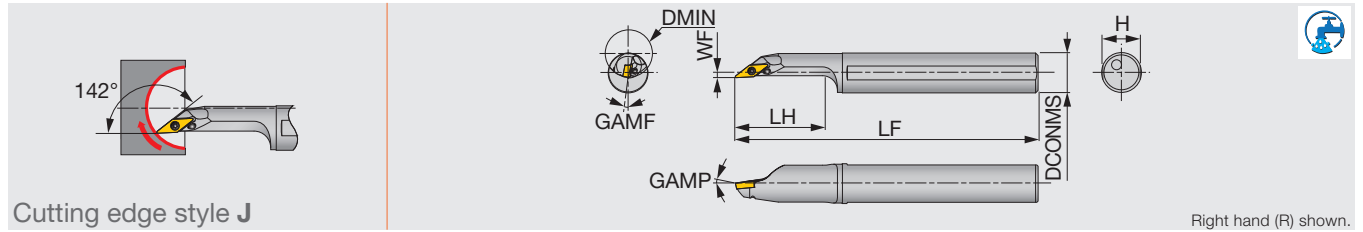
Application	Finishing	Finishing to medium cutting
	Grade	SH725
Breaker Shape	JS	PS
Cutting conditions		
B018		

Application	Finishing	Finishing to medium cutting
	Grade	SH725
Breaker Shape	JS	PS
Cutting conditions		
B020		

Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	
B022	

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions		
B028		

Reference pages: A-SVJBR/L: Insert → B150 -, CBN → B189



Cutting edge style J

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVJCR/L08-D160	Steel	16	12	2	150	28	11	-5°	-5°	0.4	VC**0802...	0.6
A16Q-SVJCR/L08-D200	Steel	20	16	2	180	35	15	-5°	-5°	0.4	VC**0802...	0.6

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVJC*08-D...	CSTB-2L	T-6F

INSERT SELECTION

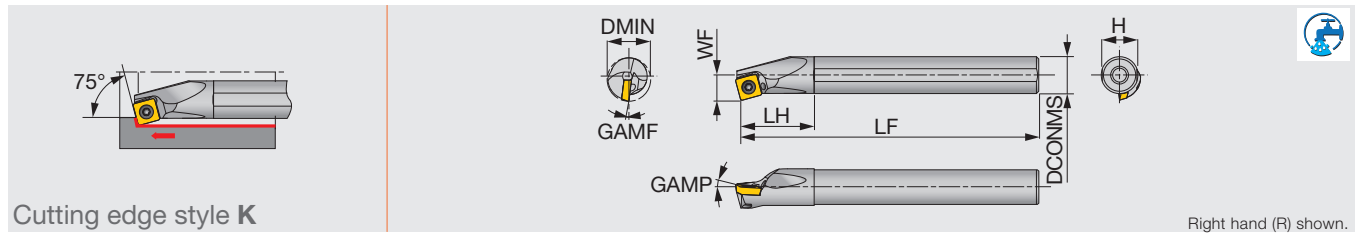
P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting	
	Grade	T9215		Grade	T9215	
	Breaker Shape			Breaker Shape		
	Cutting conditions	B018		Cutting conditions	B020	
K	Application	Finishing to medium cutting	N	Application	Precision finishing	Medium cutting
	Grade	T515		Grade	DX120	KS05F
	Breaker Shape			Breaker Shape		
	Cutting conditions	B022		Cutting conditions	B024	
S	Application	Finishing to medium cutting	H	Application	Precision finishing	Finishing
	Grade	AH8005		Grade	BXM10	BXM20
	Breaker Shape			Breaker Shape		
	Cutting conditions	B026		Cutting conditions	B028	

Reference pages: A-SVJCR/L: Insert → **B153** -

STREAMJETBAR

A-SSKPR

Screw-on boring bar, for positive square inserts



Cutting edge style K

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMP	RE**	Insert	Torque*
A16Q-SSKPR09-D200	Steel	20	16	11	180	32	15	5°	-6°	0.8	SP**0903...	3
A20R-SSKPR09-D240	Steel	24	20	13	200	36	18	5°	-2°	0.8	SP**0903...	3
A25S-SSKPR12-D310	Steel	31	25	17	250	45	23	5°	-2°	0.8	SP**1204...	6

*Torque: Recommended clamping torque (N-m)




**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SSKPR09-D2*0	CSTB-4L060	T-15F
A25S-SSKPR12-D310	CSTB-5S	T-20F

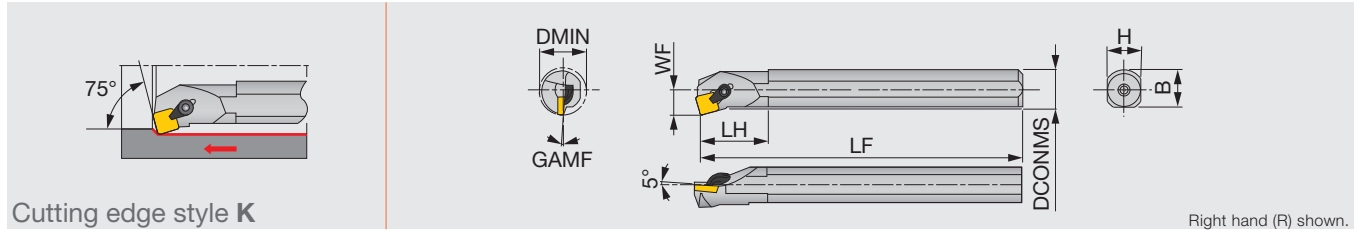
INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting
	Grade	T9215		Grade	T9215
	Breaker Shape	PS 		Breaker Shape	PS 
Cutting conditions		B018	Cutting conditions		B020
K	Application	Finishing to medium cutting			
	Grade	T515			
	Breaker Shape	CM 			
Cutting conditions		B022			

Reference pages: A-SSKPR: Insert → **B134** -, CBN → **B184**

S/C-CSKPR/L

Clamp-on boring bar, for positive square inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S16Q-CSKPR09	Steel	20	16	11	180	30	15	15	-4°	0.8	SP**0903...
S20R-CSKPR/L09	Steel	25	20	13	200	40	18	18.5	-2°	0.8	SP**0903...
S25S-CSKPR12	Steel	32	25	17	250	45	23	22.5	0°	0.8	SP**1203...





**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	Clamp set	Wrench
S16Q-CSKPR09	CSG-5S	P-2.5
S20R-CSKPR/L09	CSG-5	P-2.5
S25S-CSKPR12	CSG-6	P-3

INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Medium cutting
	Grade	T9215		Grade	T6130
	Breaker Shape	PS 		Breaker Shape	PM 
Cutting conditions		B018	Cutting conditions		B020
K	Application	Finishing to medium cutting	N	Application	Finishing
	Grade	T515		Grade	DX140
	Breaker Shape	CM 		Breaker Shape	T-DIA 
Cutting conditions		B022	Cutting conditions		B024

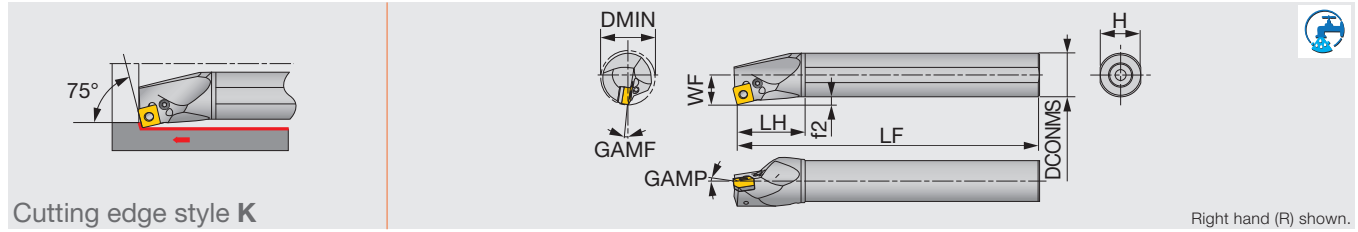
Reference pages: S/C-CSKPR/L: Insert → **B134 -**, CBN → **B184**, PCD → **B195**



STREAMJETBAR

A-PSKNR/L

Lever-lock boring bar, for negative square inserts



Cutting edge style K

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A32S-PSKNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	SN**1204...	4.8
A40T-PSKNR/L12-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	SN**1204...	4.8
A50U-PSKNR/L12-D630	Steel	63	50	35	350	65	47	10	-6°	-8°	0.8	SN**1204...	4.8

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

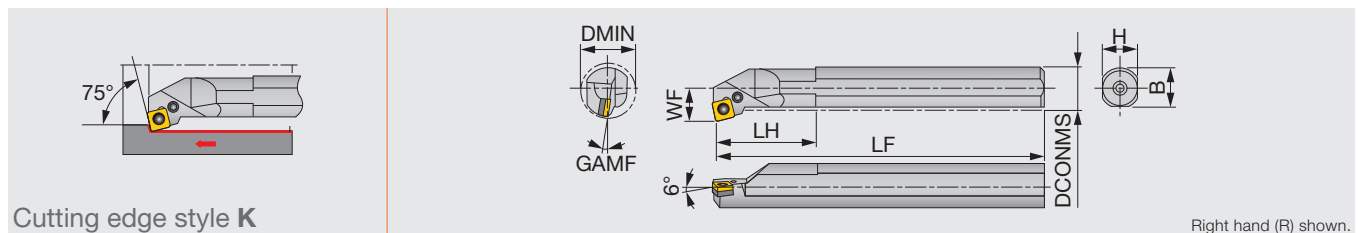
SPARE PARTS

Designation	Shim	Screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A32S-PSKNR/L12-D400	LSS42BR/L	LCS4	P-3	LSP4	LCL4	EA-32	SSH4-5
A40T-PSKNR/L12-D500	LSS42BR/L	LCS4	P-3	LSP4	LCL4	-	SSH6-6
A50U-PSKNR/L12-D630	LSS42BR/L	LCS4	P-3	LSP4	LCL4	-	SSH6-6

*Optional

S-PSKNR

Lever-lock boring bar, for negative square inserts



Cutting edge style K

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S32S-PSKNR12	Steel	40	32	22	250	50	30	29.5	-10°	0.8	SN**1204...
S40T-PSKNR12	Steel	50	40	27	300	55	37	37.5	-10°	0.8	SN**1204...
S50U-PSKNR12	Steel	63	50	35	350	65	47	47.5	-8°	0.8	SN**1204...

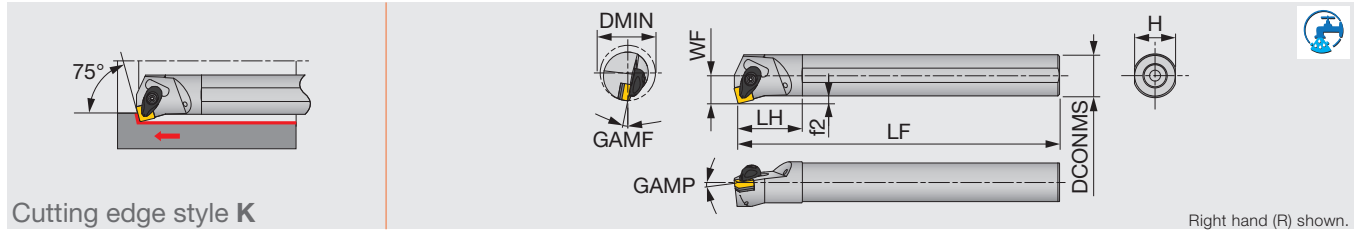
**RE : Standard corner radius

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

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
S**-PSKNR12	LSS42BR	LCS4	P-3	LSP4	LCL4

Reference pages: A-PSKNR/L, S-PSKNR: Insert → B075 -, CBN → B175, PCD → B193



Cutting edge style K

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ASKNR/L12-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	SN**1204...	3
A32S-ASKNR/L12-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	SN**1204...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ASKN*12-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASS422	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	B006			

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

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

Application	Finishing	Medium cutting
	Grade	DX140
Breaker Shape	T-DIA	P
Cutting conditions	B012	

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX480	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

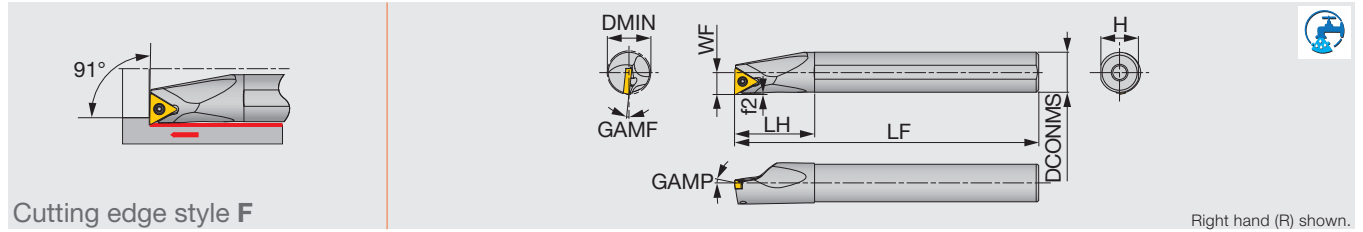
Reference pages: A-ASKNR/L: Insert → **B075 -**, CBN → **B175**, PCD → **B193**



STREAMJETBAR

A/E-STFCR/L

Screw-on boring bar, for positive 60° triangular inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-STFCR/L1103-D120	Steel	12	10	6.5	125	20	9	0.6	0°	-13°	0.4	TC**1103...	1.2
A12M-STFCR/L1103-D140	Steel	14	12	7	150	24	11	0.5	0°	-10°	0.4	TC**1103...	1.2
A16Q-STFCR/L1103-D180	Steel	18	16	9	180	32	15	0.5	0°	-7°	0.4	TC**1103...	1.2
E10M-STFCR/L1103-D120	Carbide	12	10	6.5	150	25	9	0.7	0°	-13°	0.4	TC**1103...	1.2
E12Q-STFCR/L1103-D140	Carbide	14	12	7	180	27	11	0.5	0°	-10°	0.4	TC**1103...	1.2
E16R-STFCR/L1103-D180	Carbide	18	16	9	200	32	15	0.5	0°	-7°	0.4	TC**1103...	1.2

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-STFCR/L1103-D...	CSTB-2.5	T-8F
E**-STFCR/L1103-D...	CSTB-2.5	T-8F

INSERT SELECTION

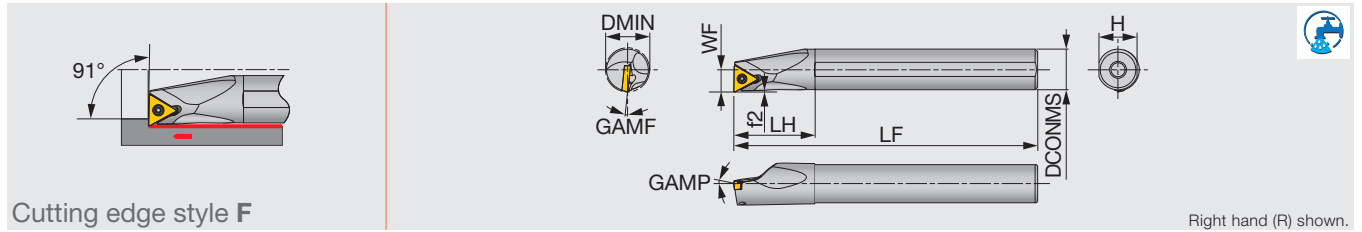
Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	SH725	SH725	T9215	T9215
Grade	01	JS	PS	PM
Breaker Shape				
Cutting conditions	B018			

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	SH725	SH725	T9215	T9215
Grade	01	JS	PS	PM
Breaker Shape				
Cutting conditions	B020			

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

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

Reference pages: A/E-STFCR/L: Insert → **B137** -, PCD → **B194**



Cutting edge style F

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A08H-STFPR/L09-D100	Steel	10	8	5.5	100	16	7.5	0.7	5°	-8°	0.4	TP**0902...	0.9
A10K-STFPR/L1102-D120	Steel	12	10	6.5	125	20	9	0.7	5°	-6°	0.4	TP**1102...	1.2
A12M-STFPR/L1102-D140	Steel	14	12	7.0	150	24	11	0.6	5°	-4°	0.4	TP**1102...	1.2
A16Q-STFPR/L13-D180	Steel	18	16	9	180	32	15	0.7	5°	-2°	0.4	TP**1303...	1.4
A20R-STFPR13-D220	Steel	22	20	11	200	36	18	0.8	5°	-2°	0.4	TP**1303...	1.4
A25S-STFPR16-D270	Steel	27	25	13.5	250	45	23	0.6	5°	-1°	0.4	TP**16T3...	3
E08K-STFPR/L09-D100	Carbide	10	8	5.5	125	22	7.5	0.7	5°	-8°	0.4	TP**0902...	0.9
E10M-STFPR/L1102-D120	Carbide	12	10	6.5	150	25	9	0.7	5°	-6°	0.4	TP**1102...	1.2
E12Q-STFPR/L1102-D140	Carbide	14	12	7	180	27	11	0.6	5°	-4°	0.4	TP**1102...	1.2
E16R-STFPR13-D180	Carbide	18	16	9	200	32	15	0.7	5°	-2°	0.4	TP**1303...	1.4
E20S-STFPR13-D220	Carbide	22	20	11	250	36	18	0.8	5°	-2°	0.4	TP**1303...	1.4

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

(1) TPGH, TPGM, and TPGA inserts cannot be used.

SPARE PARTS

Designation	Clamping screw	Wrench
A08H-STFPR/L09-D100	CSTB-2.2S	T-7F
A10K-STFPR/L1102-D120	CSTB-2.5B	T-8F
A12M-STFPR/L1102-D140	CSTB-2.5	T-8F
A16Q-STFPR/L13-D180	CSTB-3S	T-9F
A20R-STFPR13-D220	CSTB-3	T-9F
A25S-STFPR16-D270	CSTB-4M	T-15F
E08K-STFPR/L09-D100	CSTB-2.2S	T-7F
E10M-STFPR/L1102-D120	CSTB-2.5B	T-8F
E12Q-STFPR/L1102-D140	CSTB-2.5	T-8F
E16R-STFPR13-D180	CSTB-3S	T-9F
E20S-STFPR13-D220	CSTB-3	T-9F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	SH725	T9215	T9215
Grade	JS	PS	PM
Breaker Shape			
Cutting conditions	B018		

Application	Finishing	Finishing to medium cutting	Medium cutting
	SH725	T9215	T9215
Grade	JS	PS	PM
Breaker Shape			
Cutting conditions	B020		

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

Application	Precision finishing
Grade	DX120
Breaker Shape	T-DIA
Cutting conditions	B024

Application	Precision finishing
Grade	BX470
Breaker Shape	T-CBN
Cutting conditions	B026

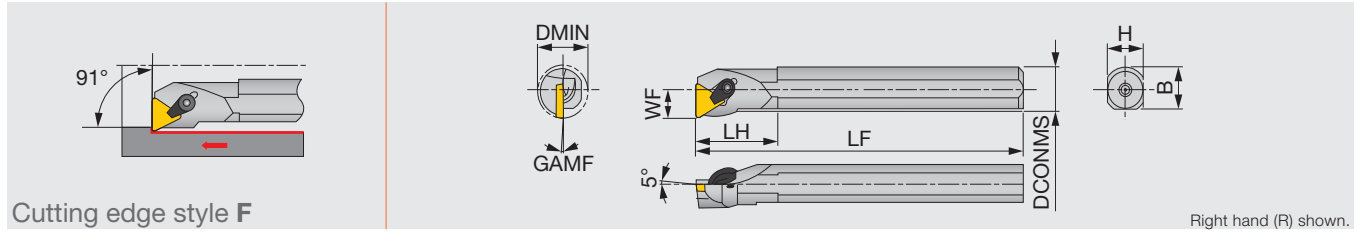
Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: A/E-STFPR/L: Insert → B142 -, CBN → B186 -, PCD → B196



S/C-CTFPR/L

Clamp-on boring bar, for positive 60° triangular inserts



Cutting edge style F

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S12M-CTFPR/L11	Steel	16	12	9	150	25	11	11.5	-6°	0.4	TP**1103...
S16Q-CTFPR/L11	Steel	20	16	11	180	30	15	15	-4°	0.4	TP**1103...
S20R-CTFPR/L16	Steel	25	20	13	200	40	18	18.5	-2°	0.8	TP**1603...
S25S-CTFPR/L16	Steel	32	25	17	250	45	23	22.5	0°	0.8	TP**1603...
S32T-CTFPR/L16	Steel	40	32	22	300	50	30	29.5	0°	0.8	TP**1603...
C12Q-CTFPR/L11	Carbide	16	12	9	180	-	11	-	-6°	0.4	TP**1103...
C16R-CTFPR/L11	Carbide	20	16	11	200	-	15	-	-4°	0.4	TP**1103...

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

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

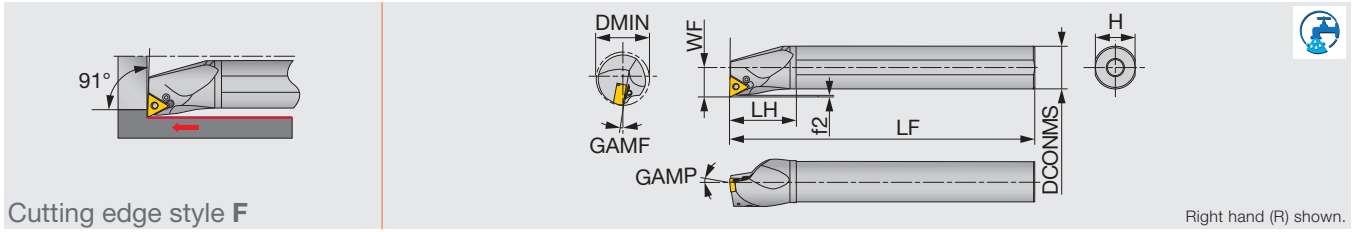
Designation	Clamp set 1	Clamp set 2	Wrench	Shim	Shim screw
S12M-CTFPR/L11	CSW-00	-	P-2.5	-	-
S16Q-CTFPR/L11	-	CSG-5S	P-2.5	-	-
S20R-CTFPR/L16	-	CSG-6S	P-3	-	-
S25S-CTFPR/L16	-	CSG-6	P-3	-	-
S32T-CTFPR/L16	-	CSG-6	P-3	PAT-32	M3X0.5X6
C12Q-CTFPR/L11	CSW-00	-	P-2.5	-	-
C16R-CTFPR/L11	-	CSG-5S	P-2.5	-	-

OTHERS

INSERT SELECTION

P	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	NS9530	T9215	T9215
	Breaker Shape	01	PSS	PS	PM
	Cutting conditions	B018			
M	Application	Finishing	Finishing to medium cutting	Medium cutting	
	Grade	AH725	AH630	T6130	
	Breaker Shape	PSF	PSS	PM	
	Cutting conditions	B020			
K	Application	Finishing to medium cutting			
	Grade	T515			
	Breaker Shape	CM			
Cutting conditions	B022				
N	Application	Finishing			
	Grade	DX140			
	Breaker Shape	T-DIA			
	Cutting conditions	B024			
H	Application	Precision finishing	Finishing		
	Grade	BXM10	BXM20		
	Breaker Shape	T-CBN	T-CBN		
	Cutting conditions	B028			

Reference pages: S/C-CTFPR/L: Insert → B142 -, CBN → B186 -, PCD → B196



Cutting edge style F

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PTFNR/L1104-D320	Steel	32	25	17	200	45	23	1.31	-6°	-12°	0.8	TN**1104...	2
A32S-PTFNR/L1104-D400	Steel	40	32	22	250	50	30	1.25	-6°	-10°	0.8	TN**1104...	2

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PTFNR/L...	LCS23A	P-2.5	LCL23	EA-25	SSHM4-5
A32S-PTFNR/L...	LCS23A	P-2.5	LCL23	EA-32	SSHM4-5

*Optional

INSERT SELECTION

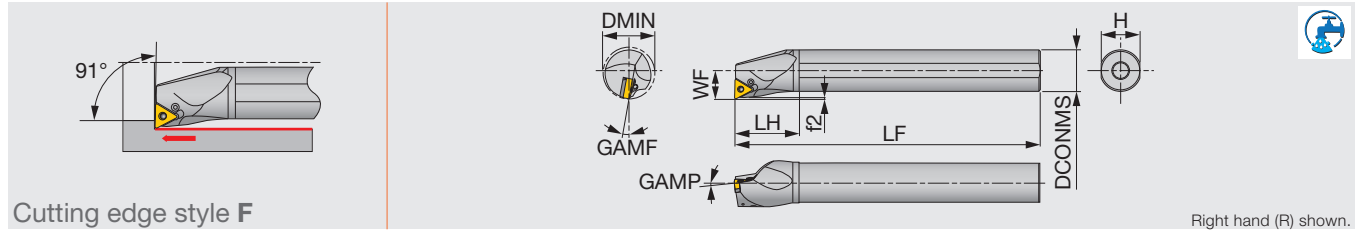
Application	Finishing	Medium cutting
	Grade T9215	Grade T9215
Breaker Shape		
Cutting conditions	B006	

Application	Finishing	Medium cutting
	Grade T6120	Grade T6120
Breaker Shape		
Cutting conditions	B008	



A-PTFNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PTFNR/L16-D320	Steel	32	25	17	200	45	23	1.2	-6°	-12°	0.8	TN**1604...	2.7
A32S-PTFNR/L16-D400	Steel	40	32	22	250	50	30	1.1	-6°	-10°	0.8	TN**1604...	2.7
A40T-PTFNR/L16-D500	Steel	50	40	27	300	60	37	1.1	-6°	-10°	0.8	TN**1604...	2.7
A50U-PTFNR/L16-D630	Steel	63	50	35	350	65	47	1.1	-6°	-8°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

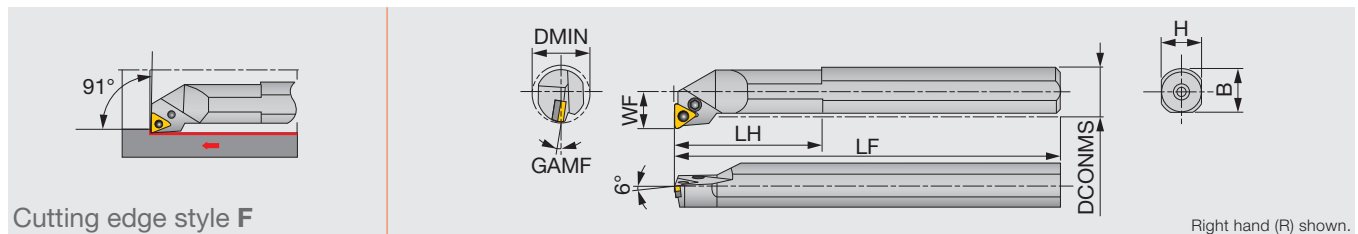
Note: Use right-hand toolholders (PTFNR**) with left-hand inserts (L); and left-hand toolholders (PTFNL**) with right-hand inserts (R).

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PTFNR/L16-D320	ELST317BR/L	LCS3	P-2.5	LSP3	LCL33	EA-25	SSHM4-5
A32S-PTFNR/L16-D400	LST317BR/L	LCS3	P-2.5	LSP3	LCL3	EA-32	SSHM4-5
A40T-PTFNR/L16-D500	LST317BR/L	LCS3	P-2.5	LSP3	LCL3	-	SSHM6-6
A50U-PTFNR/L16-D630	LST317BR/L	LCS3	P-2.5	LSP3	LCL3	-	SSHM6-6

*Optional

S-PTFNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert	Torque*
S32S-PTFNR/L16	Steel	40	32	22	250	50	30	29.5	-10°	0.8	TN**1604...	2.7
S40T-PTFNR/L16	Steel	50	40	27	300	55	37	37.5	-10°	0.8	TN**1604...	2.7
S50U-PTFNR16	Steel	63	50	35	350	65	47	47.5	-8°	0.8	TN**1604...	2.7

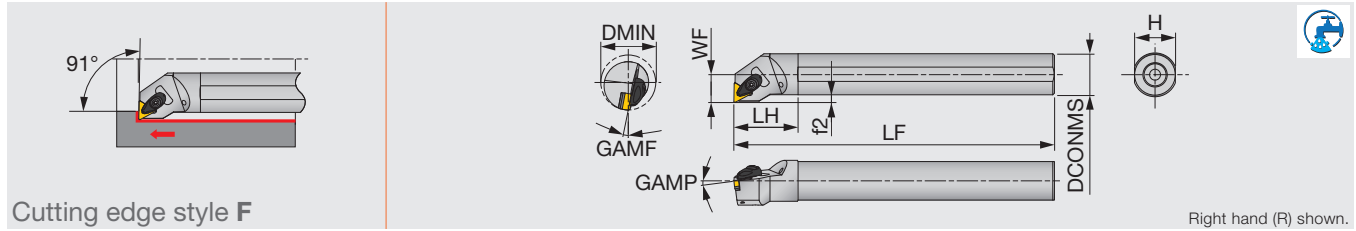
*Torque: Recommended clamping torque (N-m)

**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).

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
S32S-PTFNR16	LST317BR	LCS3	P-2.5	LSP3	LCL3
S32S-PTFNL16	LST317BL	LCS3	P-2.5	LSP3	LCL3
S40T-PTFNR16	LST317BR	LCS3	P-2.5	LSP3	LCL3
S40T-PTFNL16	LST317BL	LCS3	P-2.5	LSP3	LCL3
S50U-PTFNR16	LST317BR	LCS3	P-2.5	LSP3	LCL3

Reference pages: A-PTFNR/L, S-PTFNR/L: Insert → **B084 -**, CBN → **B176 -**, PCD → **B192 -**



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ATFNR/L16-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	TN**1604...	3
A32S-ATFNR/L16-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	TN**1604...	3

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ATFNR/L16-D...	ACP3S	ACS-5W	BP-7	SP-2.5	AST322	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
Images				
Cutting conditions	B006			

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SF	SM
Images		
Cutting conditions	B008	

Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Breaker Shape	All-round	All-round	All-round
Images			
Cutting conditions	B010		

Application	Precision finishing	Finishing	Medium cutting
	Grade	DX120	DX140
Breaker Shape	T-DIA	with rake T-DIA	P
Images			
Cutting conditions	B012		

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Images			
Cutting conditions	B014		

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Images		
Cutting conditions	B016	

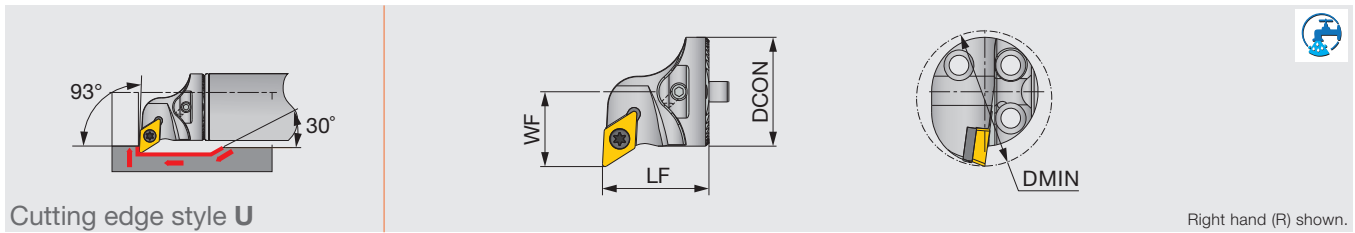
Reference pages: A-ATFNR/L: Insert → **B084 -**, CBN → **B176 -**, PCD → **B192 -**



BOREMEISTER

S-SDUCR/L-H

Screw-on exchangeable boring head, for positive 55° rhombic inserts



Cutting edge style **U**

Right hand (R) shown.

Designation	DMIN	DCON	WF	LF	Shank	Insert
S16-SDUCR/L07-H	20	16	11	20	D/G16	DC**0702...
S20-SDUCR/L11-H	25	20	13	20	D/G20	DC**11T3...
S25-SDUCR/L11-H	32	25	17	20	D25	DC**11T3...
S32-SDUCR/L11T-H	40	32	22	32	D32	DC**11T3...
S40-SDUCR/L11T-H	50	40	27	32	D40, D50, D60	DC**11T3...

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

SPARE PARTS

Designation	Clamping screw	Wrench	Shim	Shim screw
S16-SDUCR/L07-H	SR14-548	T-7/5	-	-
S20-SDUCR/L11-H	SR16-236P	T-15/5	-	-
S25-SDUCR/L11-H	SR16-236P	T-15/5	-	-
S32-SDUCR/L11T-H	SR16-236P	T-15/5	TDC3-1P	SRTC-3P
S40-SDUCR/L11T-H	SR16-236P	T-15/5	TDC3-1P	SRTC-3P

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions		B018	

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	GH330	AH725	AH630
Breaker Shape	W**	PSF	PSS	PM
Cutting conditions		B020		

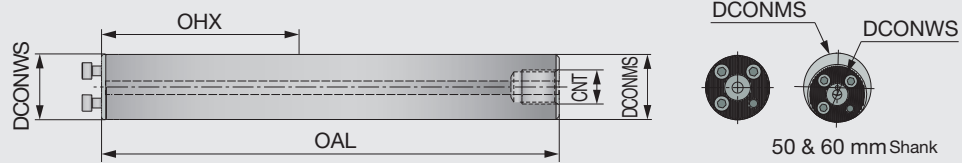
Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Cutting conditions	

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

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PSS	PS
Cutting conditions		B026

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions		B028

Reference pages: S-SDUCR/L-H: Insert → **B119 -**, CBN → **B182**, PCD → **B194 -**

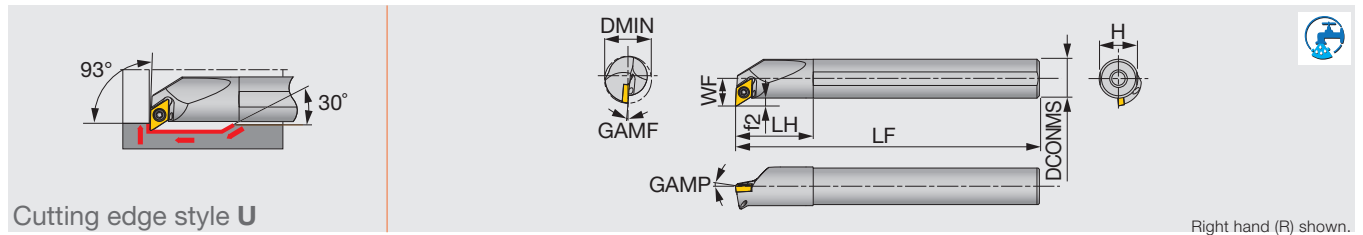


Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS



Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SRM3.5X10DIN912	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L...	SRM6X16DIN912-12.9	HW5.0



Cutting edge style U

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SDUCR/L07-D130	Steel	13	10	7	125	20	9	2	0°	-10°	0.4	DC**0702...	1.2
A12M-SDUCR/L07-D160	Steel	16	12	9.3	150	24	11	3.3	0°	-6°	0.4	DC**0702...	1.2
A16Q-SDUCR/L07-D200	Steel	20	16	11.3	180	32	15	3.3	0°	-5°	0.4	DC**0702...	1.2
A20R-SDUCR/L11-D270	Steel	27	20	16.1	200	36	18	6.1	0°	-5°	0.8	DC**11T3...	3
A25S-SDUCR/L11-D320	Steel	32	25	18.6	250	45	23	6.1	0°	-4°	0.8	DC**11T3...	3
E10H-SDUCR07-D130	Carbide	13	10	7	100	25	9	1.9	5°	-3.5°	0.4	DC**0702...	1.2
E10M-SDUCR/L07-D130	Carbide	13	10	7	150	25	9	2	0°	-10°	0.4	DC**0702...	1.2
E12J-SDUCR07-D160	Carbide	16	12	9.3	110	27	11	3.2	0°	-6°	0.4	DC**0702...	1.2
E12Q-SDUCR/L07-D160	Carbide	16	12	9.3	180	27	11	3.3	0°	-6°	0.4	DC**0702...	1.2
E16L-SDUCR07-D200	Carbide	20	16	11.3	130	32	15	3.2	0°	-5°	0.4	DC**0702...	1.2
E16R-SDUCR/L07-D200	Carbide	20	16	11.3	200	32	15	3.3	0°	-5°	0.4	DC**0702...	1.2
E20S-SDUCR11-D270	Carbide	27	20	16.1	250	36	18	6.1	0°	-5°	0.8	DC**11T3...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A1**-SDUCR/L07-D1*0	CSTB-2.5S	T-8F
A16Q-SDUCR/L07-D200	CSTB-2.5	T-8F
A2**-SDUCR/L11-D**0	CSTB-4S	T-15F
E1**-SDUCR/L07-D1*0	CSTB-2.5S	T-8F
E16*-SDUCR/L07-D200	CSTB-2.5	T-8F
E20S-SDUCR11-D270	CSTB-4S	T-15F

INSERT SELECTION

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	SH725	SH725	T9215	T9215
Grade	01	JS	PS	PM
Breaker Shape				
Cutting conditions	B018			

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	SH725	SH725	T9215	T9215
Grade	01	JS	PS	PM
Breaker Shape				
Cutting conditions	B020			

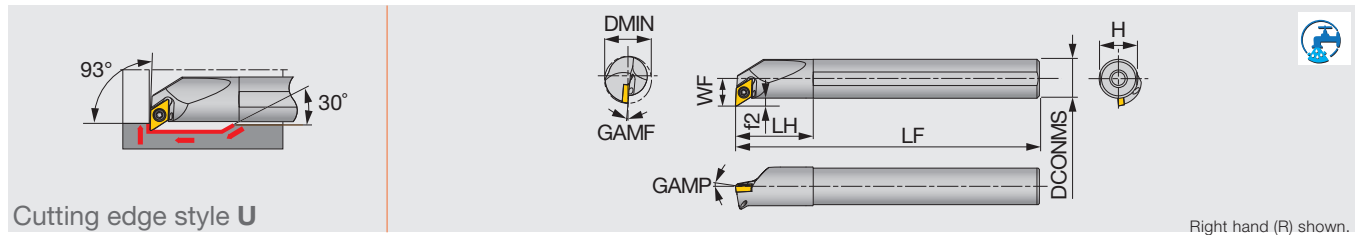
Application	Finishing to medium cutting
	T515
Grade	CM
Breaker Shape	
Cutting conditions	B022

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

Application	Precision finishing	Finishing to medium cutting
	BX470	AH8005
Grade	T-CBN	PS
Breaker Shape		
Cutting conditions	B026	

Application	Precision finishing	Finishing
	BXM10	BXM20
Grade	T-CBN	T-CBN
Breaker Shape		
Cutting conditions	B028	

Reference pages: A/E-SDUCR/L: Insert → B119 -, CBN → B182, PCD → B194 -



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDUPR07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.4	DPMT0702...	1.2
A12M-SDUPL07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.4	DPMT0702...	1.2
A12M-SDUPR07-D180-P	Special alloy steel	18	12	10.3	150	24	11	4.3	5	0	0.4	DPMT0702...	1.2
A12M-SDUPL07-D180-P	Special alloy steel	18	12	10.3	150	24	11	4.3	5	0	0.4	DPMT0702...	1.2
A16Q-SDUPR07-D220-P	Special alloy steel	22	16	12.3	180	32	15	4.3	5	0	0.4	DPMT0702...	1.2
A16Q-SDUPL07-D220-P	Special alloy steel	22	16	12.3	180	32	15	4.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPR07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPL07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPR07-D180	Carbide	18	12	10.3	180	27	11	4.3	5	0	0.4	DPMT0702...	1.2
E12Q-SDUPL07-D180	Carbide	18	12	10.3	180	27	11	4.3	5	0	0.4	DPMT0702...	1.2
E16R-SDUPR07-D220	Carbide	22	16	12.3	200	32	15	4.3	5	0	0.4	DPMT0702...	1.2
E16R-SDUPL07-D220	Carbide	22	16	12.3	200	32	15	4.3	5	0	0.4	DPMT0702...	1.2

*Torque: Recommended clamping torque (N-m)


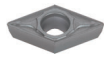
**RE : Standard corner radius

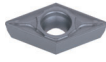
Note: Use right-hand toolholders (SCLPR**) with left-hand inserts (L); and left-hand toolholders (SCLPL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SDUPR/L07-D**0-P	CSTB-2.5S	T-8F
E**-SDUPR/L07-D**0	CSTB-2.5S	T-8F

INSERT SELECTION

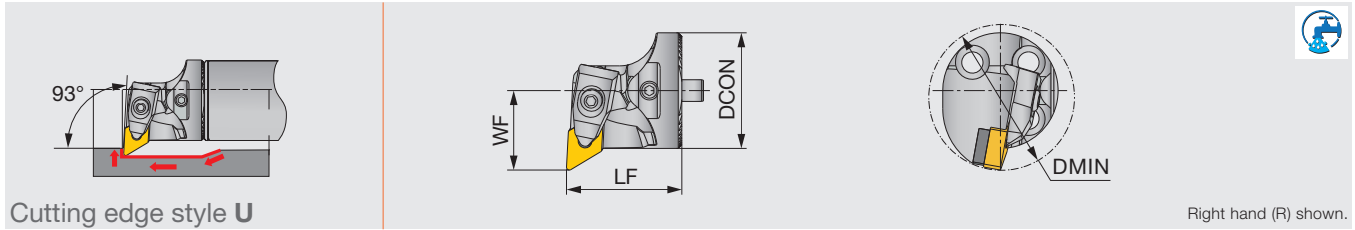
P	Application	Finishing to medium cutting	
	Grade	T9225	NS9530
	Breaker Shape		
	Cutting conditions	B018	

S	Application	Finishing to medium cutting	
	Grade	AH8015	
	Breaker Shape		
	Cutting conditions	B026	

BOREMEISTER

S-DDUNR/L-H

Double-clamp exchangeable boring head, for negative 55° rhombic inserts



Designation	DMIN	DCON	WF	LF	Shank	Insert
S32-DDUNR/L11T-H	40	32	22	32	D32	DN**1104...
S40-DDUNR/L15T-H	50	40	27	32	D40, D50, D60	DN**1504/06...

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

Designation	Shim	Shim screw	Clamp	Clamp Screw	Spring	Wrench
S32-DDUNR/L11T-H	RDT3-2	SR40085I	LCGR-3	SRRC3	KSP3	HW2.5
S40-DDUNR/L15T-H	RDT433	SR14-506	DLM4	DLS4	DSP4	HW3.0
S40-DDUNR/L15T-H	RDT443	SR14-506	DLM4	DLS4	DSP4	HW3.0

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B006			

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

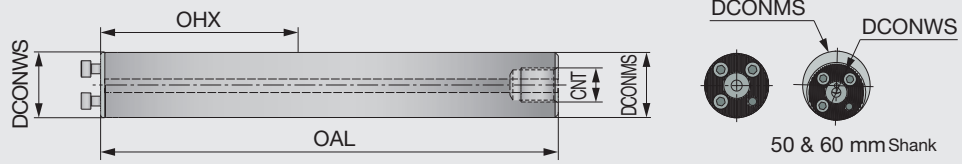
Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions	B010		

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

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

Reference pages: S-DDUNR/L-H: Insert → B065 -, CBN → B172 -, PCD → B192 -



Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS

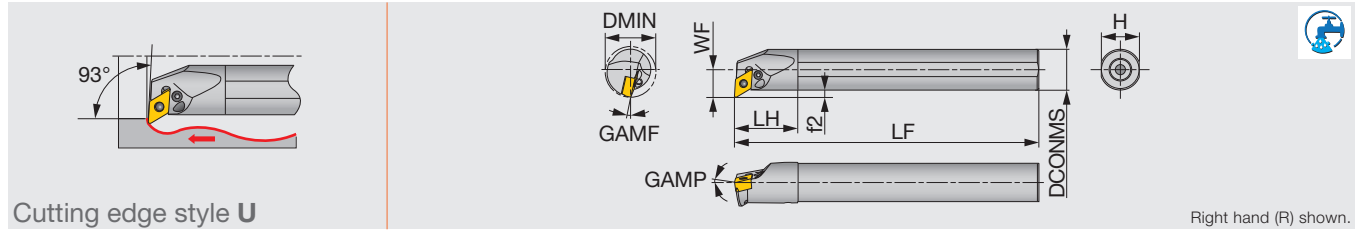


Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SRM3.5X10DIN912	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L...	SRM6X16DIN912-12.9	HW5.0

ISO ETURN

A-PDUNR/L-Eco

Lever-lock boring bar, for negative 55° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A20Q-PDUNR/L1104-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	DN**1104...	1.7

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

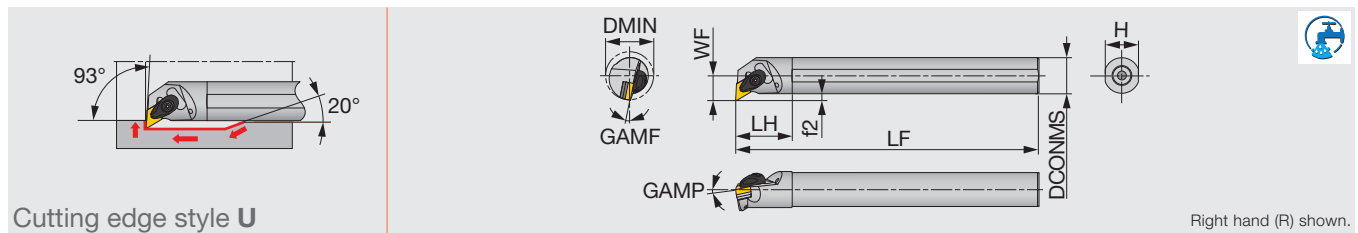
Designation	Clamping screw	Wrench	Lever	Oil supply attachment*	Screw for oil hole*
A20Q-PDUNR/L1104-D250	LCS22A	P-2F	LCL33NL	EA-20	SSH2.5-3

*Optional

ISO ETURN

A-ADUNR/L-Eco

Double-clamp boring bar, for negative 55° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-ADUNR/L1104-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	0.8	DN**1104...	3
A32S-ADUNR/L1104-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	0.8	DN**1104...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ADUNR/L...	ACP3S-E	ACS-5W	BP-7	SP-2.5	ASD322	CSTB-3.5	T-15F

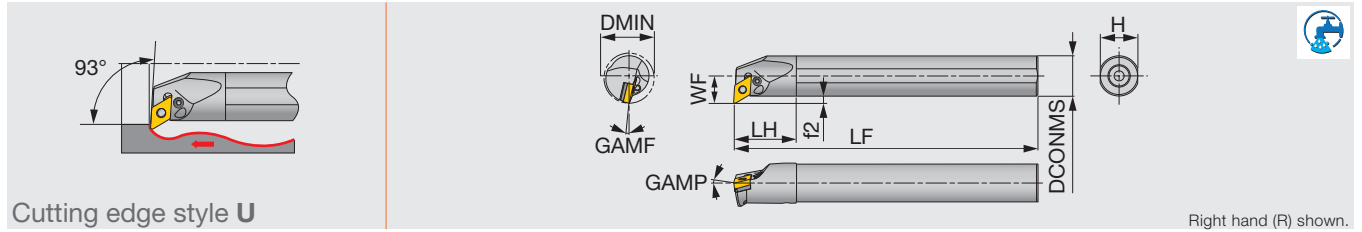
INSERT SELECTION

Application	Finishing	Medium cutting
	Grade	T9215
Breaker Shape	TSF	TM
Breaking Shape		
Cutting conditions	B006	

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SS	SM
Breaking Shape		
Cutting conditions	B008	

Application	Medium cutting
Grade	T515
Breaker Shape	TM
Breaking Shape	
Cutting conditions	B010

Reference pages: A-PDUNR/L-Eco, A-ADUNR/L-Eco: Insert → **B065 -**



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A20Q-PDUNR/L11-D250	Steel	25	20	13	180	36	18	3	-6°	-14°	0.8	DN**1104...	1.7
A25R-PDUNR/L11-D320	Steel	32	25	17	200	45	23	4.5	-6°	-12°	0.8	DN**1104...	2.7
A32S-PDUNR/L15-D400	Steel	40	32	22	250	50	30	6	-6°	-13°	0.8	DN**1504...	4.8
A40T-PDUNR/L15-D500	Steel	50	40	27	300	60	37	7	-6°	-10°	0.8	DN**1504...	4.8
A50U-PDUNR/L15-D630	Steel	63	50	35	350	65	47	10	-6°	-8°	0.8	DN**1504...	4.8
A32S-PDUNR/L1506-D400	Steel	40	32	22	250	50	30	6	-6°	-13°	0.8	DN**1506...	4.8
A40T-PDUNR/L1506-D500	Steel	50	40	27	300	60	37	7	-6°	-11°	0.8	DN**1506...	4.8
A50U-PDUNR/L1506-D630	Steel	63	50	35	350	65	47	10	-6°	-10°	0.8	DN**1506...	4.8

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

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A20Q-PDUNR/L11-D250	-	LCS22A	-	P-2F	-	-	LCL33NL	EA-20	SSHM2.5-3
A25R-PDUNR/L11-D320	ELSD317BR/L	-	LCS3	-	P-2.5	LSP3	LCL33L	EA-25	SSHM3-4
A32S-PDUNR/L15-D400	LSD42BR/L	-	LCS4	-	P-3	LSP4	LCL4	EA-32	SSHM5-6
A40T-PDUNR/L15-D500	LSD42BR/L	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A50U-PDUNR/L15-D630	LSD42BR/L	-	LCS4	-	P-3	LSP4	LCL4	-	SSHM6-6
A32S-PDUNR/L1506-D400	ELSD42	-	ELCS4	-	P-3	LSP4S	LCL44	EA-20	SSHM5-6
A40T-PDUNR/L1506-D500	ELSD42	-	ELCS4	-	P-3	LSP4S	LCL44	-	SSHM6-6
A50U-PDUNR/L1506-D630	ELSD42	-	ELCS4	-	P-3	LSP4S	LCL44	-	SSHM6-6

*Optional

INSERT SELECTION

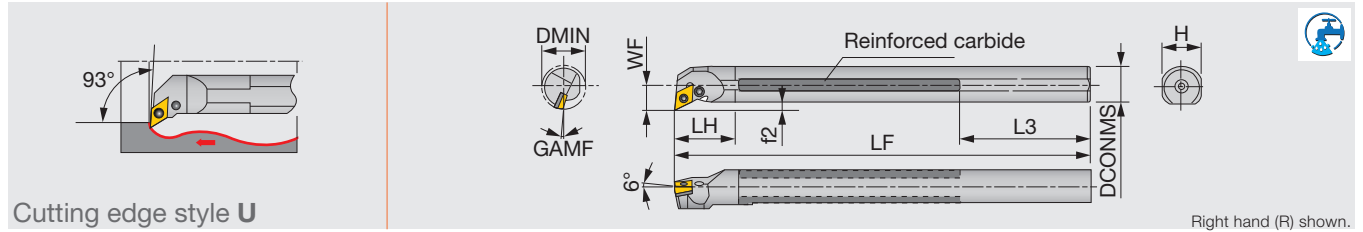
P	Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215	T9215
	Breaker Shape	TF	TSF	TM	TH
	Cutting conditions	B006			
M	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T6120	T6130	T6130	
	Breaker Shape	SF	SM	SH	
	Cutting conditions	B008			
K	Application	Finishing	Medium cutting	Medium to heavy cutting	
	Grade	T515	T515	T515	
	Breaker Shape	All-round	All-round	All-round	
	Cutting conditions	B010			
N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	DX120	DX140	TH10	
	Breaker Shape	T-DIA	with rake T-DIA	P	
	Cutting conditions	B012			
S	Application	Precision finishing	Finishing	Medium cutting	
	Grade	BX470	AH8005	AH8005	
	Breaker Shape	T-CBN	HRF	HRM	
	Cutting conditions	B014			
H	Application	Precision finishing	Finishing		
	Grade	BXM10	BXM20		
	Breaker Shape	T-CBN	T-CBN		
	Cutting conditions	B016			

Reference pages: A-PDUNR/L: Insert → B065 -, CBN → B172 -, PCD → B192 -



T-PDUNR

Lever-lock boring bar, for negative 55° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMF	RE**	Insert
T32U-PDUNR15C	Reinforced	40	Rc1/2	32	22	350	50	103	30	6	-13°	0.8	DN**1504...
T40V-PDUNR15C	Reinforced	50	Rc1/2	40	27	400	55	88	37	7	-10°	0.8	DN**1504...
T50W-PDUNR15C	Reinforced	63	Rc1/2	50	35	450	65	63	47	10	-8°	0.8	DN**1504...

**RE : Standard corner radius

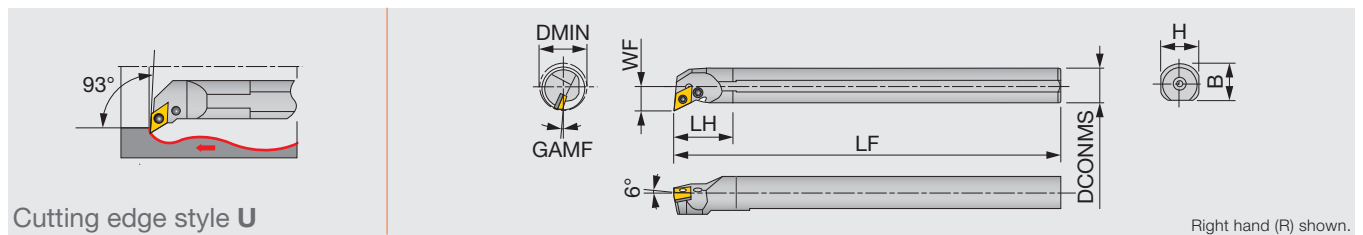
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
T**-PDUNR15C	LSD42BR	LCS4	P-3	LSP4	LCL4

S-PDUNR/L

Lever-lock boring bar, for negative 55° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert
S20Q-PDUNR/L11	Steel	25	20	13	180	35	18	19	-14°	0.8	DN**1104...
S25R-PDUNR/L11	Steel	32	25	17	200	40	23	24	-12°	0.8	DN**1104...
S32S-PDUNR/L15	Steel	40	32	22	250	50	30	29.5	-13°	0.8	DN**1504...
S40T-PDUNR/L15	Steel	50	40	27	300	55	37	37.5	-10°	0.8	DN**1504...
S50U-PDUNR/L15	Steel	63	50	35	350	65	47	47.5	-8°	0.8	DN**1504...

**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

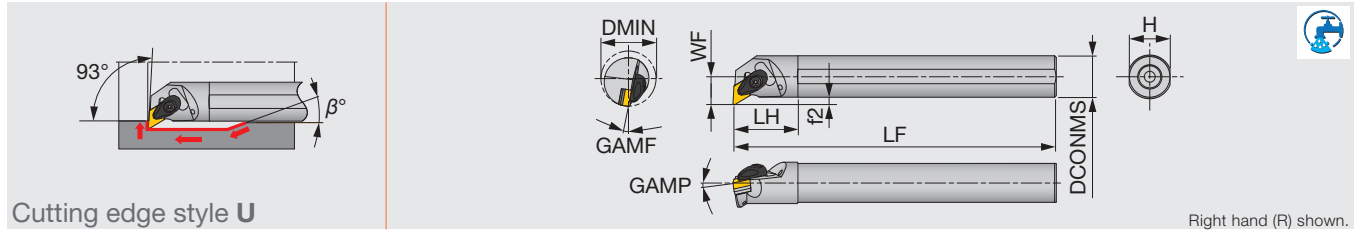
Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
S20Q-PDUNR/L11	-	LCS22A	-	P-2F	-	-	LCL33NL
S25R-PDUNR11	ELSD317BR	-	LCS3	-	P-2.5	LSP3	LCL33L
S25R-PDUNL11	ELSD317BL	-	LCS3	-	P-2.5	LSP3	LCL33L
S32S-PDUNR15	LSD42BR	-	LCS4	-	P-3	LSP4	LCL4
S32S-PDUNL15	LSD42BL	-	LCS4	-	P-3	LSP4	LCL4
S40T-PDUNR15	LSD42BR	-	LCS4	-	P-3	LSP4	LCL4
S40T-PDUNL15	LSD42BL	-	LCS4	-	P-3	LSP4	LCL4
S50U-PDUNR15	LSD42BR	-	LCS4	-	P-3	LSP4	LCL4
S50U-PDUNL15	LSD42BL	-	LCS4	-	P-3	LSP4	LCL4

Reference pages: T-PDUNR, S-PDUNR/L: Insert → **B065 -**, CBN → **B172 -**, PCD → **B192 -**

TURNINGA

A-ADUNR/L

Double-clamp boring bar, for negative 55° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMB	β°	RE**	Insert	Torque*
A25R-ADUNR/L15-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	30	0.8	DN**1504...	3
A32S-ADUNR/L15-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	20	0.8	DN**1504...	3
A40T-ADUNR/L15-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	15	0.8	DN**1504...	3
A50U-ADUNR/L15-D630	Steel	63	50	35	350	65	47	10	-6°	-7°	15	0.8	DN**1504...	3
A25R-ADUNR/L1506-D320	Steel	32	25	17	200	45	23	4.5	-6°	-13°	15	0.8	DN**1506...	3
A32S-ADUNR/L1506-D400	Steel	40	32	22	250	50	30	6	-6°	-11°	20	0.8	DN**1506...	3

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

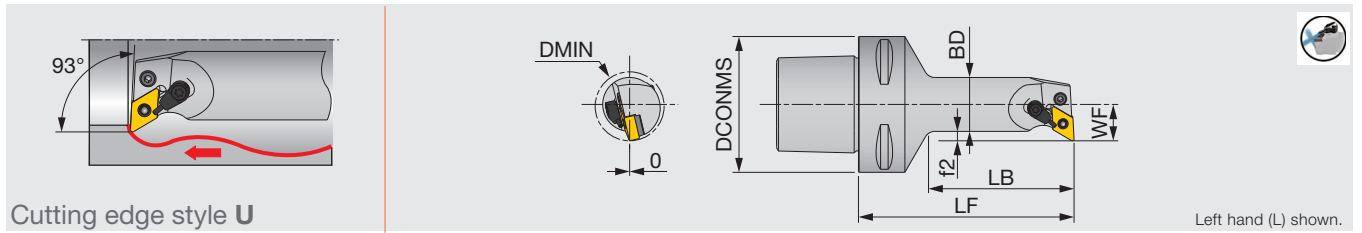
SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-ADUNR/L15-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASD432	CSTB-3.5	T-15F
A**-ADUNR/L1506-D...	ACP4S	ACS-5W	BP-7	SP-2.5	ASD423	CSTB-3.5	T-15F

TUNG T^{URN}JET

C-PDUNL-CHP

Lever-lock boring bar with TungCap connection, with 93° approach angle, for negative 55° rhombic inserts, with high pressure coolant capability



Designation	DMIN	DCONMS	BD	LF	LB	WF	f2	RE**	Insert
C6PDUNL17100-1104-CHP	32	63	25	100	67.5	17	4.5	0.8	DN**1104...

Applicable for 14 MPa coolant

**RE : Standard corner radius

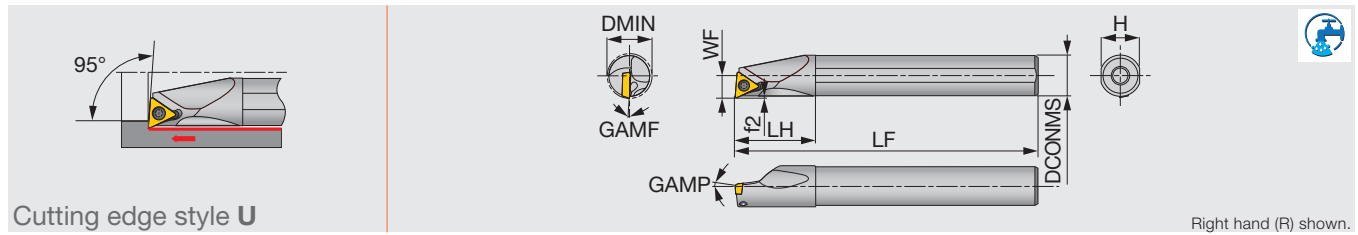
SPARE PARTS

Designation	Shim	Clamping screw	Coolant unit	Wrench	Spring pin	Lever
C6PDUNL17100-1104-CHP	ELSD317BL	LCS43	S-CU-CHP	P-2.5	LSP3	LCL33L

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	T6120	T6130	T6130
Breaker Shape					Breaker Shape					
Cutting conditions	B006				Cutting conditions	B008				
K	Application	Finishing	Medium cutting	Medium to heavy cutting	N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	T515	T515	T515		Grade	DX120	DX140	TH10	
Breaker Shape					Breaker Shape					
Cutting conditions	B010				Cutting conditions	B012				
S	Application	Precision finishing	Finishing	Medium cutting	H	Application	Precision finishing	Finishing		
	Grade	BX470	AH8005	AH8005		Grade	BXM10	BXM20		
Breaker Shape					Breaker Shape					
Cutting conditions	B014				Cutting conditions	B016				

Reference pages: A-ADUNR/L, C-PDUNR/L-CHP Insert → B065 -, CBN → B172 -, PCD → B192 -



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A07G-STUPR/L07-D080	Steel	8	7	4	90	12	6.75	0.4	5°	-10°	0.4	TP**0701...	0.9
A08H-STUPR/L07-D080	Steel	8	8	4	100	19.5	7.5	0.5	5°	-10°	0.4	TP**0701...	0.9
A08H-STUPR/L09-D100	Steel	10	8	5.5	100	16	7.5	0.6	5°	-8°	0.4	TP**0902... ⁽¹⁾	0.9
A10F-STUPR1102-D120	Steel	12	10	6.5	80	20	9	1.4	5°	-6°	0.4	TP**1102... ⁽¹⁾	1.2
A10K-STUPR/L1102-D120	Steel	12	10	6.5	125	20	9	0.7	5°	-6°	0.4	TP**1102... ⁽¹⁾	1.2
A10K-STUPR/L1103-D120	Steel	12	10	6.5	125	20	9	0.6	5°	-10°	0.4	TP**1103... ⁽¹⁾	1.4
A12H-STUPR1102-D140	Steel	14	12	7	100	24	11	0.8	5°	-4°	0.4	TP**1102... ⁽¹⁾	1.2
A12M-STUPR/L1102-D140	Steel	14	12	7	150	24	11	0.8	5°	-4°	0.4	TP**1102... ⁽¹⁾	1.2
A12M-STUPR/L1103-D140	Steel	14	12	7	150	24	11	0.6	5°	-6°	0.4	TP**1103... ⁽¹⁾	1.4
A12H-STUPR1102-D160	Steel	16	12	9	100	24	11	0.6	5°	-3°	0.4	TP**1102... ⁽¹⁾	1.2
A12M-STUPR/L1102-D160	Steel	16	12	9	150	24	11	0.6	5°	-3°	0.4	TP**1102... ⁽¹⁾	1.2
A16K-STUPR13-D180	Steel	18	16	9	125	32	15	0.8	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
A16Q-STUPR/L1103-D180	Steel	18	16	9	180	32	15	0.8	5°	-4°	0.4	TP**1103... ⁽¹⁾	1.4
A16Q-STUPR/L13-D180	Steel	18	16	9	180	32	15	0.8	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
A16K-STUPR13-D200	Steel	20	16	11	125	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
A16Q-STUPR/L13-D200	Steel	20	16	11	180	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
A20R-STUPR/L1103-D220	Steel	22	20	11	200	36	18	0.7	5°	-2°	0.4	TP**1103... ⁽¹⁾	1.4
A20R-STUPR/L13-D220	Steel	22	20	11	200	36	18	0.7	5°	-2°	0.4	TP**1303... ⁽¹⁾	1.4
A25S-STUPR/L16-D270	Steel	27	25	13.5	250	45	23	0.5	5°	-1°	0.8	TP**16T3... ⁽¹⁾	3
A32T-STUPR/L16-D340	Steel	34	32	17	300	50	30	0.7	5°	0°	0.8	TP**16T3...	3
E07H-STUPR/L07-D080	Carbide	8	7	4	100	14	6.75	0.3	5°	-10°	0.4	TP**0701...	0.9
E08G-STUPR07-D080	Carbide	8	8	4	90	44.5	7.5	0.5	5°	-10°	0.4	TP**0701...	0.9
E08K-STUPR/L07-D080	Carbide	8	8	4	125	44.5	7.5	0.5	5°	-10°	0.4	TP**0701...	0.9
E08G-STUPR09-D100	Carbide	10	8	5.5	90	22	7	0.6	5°	-8°	0.4	TP**0902... ⁽¹⁾	0.9
E08K-STUPR/L09-D100	Carbide	10	8	5.5	125	22	7	0.6	5°	-8°	0.4	TP**0902... ⁽¹⁾	0.9
E10F-STUPR1102-D120	Carbide	12	10	6.5	80	25	9	0.5	5°	-6°	0.4	TP**1102... ⁽¹⁾	1.2
E10H-STUPR1102-D120	Carbide	12	10	6.5	100	25	9	0.6	5°	-6°	0.4	TP**1102... ⁽¹⁾	1.2
E10M-STUPR/L1102-D120	Carbide	12	10	6.5	150	25	9	0.6	5°	-6°	0.4	TP**1102... ⁽¹⁾	1.2
E10M-STUPR/L1103-D120	Carbide	12	10	6.5	150	25	9	0.7	5°	-10°	0.4	TP**1103... ⁽¹⁾	1.4
E12G-STUPR1102-D140	Carbide	14	12	7	90	27	11	0.8	5°	-4°	0.4	TP**1102... ⁽¹⁾	1.2
E12J-STUPR1102-D140	Carbide	14	12	7	110	27	11	0.8	5°	-4°	0.4	TP**1102... ⁽¹⁾	1.2
E12Q-STUPR/L1102-D140	Carbide	14	12	7	180	27	11	0.8	5°	-4°	0.4	TP**1102... ⁽¹⁾	1.2
E12Q-STUPR/L1103-D140	Carbide	14	12	7	180	27	11	0.7	5°	-6°	0.4	TP**1103... ⁽¹⁾	1.4
E12G-STUPR1102-D160	Carbide	16	12	9	90	27	11	0.6	5°	-3°	0.4	TP**1102... ⁽¹⁾	1.2
E12J-STUPR1102-D160	Carbide	16	12	9	110	27	11	0.6	5°	-3°	0.4	TP**1102... ⁽¹⁾	1.2
E12Q-STUPR/L1102-D160	Carbide	16	12	9	180	27	11	0.6	5°	-3°	0.4	TP**1102... ⁽¹⁾	1.2
E16H-STUPR13-D180	Carbide	18	16	9	100	32	15	0.9	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
E16R-STUPR/L1103-D180	Carbide	18	16	9	200	32	15	0.8	5°	-3°	0.4	TP**1103... ⁽¹⁾	1.4
E16L-STUPR13-D180	Carbide	18	16	9	130	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
E16R-STUPR/L13-D180	Carbide	18	16	9	200	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
E16H-STUPR13-D200	Carbide	20	16	11	100	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
E16L-STUPR13-D200	Carbide	20	16	11	130	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
E16R-STUPL13-D200	Carbide	20	16	11	200	32	15	0.6	5°	-3°	0.4	TP**1303... ⁽¹⁾	1.4
E20S-STUPR1103-D220	Carbide	22	20	11	250	36	18	0.7	5°	-2°	0.4	TP**1103... ⁽¹⁾	1.4
E20S-STUPR13-D220	Carbide	22	20	11	250	36	18	0.6	5°	-2°	0.4	TP**1303... ⁽¹⁾	1.4
E25T-STUPR16-D270	Carbide	27	25	13.5	300	45	23	0.5	5°	-1°	0.8	TP**16T3...	3

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

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

(1) TPGH, TPGM, and TPGA inserts cannot be used.

SPARE PARTS



Designation	Clamping screw	Wrench
A/E07*-STUPR/L07-...	CSTB-2.2L038	T-7F
A/E08*-STUPR/L07-...	CSTB-2.2L038	T-7F
A/E08*-STUPR/L09-...	CSTB-2.2L038	T-7F
A/E10*-STUPR/L1102-...	CSTB-2.5S	T-8F
A/E10*-STUPR/L1103-...	CSTB-3L050	T-9F
A/E12*-STUPR/L1102-...	CSTB-2.5B	T-8F
A/E12*-STUPR/L1103-...	CSTB-3L050	T-9F
A/E16*-STUPR/L1103-...	CSTB-3S	T-9F
A/E16*-STUPR/L13-...	CSTB-3S	T-9F
A/E20*-STUPR/L1103-...	CSTB-3S	T-9F
A/E20*-STUPR/L13-...	CSTB-3	T-9F
A/E25*-STUPR/L16-...	CSTB-4M	T-15F
A32*-STUPR/L16-...	CSTB-4M	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	T9215
Breaker Shape	JS	PS	PM
Cutting conditions	B018		

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	T9215
Breaker Shape	JS	PS	PM
Cutting conditions	B020		

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

Application	Precision finishing
Grade	DX120
Breaker Shape	T-DIA ^{with rake}
Cutting conditions	B024

Application	Precision finishing
Grade	BX470
Breaker Shape	T-CBN
Cutting conditions	B026

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Grade

Insert

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

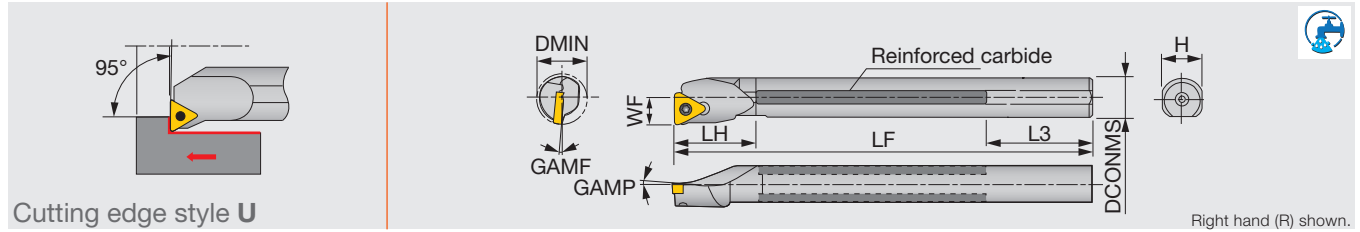
Tooling System

User's Guide

Index

T-STUPR/L

Screw-on boring bar, for positive 60° triangular inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMP	GAMF	RE**	Insert	Torque*
T12M-STUPR11-D14	Reinforced	14	-	12	7	150	24	59	11	5°	-4°	0.4	TP**1102...	1.2
T12M-STUPR/L11	Reinforced	16	-	12	9	150	25	58	11	5°	-4°	0.4	TP**1102...	1.2
T16Q-STUPR13-D18	Reinforced	18	-	16	9	180	30	59	15	5°	-3.5°	0.4	TP**1303...	1.4
T16Q-STUPR/L13	Reinforced	20	-	16	11	180	30	59	15	5°	-3°	0.4	TP**1303...	1.4
T20R-STUPR13C-D22	Reinforced	22	Rc1/4	20	11	200	35	49	18	5°	-2°	0.4	TP**1303...	1.4
T20R-STUPR/L13	Reinforced	24	-	20	13	200	40	49	18	5°	-2°	0.4	TP**1303...	1.4
T25S-STUPR16C-D27	Reinforced	27	Rc1/4	25	13.5	250	40	64	23	5°	-1°	0.8	TP**16T3...	3
T25S-STUPR/L16	Reinforced	31	-	25	17	250	45	64	23	5°	0°	0.8	TP**16T3...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
T12M-STUPR11-D14	CSTB-2.5B	T-8F
T12M-STUPR/L11	CSTB-2.5	T-8F
T16Q-STUPR13-D18	CSTB-3S	T-9F
T16Q-STUPR/L13	CSTB-3	T-9F
T20R-STUPR13C-D22	CSTB-3S	T-9F
T20R-STUPR/L13	CSTB-3	T-9F
T25S-STUPR/L16...	CSTB-4S	T-15F

INSERT SELECTION

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	NS9530	T9215
Breaker Shape	01	PSS	PS	PM
Cutting conditions	B018			

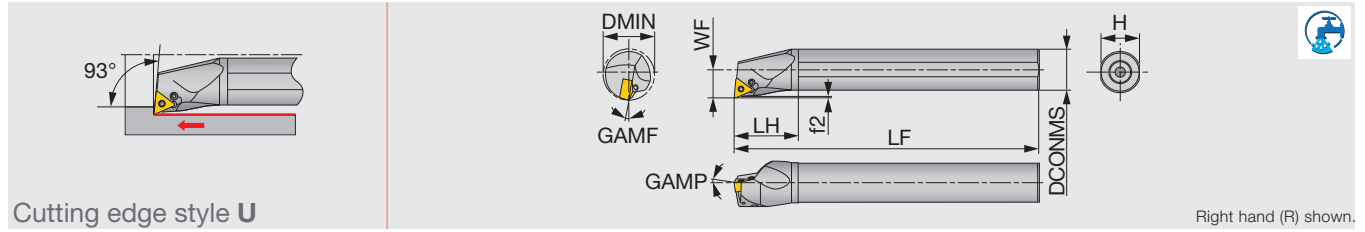
Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	AH725	AH630
Breaker Shape	PSF	PSS	PM
Cutting conditions	B020		

Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	B022

Application	Finishing
	Grade
Breaker Shape	T-DIA
Cutting conditions	B024

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: T-STUPR/L: Insert → B142 -, CBN → B185 -, PCD → B196



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PTUNR/L1104-D320	Steel	32	25	17	200	45	23	1.22	-6°	-12°	0.8	TN**1104...	2
A32S-PTUNR/L1104-D400	Steel	40	32	22	250	50	30	1.16	-6°	-10°	0.8	TN**1104...	2

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Clamping screw	Wrench	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PTUNR/L1104-D320	LCS23A	P-2.5	LCL23	EA-25	SSHM4-5
A32S-PTUNR/L1104-D400	LCS23A	P-2.5	LCL23	EA-32	SSHM4-5

*Optional

INSERT SELECTION

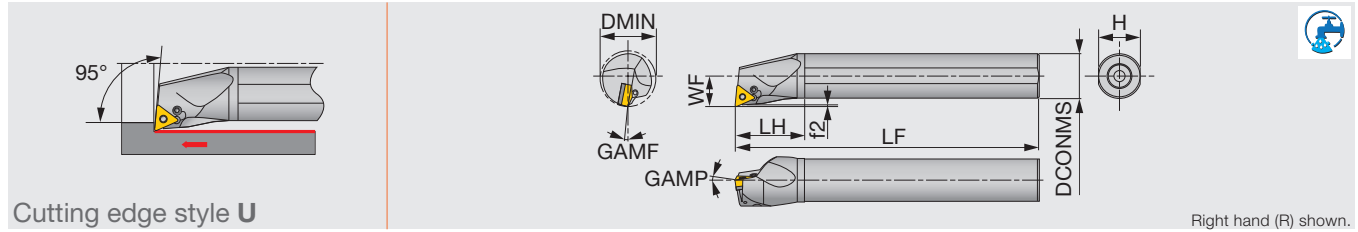
Application	Finishing	Medium cutting
	Grade	T9215
Breaker Shape	TSF	TM
Cutting conditions	B006	

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SS	SM
Cutting conditions	B008	



A-PTUNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16M-PTUNR/L11-D200	Steel	20	16	11	150	32	15	1	-6°	-14°	0.4	TN**1103...	1.7
A20Q-PTUNR/L11-D250	Steel	25	20	13	180	36	18	1	-6°	-12°	0.4	TN**1103...	1.7
A25R-PTUNR/L16-D320	Steel	32	25	17	200	45	23	1.4	-6°	-12°	0.8	TN**1604...	2.7
A32S-PTUNR/L16-D400	Steel	40	32	22	250	50	30	1.3	-6°	-10°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

Toolholder length may not conform to ISO standard.

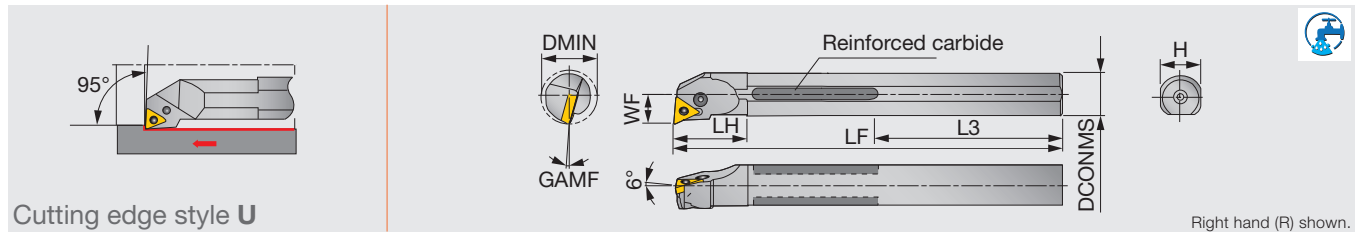
Note: Use right-hand toolholders (PTUNR**) with left-hand inserts (L); and left-hand toolholders (PTUNL**) with right-hand inserts (R).

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A16M-PTUNR/L11-D200	-	LCS22A	-	P-2F	-	-	LCL22N	-	SSHM3-4
A20Q-PTUNR/L11-D250	-	LCS22A	-	P-2F	-	-	LCL22N	EA-20	SSHM3-4
A25R-PTUNR/L16-D320	ELST317BR/L	-	LCS3	-	P-2.5	LSP3	LCL33	EA-25	SSHM4-5
A32S-PTUNR/L16-D400	LST317BR/L	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32	SSHM4-5

*Optional

T-PTUNR

Lever-lock boring bar, for negative 60° triangular inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	GAMF	RE**	Insert	Torque*
T16Q-PTUNR11	Reinforced	20	-	16	11	180	27	59	15	-14°	0.4	TN**1103...	1.7
T20R-PTUNR11C	Reinforced	25	Rc1/4	20	13	200	35	49	18	-12°	0.4	TN**1103...	1.7
T25S-PTUNR16C	Reinforced	32	Rc1/4	25	17	250	40	64	23	-12°	0.8	TN**1604...	2.7
T32U-PTUNR16C	Reinforced	40	Rc1/2	32	22	350	50	103	30	-10°	0.8	TN**1604...	2.7
T40V-PTUNR16C	Reinforced	50	Rc1/2	40	27	400	55	88	37	-10°	0.8	TN**1604...	2.7
T50W-PTUNR16C	Reinforced	63	Rc1/2	50	35	450	65	63	47	-8°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

Toolholder length may not conform to ISO standard.

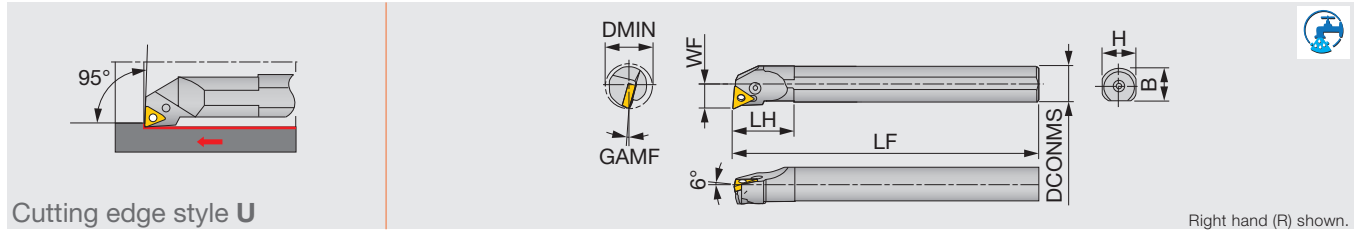
Note: Use right-hand toolholders (R) with left-hand inserts (L); and left-hand toolholders (L) with right-hand inserts (R).

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever
T**-PTUNR11...	-	LCS22A	-	P-2F	-	-	LCL22N
T25S-PTUNR16C	ELST317BR	-	LCS3	-	P-2.5	LSP3	LCL33
T**-PTUNR16C	LST317BR	-	LCS3	-	P-2.5	LSP3	LCL3

Reference pages: A-PTUNR/L, T-PTUNR: Insert → B084 -, CBN → B176 -, PCD → B192 -

A/S-PTUNR/L

Lever-lock boring bar, for negative 60° triangular inserts



Cutting edge style U

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMF	RE**	Insert	Torque*
S16M-PTUNR/L11	Steel	20	16	11	150	30	15	15.5	-14°	0.4	TN**1103...	1.7
S20Q-PTUNR/L11	Steel	25	20	13	180	35	18	19	-12°	0.4	TN**1103...	1.7
S25R-PTUNR/L16	Steel	32	25	17	200	40	23	24	-12°	0.8	TN**1604...	2.7
A32S-PTUNR/L16	Steel	40	32	22	250	50	30	29.5	-12°	0.8	TN**1604...	2.7

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

Toolholder length may not conform to ISO standard.

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

Designation	Shim	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Spring pin	Lever	Oil supply attachment*
S**-PTUNR/L11	-	LCS22A	-	P-2F	-	-	LCL22N	-
S25R-PTUNR16	ELST317BR	-	LCS3	-	P-2.5	LSP3	LCL33	-
S25R-PTUNL16	ELST317BL	-	LCS3	-	P-2.5	LSP3	LCL33	-
A32S-PTUNR16	LST317BR	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32
A32S-PTUNL16	LST317BL	-	LCS3	-	P-2.5	LSP3	LCL3	EA-32

*Optional

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting	Medium to heavy cutting
	Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM	TH
Cutting conditions	B006			

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SF	SM
Cutting conditions	B008	

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

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

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

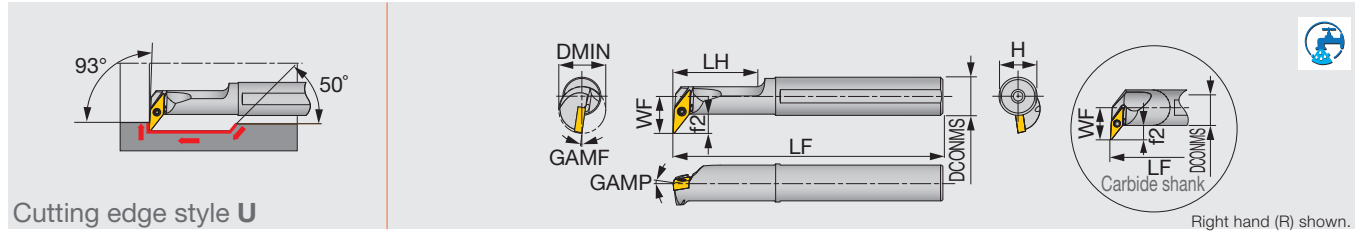
Reference pages: A/S-PTUNR/L: Insert → B084 -, CBN → B176 -, PCD → B192 -



STREAMJETBAR

A/E-SVUBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SVUBR/L11-D200	Steel	20	16	15.5	180	35	15	8	0°	-8°	0.4	VB**1103...	1.2
A20R-SVUBR/L11-D250	Steel	25	20	17.5	200	40	19	8	0°	-7°	0.4	VB**1103...	1.2
A25S-SVUBR/L16-D320	Steel	32	25	20.5	250	50	23	8.5	0°	-6°	0.8	VB**1604...	3
E16R-SVUBR/L11-D245	Carbide	24.5	16	16	200	-	15	8	0°	-8°	0.4	VB**1103...	1.2
E20S-SVUBR/L11-D285	Carbide	28.5	20	18	250	-	19	8	0°	-7°	0.4	VB**1103...	1.2
E25T-SVUBR/L16-D340	Carbide	34	25	21	300	-	23	8.5	0°	-6°	0.8	VB**1604...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVUBR/L11-D2*0	CSTB-2.5	T-8F
A25S-SVUBR/L16-D320	CSTB-3.5	T-15F
E**-SVUBR/L11-D2*5	CSTB-2.5	T-8F
E25T-SVUBR/L16-D340	CSTB-3.5	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting
	SH725	T9215
Grade	JS	PS
Breaker Shape		
Cutting conditions	B018	

Application	Finishing	Finishing to medium cutting
	SH725	T9215
Grade	JS	PS
Breaker Shape		
Cutting conditions	B020	

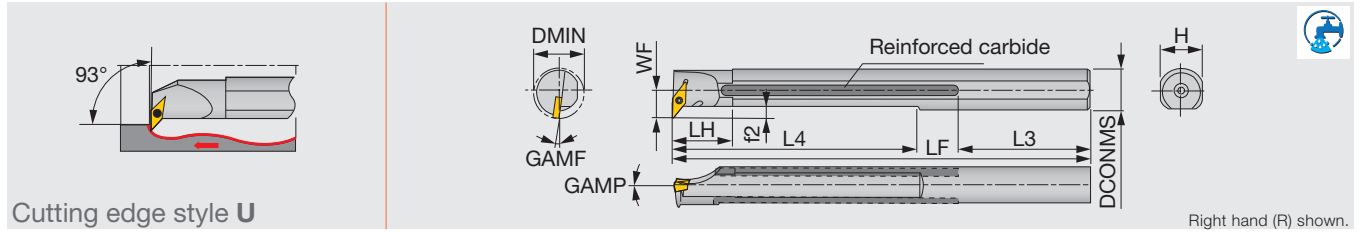
Application	Finishing to medium cutting
	T515
Grade	CM
Breaker Shape	
Cutting conditions	B022

Application	Precision finishing	Finishing
	BXM10	BXM20
Grade	T-CBN	T-CBN
Breaker Shape		
Cutting conditions	B028	

Reference pages: A/E-SVUBR/L: Insert → **B150 -**, CBN → **B189**

T-SVUBR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	L4	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T20R-SVUBR11C	Reinforced	25	Rc1/4	20	14	200	30	59	121	18	4	0°	-8°	0.4	VB**1103...	1.2

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
T20R-SVUBR11C	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B018	

M

Application	Finishing	Finishing to medium cutting
Grade	AH725	AH630
Breaker Shape	PSF	PSS
Cutting conditions	B020	

K

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

S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

H

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

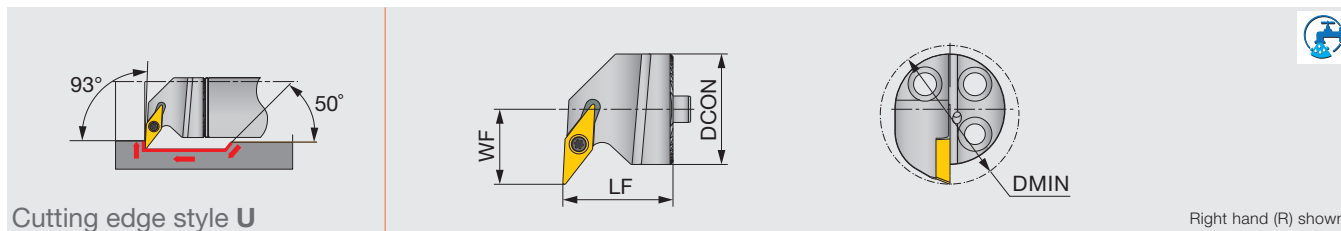
Reference pages: T-SVUBR: Insert → **B150** -, CBN → **B189**



BOREMEISTER

S-SVUCR/L-H

Screw-on exchangeable boring head, for positive 35° rhombic inserts



Cutting edge style **U**

Right hand (R) shown.

Designation	DMIN	DCON	WF	LF	Shank	Insert
S20-SVUCR/L11-H	27	20	16	20	D/G20	VC**1103...
S25-SVUCR/L11-H	31	25	17	25	D25	VC**1103...

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

SPARE PARTS

Designation	Clamping screw	Wrench
S20-SVUCR/L11-H	SR14-560	T-8/5
S25-SVUCR/L11-H	SR14-560	T-8/5

INSERT SELECTION

Application	Finishing	Finishing to medium cutting
	Grade	NS9530
Breaker Shape	PSS	PS
Cutting conditions	B018	

Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	AH725	AH630
Breaker Shape	PSF	PSS	PM
Cutting conditions	B020		

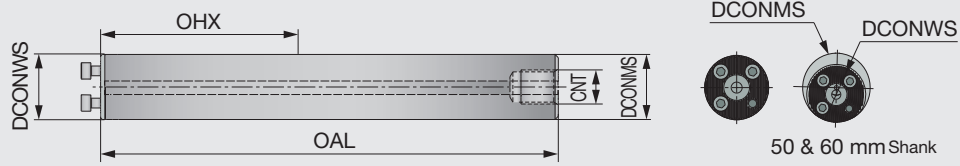
Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	B022

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

Application	Finishing	Finishing to medium cutting
	Grade	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: S-SVUCR/L-H: Insert → **B153** -



Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS



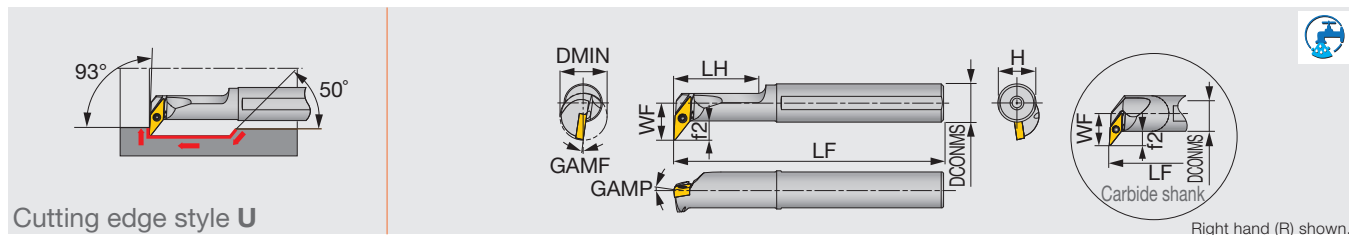
Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SRM3.5X10DIN912	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L...	SRM6X16DIN912-12.9	HW5.0



STREAMJETBAR

A/E-SVUCR/L

Screw-on boring bar, for positive 35° rhombic inserts



Cutting edge style U

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVUCR/L08-D160	Steel	16	12	11	150	30	11	5.5	0°	-8°	0.4	VC**0802...	0.6
A25S-SVUCR/L16-D320	Steel	32	25	19	250	45	23	6.5	0°	-5°	0.8	VC**1604...	3
E12Q-SVUCR/L08-D180	Carbide	18	12	11.5	180	-	11	5.5	0°	-8°	0.4	VC**0802...	0.6
E25T-SVUCR/L16-D320	Carbide	32	25	19	300	-	23	6.5	0°	-5°	0.8	VC**1604...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A12M-SVUCR/L08-D160	CSTB-2L	T-6F
A25S-SVUCR/L16-D320	CSTB-3.5	T-15F
E12Q-SVUCR/L08-D180	CSTB-2L	T-6F
E25T-SVUCR/L16-D320	CSTB-3.5	T-15F

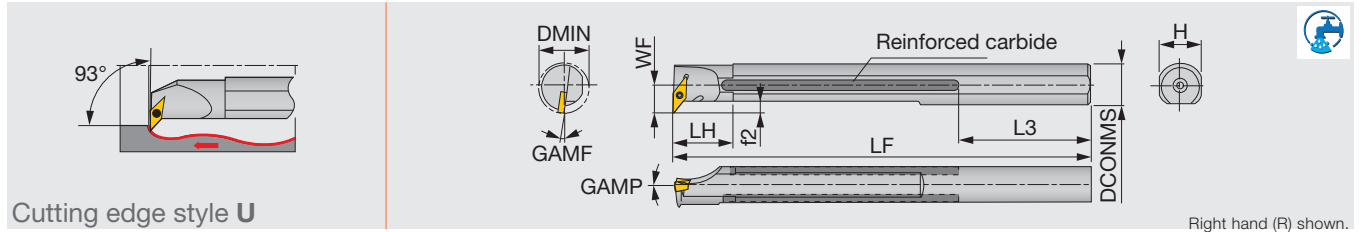
INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting	
	Grade	T9215		Grade	T9215	
	Breaker Shape	PS		Breaker Shape	PS	
Cutting conditions		B018	Cutting conditions		B020	
K	Application	Finishing to medium cutting	N	Application	Precision finishing	Medium cutting
	Grade	T515		Grade	DX120	KS05F
	Breaker Shape	CM		Breaker Shape	T-DIA with rake	AL
Cutting conditions		B022	Cutting conditions		B024	
S	Application	Finishing to medium cutting	H	Application	Precision finishing	Finishing
	Grade	AH8005		Grade	BXM10	BXM20
	Breaker Shape	PS		Breaker Shape	T-CBN	T-CBN
Cutting conditions		B026	Cutting conditions		B028	

Reference pages: A/E-SVUCR/L: Insert → B153 -, CBN → B190, PCD → B194 -

T-SVUCR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T25S-SVUCR16C	Reinforced	32	Rc1/4	25	19	250	40	64	23	6.5	0°	-5°	0.8	VC**1604...	3

*Torque: Recommended clamping torque (N·m)
 **RE : Standard corner radius
 *The hole specification of applicable inserts conforms to ISO standard.
 Note: Use right-hand toolholders (SVUCR**) with left-hand inserts (L).

SPARE PARTS

Designation	Clamping screw	Wrench
T25S-SVUCR16C	CSTB-3.5L	T-15F

INSERT SELECTION

P	Application	Finishing	Finishing to medium cutting	M	Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	T9215		Grade	AH725	AH630	T6130
	Breaker Shape				Breaker Shape			
	Cutting conditions	B018			Cutting conditions	B020		
K	Application	Finishing to medium cutting	N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	T515		Grade	DX120	DX140	KS05F	
	Breaker Shape			Breaker Shape				
	Cutting conditions	B022		Cutting conditions	B024			
S	Application	Finishing	Finishing to medium cutting	H	Application	Precision finishing	Finishing	
	Grade	AH8015	AH8015		Grade	BXM10	BXM20	
	Breaker Shape				Breaker Shape			
	Cutting conditions	B026			Cutting conditions	B028		

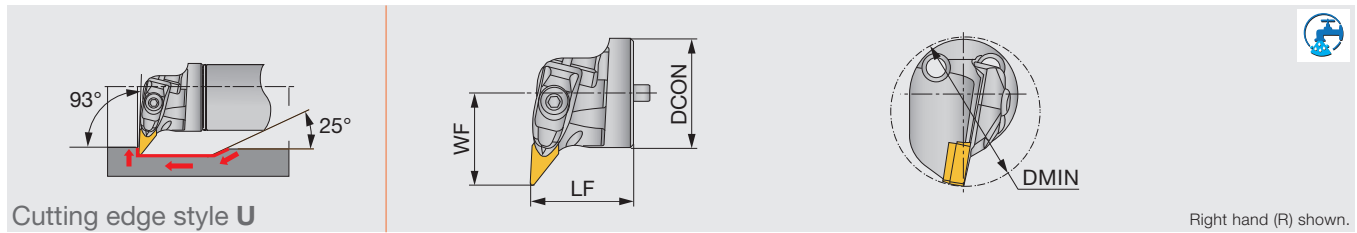
Reference pages: T-SVUCR: Insert → B153 -, CBN → B190, PCD → B194 -



BOREMEISTER

S-DVUNR/L-H

Double-clamp exchangeable boring head, for negative 35° rhombic inserts



Cutting edge style **U**

Right hand (R) shown.

Designation	DMIN	DCON	WF	LF	Shank	Insert
S40-DVUNR/L16T-H	56	40	34	38	D40, D50, D60	VN**1604...

SPARE PARTS						
Designation	Shim	Shim screw	Clamp	Clamp screw	Spring	Wrench
S40-DVUNR/L16T-H	ASV322	SR35080I	DLM3V	SR10402267	KSP5	HW4.0

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting
	Grade	NS9530	GT9530
Breaker Shape	TF	TSF	TM
Cutting conditions			
B006			

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SF	SM
Cutting conditions		
B008		

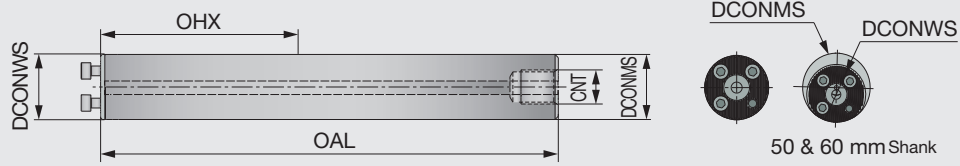
Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions			
B010			

Application	Precision finishing
	Grade
Breaker Shape	T-DIA
Cutting conditions	
B012	

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions			
B014			

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions		
B016		

Reference pages: S-DVUNR/L-H: Insert → **B094 -**, CBN → **B178**, PCD → **B192**



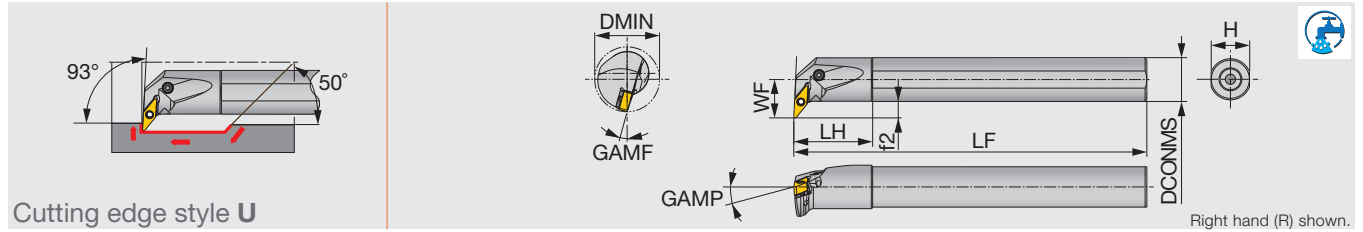
Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

SPARE PARTS



Designation	Clamping screw	Wrench
D16-L..., G16-L...	SRM3X10DIN912	HW2.5
D20-L..., G20-L...	SRM3.5X10DIN912	HW2.5
D25-L...	SRM4X12DIN912	HW3.0
D32-L...	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L...	SRM6X16DIN912-12.9	HW5.0





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PVUNR/L1204-D320	Steel	32	25	18	200	45	23	5.0	-5°	-15°	0.8	VN**1204...	3
A25R-PVUNR/L1204-D370	Steel	37	25	22	200	45	23	8.0	-4°	-15°	0.8	VN**1204...	3
A32S-PVUNR/L1204-D400	Steel	40	32	22	250	50	30	5.5	-6°	-12°	0.8	VN**1204...	3

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

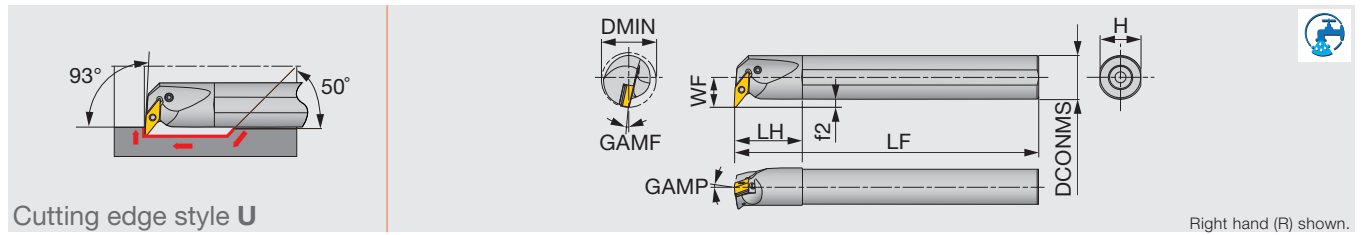
Designation	Clamping screw	Wrench	Lever	Shim	Spring pin	Oil supply attachment*	Screw for oil hole*
A25R-PVUNR/L1204-D...	LCS3V	P-2.5	LCL3V	LSV212	LSP3	EA-25	SSHM4-5
A32S-PVUNR/L1204-D400	LCS3V	P-2.5	LCL3V	LSV212	LSP3	EA-32	SSHM4-5

*Optional

INSERT SELECTION

Application	Finishing	Medium cutting
	Grade	T9215
Breaker Shape	TSF	TM
Cutting conditions	B006	

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SS	SM
Cutting conditions	B008	



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A25R-PVUNR/L16-D370	Steel	37	25	22	200	45	23	9.5	-5°	-14°	0.8	V/YN**1604...	2.7
A32S-PVUNR/L16-D400	Steel	40	32	22	250	50	30	6	-5°	-12°	0.8	V/YN**1604...	2.7
A40T-PVUNR/L16-D500	Steel	50	40	27	300	60	37	7	-5°	-10°	0.8	V/YN**1604...	2.7

*Torque: Recommended clamping torque (N-m)

**RE: Standard corner radius

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A25R-PVUNR/L16-D370	LSV317BR/L	LCS3V	P-2.5	LSP3	LCL3V	EA-25	SSHM4-5
A32S-PVUNR/L16-D400	LSV317BR/L	LCS3V	P-2.5	LSP3	LCL3V	EA-32	SSHM4-5
A40T-PVUNR/L16-D500	LSV317BR/L	LCS3V	P-2.5	LSP3	LCL3V	-	SSHM5-6

*Optional

INSERT SELECTION

P	Application	Precision finishing	Finishing	Medium cutting
	Grade	NS9530	GT9530	T9215
Breaker Shape	TF	TSF	TM	
Cutting conditions		B006		

M	Application	Finishing	Medium cutting
	Grade	T6120	T6130
Breaker Shape	SF	SM	
Cutting conditions		B008	

K	Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515	T515
Breaker Shape	All-round	All-round	All-round	
Cutting conditions		B010		

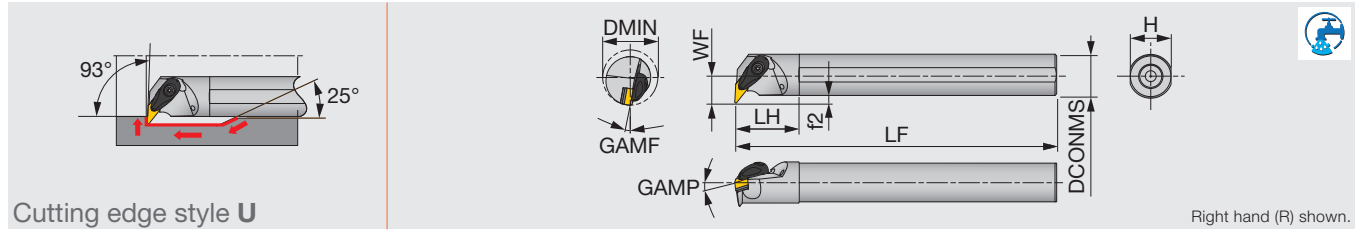
N	Application	Precision finishing
	Grade	DX120
Breaker Shape	T-DIA with rake	
Cutting conditions		B012

S	Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM	
Cutting conditions		B014		

H	Application	Precision finishing	Finishing
	Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN	
Cutting conditions		B016	

Reference pages: A-PVUNR/L: Insert → B094 -, B107, CBN → B178, PCD → B192





Cutting edge style **U**

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A32S-AVUNR/L16-D400	Steel	40	32	22	250	50	30	6	-6°	-10°	0.8	V/YN**1604...	3
A40T-AVUNR/L16-D500	Steel	50	40	27	300	55	37	7	-6°	-8°	0.8	V/YN**1604...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

SPARE PARTS

Designation	Clamp	Clamp screw	Spring	Spring pin	Shim	Shim screw	Wrench
A**-AVUNR/L16-D...	ACP3L	ACS-5W	BP-7	SP-2.5	ASV322	CSTB-3.5	T-15F

INSERT SELECTION

Application	Precision finishing	Finishing	Medium cutting
	Grade	NS9530	GT9530
Breaker Shape	TF	TSF	TM
Cutting conditions			
B006			

Application	Finishing	Medium cutting
	Grade	T6120
Breaker Shape	SF	SM
Cutting conditions		
B008		

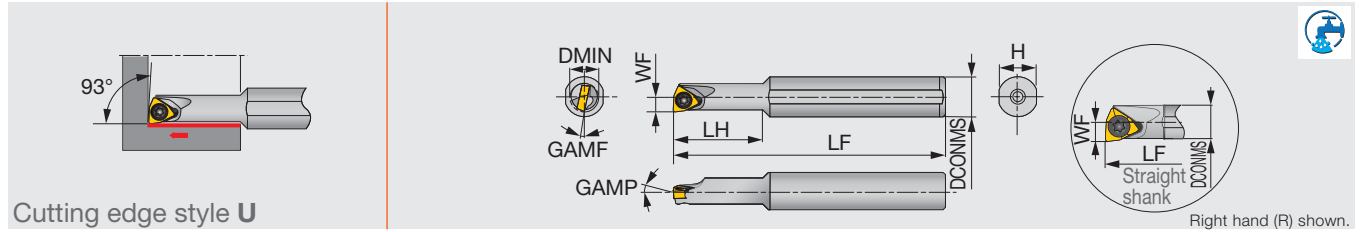
Application	Finishing	Medium cutting	Medium to heavy cutting
	Grade	T515	T515
Breaker Shape	All-round	All-round	All-round
Cutting conditions			
B010			

Application	Precision finishing
Grade	DX120
Breaker Shape	T-DIA with rake
Cutting conditions	
B012	

Application	Precision finishing	Finishing	Medium cutting
	Grade	BX470	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions			
B014			

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions		
B016		

Reference pages: A-AVUNR/L: Insert → **B094 -**, **B107**, CBN → **B178**, PCD → **B192**



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	GAMF	RE**	Insert	Torque*
A05F-SWUBR/L03-D060	Steel	6	5	3	80	9	4.8	0°	-13°	0.4	WB**0301...	0.6
A06G-SWUBR/L03-D070	Steel	7	6	3.5	90	11	5.75	0°	-12°	0.4	WB**0301...	0.6
A07G-SWUBR/L03-D080	Steel	8	7	4	90	12	6.75	0°	-11°	0.4	WB**0301...	0.6
A08H-SWUBR03-D060	Steel	6	8	3.1	100	18	7.5	0°	-12°	0.4	WB**0301...	0.6
A08H-SWUBR03-D070	Steel	7	8	3.6	100	20	7.5	0°	-12°	0.4	WB**0301...	0.6
E05G-SWUBR/L03-D060	Carbide	6	5	3	90	10	4.8	0°	-13°	0.4	WB**0301...	0.6
E06H-SWUBR/L03-D070	Carbide	7	6	3.5	100	12	5.75	0°	-12°	0.4	WB**0301...	0.6
E07H-SWUBR/L03-D080	Carbide	8	7	4	100	14	6.75	0°	-11°	0.4	WB**0301...	0.6
E08K-SWUBR03-D060	Carbide	6	8	3.1	125	30	7.5	0°	-12°	0.4	WB**0301...	0.6
E08K-SWUBR03-D070	Carbide	7	8	3.6	125	40	7.5	0°	-12°	0.4	WB**0301...	0.6

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A/E**-SWUBR/L...	CSTB-2	T-6F

INSERT SELECTION

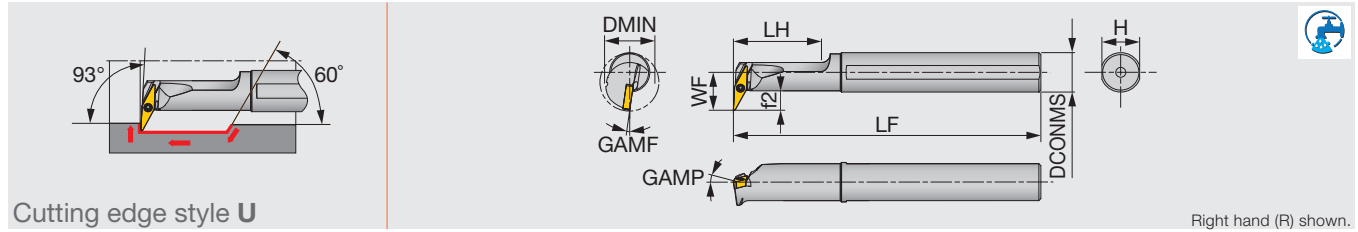
Application	Finishing	Application	Finishing	Application	Finishing	Application	Finishing
Grade	SH725	Grade	SH725	Grade	TH10	Grade	GH110
Breaker Shape	W08	Breaker Shape	W08	Breaker Shape	W08	Breaker Shape	W08
Cutting conditions	B006	Cutting conditions	B008	Cutting conditions	B010	Cutting conditions	B012



Y-PRO SERIES

A/E-SYUBR/L

Screw-on boring bar, for positive 25° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SYUBR/L11-D200	Steel	20	16	15.5	180	35	15	8	0°	-8°	0.4	YW**11T2...	0.6
E12Q-SYUBR/L11-D200	Carbide	20	12	13.5	180	27	11	7.5	0°	-8°	0.4	YW**11T2...	0.6
E16R-SYUBR/L11-D245	Carbide	24.5	16	16	200	32	15	8	0°	-8°	0.4	YW**11T2...	0.6

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

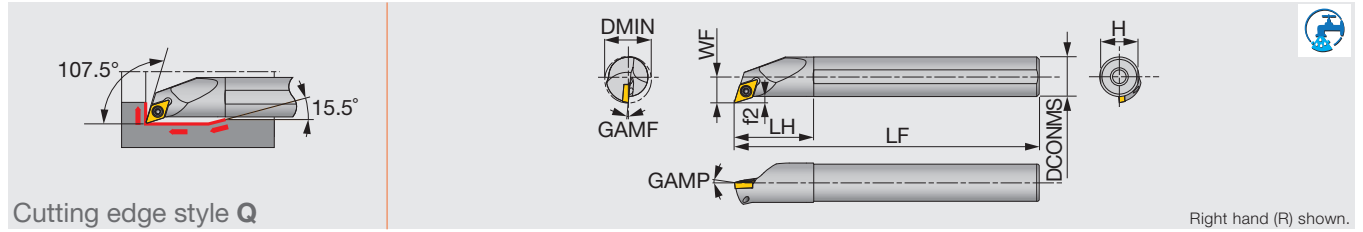
SPARE PARTS

Designation	Clamping screw	Wrench
A16Q-SYUBR/L11-D200	CSTB-2L	T-6F
E**-SYUBR/L11-D...	CSTB-2L	T-6F

INSERT SELECTION

P	Application	Finishing to medium cutting	K	Application	Finishing to medium cutting
	Grade	T9225		Grade	GT9530
	Breaker Shape	ZM		Breaker Shape	ZM
	Cutting conditions	B018		Cutting conditions	B022

Reference pages: A/E-SYUBR/L: Insert → **B160**



Cutting edge style Q

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SDQCR/L07-D130	Steel	13	10	7.6	125	20	9	2.6	0°	-8°	0.4	DC**0702...	1.2
A12M-SDQCR/L07-D160	Steel	16	12	8.6	150	24	11	2.6	0°	-6°	0.4	DC**0702...	1.2
A16Q-SDQCR/L07-D200	Steel	20	16	10.6	180	32	15	2.6	0°	-5°	0.4	DC**0702...	1.2
A20R-SDQCR/L11-D250	Steel	25	20	13.7	200	36	18	3.7	0°	-7°	0.8	DC**11T3...	3
A25S-SDQCR/L11-D300	Steel	30	25	16.2	250	45	23	3.7	0°	-4°	0.8	DC**11T3...	3
E10H-SDQCR07-D130	Carbide	13	10	7.6	100	25	9	2.5	0°	-8°	0.4	DC**0702...	1.2
E10M-SDQCR/L07-D130	Carbide	13	10	7.6	150	25	9	2.6	0°	-8°	0.4	DC**0702...	1.2
E12J-SDQCR07-D160	Carbide	16	12	8.6	110	27	11	2.5	0°	-6°	0.4	DC**0702...	1.2
E12Q-SDQCR/L07-D160	Carbide	16	12	8.6	180	27	11	2.6	0°	-6°	0.4	DC**0702...	1.2
E16L-SDQCR07-D200	Carbide	20	16	10.6	130	32	15	2.5	0°	-5°	0.4	DC**0702...	1.2
E16R-SDQCR/L07-D200	Carbide	20	16	10.6	200	32	15	2.6	0°	-5°	0.4	DC**0702...	1.2
E20S-SDQCR/L11-D250	Carbide	25	20	13.7	250	36	18	3.7	0°	-7°	0.8	DC**11T3...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A1**-SDQCR/L07-D**0	CSTB-2.5S	T-8F
A2**-SDQCR/L11-D**0	CSTB-4S	T-15F
E1**-SDQCR/L07-D**0	CSTB-2.5S	T-8F
E20S-SDQCR/L11-D250	CSTB-4S	T-15F

INSERT SELECTION

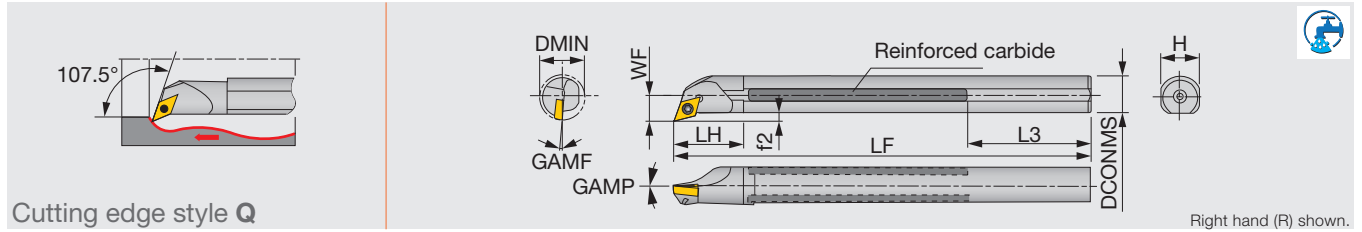
P	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	SH725	T9215	T9215
Breaker Shape	01	JS	PS	PM	
	Cutting conditions B018				
M	Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	Grade	SH725	SH725	T9215	T9215
Breaker Shape	01	JS	PS	PM	
	Cutting conditions B020				
K	Application	Finishing to medium cutting			
	Grade	T515			
Breaker Shape	CM				
	Cutting conditions B022				
N	Application	Precision finishing	Medium cutting		
	Grade	DX120	KS05F		
Breaker Shape	T-DIA	with rake AL			
	Cutting conditions B024				
S	Application	Precision finishing	Finishing to medium cutting		
	Grade	BX470	AH8005		
Breaker Shape	T-CBN	PS			
	Cutting conditions B026				
H	Application	Precision finishing	Finishing		
	Grade	BXM10	BXM20		
Breaker Shape	T-CBN	T-CBN			
	Cutting conditions B028				

Reference pages: A/E-SDQCR/L: Insert → B119 -, CBN → B182, PCD → B194 -



T-SDQCR/L

Screw-on boring bar, for positive 55° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T16Q-SDQCR/L07	Reinforced	20	-	16	11	180	27	59	15	3	0°	-6°	0.4	DC**0702...	1.2
T20R-SDQCR/L11C	Reinforced	25	Rc1/4	20	13	200	35	49	18	3	0°	-6°	0.8	DC**11T3...	3
T25S-SDQCR/L11C	Reinforced	32	Rc1/4	25	17	250	40	64	23	4.5	0°	-4°	0.8	DC**11T3...	3

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

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

SPARE PARTS

Designation	Clamping screw	Wrench
T16Q-SDQCR/L07	CSTB-2.5	T-8F
T20R-SDQCR/L11C	CSTB-4M	T-15F
T25S-SDQCR/L11C	CSTB-4	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting	Medium cutting
Grade	NS9530	T9215	T9215
Breaker Shape	PSS	PS	PM
Cutting conditions	B018		

M

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
Grade	GH330	AH725	AH630	T6130
Breaker Shape	W**	PSF	PSS	PM
Cutting conditions	B020			

K

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

N

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

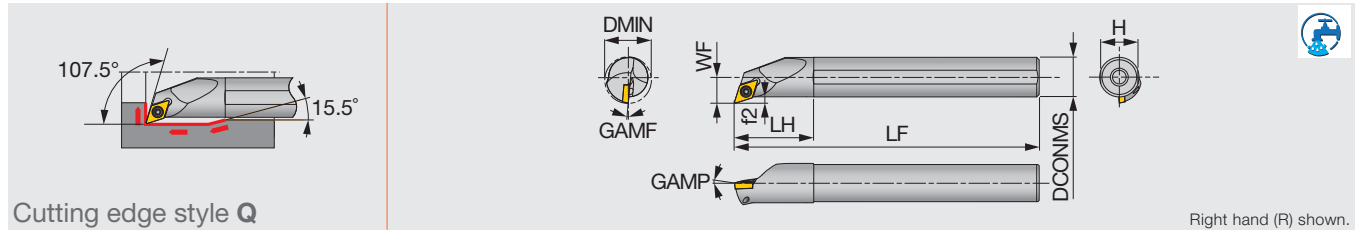
S

Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

H

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: T-SDQCR/L: Insert → **B119 -**, CBN → **B182**, PCD → **B194 -**



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDQPR07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.40	DPMT0702...	1.2
A12M-SDQPL07-D150-P	Special alloy steel	15	12	8.3	150	24	11	2.3	5	0	0.40	DPMT0702...	1.2
A12M-SDQPR07-D180-P	Special alloy steel	18	12	9.6	150	24	11	3.6	5	0	0.40	DPMT0702...	1.2
A12M-SDQPL07-D180-P	Special alloy steel	18	12	9.6	150	24	11	3.6	5	0	0.40	DPMT0702...	1.2
A16Q-SDQPR07-D220-P	Special alloy steel	22	16	11.6	180	32	15	3.6	5	0	0.40	DPMT0702...	1.2
A16Q-SDQPL07-D220-P	Special alloy steel	22	16	11.6	180	32	15	3.6	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPR07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPL07-D150	Carbide	15	12	8.3	180	27	11	2.3	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPR07-D180	Carbide	18	12	9.6	180	27	11	3.6	5	0	0.40	DPMT0702...	1.2
E12Q-SDQPL07-D180	Carbide	18	12	9.6	180	27	11	3.6	5	0	0.40	DPMT0702...	1.2
E16R-SDQPR07-D220	Carbide	22	16	11.6	200	32	15	3.6	5	0	0.40	DPMT0702...	1.2
E16R-SDQPL07-D220	Carbide	22	16	11.6	200	32	15	3.6	5	0	0.40	DPMT0702...	1.2

*Torque: Recommended clamping torque (N-m)


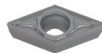
**RE : Standard corner radius

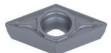
Note: Use right-hand toolholders (SDQCR**) with left-hand inserts (L); and left-hand toolholders (SDQCL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SDQPR/L07-D**0-P	CSTB-2.5S	T-8F
E**-SDQPR/L07-D**0	CSTB-2.5S	T-8F

INSERT SELECTION

P	Application	Finishing to medium cutting	
	Grade	T9225	NS9530
	Breaker Shape		
	Cutting conditions	B018	

S	Application	Finishing to medium cutting	
	Grade	AH8015	
	Breaker Shape		
	Cutting conditions	B026	

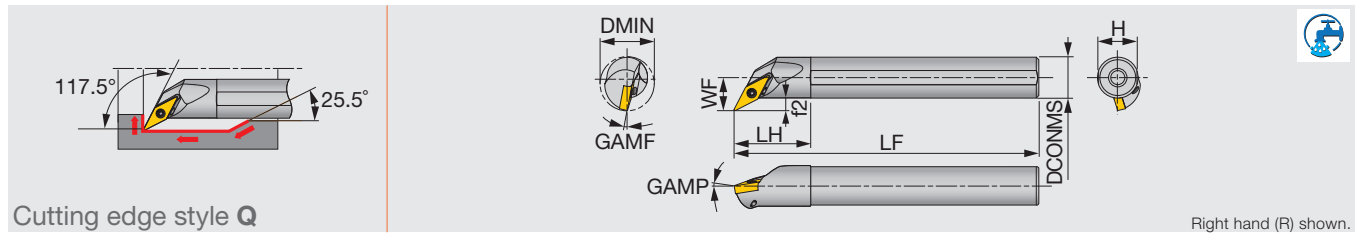
Reference pages: A/E-SDQPR/L: Insert → **B125**



STREAMJETBAR

A/E-SVQBR/L

Screw-on boring bar, for positive 35° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVQBR/L11-D170	Steel	17	12	10.5	150	24	11	4.5	-5°	-10°	0.4	VB**1103...	1.2
A16Q-SVQBR/L11-D215	Steel	21.5	16	13	180	30	15	5	-5°	-8°	0.4	VB**1103...	1.2
A20R-SVQBR/L11-D255	Steel	25.5	20	15	200	36	18	5	-5°	-6°	0.4	VB**1103...	1.2
A25S-SVQBR/L16-D305	Steel	30.5	25	17.5	250	45	23	5	-5°	-8°	0.8	VB**1604...	3
E12Q-SVQBR/L11-D170	Carbide	17	12	10.5	180	27	11	4.5	-5°	-10°	0.4	VB**1103...	1.2
E16R-SVQBR/L11-D215	Carbide	21.5	16	13	200	32	15	5	-5°	-8°	0.4	VB**1103...	1.2
E20S-SVQBR/L11-D255	Carbide	25.5	20	15	250	36	18	5	-5°	-6°	0.4	VB**1103...	1.2
E25T-SVQBR/L16-D305	Carbide	30.5	25	17.5	300	45	23	5	-5°	-8°	0.8	VB**1604...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVQBR/L11-D...	CSTB-2.5	T-8F
A25S-SVQBR/L16-D305	CSTB-3.5	T-15F
E**-SVQBR/L11-D...	CSTB-2.5	T-8F
E25T-SVQBR/L16-D305	CSTB-3.5	T-15F

INSERT SELECTION

Application	Finishing	Finishing to medium cutting
	Grade	SH725
Breaker Shape	JS	PS
Cutting conditions		
B018		

Application	Finishing	Finishing to medium cutting
	Grade	SH725
Breaker Shape	JS	PS
Cutting conditions		
B020		

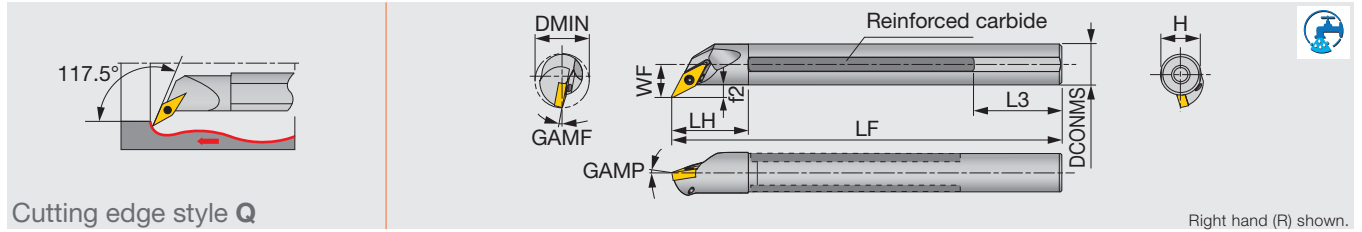
Application	Finishing to medium cutting
	Grade
Breaker Shape	CM
Cutting conditions	
B022	

Application	Precision finishing	Finishing
	Grade	BXM10
Breaker Shape	T-CBN	T-CBN
Cutting conditions		
B028		

Reference pages: A/E-SVQBR/L: Insert → B150 -, CBN → B190

T-SVQBR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T20R-SVQBR11C	Reinforced	25	Rc1/4	20	14	200	30	59	18	4	-5°	-7°	0.4	VB**1103...	1.2

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

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
T20R-SVQBR11C	CSTB-2.5	T-8F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	NS9530	T9215
Breaker Shape	PSS	PS
Cutting conditions	B018	

M

Application	Finishing	Finishing to medium cutting
Grade	AH725	AH630
Breaker Shape	PSF	PSS
Cutting conditions	B020	

K

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

S

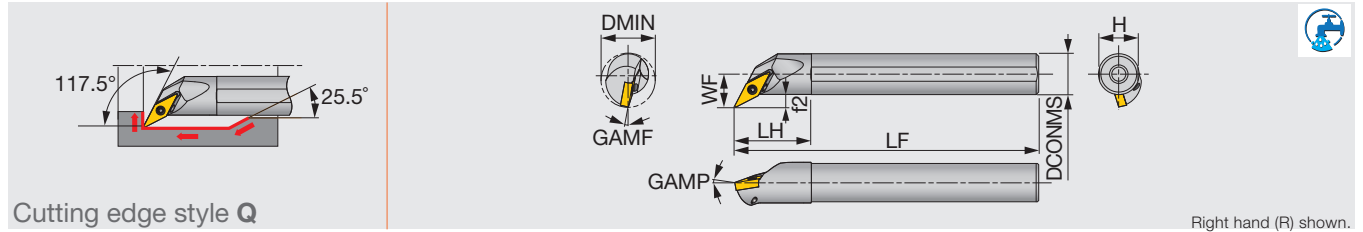
Application	Finishing	Finishing to medium cutting
Grade	AH8015	AH8015
Breaker Shape	PSS	PS
Cutting conditions	B026	

H

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B028	

Reference pages: T-SVQBR: Insert → B150 -, CBN → B190





Cutting edge style Q

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A10K-SVQCR/L08-D135	Steel	13.5	10	8	125	20	9	3	-5°	-8°	0.4	VC**0802...	0.6
A16Q-SVQCR/L11-D215	Steel	21.5	16	13	180	30	15	4.9	-5°	-8°	0.4	VC**1103...	1.2
E10M-SVQCR/L08-D135	Carbide	13.5	10	8	150	25	9	3	-5°	-8°	0.4	VC**0802...	0.6
E16R-SVQCR/L11-D215	Carbide	21.5	16	13	200	32	15	4.9	-5°	-8°	0.4	VC**1103...	1.2

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A10K-SVQCR/L08-D135	CSTB-2L	T-6F
A16Q-SVQCR/L11-D215	CSTB-2.5	T-8F
E10M-SVQCR/L08-D135	CSTB-2L	T-6F
E16R-SVQCR/L11-D215	CSTB-2.5	T-8F

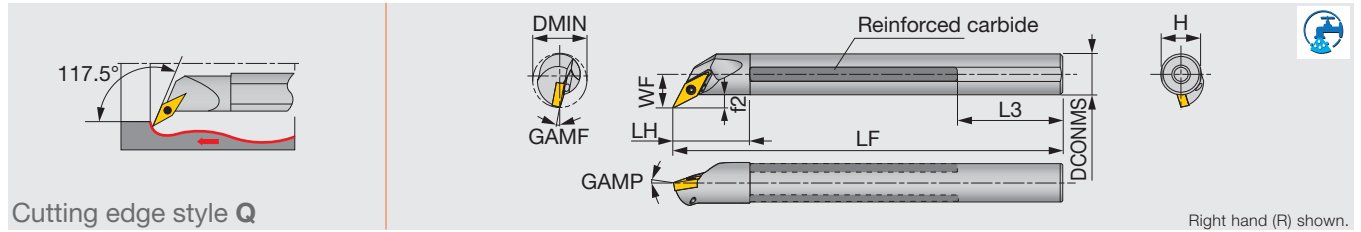
INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting
	Grade	T9215		Grade	T9215
	Breaker Shape	PS		Breaker Shape	PS
Cutting conditions		B018	Cutting conditions		B020
K	Application	Finishing to medium cutting	N	Application	Precision finishing
	Grade	T515		Grade	DX120
	Breaker Shape	CM	Breaker Shape	T-DIA with rake	AL
Cutting conditions		B022	Cutting conditions		B024
S	Application	Finishing to medium cutting	H	Application	Precision finishing
	Grade	AH8005		Grade	BXM10
	Breaker Shape	PS	Breaker Shape	T-CBN	
Cutting conditions		B026	Cutting conditions		B028

Reference pages: A/E-SVQCR/L: Insert → **B153** -

T-SVQCR

Screw-on boring bar, for positive 35° rhombic inserts (Tsuppari-Ichiban)



Designation	Material	DMIN	CNT	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
T25S-SVQCR16C	Reinforced	32	Rc1/4	25	17	250	40	64	23	4.5	0°	-5°	0.8	VC**1604...	3

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

*The hole specification of applicable inserts conforms to ISO standard.

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
T25S-SVQCR16C	CSTB-3.5L	T-15F

INSERT SELECTION

P	Application	Finishing	Finishing to medium cutting	M	Application	Finishing	Finishing to medium cutting	Medium cutting
	Grade	NS9530	T9215		Grade	AH725	AH630	T6130
	Breaker Shape				Breaker Shape			
	Cutting conditions	B018			Cutting conditions	B020		
K	Application	Finishing to medium cutting	N	Application	Precision finishing	Finishing	Medium cutting	
	Grade	T515		Grade	DX120	DX140	KS05F	
	Breaker Shape			Breaker Shape	T-DIA	T-DIA with rake	AL	
	Cutting conditions	B022			Cutting conditions	B024		
S	Application	Finishing	Finishing to medium cutting	H	Application	Precision finishing	Finishing	
	Grade	AH8015	AH8015		Grade	BXM10	BXM20	
	Breaker Shape				Breaker Shape	T-CBN	T-CBN	
	Cutting conditions	B026			Cutting conditions	B028		

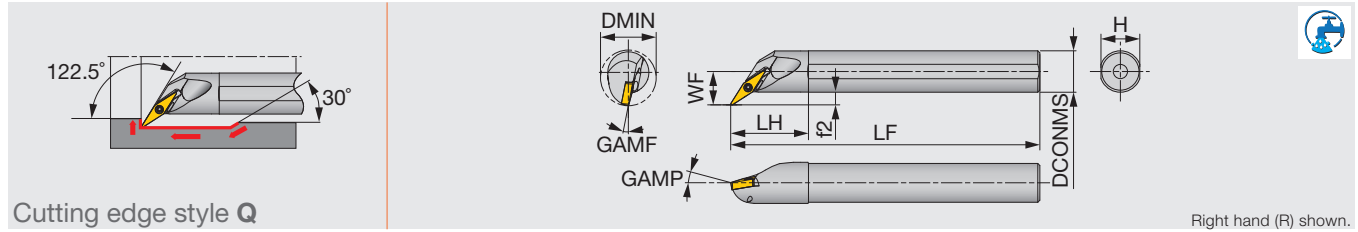
Reference pages: T-SVQCR: Insert → B153 -, CBN → B190, PCD → B194 -



Y-PRO SERIES

A/E-SYQBR/L

Screw-on boring bar, for positive 25° rhombic inserts



Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SYQBR/L11-D170	Steel	17	12	10.5	150	24	11	4.5	-5°	-10°	0.4	YW**11T2...	0.6
A16Q-SYQBR/L11-D215	Steel	21.5	16	13	180	30	15	5	-5°	-8°	0.4	YW**11T2...	0.6
E12Q-SYQBR/L11-D170	Carbide	17	12	10.5	180	27	11	4.5	-5°	-10°	0.4	YW**11T2...	0.6
E16R-SYQBR/L11-D215	Carbide	21.5	16	13	200	32	15	5	-5°	-8°	0.4	YW**11T2...	0.6

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

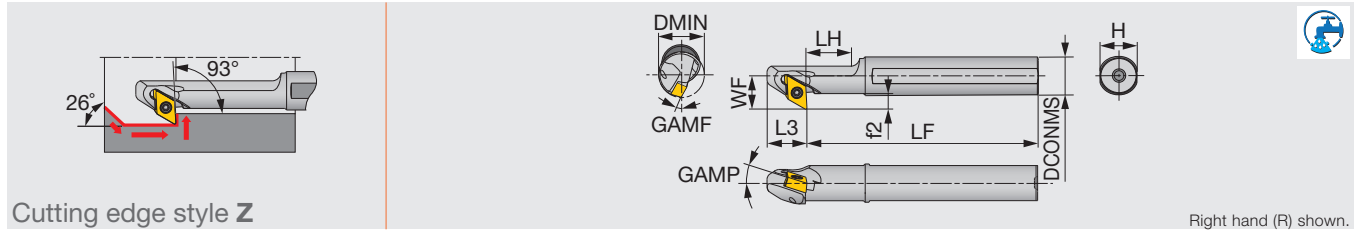
SPARE PARTS

Designation	Clamping screw	Wrench
A**-SYQBR/L11-D...	CSTB-2L	T-6F
E**-SYQBR/L11-D...	CSTB-2L	T-6F

INSERT SELECTION

P	Application	Finishing to medium cutting	K	Application	Finishing to medium cutting
	Grade	T9225		Grade	GT9530
	Breaker Shape	ZM		Breaker Shape	ZM
	Cutting conditions	B018		Cutting conditions	B022

Reference pages: A/E-SYQBR/L: Insert → **B160**



Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDZXR/L07-D140	Steel	14	12	10.5	150	30	13	11	4.5	-10°	-14°	0.4	DXGU0703**R/L...	0.9
A16Q-SDZXR/L07-D160	Steel	16	16	12.5	180	35	13	15	4.5	-10°	-12.5°	0.4	DXGU0703**R/L...	0.9
A20R-SDZXR/L07-D200	Steel	20	20	14.5	200	40	13	18	4.5	-10°	-10.5°	0.4	DXGU0703**R/L...	0.9
E12Q-SDZXR/L07-D180	Carbide	18	12	10.5	180	-	13	11	4.5	-11°	-11°	0.4	DXGU0703**R/L...	0.9
E16R-SDZXR/L07-D220	Carbide	22	16	12.5	200	-	13	15	4.5	-11°	-9°	0.4	DXGU0703**R/L...	0.9

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

SPARE PARTS		
Designation	Clamping screw	Wrench
A/E**-SDZXR/L...	SR34-514	T-7F

INSERT SELECTION

P	Application	Finishing	Medium cutting	M	Application	Finishing	Medium cutting
	Grade	NS9530	AH725		Grade	AH8015	AH8015
	Breaker Shape	SS	TS		Breaker Shape	SS	TS
	Cutting conditions	D095			Cutting conditions	D095	

K	Application	Finishing	Medium cutting	N	Application	Finishing	Medium cutting
	Grade	NS9530	AH725		Grade	KS05F	KS05F
	Breaker Shape	SS	TS		Breaker Shape	SS	TS
	Cutting conditions	D095			Cutting conditions	D095	

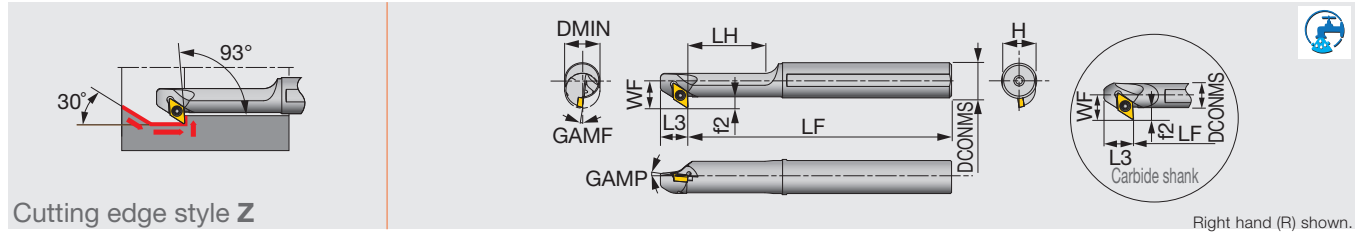
Reference pages: A/E-SDZXR/L: Insert → **B125** -
 Standard cutting conditions → **D095**



STREAMJETBAR

A/E-SDZCR/L

Screw-on boring bar, for positive 55° rhombic inserts



Cutting edge style Z

Right hand (R) shown.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SDZCR/L07-D140	Steel	14	12	10.5	150	30	12.5	11	4.5	0°	-9°	0.4	DC**0702...	1.2
A16Q-SDZCR/L07-D160	Steel	16	16	12.5	180	35	12.5	15	4.5	0°	-8°	0.4	DC**0702...	1.2
A20R-SDZCR/L11-D200	Steel	20	20	15.5	200	40	15.0	18	5.5	0°	-8°	0.8	DC**11T3...	3
A25S-SDZCR/L11-D250	Steel	25	25	18	250	50	15	23	5.5	0°	-6°	0.8	DC**11T3...	3
E12Q-SDZCR/L07-D180	Carbide	18	12	10.5	180	-	12.5	11	4.5	0°	-8°	0.4	DC**0702...	1.2
E16R-SDZCR/L07-D220	Carbide	22	16	12.5	200	-	12.5	15	4.5	0°	-6°	0.4	DC**0702...	1.2

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A1**-SDZCR/L07-D1*0	CSTB-2.5	T-8F
A2**-SDZCR/L11-D2*0	CSTB-4S	T-15F
E1**-SDZCR/L07-D**0	CSTB-2.5	T-8F

INSERT SELECTION

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	SH725	SH725	T9215	T9215
Grade	01	JS	PS	PM
Breaker Shape				
Cutting conditions	B018			

Application	Precision finishing	Finishing	Finishing to medium cutting	Medium cutting
	SH725	SH725	T9215	T9215
Grade	01	JS	PS	PM
Breaker Shape				
Cutting conditions	B020			

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

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

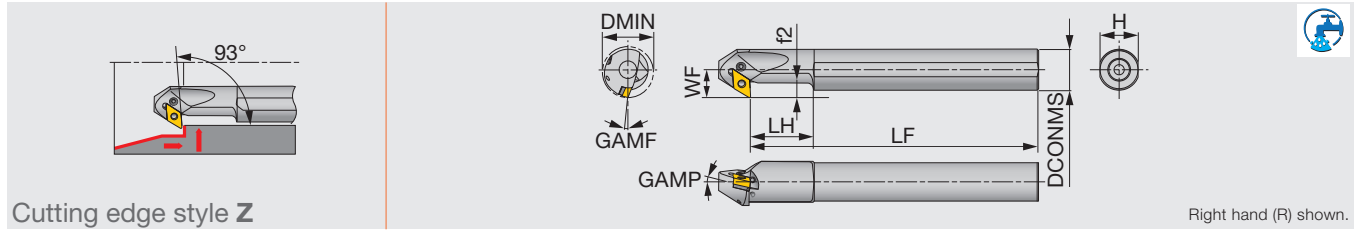
Application	Precision finishing	Finishing to medium cutting
	BX470	AH8005
Grade	T-CBN	PS
Breaker Shape		
Cutting conditions	B026	

Application	Precision finishing	Finishing
	BXM10	BXM20
Grade	T-CBN	T-CBN
Breaker Shape		
Cutting conditions	B028	

Reference pages: A/E-SDZCR/L: Insert → B119 -, CBN → B182, PCD → B194 -

A-PDZNR/L

Lever-lock boring bar, for negative 55° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A32S-PDZNR/L15-D400	Steel	40	32	22	250	50	30	11.5	-6°	-13°	0.8	DN**1504...	4.8
A40T-PDZNR/L15-D500	Steel	50	40	27	300	60	37	14.5	-6°	-10°	0.8	DN**1504...	4.8
A50U-PDZNR/L15-D630	Steel	63	50	35	350	65	47	14.5	-6°	-8°	0.8	DN**1504...	4.8

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever	Oil supply attachment*	Screw for oil hole*
A32S-PDZNR15-D400	LSZ42BR	LCS4	P-3	LSP4	LCL4	EA-32	SSH4-5
A32S-PDZNL15-D400	LSZ42BL	LCS4	P-3	LSP4	LCL4	EA-32	SSH4-5
A40T-PDZNR15-D500	LSZ42BR	LCS4	P-3	LSP4	LCL4	-	SSH5-6
A40T-PDZNL15-D500	LSZ42BL	LCS4	P-3	LSP4	LCL4	-	SSH5-6
A50U-PDZNR15-D630	LSZ42BR	LCS4	P-3	LSP4	LCL4	-	SSH6-6
A50U-PDZNL15-D630	LSZ42BL	LCS4	P-3	LSP4	LCL4	-	SSH6-6

*Torque: Recommended clamping torque (N-m)

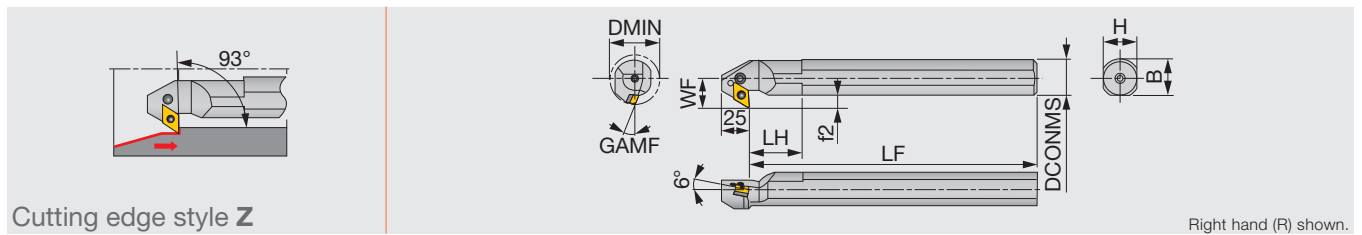
**RE: Standard corner radius

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

*Optional

S-PDZNR/L

Lever-lock boring bar, for negative 55° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	B	GAMF	RE**	Insert
S32S-PDZNR/L15	Steel	40	32	22	250	30	30	6	29.5	-13°	0.8	DN**1504...
S40T-PDZNR15	Steel	50	40	27	300	35	37	7	37.5	-10°	0.8	DN**1504...
S50U-PDZNR15	Steel	60	50	35	350	40	47	10	47.5	-8°	0.8	DN**1504...

SPARE PARTS

Designation	Shim	Clamping screw	Wrench	Spring pin	Lever
S32S-PDZNR15	LSZ42BR	LCS4	P-3	LSP4	LCL4
S32S-PDZNL15	LSZ42BL	LCS4	P-3	LSP4	LCL4
S*0*-PDZNR15	LSZ42BR	LCS4	P-3	LSP4	LCL4

**RE: Standard corner radius

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

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	B006			

M

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

K

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

N

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

S

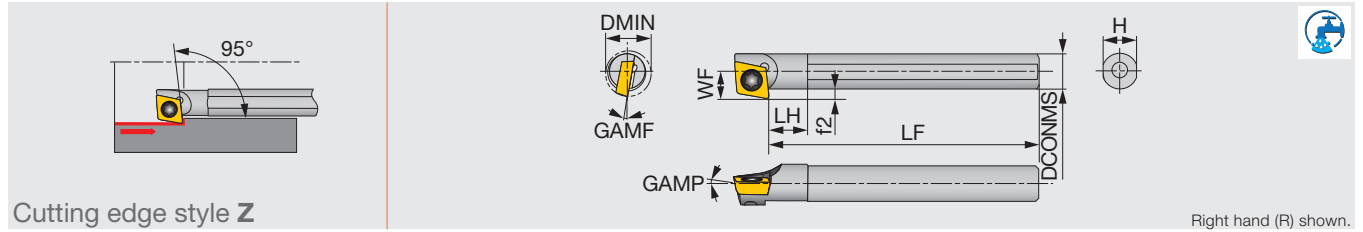
Application	Precision finishing	Finishing	Medium cutting
Grade	BX470	AH8005	AH8005
Breaker Shape	T-CBN	HRF	HRM
Cutting conditions	B014		

H

Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Cutting conditions	B016	

Reference pages: A-PDZNR/L, S-PDZNR/L: Insert → B065 -, CBN → B172 -, PCD → B192 -





Designation	Material	DMIN	DCONMS	WF	LF	LH	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A04F-SEZPR/L03-D055	Steel	5.5	4	3.2	80	4	3.8	1.2	0°	-8°	0.2	EP**03X1...	0.6
A05F-SEZPR/L03-D065	Steel	6.5	5	3.7	80	5	4.8	1.2	0°	-6°	0.2	EP**03X1...	0.6
E04G-SEZPR/L03-D055	Carbide	5.5	4	3.2	90	5	3.8	1.2	0°	-8°	0.2	EP**03X1...	0.6
E05G-SEZPR/L03-D065	Carbide	6.5	5	3.7	90	6	4.8	1.2	0°	-6°	0.2	EP**03X1...	0.6

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

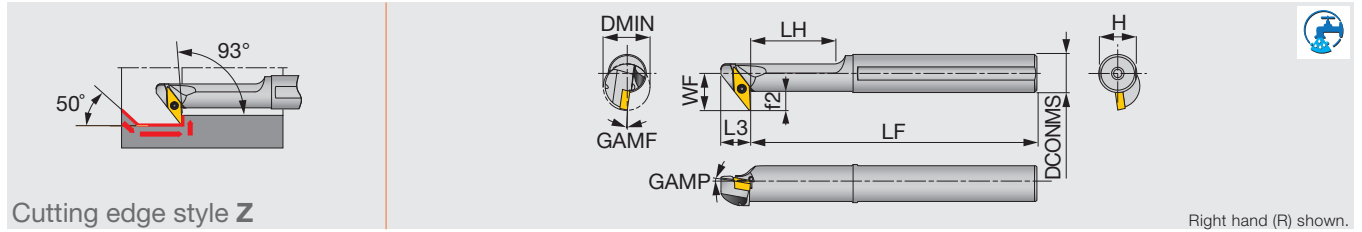
SPARE PARTS

Designation	Clamping screw	Wrench
A**-SEZPR/L03-D...	CSTA-1.6	T-6F
E**-SEZPR/L03-D...	CSTA-1.6	T-6F

INSERT SELECTION

P	Application	Finishing	M	Application	Finishing	K	Application	Finishing
	Grade	SH725		Grade	SH725		Grade	SH725
	Breaker Shape	JS		Breaker Shape	JS		Breaker Shape	JS
Cutting conditions		B006	Cutting conditions		B008	Cutting conditions		B010
N	Application	Precision finishing	Finishing	H	Application	Precision finishing		
	Grade	DX140	GH110		Grade	BX310		
	Breaker Shape	T-DIA	W08		Breaker Shape	T-CBN		
Cutting conditions		B012		Cutting conditions		B016		

Reference pages: A/E-SEZPR/L: Insert → **B127** -, CBN → **B184**



Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A16Q-SVZBR/L11-D200	Steel	20	16	15.5	180	35	12.5	15	8	0°	-8°	0.4	VB**1103...	1.2
A20R-SVZBR/L11-D250	Steel	25	20	17.5	200	40	12.5	18	8	0°	-7°	0.4	VB**1103...	1.2
A25S-SVZBR/L16-D320	Steel	32	25	24	250	50	17.5	23	12	0°	-6°	0.8	VB**1604...	3
A32T-SVZBR/L16-D400	Steel	40	32	27.5	300	72	17.5	30	12	0°	-5°	0.8	VB**1604...	3

*Torque: Recommended clamping torque (N-m)

**RE : Standard corner radius

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

SPARE PARTS

Designation	Clamping screw	Wrench
A**-SVZBR/L11-D2*0	CSTB-2.5	T-8F
A25S-SVZBR/L16-D320	CSTB-3.5	T-15F
A32T-SVZBR/L16-D400	CSTB-3.5L	T-15F

INSERT SELECTION

P

Application	Finishing	Finishing to medium cutting
Grade	SH725	T9215
Breaker Shape	JS	PS
Images		
Cutting conditions	B018	

M

Application	Finishing	Finishing to medium cutting
Grade	SH725	T9215
Breaker Shape	JS	PS
Images		
Cutting conditions	B020	

K

Application	Finishing to medium cutting
Grade	T515
Breaker Shape	CM
Image	
Cutting conditions	B022

H

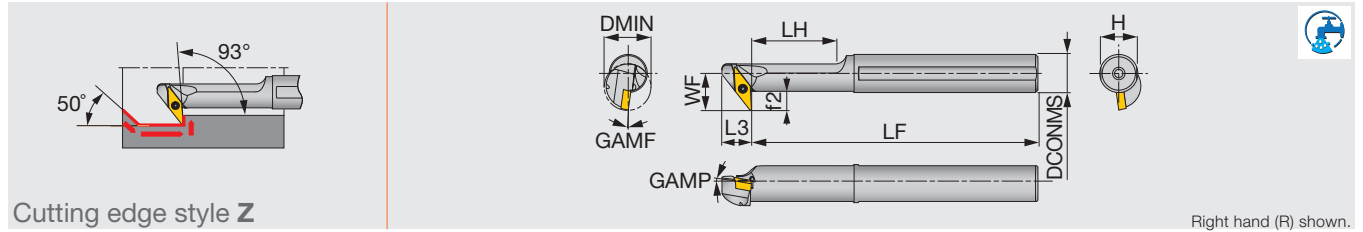
Application	Precision finishing	Finishing
Grade	BXM10	BXM20
Breaker Shape	T-CBN	T-CBN
Images		
Cutting conditions	B028	



STREAMJETBAR

A-SVZCR/L

Screw-on boring bar, for positive 35° rhombic inserts



Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	f2	GAMP	GAMF	RE**	Insert	Torque*
A12M-SVZCR/L08-D160	Steel	16	12	11	150	30	10	11	5.5	0°	-8°	0.4	VC**0802...	0.6

*Torque: Recommended clamping torque (N·m)

**RE : Standard corner radius

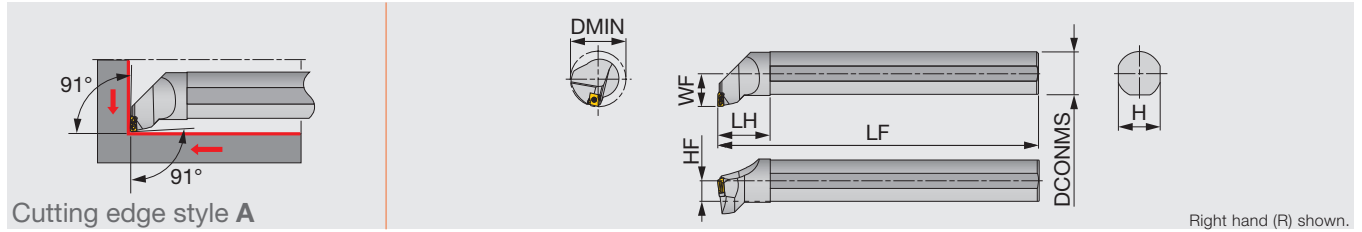
Note: Use right-hand toolholders (SVZCR**) with right-hand inserts (R); and left-hand toolholders (SVZCL**) with left-hand inserts (L).

SPARE PARTS		
Designation	Clamping screw	Wrench
A12M-SVZCR/L08-D160	CSTB-2L	T-6F

INSERT SELECTION

P	Application	Finishing to medium cutting	M	Application	Finishing to medium cutting	
	Grade	T9215		Grade	T9215	
	Breaker Shape	PS		Breaker Shape	PS	
Cutting conditions		B018	Cutting conditions		B020	
K	Application	Finishing to medium cutting	N	Application	Precision finishing	Medium cutting
	Grade	T515		Grade	DX120	KS05F
	Breaker Shape	CM		Breaker Shape	T-DIA with rake	AL
Cutting conditions		B022	Cutting conditions		B024	
S	Application	Finishing to medium cutting	H	Application	Precision finishing	Finishing
	Grade	AH8005		Grade	BXM10	BXM20
	Breaker Shape	PS		Breaker Shape	T-CBN	T-CBN
Cutting conditions		B026	Cutting conditions		B028	

Reference pages: A-SVZCR/L: Insert → **B153** -



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	HF	Insert
S25T-TLANR/L12-D530	Steel	53	25	17	300	40	23	11.5	LNMX1204**L/R...
S32U-TLANR/L12-D530	Steel	53	32	22	350	45	30	15	LNMX1204**L/R...
S40V-TLANR/L12-D530	Steel	53	40	27	400	53	37	18.5	LNMX1204**L/R...
S50U-TLANR/L16-D850	Steel	85	50	37	350	63	47	23.5	LNMX1606**L/R...

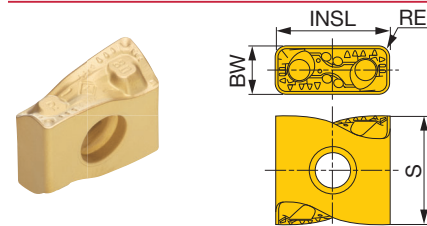
Note: Use right-hand toolholders (TLANR**) with left-hand inserts (L); and left-hand toolholders (TLANL**) with right-hand inserts (R).

SPARE PARTS

Designation	Clamping screw	Shim screw	Shim	Spring pin	Wrench 1	Wrench 2
S**-TLANR/L12-D530	CSTB-3.5L115-S	CSTF-2L055-S	TSL12L/RI	-	KEYV-T10	T-6F-S
S50U-TLANR16-D850	CSTB-4L115-S	-	TSL16LI	PSP-16	KEYV-T15	-
S50U-TLANL16-D850	CSTB-4L115-S	-	TSL16RI	PSP-16	KEYV-T15	-

INSERT

LNMX12/16/24



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

★ : First choice
☆ : Second choice

Designation	HAND	RE	Coated						BW	INSL	S
			T9115	T9125	AH725						
LNMX120408R-TDR	R	0.8	●	●					4.8	12	11.6
LNMX120408L-TDR	L	0.8	●	●					4.8	12	11.6
LNMX120412R-TDR	R	1.2	●	●					4.8	12	11.6
LNMX120412L-TDR	L	1.2	●	●					4.8	12	11.6
LNMX160608R-TDR	R	0.8	●	●					6.4	16.2	13.5
LNMX160608L-TDR	L	0.8	●	●					6.4	16.2	13.5
LNMX160612R-TDR	R	1.2	●	●					6.4	16.2	13.5
LNMX160612L-TDR	L	1.2	●	●					6.4	16.2	13.5
LNMX160616R-TDR	R	1.6	●	●					6.4	16.2	13.5
LNMX160616L-TDR	L	1.6	●	●					6.4	16.2	13.5
LNMX241016R-TDR	R	1.6	●	●					9.4	24	20.5
LNMX241016L-TDR	L	1.6	●	●					9.4	24	20.5
LNMX241024R-TDR	R	2.4	●	●					9.4	24	20.5
LNMX241024L-TDR	L	2.4	●	●					9.4	24	20.5
LNMX160608R-MDR	R	0.8	●		●				6.4	16.2	13.5
LNMX160608L-MDR	L	0.8	●		●				6.4	16.2	13.5
LNMX160612R-MDR	R	1.2	●		●				6.4	16.2	13.5
LNMX160612L-MDR	L	1.2	●		●				6.4	16.2	13.5
LNMX160608R-TWR	R	0.8	●	●					6.4	16.2	13.5
LNMX160608L-TWR	L	0.8	●	●					6.4	16.2	13.5
LNMX160612R-TWR	R	1.2	●	●					6.4	16.2	13.5
LNMX160612L-TWR	L	1.2	●	●					6.4	16.2	13.5

● : Line up

Reference pages: Standard cutting conditions → [D096](#)

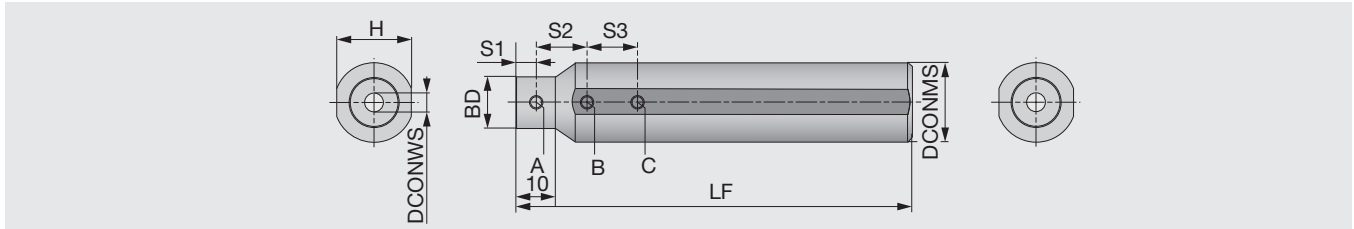


Technical Guide

STREAMJETBAR

BLM sleeve

Round shank sleeve for StreamJetBar-Mini series



Designation	DCONMS	DCONWS	BD	LF	H	S1	S2	S3
BLM159-04	15.875	4	15	100	15	5	15	15
BLM159-05	15.875	5	15	100	15	5	15	15
BLM159-06	15.875	6	15	100	15	5	20	20
BLM159-07	15.875	7	15	100	15	5	20	20
BLM16-04	16	4	15	100	15	5	15	15
BLM16-05	16	5	15	100	15	5	15	15
BLM16-06	16	6	15	100	15	5	20	20
BLM16-07	16	7	15	100	15	5	20	20
BLM19-04	19.05	4	18	100	18	5	15	15
BLM19-05	19.05	5	18	100	18	5	15	15
BLM19-06	19.05	6	18	100	18	5	20	20
BLM19-07	19.05	7	18	100	18	5	20	20
BLM20-04	20	4	13	100	19	5	15	15
BLM20-05	20	5	14	100	19	5	15	15
BLM20-06	20	6	15	100	19	5	20	20
BLM20-07	20	7	16	100	19	5	20	20
BLM22-04	22	4	13	125	21	5	15	15
BLM22-05	22	5	14	125	21	5	15	15
BLM22-06	22	6	15	125	21	5	20	20
BLM22-07	22	7	16	125	21	5	20	20
BLM25-04	25	4	13	125	24	5	15	15
BLM25-05	25	5	14	125	24	5	15	15
BLM25-06	25	6	15	125	24	5	20	20
BLM25-07	25	7	16	125	24	5	20	20
BLM254-04	25.4	4	13	125	24	5	15	15
BLM254-05	25.4	5	14	125	24	5	15	15
BLM254-06	25.4	6	15	125	24	5	20	20
BLM254-07	25.4	7	16	125	24	5	20	20

SPARE PARTS

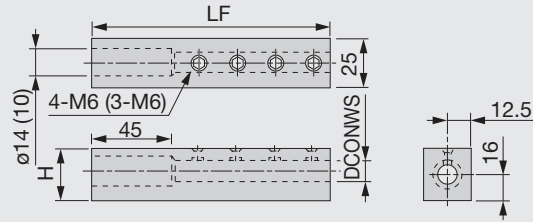


Designation	Clamping screw A	Clamping screw B, C	Wrench	Seal cap* (inner screw)
BLM159, 16...	SSHM4-4	SSHM4-4	P-2	CA-16(M6)
BLM19-04	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM19-05, 06, 07	SSHM4-4	SSHM4-4	P-2	CA-16(M6)
BLM20-04, 05	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM20-06, 07	SSHM4-4	SSHM4-4	P-2	CA-16(M6)
BLM22-...	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM25-04, 05	SSHM4-4	SSHM4-8	P-2	CA-16(M6)
BLM25-06	SSHM4-4	SSHM4-8	P-2	CA-16(M6)
BLM25-07	SSHM4-4	SSHM4-6	P-2	CA-16(M6)
BLM254-04, 05, 06	SSHM4-4	SSHM4-8	P-2	CA-16(M6)
BLM254-07	SSHM4-4	SSHM4-6	P-2	CA-16(M6)

*Optional

BLS sleeve

Square shank sleeve for boring bars (regular length)



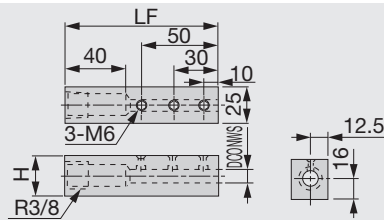
Designation	DCONWS	LF	H
BLS16-08	8	125	28
BLS16-10	10	125	28
BLS16-12	12	125	28

SPARE PARTS

Designation	Wrench
BLS16-...	P-3

BLS-C sleeve

Square shank sleeve for boring bars (short type)



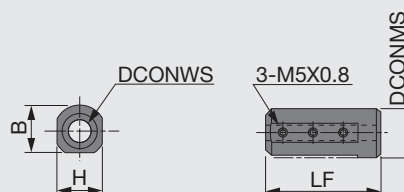
Designation	DCONWS	LF	H
BLS16-08C	8	100	28
BLS16-10C	10	100	28
BLS16-12C	12	100	28

SPARE PARTS

Designation	Wrench
BLS16-**C	P-3

BLM sleeve

Round shank sleeve for boring bars



Designation	DCONWS	DCONMS	LF	H	B
BLM19-08	8	19.05	100	18	18
BLM20-08	8	20	100	18	19
BLM22-08	8	22	125	21	21
BLM254-08	8	25.4	125	24	24
BLM25-08C	8	25	55	23	24
BLM25-10C	10	25	55	23	24
BLM25-12C	12	25	55	23	24

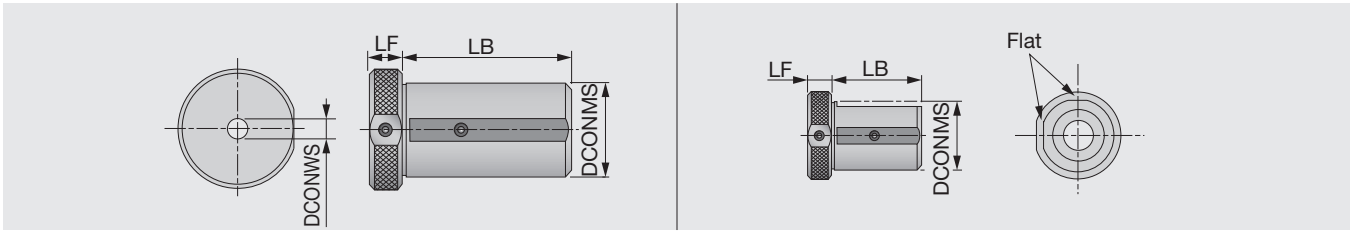
SPARE PARTS

Designation	Wrench
BLM...	P-2.5

Technical Guide

BLC sleeve

Round shank sleeve for boring bars



Designation	DCONWS	LB	LF	DCONMS
BLC40-8	8	73	13	40
BLC40-10	10	73	13	40
BLC40-12	12	73	13	40
BLC40-16	16	73	13	40
BLC32-8C	8	45	20	32
BLC32-10C	10	45	20	32
BLC32-12C	12	45	20	32
BLC40-8C	8	55	13	40
BLC40-10C	10	55	13	40
BLC40-12C	12	55	13	40
BLC40-16C	16	55	13	40

SPARE PARTS



Designation	Wrench
BLC40-8	P-3
BLC40-1...	P-4
BLC32-8C	P-3
BLC32-1*C	P-4
BLC40-8C	P-3
BLC40-1*C	P-4

ISO	Workpiece material	Grade			Cutting speed Vc (m/min)	Depth of cut ap (mm)	Feed f (mm/rev)
		First Choice	For surface finish	For wear resistance (High speed)			
P	Low carbon steel SS400, S25C, etc. E275A, C25, etc.	AH725	-	-	50 - 180	0.3 - 2	0.08 - 0.3
		-	-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	NS9530	-	80 - 250	0.3 - 2	0.08 - 0.3
		-	GT9530	-	80 - 300	0.3 - 2	0.08 - 0.3
	Carbon steel S45C, S55C, etc. C45, C55, etc.	AH725	-	-	50 - 180	0.3 - 2	0.08 - 0.3
		-	-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	NS9530	-	80 - 250	0.3 - 2	0.08 - 0.3
	Low alloy steel SCM415, etc. 18CrMo4, etc.	AH725	-	-	50 - 180	0.3 - 2	0.08 - 0.3
		-	-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	NS9530	-	80 - 250	0.3 - 2	0.08 - 0.3
	Alloy steel SCM440, SCr420, etc. 42CrMo4, 20Cr4, etc.	AH725	-	-	50 - 180	0.3 - 2	0.08 - 0.3
		-	-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
-		NS9530	-	80 - 250	0.3 - 2	0.08 - 0.3	
		-	-	80 - 300	0.3 - 2	0.08 - 0.3	
		AH8015	-	-	50 - 150	0.3 - 2	0.08 - 0.3
		AH8015	-	-	50 - 150	0.3 - 2	0.08 - 0.3
M	Stainless steel (Austenitic) SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-3, etc.	AH8015	-	-	50 - 150	0.3 - 2	0.08 - 0.3
	Stainless steel (Martensitic and ferritic) SUS430, SUS416, etc. X6Cr17, X20Cr13, etc.	AH8015	-	-	50 - 150	0.3 - 2	0.08 - 0.3
	Stainless steel (Precipitation hardening) SUS630, etc. X5CrNiCuNb16-4, etc.	AH8015	-	-	50 - 150	0.3 - 2	0.08 - 0.3
K	Grey cast iron FC250, etc. 250, etc.	AH725	-	-	50 - 180	0.3 - 2	0.08 - 0.3
		-	-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	NS9530	-	80 - 250	0.3 - 2	0.08 - 0.3
	Ductile cast iron FCD700, etc. 600-3, etc.	AH725	-	-	50 - 180	0.3 - 2	0.08 - 0.3
		-	-	AH8015	50 - 200	0.3 - 2	0.08 - 0.3
		-	NS9530	-	80 - 250	0.3 - 2	0.08 - 0.3
	-	GT9530	-	80 - 300	0.3 - 2	0.08 - 0.3	
N	Non ferrous Metal Aluminum alloy, etc.	KS05F	-	-	100 - 300	0.3 - 2	0.08 - 0.3
	Non ferrous Metal Copper Alloy, etc.	KS05F	-	-	100 - 300	0.3 - 2	0.08 - 0.3
S	Heat-resistant alloys Titanium alloys, etc.	AH8015	-	-	20 - 80	0.3 - 2	0.08 - 0.3
	Heat-resistant alloys (Nickel-base alloys)	AH8015	-	-	20 - 80	0.3 - 2	0.08 - 0.3



Technical Guide

TURNTEC

STANDARD CUTTING CONDITIONS

LNMX1204

*Values in red are for facing.

ISO	Workpiece material	Chip breaker	Grade	Cutting speed Vc (m/min)	Depth of cut: ap (mm)		Feed: f (mm/rev)	
					RE : 0.8	RE : 1.2	RE : 0.8	RE : 1.2
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 2.2	0.8 - 5 0.8 - 2.2	0.15 - 0.6	0.25 - 0.8

LNMX1606

ISO	Workpiece material	Chip breaker	Grade	Cutting speed Vc (m/min)	Depth of cut: ap (mm)			Feed: f (mm/rev)		
					RE : 0.8	RE : 1.2	RE : 1.6	RE : 0.8	RE : 1.2	RE : 1.6
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TWR	T9115	120 - 250	1 - 8 1 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
		TWR	T9125	80 - 180	1 - 8 1 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		TDR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	1 - 8 1 - 3.2	0.15 - 0.6	0.25 - 0.8	0.3 - 1
		MDR	T9115	100 - 150	1.5 - 6 0.5 - 3.2	1.5 - 7 0.8 - 3.2	-	0.1 - 0.5	0.15 - 0.7	-
		MDR	AH725	50 - 150	1.5 - 6 0.5 - 3.2	1.5 - 7 0.8 - 3.2	-	0.1 - 0.5	0.15 - 0.7	-
		TWR	T9115	100 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-
		TWR	T9125	80 - 180	0.5 - 5 0.5 - 3.2	0.8 - 6 0.8 - 3.2	-	0.15 - 0.6	0.25 - 0.8	-

LNMX2410

ISO	Workpiece material	Chip breaker	Grade	Cutting speed Vc (m/min)	Depth of cut: ap (mm)		Feed: f (mm/rev)	
					RE : 1.6	RE : 2.4	RE : 1.6	RE : 2.4
P	Steels S45C, SCM415, etc. C45, 18CrMo4, etc.	TDR	T9115	120 - 250	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
		TDR	T9125	80 - 150	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
M	Stainless steels SUS304, SUS316, etc. X5CrNi18-9, X5CrNiMo17-12-2, etc.	TDR	T9115	100 - 180	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1
		TDR	T9125	80 - 150	4 - 15 1 - 4.5	5 - 15 1 - 4.5	0.3 - 1	0.3 - 1.1

Reference pages: S-TLANR/L → **D091**