PCD·CBN·CERAMIC
Solutions





TaeguTec
Member IMC Group

CONTENTS



PCD·CBN·CERAMIC SOLUTIONS

1 PCD Line

Tool Selection Guide	6
Turning	11
Groove-Turn	54
Milling	74
Holemaking	77
End Mills	78
Special Tools	79

2 CBN Line

Tool Selection Guide	84
Turning	90
Groove-Turn	155
Milling	159
End Mills	162

3 Ceramic Line

Tool Selection Guide	164
Turning	169
Groove-Turn	217
Milling	218
End Mills	244

4 Dia-Coating Line

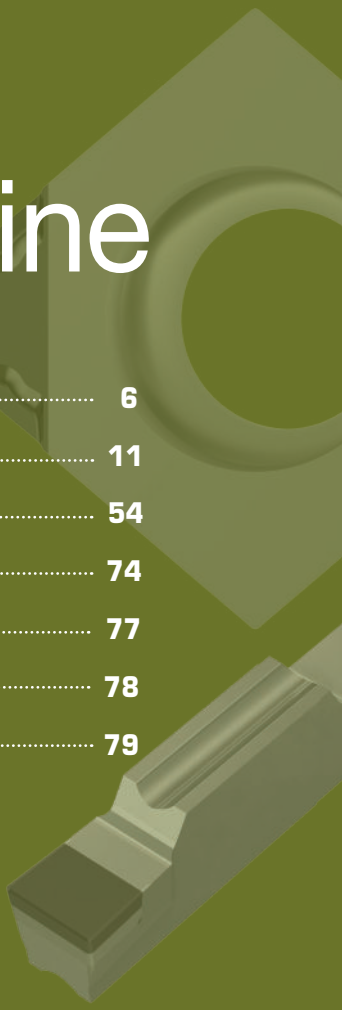
Tool Selection Guide	248
Milling	249
Holemaking	259
End Mills	260

5 Technical Information

PCD Chip Breakers	268
Turning Insert Grades	269


PCD-CBN-CERAMIC SOLUTIONS

PCD Line



- Tool Selection Guide 6
- Turning 11
- Groove-Turn 54
- Milling 74
- Holemakimg 77
- End Mills 78
- Special Tools 79

T T-Holder

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CNGA 12**	95°		TCLNR/L TCLNR/L-TB					●	●	●	●						
		95°		A-TCLNR/L											●	●	●	●
	**DNGA 15**	93°		TDJNR/L					●	●		●						
		93°		A-TDUNR/L												●	●	●
	**TNGA 16**	91°		TTGNR/L					●	●								
		93°		TTJNR/L					●	●	●							
	**VNGA 16**	93°		TVJNR/L					●	●		●						
		117.5°		TVQNR/L					●	●								

●: Standard items

S Screw clamp

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CC…06/09/12**	90°		SCACR/L-SH SCACR/L-SH-TB	●	●	●	●										
		95°		SCLCR/L SCLCR/L-SH SCLCR/L-SH-TB	●	●	●	●	●	●								
		95°		S-SCLCR/L C-SCLCR/L									●	●	●	●	●	
	**DC…07/11**	62.5°		SDNCN SDNCN-SH SDNCN-SH-TB	●	●	●	●		●								
		93°		SDJCR/L			●	●	●	●								
		93°		SDJCR/L-SH SDJCR/L-SH-TB	●	●	●	●	●									

●: Standard items



S Screw clamp

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**DC…07/11**	93°		TMS-SDUCL TMS-SDUCR/L-TB									●	●	●			
		93°		TMY-SDJCR TMY-SDJCR-TB			●	●										
		93°		S-SDUCR/L									●	●	●	●		
		93°		S-SDZCR/L									●	●	●	●		
		107.5°		S-SDQCR/L									●	●	●			
	**TC…09/11/16**	91°		STFCR/L			●	●	●	●								
		91°		STGCR/L		●	●	●	●	●								
		91°		S-STFCR/L C-STFCR/L									●	●	●	●	●	
	**VC(B)… 11/16**	72.5°		SVVBN SVVCN					●	●	●	●						
		93°		SVJBR/L SVJBR/L-TB					●	●	●	●						
		93°		SVJCR/L SVJCR/L-SH SVJCR/L-SH-TB		●	●	●	●	●	●	●						
		93°		TMS-SVUCL										●	●			
		117.5°		SVPBR/L					●	●								
		52°		S-SVJBR/L												●	●	
		93°		S-SVUBR/L S-SVUCR/L									●	●		●	●	
		108°		S-SVQBR/L S-SVQCR/L											●	●	●	
		117.5°		S-SVPBR/L S-SVPCR/L									●		●	●		

●: Standard items



C Top clamp

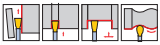
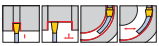


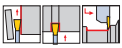
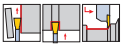
TPGN 11/16

			08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
90°		CTCPN					●	●								
91°		CTFPR/L				●	●	●								
91°		CTGPR/L			●	●	●	●								
91°		S-CTFPR/L									●	●	●	●	●	●

●: Standard items

■ Groove-Turn

					16 x 16	20 x 20	25 x 25	32 x 32
TSA CW : 2,3,4,5,6 	External		TTER/L TTER/L-TB 	CW-2	●	●	●	
				CW-3	●	●	●	●
				CW-4	●	●	●	●
				CW-5		●	●	●
				CW-6		●	●	●
				CW-8			●	●
TSA (Full Radius) CW : 2,3,4,5,6,8 			TGFR/L 	CW-2	●	●	●	
				CW-3	●	●	●	
				CW-4	●	●	●	
				CW-5		●	●	
				CW-6		●	●	
			TTER/L-15A 	CW-6			●	
				CW-8			●	
		 TCAER/L TCAER/L-TB (CW : 2,3,4,5,6) 	TCAHR/L TCAHR/L-TB 	Holder		●	●	●
		 TCAFR/L (CW : 3,4,5,6) 	TCAHPR/L TCAHPR/L-TB 	Holder		●	●	●
			C-TCAHN C-TCAHN-TB 	C-Adapter	C4 - C6			
			C-TCAHPN C-TCAHPN-TB 	C-Adapter	C4 - C6			
	Internal		TTIR/L-C TTIR/L-TB 	CW-2	Ø16 - Ø32			
				CW-3	Ø16 - Ø40			
				CW-4	Ø20 - Ø50			
				CW-5	Ø16 - Ø40			
				CW-6	Ø16 - Ø40			
				CW-8	Ø16 - Ø40			

					08 x 08	10 x10	12 x12	16 x 16
TPAR/L CW : 1, 1.5, 2 	Miniature		TTOER/L-A 		●	●	●	●
TPAR/L...R (Full-Radius) CW : 1, 1.5, 2 			TTOER-S / TTOEL-SB 			●	●	

●: Standard items

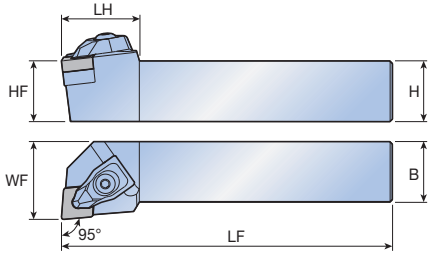
Milling

Facing		**APCT**		TFM90AP-12
Finishing		**4WHU**		4W-TF90-12
		**TCT08-05R**		AFM90B-08

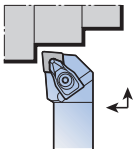
End mills

Holemaking	**PDR** PCD twist drills	
	BDR PCD burnishing drills	
End Mills	**TPE** PCD End mills	

T-holders



TCLNR

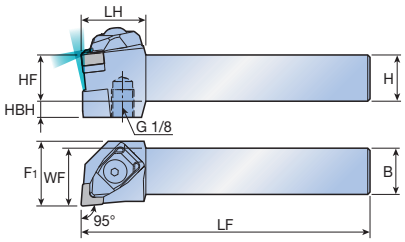
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
95°	TCLNR/L 2020 K12	20	20	20	125	32	25	CNGA 1204...
	2525 M12	25	25	25	150	32	32	
	3225 P12	32	32	25	170	32	32	
	3232 P12	32	32	32	170	32	40	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	L-W 3	T 15	

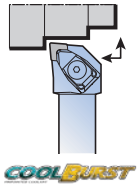
TCLNR/L-TB

T-holders



TCLNR-TB

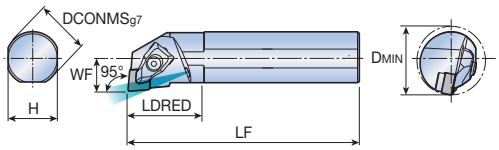
Approach angle	Designation	Dimension (mm)							Insert
		H	HF	B	LF	LH	WF	HBH	
95°	**TCLNR/L 2525 M12-TB**	25	25	25	150	32	32	7	CNGA 1204...



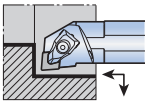
Spare parts

Designation	Clamp	Clamp screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim screw	Wrench	
									
... M12-TB	DLM 3NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x1.78	O-RING ID6.07x1.78	LSC 32 A	SO 40085I	L-W 3	T 15

T-holder type boring bars



A-TCLNR

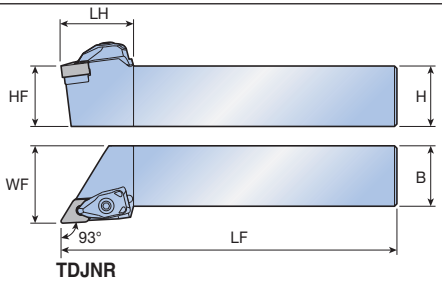
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**A25T TCLNR/L 12**	25	23	300	45	17	32	CNGA 1204...
	**A32T TCLNR/L 12**	32	30	300	45	22	40	
	A40T TCLNR/L 12	40	37	300	45	27	50	
	A50U TCLNR/L 12	50	47	350	45	35	63	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A25T...12	DLM 4	DLS 4	DSP 4	LSC 42	TS 50A105I	NZ 62	L-W 3	T 20
A32T...12	DLM 4	DLS 4	DSP 4	LSC 42	TS 50A105I	NZ 62	L-W 3	T 20
A40T...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	NZ 104	L-W 3	T 15
A50U...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	NZ 104	L-W 3	T 15

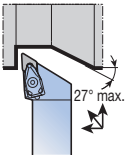
TDJNR/L

T-holders



TDJNR

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**TDJNR/L**	**2020 K15**	20	20	20	125	39	25	DNGA 1506...
		2525 M15	25	25	25	150	39	32	
		3232 P15	32	32	32	170	39	40	
		2020 K1504	20	20	20	125	39	25	DNGA 1504...
		2525 M1504	25	25	25	150	39	32	

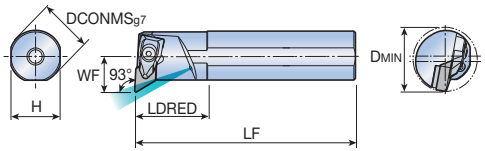


Spare parts

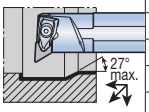
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...15	DLM 4	DLS 4	DSP 4	TSD 43	SO 40050I	L-W 3	T 15	
...1504	DLM 4	DLS 4	DSP 4	TSD 44	SO 40050I	L-W 3	T 15	

A-TDUNR/L

T-holder type boring bars



A-TDUNR

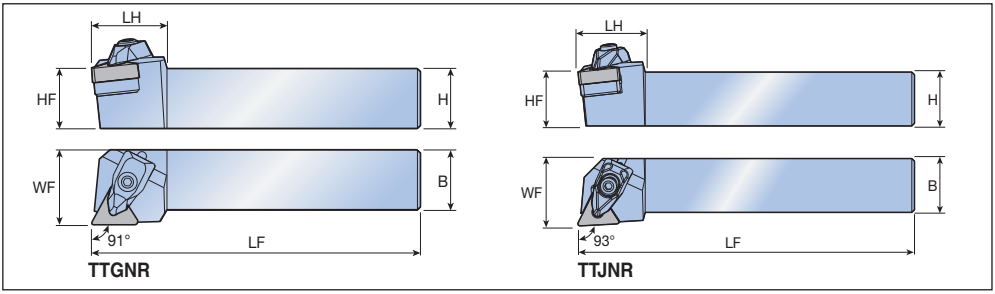
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
93°	**A32T TDUNR/L 15**	32	30	300	45	22	40	DNGA 1506...
	**A40T TDUNR/L 15**	40	37	300	45	27	50	
	A50U TDUNR/L 15	50	47	350	45	35	63	

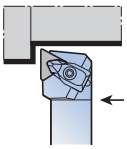
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A32T ...15	DLM 4	DLS 4	DSP 4	LSD 42	TS 50A105I	NZ 62	L-W 3	T 20
...15	DLM 4	DLS 4	DSP 4	TSD 43	SO 40050I	NZ 104	L-W 3	T 15

TTGNR/L TTJNR/L

T-holders

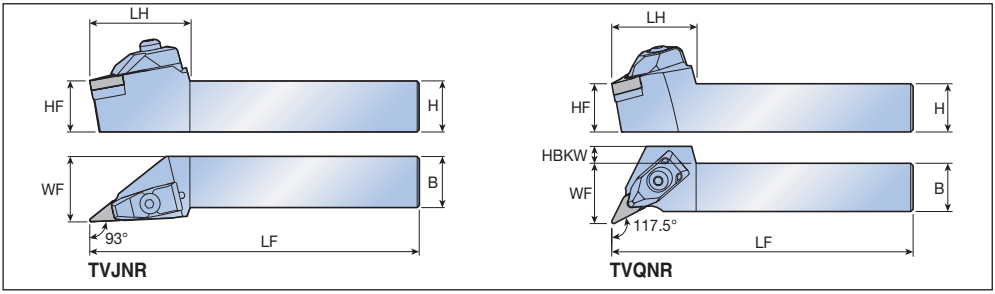


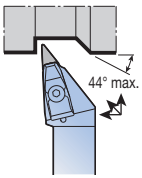
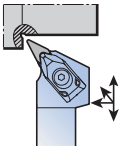
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°/93°	**TTGNR/L**	**2020 K16**	20	20	20	125	25	25	TNGA 1604...
		**2525 M16**	25	25	25	150	25	32	
	TTJNR/L	**2020 K16**	20	20	20	125	25	25	
		2525 M16	25	25	25	150	25	32	
	TTJNL	**3225 M16**	32	32	25	150	25	32	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16	DLM 3	DLS 3	DSP 3	TST 33	SO 35080I	L-W 2.5	T 15	

T-holders



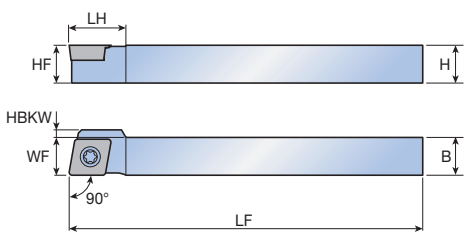
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF		
93°	**TVJNR/L**	**2020 K16**	20	20	20	125	49	25		VNGA 1604...
		**2525 M16**	25	25	25	150	49	32		
		3232 P16	32	32	32	170	49	40		
117.5°	**TVQNR/L**	**2020 K16**	20	20	20	125	42	25	8	VNGA 1604...
		**2525 M16**	25	25	25	150	42	32	2	

Spare parts

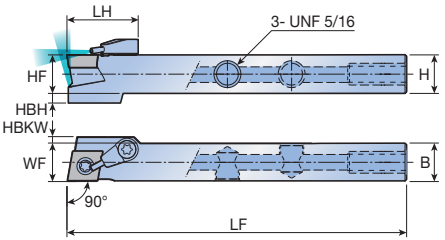
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16	DLM 3V	DLS 5	DSP 5	TSV 33	SO 35080I	L-W 4	T 15	

SCACR/L-SH SCACR/L-SH-TB

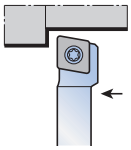
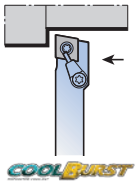
Screw type holders



SCACR-SH



SCACR-SH-TB

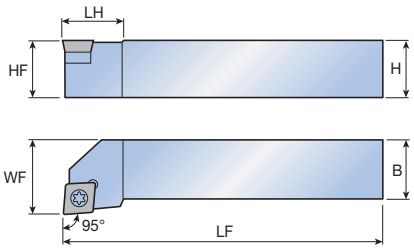
Approach angle	Designation		Dimension (mm)								Insert
			H	HF	HBH	B	LF	LH	WF	HBKW	
90°	# **SCACR**	**0808 K06-SH**	8	8	-	8	125	8	8	-	CC... 0602...
	# **SCACR/L**	**1010 K06-SH**	10	10	-	10	125	10	10	-	
		1010 K09-SH	10	10	-	10	125	15	10	2	CC... 09T3...
		1212 K09-SH	12	12	-	12	125	15	12	-	
		1616 K09-SH	16	16	-	16	125	16	16	-	
90°	# **SCACR/L**	**1212 K09-SH-TB**	12	12	3	12	125	23	12	2	CC... 09T3...
		**1616 K09-SH-TB**	16	16	-	16	125	23	16	-	

▸ #: TOP-MINI holders

Spare parts

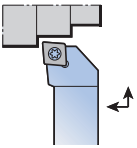
Designation	Screw	Cooling unit	Plug	Wrench			
							
...06-SH	SO 25065I	-	-	T 7	-		
...09-SH	SO 35080I	-	-	T 15	-		
SCACR/L-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32		

Screw type holders



SCLCR

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	SCLCR/L	0808 F06	8	8	8	80	10	10	CC... 0602...
		1010 F06	10	10	10	80	10	12	
		1212 F09	12	12	12	80	16	16	CC... 09T3...
		1616 H09	16	16	16	100	16	20	
		2020 K09	20	20	20	125	20	25	
		2525 M09	25	25	25	150	20	32	
		2020 K12	20	20	20	125	25	25	CC... 1204...
		2525 M12	25	25	25	150	26	32	

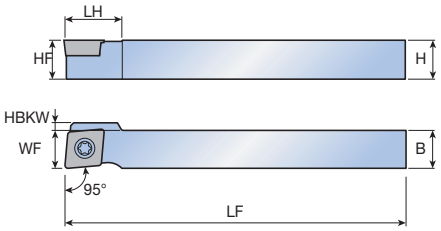


Spare parts

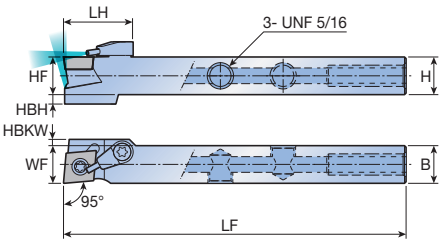
Designation	Screw	Shim	Shim screw	Wrench			
...06	SO 25065I	-	-	T 7			
...F09	SO 35080I	-	-	T 15			
...09	SO 35124I	SSC 32	SO 50090S	T 15			
...12	SO 45130I	SSC 43N	SO 60105S	T 20			

SCLCR/L-SH SCLCR/L-SH-TB

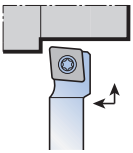
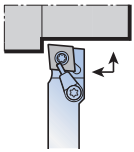
Screw type holders



SCLCR-SH



SCLCR-SH-TB

Approach angle	Designation		Dimension (mm)								Insert
			H	HF	HBH	B	LF	LH	WF	HBKW	
95°	# SCLCR/L	**0808 K06-SH**	8	8	-	8	125	8	8	-	CC... 0602...
		**1010 K06-SH**	10	10	-	10	125	10	10	-	
		1010 K09-SH	10	10	-	10	125	15	10	2	CC... 09T3...
		1212 K09-SH	12	12	-	12	125	15	12	-	
		1616 K09-SH	16	16	-	16	125	16	16	-	
95°	# SCLCR/L	**1212 K09-SH-TB**	12	12	3	12	125	23	12	2	CC... 09T3...
		**1616 K09-SH-TB**	16	16	-	16	125	23	16	-	

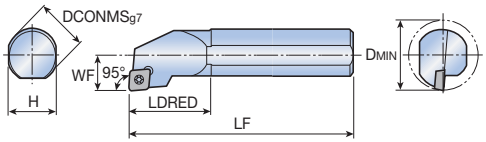
▸ #: TOP-MINI holders

Spare parts

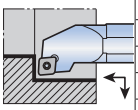
Designation	Screw	Cooling unit	Plug	Wrench			
							
...06-SH	SO 25065I	-	-	T 7	-		
...09-SH	SO 35080I	-	-	T 15	-		
SCLCR/L-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32		

S-SCLCR/L

Screw type boring bars



S-SCLCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**S08K SCLCR/L 06**	8	7	125	18	6	11	CC... 0602...
	**S10K SCLCR/L 06**	10	9	125	20	7	13	
	S12M SCLCR/L 06	12	11	150	25	9	16	
	S16R SCLCR/L 06	16	15	200	30	11	20	
	S12M SCLCR/L 09	12	11	150	23	9	16	CC... 09T3...
	S16R SCLCR/L 09	16	15	200	30	11	20	
	S20S SCLCR/L 09	20	18	250	32	13	25	
	S25T SCLCR/L 12	25	23	300	42	17	32	CC... 1204...
	S32T SCLCR/L 12	32	30	300	45	22	40	
	S40T SCLCR/L 12	40	37	300	55	27	50	

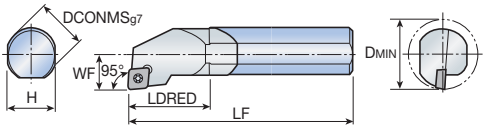
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

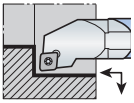
Designation	Screw	Shim	Shim screw	Wrench			
							
S...K ...06	SO 25050I	-	-	T 7	-		
...06	SO 25065I	-	-	T 7	-		
...09	SO 35080I	-	-	T 15	-		
S25T...12	SO 45100I	-	-	T 20	-		
...12	SO 45130I	SSC 43N	SO 60105S	T 20	L-W 5		

C-SCLCR/L

Screw type boring bars



C-SCLCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	✓ **C08K SCLCR/L 06**	8	7	125	15	6	11	CC... 0602...
	✓ **C10K SCLCR/L 06**	10	9	125	15	7	13	
	✓ **C12M SCLCR/L 06**	12	11	150	18	9	16	
	✓ **C12M SCLCR/L 09**	12	11	150	18	9	16	CC... 09T3...
	✓ **C16R SCLCR/L 09**	16	15	200	25	11	20	
	✓ **C20S SCLCR/L 09**	20	18	250	25	13	25	

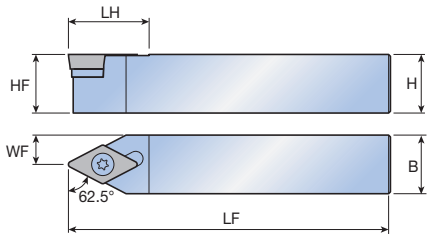
▸ ✓: Designates carbide shank ▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

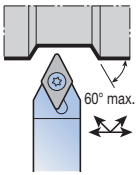
Designation	Screw	Wrench					
							
C08/C10 ...06	SO 25050I	T 7					
C12 ...06	SO 25065I	T 7					
...09	SO 35080I	T 15					

SDNCN

Screw type holders



SDNCN

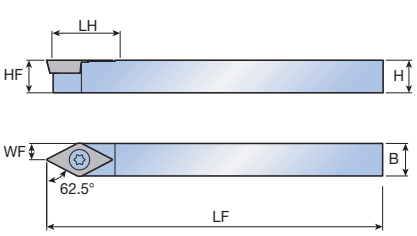
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
62.5°	**SDNCN**	**0808 F07**	8	8	8	80	15	4	DC... 0702...
		**1010 F07**	10	10	10	80	15	5	
		1616 H11	16	16	16	100	22	8	DC... 11T3...
		2525 M11	25	25	25	150	22	12.5	

Spare parts

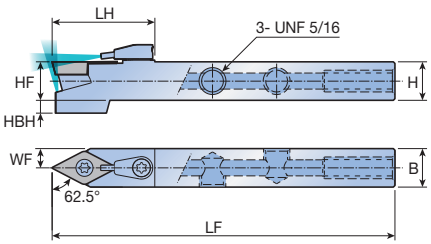
Designation	Screw	Shim	Shim screw	Wrench				
								
...07	SO 25065I	-	-	T 7				
...11	SO 35124I	SSD 32	SO 50090S	T 15				

SDNCN-SH SDNCN-SH-TB

Screw type holders

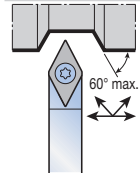


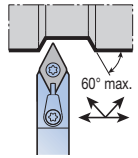
SDNCN-SH



SDNCN-SH-TB

Approach angle	Designation		Dimension (mm)							Insert
			H	HF	HBH	B	LF	LH	WF	
62.5°	# SDNCN	0808 K07-SH	8	8	-	8	125	15	4	DC... 0702...
		1010 K07-SH	10	10	-	10	125	15	5	
		1010 K11-SH	10	10	-	10	125	22	5	DC... 11T3...
		1212 K11-SH	12	12	-	12	125	22	6	
		1616 K11-SH	16	16	-	16	125	22	8	
62.5°	# SDNCN	1212 K11-SH-TB	12	12	4	12	125	32	6	DC... 11T3...
		1616 K11-SH-TB	16	16	-	16	125	32	8	





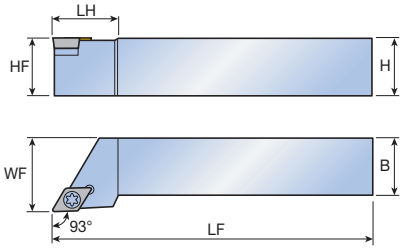
COOLBURST

▸ #: TOP-MINI holders

Spare parts

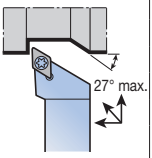
Designation	Screw	Cooling unit	Plug	Wrench				
								
...07	SO 25065I	-	-	T 7	-			
...11-SH	SO 35080I	-	-	T 7	-			
SDNCN-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32			

Screw type holders



SDJCR

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**SDJCR/L**	**1212 F07**	12	12	12	80	15	16	DC... 0702...
		1616 H07	16	16	16	100	15	20	
		2020 K07	20	20	20	125	20	25	
		1616 H11	16	16	16	100	24	20	DC... 11T3...
		2020 K11	20	20	20	125	24	25	
		2525 M11	25	25	25	150	28	32	

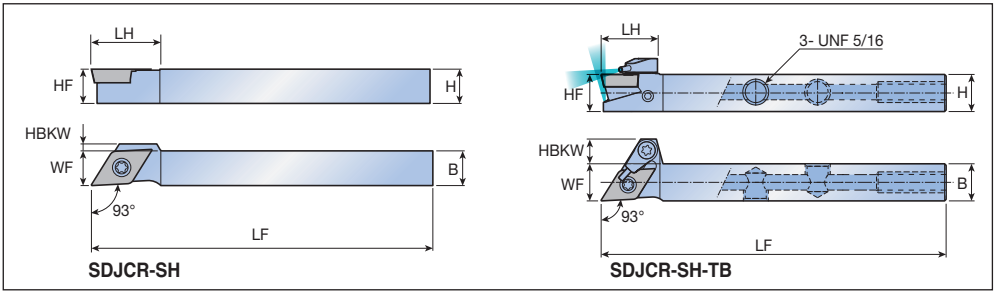


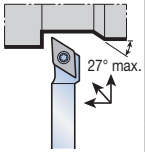
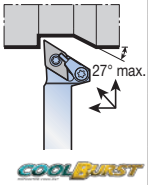
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
...07	SO 25065I	-	-	T 7				
...11	SO 35124I	SSD 32	SO 50090S	T 15				

SDJCR/L-SH SDJCR/L-SH-TB

Screw type holders



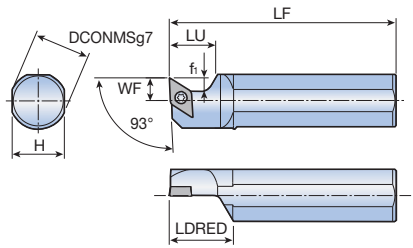
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF	HBKW	
93°	# **SDJCR/L**	**0808 K07-SH**	8	8	8	125	12.7	8	-	DC... 0702...
		**1010 K07-SH**	10	10	10	125	15	10	-	
		1010 K11-SH	10	10	10	125	20	10	2	DC... 11T3...
		1212 K11-SH	12	12	12	125	20	12	-	
		1616 K11-SH	16	16	16	125	20	16	-	
		2020 K11-SH	20	20	20	125	20	20	-	
93°	# **SDJCR/L**	**1212 K11-SH-TB**	12	12	12	125	19	12	8	DC... 11T3...
		**1616 K11-SH-TB**	16	16	16	125	19	16	4	
		2020 K11-SH-TB	20	20	20	125	20	20	-	

▸ #: TOP-MINI holders

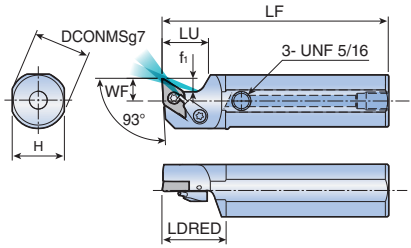
Spare parts

Designation	Screw	Cooling unit	Plug	Wrench			
							
...07	SO 25065I	-	-	T 7	-		
...11-SH	SO 35080I	-	-	T 15	-		
SDJCR/L-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32		

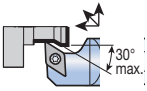
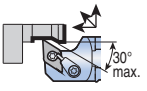
Sleeve holders



TMS-SDUCL



TMS-SDUCL-TB

Approach angle	Designation	Dimension (mm)							Insert
		DCONMS	H	LF	f1	LU	LDRED	WF	
93°	# **TMS-16X SDUCL 11**	16	15	85	6	20	28	10	DC... 11T3...
	**19.05H SDUCL 11**	19.05	17	100	6	20	28	10	
	20H SDUCL 11	20	18	100	6	20	28	10	
	22H SDUCL 11	22	20	100	6	20	28	10	
	25H SDUCL 11	25	23	100	6	20	28	10	
93°	# **TMS-16X SDUCR 11- TB**	16	15	85	6	20	28	10	DC... 11T3...
	**19.05H SDUCL 11-TB**	19.05	17	100	6	20	28	10	
	20H SDUCL 11-TB	20	18	100	6	20	28	10	
	22H SDUCL 11-TB	22	20	100	6	20	28	10	
	25H SDUCL 11-TB	25	23	100	6	20	28	10	

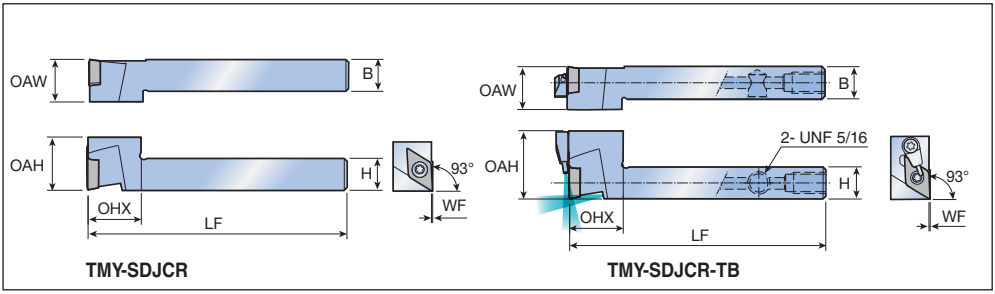
▸ #: TOP-MINI holders

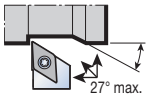
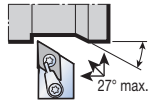
Spare parts

Designation	Screw	Cooling unit	Plug	Wrench		
						
TMS-SDUCL	SO 35080I	-	-	T 15	-	
TMS-SDUCL-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32	

TMY-SDJCR TMY-SDJCR-TB

Y-axis holders



Approach angle	Designation	Dimension (mm)							Insert
		H	B	LF	OHX	OAH	OAW	WF	
93°	# **TMY-SDJCR 1212 K11**	12	12	125	21	20	16	0	DC... 11T3...
 	**SDJCR 1616 K11**	16	16	125	21	20	16	0	
93°	# **TMY-SDJCR 1212 K11-TB**	12	12	125	21	25.5	16	0	DC... 11T3...
 COOLBURST 	**SDJCR 1616 K11-TB**	16	16	125	21	25.5	16	0	

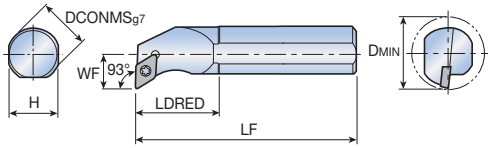
▸ #: TOP-MINI holders

Spare parts

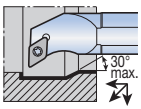
Designation	Screw	Cooling unit	Plug	Wrench		
						
TMY-SDJCR	SO 35080I	-	-	T 15	-	
TMY-SDJCR-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32	

S-SDUCR/L

Screw type boring bars



S-SDUCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
93°	**S10K SDUCR/L 07**	10	9	125	20	7	13	DC... 0702...
	**S12M SDUCR/L 07**	12	11	150	23	9	16	
	S16R SDUCR/L 07	16	15	200	30	11	20	
	S16R SDUCR/L 11	16	15	200	27	11	20	DC... 11T3...
	S20S SDUCR/L 11	20	18	250	32	13	25	
	S25T SDUCR/L 11	25	23	300	42	17	32	
	S32T SDUCR/L 11	32	30	300	55	22	40	

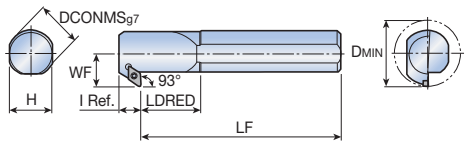
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

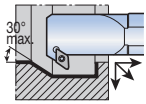
Designation	Screw	Wrench						
								
S ...07	SO 25065I	T 7						
S ...11	SO 35080I	T 15						

S-SDZCR/L

Screw type back boring bars



S-SDZCR

Approach angle	Designation	Dimension (mm)							Insert
		DCONMS	H	LF	LDRED	WF	l	DMIN	
93°	**S16R SDZCR/L 07**	16	15	200	23	13	12	22	DC... 0702...
	**S20S SDZCR/L 07**	20	18	250	28	15	12	30	
	S25T SDZCR/L 07	25	23	300	33	18	12	33	
	S20S SDZCR/L 11	20	18	250	24	15	16	27	DC... 11T3...
	S32T SDZCR/L 11	32	30	300	34	22	16	40	

For back boring

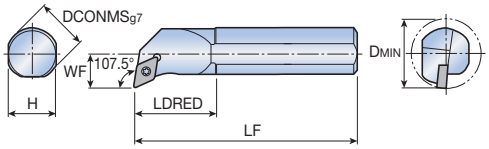
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...07	SO 25065I	-	-	T 7	-			
S20S...11	SO 35080I	-	-	T 15	-			
S32T...11	SO 35124I	SSD 32	SO 50090S	T 15	L-W 3.5			

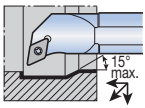
S-SDQCR/L

Screw type boring bars



S-SDQCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
107.5°	**S10K SDQCR/L 07**	10	9	125	20	7	13	DC... 0702...
	S12M SDQCR/L 07	12	11	150	22	9	16	
	S16R SDQCR/L 07	16	15	200	27	11	20	
	S20S SDQCR/L 11	20	18	250	40	13	25	DC... 11T3...
	S25T SDQCR/L 11	25	23	300	50	17	32	



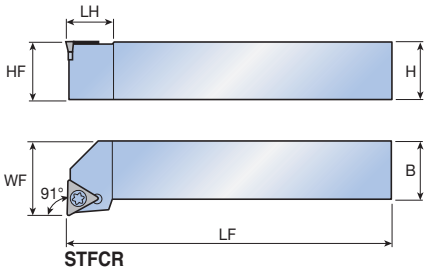
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

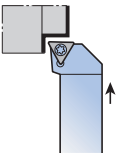
Designation	Screw	Wrench						
								
S10 ...07	SO 25050I	T 7						
S ...07	SO 25065I	T 7						
S ...11	SO 35080I	T 15						

STFCR/L

Screw type holders



STFCR

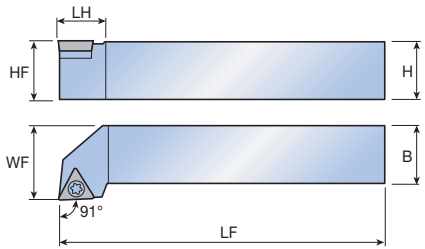
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°	**STFCR/L**	**1212 F1102**	12	12	12	80	14	16	TC...1102...
		**1616 H16**	16	16	16	100	19	20	TC...16T3...
		2020 K16	20	20	20	125	19	25	
		2525 M16	25	25	25	150	20	32	

Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...1102	SO 25065I	-	-	T 7				
...16	SO 35124I	SST 32	SO 50090S	T 15				

STGCR/L

Screw type holders



STGCR

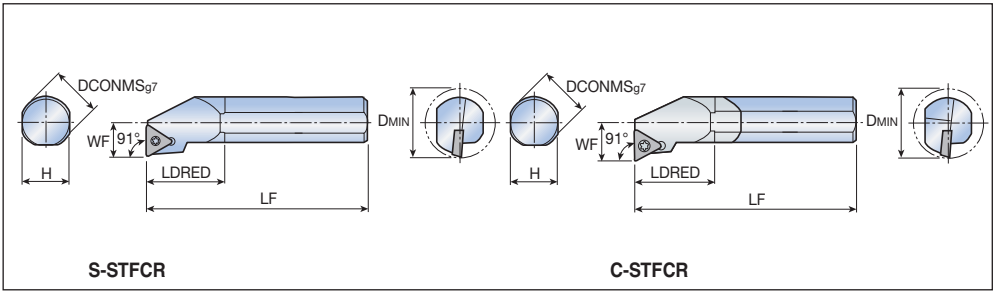
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF		
91°	STGCR/L	1010 E09	10	10	10	70	11	12		TC...0902...
		1212 F1102	12	12	12	80	14.3	16		TC...1102...
		1616 H1102	16	16	16	100	14.3	20		
		1616 H16	16	16	16	100	21	20		TC...16T3...
		2020 K16	20	20	20	125	21	25		
		2525 M16	25	25	25	150	21	32		

Spare parts

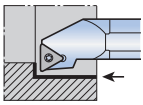
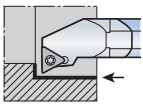
Designation	Screw	Shim	Shim screw	Wrench			
...09	SO 22065I	-	-	T 7			
...1102	SO 25065I	-	-	T 7			
...16	SO 35065I	SST 32	SO 50090S	T 15			

S-STFCR/L C-STFCR/L

Screw type boring bars



S-STFCR C-STFCR

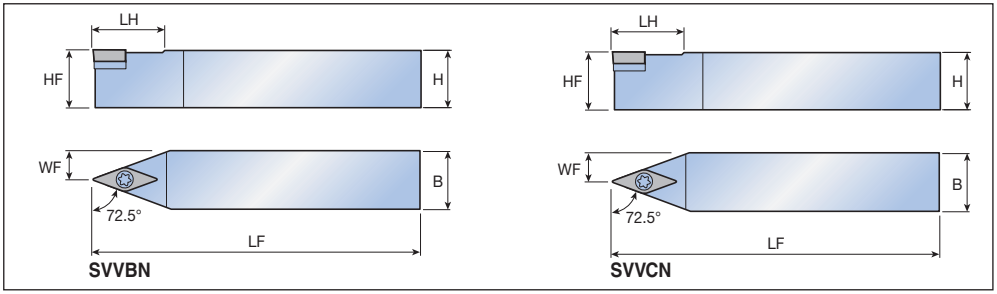
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	**S08K STFCR/L 09**	8	7	125	20	5	10	TC...0902...
	**S10M STFCR/L 09**	10	9	125	22.5	6	12	
	S12M STFCR/L 09	12	11	150	30	9	16	
	S16R STFCR/L 09	16	15	200	35	11	20	
	S10K STFCR/L 09	10	9	125	17.7	6	12	
	S12M STFCR/L 1102	12	11	150	25	9	16	TC...1102...
	S16R STFCR/L 1102	16	15	200	35	11	20	
	S20S STFCR/L 1102	20	18	250	36	13	25	
	S20S STFCR/L 16	20	18	250	36	13	25	TC...16T3...
	S25T STFCR/L 16	25	23	300	49	17	32	
	S32T STFCR/L 16	32	30	300	45	22	40	
	S40T STFCR/L 16	40	37	300	60	27	50	
91°	✓ **C10K STFCR/L 1102**	10	9	125	15	7	13	TC...1102...
	✓ **C10K STFCR 1102**	10	9	125	15	7	13	
	✓ **C12M STFCR/L 1102**	12	11	150	20	9	16	
	✓ **C16R STFCR/L 1102**	16	15	200	25	11	20	

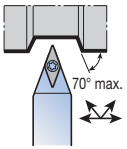
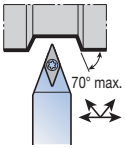
▸ ✓: Designates carbide shank ▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

Designation	Screw	Shim	Shim screw	Wrench			
							
S08K...09	TS 22046II	-	-	T 7	-		
...09	SO 22050I	-	-	T 7	-		
S10K...1102	SO 22050I	-	-	T 7	-		
...1102	SO 25065I	-	-	T 7	-		
S20S...16	SO 35080I	-	-	T 15	-		
S25T...16	SO 35080I	-	-	T 15	-		
S32T...16	SO 35124I	SST 32	S 50090S	T 15	L-W 3.5		
S40T...16	SO 35124I	SST 32	S 50090S	T 15	L-W 3.5		

Screw type holders



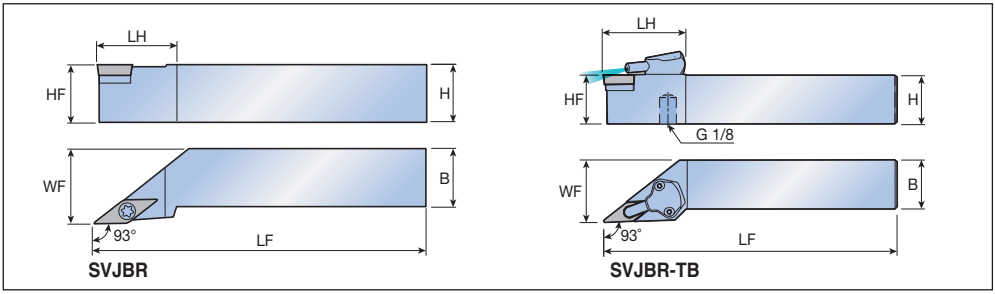
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
72.5°	**SVVBN**	**2020 K16**	20	20	20	125	31.5	10.0	VB...1604...
		**2525 M16**	25	25	25	150	31.5	12.5	
		3225 P16	32	32	25	170	31.5	12.5	
72.5°	**SVVCN**	**2020 K16**	20	20	20	125	31.5	10.0	VC...1604...
		**2525 M16**	25	25	25	150	31.5	12.5	
		3225 P16	32	32	25	170	31.5	12.5	
		3232 P16	32	32	32	170	32	16.0	

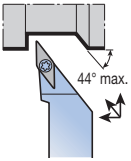
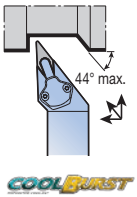
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

SVJBR/L SVJBR/L-TB

Screw type holders

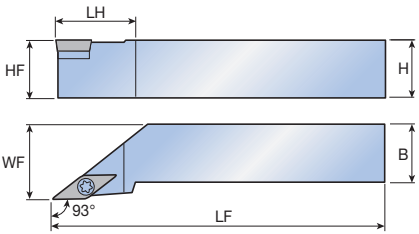


Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**SVJBR/L**	**2020 K16**	20	20	20	125	35	25	VB... 1604...
		**2525 M16**	25	25	25	150	35	32	
		3225 P16	32	32	25	170	35	32	
		3232 P16	32	32	32	170	35	40	
93°	**SVJBR/L**	**2525 M16-TB**	25	25	25	150	42	32	VB... 1604...
									

Spare parts

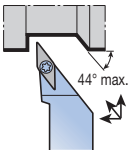
Designation	Screw	Shim	Shim screw	Cooling unit	O-ring	Wrench	
							
...16	SO 35124I	SSV 32	SO 50090S	-	-	T 15	-
SVJBR/L-TB	SO 35124I	SSV 32	TS 5035062S	CU-V-TB	ID 6.4x0.9	T 8, T 15	L-W 3.5

Screw type holders



SVJCR

Approach angle	Designation		Dimension (mm)						Inserts
			H	HF	B	LF	LH	WF	
93°	**SVJCR/L**	**2020 K16**	20	20	20	125	35	25	VC... 1604...
		2525 M16	25	25	25	150	35	32	
		3225 P16	32	32	25	170	35	32	
		3232 P16	32	32	32	170	47	40	

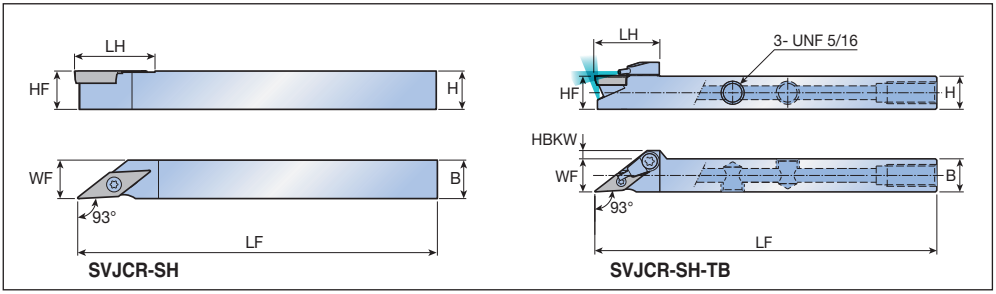


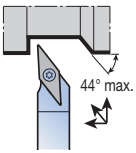
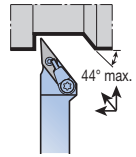
Spare parts

Designation	Screw	Shim	Shim screw	Wrench			
							
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5		

SVJCR/L-SH SVJCR/L-SH-TB

Screw type holders



Approach angle	Designation		Dimension (mm)							Inserts
			H	HF	B	LF	LH	WF	HBKW	
93°	# **SVJCR/L**	**1010 K11-SH**	10	10	10	125	21	10	-	VC... 1103...
		**1212 K11-SH**	12	12	12	125	21	12	-	
		1616 K11-SH	16	16	16	125	21	16	-	
		2020 K11-SH	20	20	20	125	21	20	-	
93°	# **SVJCR/L**	**1212 K11-SH-TB**	12	12	12	125	23.6	12	3	VC... 1103...
		**1616 K11-SH-TB**	16	16	16	125	23.6	16	-	
		2020 K11-SH-TB	20	20	20	125	23.6	20	-	

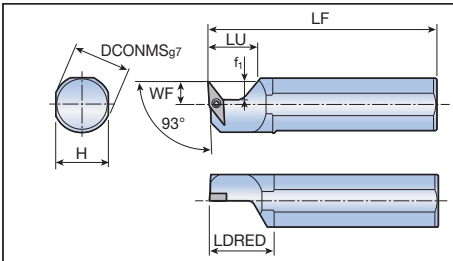
▸ #: TOP-MINI holders

Spare parts

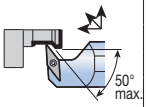
Designation	Screw	Cooling unit	Plug	Wrench			
							
...11-SH	SO 25065I	-	-	T 7	-		
SVJCR/L-SH-TB	SO 25065I	S-CU-TB	PLG 5/16 UNF	T 7	L-W 5/32		

TMS-SVUCL

Sleeve holders



TMS-SVUCL

Approach angle	Designation	Dimension (mm)							Insert
		DCONMS	H	LF	f_1	LU	LDRED	WF	
93°	# **TMS-19.05H SVUCL 11**	19.05	17	100	8	21	25	10	VC… 1103…
	**22H SVUCL 11**	22	20	100	8	21	25	10	
	25.4H SVUCL 11	25	23	100	8	21	28	10	
	25H SVUCL 11	25	23	100	8	21	28	10	

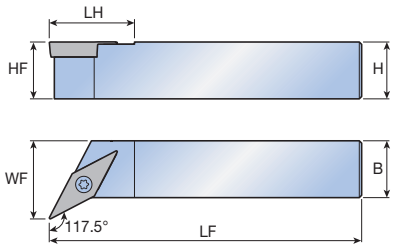
▸ #: TOP-MINI holders

Spare parts

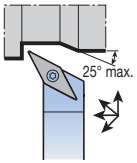
Designation	Screw	Wrench						
								
TMS-SVUCL	SO 25065I	T 7						

SVPBR/L

Screw type holders



SVPBR

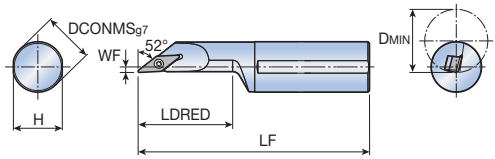
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
117.5°	**SVPBR/L 2020 K16**	20	20	20	125	25	25	VB... 1604...
	**2525 M16**	25	25	25	150	25	32	

Spare parts

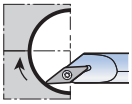
Designation	Screw	Shim	Shim screw	Wrench				
								
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

S-SVJBR/L

Screw type boring bars



S-SVJBR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
52°	**S32S SVJBR/L 16**	32	30	250	60	3.5	40	VB... 1604...
	**S40T SVJBR/L 16**	40	37	300	75	4.5	50	

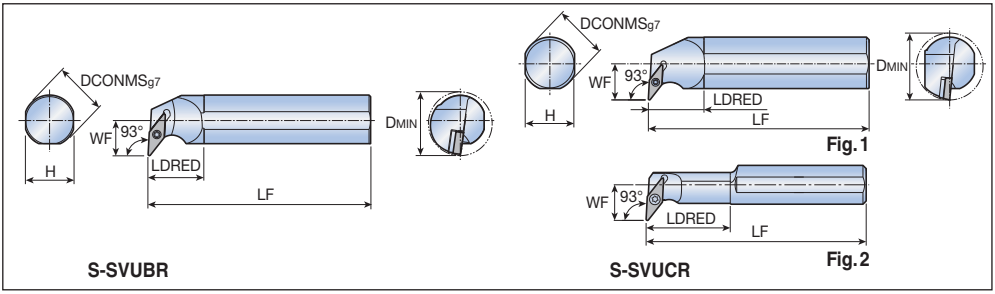
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

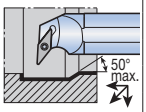
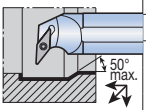
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...16	SO 35124I	SSV32	SO 50090S	T15	L-W 3.5			

S-SVUBR/L S-SVUCR/L

Screw type boring bars



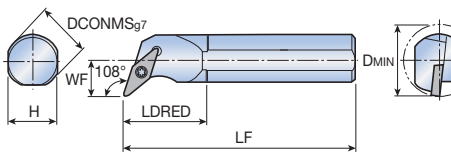
Approach angle	Designation	Dimension (mm)						Fig.	Insert
		DCONMS	H	LF	LDRED	WF	DMIN		
93°	**S32T SVUBR/L 16**	32	30	300	45	22	40		VB... 1604...
	**S40T SVUBR/L 16**	40	37	300	55	27	50		
93°	**S16Q SVUCR/L 11-D20**	16	15	180	32	15.5	20	2	VC...1103...
	**S20R SVUCR/L 11-D25**	20	18	200	40	17.5	25	2	
	S32T SVUCR/L 16	32	30	300	35	22	40	1	VC...1604...
	S40T SVUCR/L 16	40	37	300	41.5	27	50	1	

▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

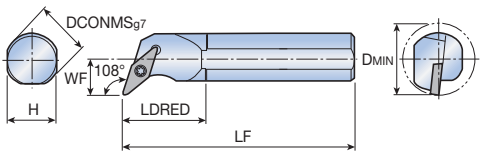
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...11-...	SO 25065I	-	-	T 7	-			
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

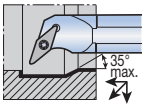
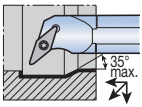
Screw type boring bars



S-SVQBR



S-SVQCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
108°	**S25T SVQBR/L 16**	25	23	300	40	17	32	VB... 1604...
	**S32T SVQBR/L 16**	32	30	300	45	22	40	
	S40T SVQBR/L 16	40	37	300	41.5	27	50	
108°	**S32T SVQCR/L 16**	32	30	300	45	22	40	VC...1604...
	**S40T SVQCR/L 16**	40	37	300	55	27	50	

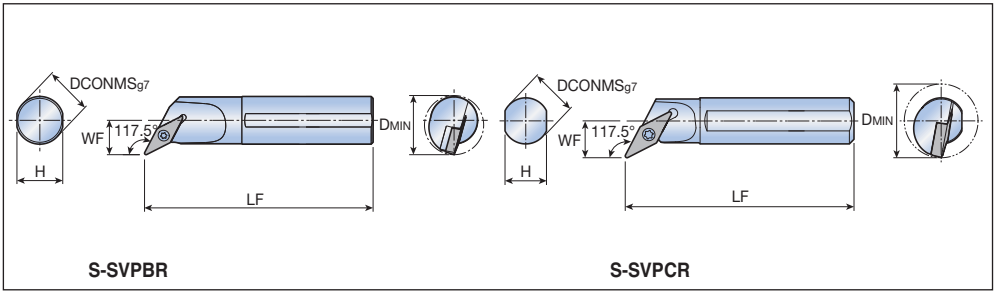
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

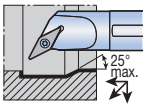
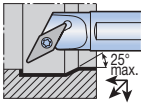
Designation	Screw	Shim	Shim screw	Wrench				
								
S25T...16	SO 35080I	-	-	T 15	-			
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

S-SVPBR/L S-SVPCR/L

Screw type boring bars



S-SVPBR S-SVPCR

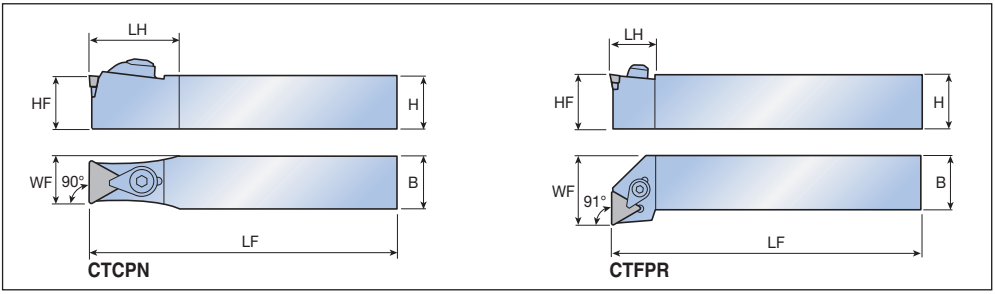
Approach angle	Designation		Dimension (mm)						Insert
			DCONMS	H	LF	LDRED	WF	DMIN	
117.5°	**S25S**	**SVPBR/L 16**	25	23	250	51	18	31	VB... 1604...
	**S32S**	**SVPBR/L 16**	32	30	250	54	23	40	
117.5°	**S12M**	**SVPCR/L 11-D20**	12	11	150	19	10	20	VC...1103...
									

▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...11	SO 25065I	-	-	T 7	-			
...16	SO 35124I	SSV32	SO 50090S	T 15	L-W 3.5			

Top clamp type holders



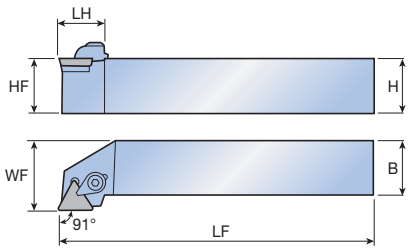
Approach angle	Designation		Dimension (mm) H	HF	B	LF	LH	WF	Insert
90°	**CTCPN**	**2009 K11**	20	20	9	125	20	9.4	TPGN 1103...
		2513 Q16	25	25	13	180	30	14.1	TPGN 1603...
91°	**CTFPR/L**	**1616 H11**	16	16	16	100	14.4	20	TPGN 1103...
		2020 K11	20	20	20	125	16	25	
		2020 K16	20	20	20	125	20	25	TPGN 1603...
		2525 M16	25	25	25	150	20	32	

Spare parts

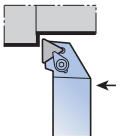
Designation	Clamp		Screw	Shim	Shim pin	Snap ring	Wrench		
CTCPN...11	CL 2C	-	CLS 2C	-	-	CSR 2C	L-W 2.5		
CTCPN...16	CL 3C	-	CLS 3C	CST 32	CSP 3	CSR 2	L-W 3		
CTFPR/L...11	-	CL 2	CLS 2	-	-	CSR 2	L-W 2.5		
CTFPR/L...16	-	CL 3	CLS 3	CST 32	CSP 3	WSR 4	L-W 3		

CTGPR/L

Top clamp type holders



CTGPR

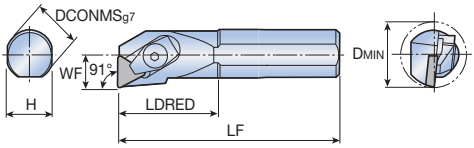
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°	**CTGPR/L**	**1212 F11**	12	12	12	80	19	16	TPGN 1103...
		**1616 H11**	16	16	16	100	18	20	
		2020 K11	20	20	20	125	19	25	
		2020 K16	20	20	20	125	25	25	TPGN 1603...
		2525 M16	25	25	25	150	25	32	

Spare parts

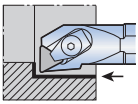
Designation	Clamp	Screw	Shim	Shim pin	Snap ring	Wrench		
								
...11	CL 2	CLS 2	-	-	CSR 2	L-W 2.5		
...16	CL 3	CLS 3	CST 32	CSP 3	WSR 4	L-W 3		

S-CTFPR/L

Top clamp type boring bars



S-CTFPR

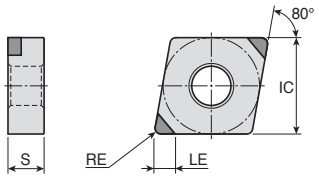
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	**S12M CTFPR/L 11**	12	11	150	30	9	16	TPGN 1103...
	**S16R CTFPR/L 11**	16	15	200	30	11	20	
	S20S CTFPR/L 11	20	18	250	35	13	25	
	S16R CTFPR/L 16	16	15	200	40	11	20	TPGN 1603...
	S20S CTFPR/L 16	20	18	250	50	13	25	
	S25T CTFPR/L 16	25	23	300	40	17	32	
	S32T CTFPR/L 16	32	30	300	45	22	40	
	S40T CTFPR/L 16	40	37	300	41.5	27	50	
	S50U CTFPR/L 16	50	47	350	56	35	63	

Spare parts

Designation	Clamp		Screw	Snap ring	Shim	Shim pin	Wrench	
								
...11	CL 2C	-	CLS 2C	CSR 2C	-	-	L-W 2.5	
S16R...16	CL 3C	-	CLS 3C	CSR 2	-	-	L-W 3	
S20S...16	CL 3C	-	CLS 3C	CSR 2	-	-	L-W 3	
S25T...16	-	CL 3	CLS 3S	WSR 4	-	-	L-W 3	
...16	-	CL 3	CLS 3	WSR 4	CST 32	CSP 3	L-W 3	

CNGA

Negative 80° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
12	12.7	4.76	0.4-1.2

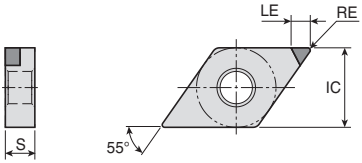
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
					TD1010	TD1020	TD1030
 	**CNGA 120404 LN-10**	4.0	0.1-3.0	0.05-0.25		●	
	120408 LN-10	3.9	0.1-3.0	0.05-0.25		●	
	120412 LN-10	3.8	0.1-3.0	0.05-0.25		●	

▸ For edge preparations & land information, see page 269.

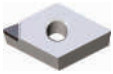
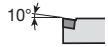
●: Standard items

DNGA

Negative 55° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
15	12.7	4.76-6.35	0.4-0.8

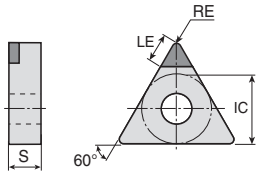
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
					TD1010	TD1020	TD1030
 	**DNGA 150404 LN-10**	4.0	0.1-2.5	0.05-0.20		●	
	150408 LN-10	3.7	0.1-2.5	0.05-0.20		●	
	150604 LN-10	4.0	0.1-2.5	0.05-0.20		●	
	150608 LN-10	3.7	0.1-2.5	0.05-0.20		●	

▸ For edge preparations & land information, see page 269.

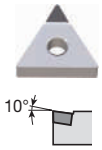
●: Standard items

TNGA

Negative triangular inserts



Size	Dimension (mm)		
	IC	S	RE
16	9.52	4.76	0.4

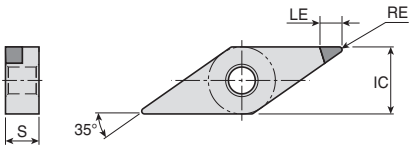
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
						TD1010	TD1020	TD1030
	**TNGA**	**160404 LN-10**	4.3	0.1-3.0	0.05-0.20		●	

▸ For edge preparations & land information, see page 269.

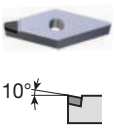
●: Standard items

VNGA

Negative 35° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
16	9.52	4.76	0.4

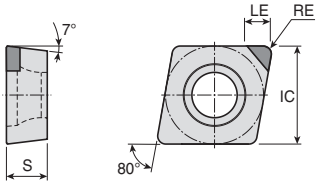
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
						TD1010	TD1020	TD1030
	**VNGA**	**160404 LN-10**	5.0	0.1-2.0	0.05-0.20		●	

▸ For edge preparations & land information, see page 269.

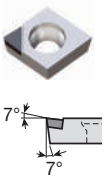
●: Standard items

CCGW CCGT-CB CCGT-CF

Positive 80° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
06	6.35	2.38	0.2-0.4
09	9.52	3.97	0.2-0.8
12	12.7	4.76	0.4-0.8

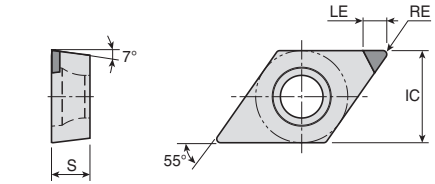
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
					TD1010	TD1020	TD1030
	**CCGW 060202 LN-7**	3.1	0.08-3.0	0.05-0.30	●	●	●
	060204 LN-7	3.1	0.08-3.0	0.05-0.30	●	●	●
	09T304 LN-7	4.0	0.1-3.0	0.05-0.30	●	●	●
	09T308 LN-7	3.9	0.1-3.0	0.05-0.30	●	●	
	120404 LN-7	4.0	0.1-3.0	0.05-0.30	●	●	●
	120408 LN-7	3.9	0.1-3.0	0.05-0.30	●	●	
	**CCGT 060204 CB**	3.1	0.5-1.5	0.10-0.50		●	
	09T302 CB	4.15	0.5-2.0	0.10-0.50		●	
	09T304 CB	4.1	0.5-2.0	0.10-0.50		●	
	09T308 CB	4.0	0.5-2.0	0.10-0.50		●	
	120404 CB	4.1	0.5-2.0	0.10-0.50		●	
	120408 CB	4.0	0.5-2.0	0.10-0.50		●	
PCD chip breaker							
	**CCGT 09T302 CF**	4.15	0.1-1.0	0.05-0.20		●	
	09T304 CF	4.1	0.1-1.0	0.05-0.20		●	
	120404 CF	4.1	0.1-1.0	0.05-0.20		●	
	120408 CF	4.0	0.1-1.0	0.05-0.20		●	
PCD chip breaker							

▸ For edge preparations & land information, see page 269.

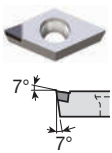
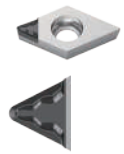
●: Standard items

DCGW DCGT-CB DCGT-CF

Positive 55° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
07	6.35	2.38	0.2-0.4
11	9.52	3.97	0.2-0.8

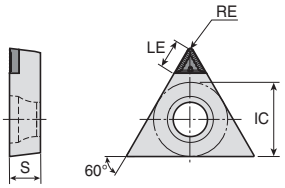
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
					TD1010	TD1020	TD1030
	**DCGW 070202 LN-7**	3.4	0.1-2.0	0.05-0.30	●	●	
	070204 LN-7	3.3	0.1-2.0	0.05-0.30	●	●	
	11T302 LN-7	3.9	0.1-2.0	0.05-0.30	●	●	●
	11T304 LN-7	3.7	0.1-2.0	0.05-0.30	●	●	●
	11T308 LN-7	3.3	0.1-2.0	0.05-0.30	●	●	●
	**DCGT 070202 CB**	3.4	0.5-1.5	0.10-0.50		●	
	070204 CB	3.3	0.5-1.5	0.10-0.50		●	
	11T302 CB	4.9	0.5-2.5	0.10-0.50		●	
	11T304 CB	4.7	0.5-2.5	0.10-0.50		●	
	11T308 CB	4.6	0.5-2.5	0.10-0.50		●	
For roughing to medium							
	**DCGT 070202 CF**	3.4	0.1-1.0	0.05-0.20		●	
	070204 CF	3.3	0.1-1.0	0.05-0.20		●	
	11T302 CF	4.9	0.1-1.5	0.05-0.20		●	
	11T304 CF	4.7	0.1-1.5	0.05-0.20		●	
	11T308 CF	4.6	0.1-1.5	0.05-0.20		●	
For finishing							

▸ For edge preparations & land information, see page 269.

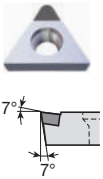
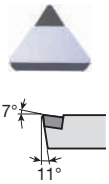
●: Standard items

TCGW TPGN TCGT-CB

Positive triangular inserts



Size	Dimension (mm)		
	IC	S	RE
09	5.56	2.38	0.4-0.8
11	6.35	2.38-3.18	0.2-0.4
16	9.52	3.18-3.97	0.2-0.8

Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
					TD1010	TD1020	TD1030
	**TCGW 090204 LN-7**	3.3	0.1-2.0	0.05-0.30		●	
	090208 LN-7	3.0	0.1-2.0	0.05-0.30		●	
	110204 LN-7	3.8	0.1-2.0	0.05-0.30	●	●	●
	16T304 LN-7	3.8	0.1-2.0	0.05-0.30		●	
	16T308 LN-7	3.5	0.1-2.0	0.05-0.30		●	
	TPGN 110302 LN-7	3.9	0.1-2.0	0.05-0.30		●	
	110304 LN-7	3.8	0.1-2.0	0.05-0.30		●	
	160302 LN-7	4.4	0.1-2.0	0.05-0.30		●	
	160304 LN-7	4.3	0.1-2.0	0.05-0.30		●	
	**TCGT 090204 CB**	2.8	0.5-1.5	0.10-0.50		●	
	110204 CB	3.8	0.5-2.0	0.10-0.50		●	
	16T304 CB	3.9	0.5-2.0	0.10-0.50		●	
	16T308 CB	3.6	0.5-2.0	0.10-0.50		●	

PCD chip breaker

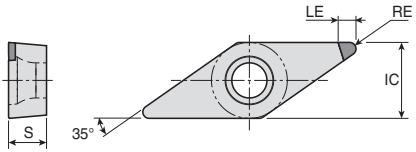


▸ For edge preparations & land information, see page 269.

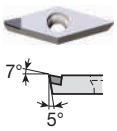
●: Standard items

VBGW VCGW VCGT-CB VCGT-CF

Positive 35° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
11	6.35	3.18	0.2-0.4
16	9.52	4.76	0.2-1.2

Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	PCD		
					TD1010	TD1020	TD1030
	**VBGW 160402 LN-7**	5.2	0.1-2.0	0.05-0.30		●	
	160404 LN-7	5.0	0.1-2.0	0.05-0.30		●	
	160408 LN-7	4.2	0.1-2.0	0.05-0.30		●	
	VCGW 160404 LN-7	5.0	0.1-2.0	0.05-0.30	●	●	●
	160408 LN-7	4.1	0.1-2.0	0.05-0.30	●	●	●
 For roughing to medium	**VCGT 110302 CB**	4.7	0.5-2.0	0.10-0.50		●	
	110304 CB	5.0	0.5-2.0	0.10-0.50		●	
	160404 CB	7.3	0.5-3.5	0.10-0.50		●	
	160408 CB	6.4	0.5-3.5	0.10-0.50		●	
	160412 CB	6.2	0.5-3.5	0.10-0.50		●	
 For finishing	**VCGT 160404 CF**	7.3	0.1-2.0	0.05-0.20		●	
	160408 CF	6.4	0.1-2.0	0.05-0.20		●	

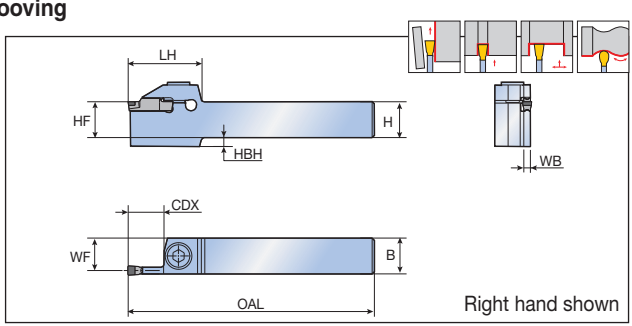
▸ For edge preparations & land information, see page 269.

●: Standard items

TTER/L

Holders for external turning and grooving



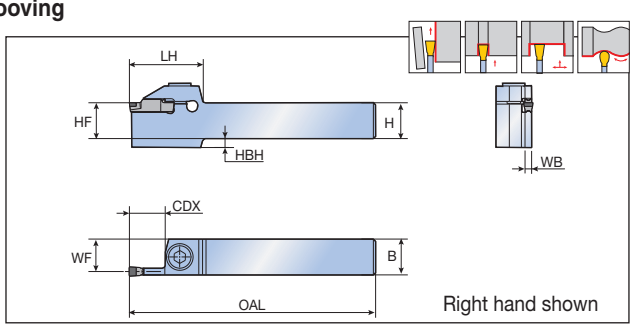


Designation		Insert seat size	Dimension (mm)								Insert
			H(HF)	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L	**1616-2T08**	2	16	16	110	30.0	15.1	1.8	4	8	TS...
	2020-2T08	2	20	20	125	30.0	19.1	1.8	-	8	
	2525-2T08	2	25	25	150	30.0	24.1	1.8	-	8	
	1616-2	2	16	16	110	32.0	15.1	1.8	4	12	
	2020-2	2	20	20	125	32.0	19.1	1.8	-	12	
	2525-2	2	25	25	150	32.0	24.1	1.8	-	12	
	1616-2T17	2	16	16	110	37.0	15.1	1.8	4	17	
	2020-2T17	2	20	20	125	37.0	19.1	1.8	-	17	
	2525-2T17	2	25	25	150	37.0	24.1	1.8	-	17	
TTER/L	**2020-3T09**	3	20	20	125	30.0	18.8	2.4	-	9	
	2525-3T09	3	25	25	150	30.0	23.8	2.4	-	9	
	1616-3	3	16	16	110	32.0	14.8	2.4	4	12	
	2020-3	3	20	20	125	32.0	18.8	2.4	-	12	
	2525-3	3	25	25	150	32.0	23.8	2.4	-	12	
	1616-3T20	3	16	16	110	38.5	14.8	2.4	-	20	
	2020-3T20	3	20	20	125	38.5	18.8	2.4	-	20	
	2525-3T20	3	25	25	150	38.5	23.8	2.4	-	20	
	2525-3T25	3	25	25	150	44.5	23.8	2.4	-	25	
	3232-3T20	3	32	32	170	38.5	30.8	2.4	-	20	
TTER/L	**1616-4T10**	4	16	16	110	32.0	14.5	3.0	4	10	
	2020-4T10	4	20	20	125	32.0	18.5	3.0	-	10	
	2525-4T10	4	25	25	150	32.0	23.5	3.0	-	10	
	1616-4	4	16	16	110	33.0	14.5	3.0	4	15	
	2020-4	4	20	20	125	33.0	18.5	3.0	-	15	
	2525-4	4	25	25	150	33.0	23.5	3.0	-	15	
	1616-4T25	4	16	16	110	45.0	14.5	3.0	-	25	
	2020-4T25	4	20	20	125	45.0	18.5	3.0	-	25	
	2525-4T25	4	25	25	150	45.0	23.5	3.0	-	25	
	2525-4T30	4	25	25	150	51.0	23.5	3.0	-	30	
	3232-4T25	4	32	32	170	45.0	30.5	3.0	-	25	
TTER/L	**2020-5T12**	5	20	20	125	35.0	18.1	3.9	-	12	
	2525-5T12	5	25	25	150	35.0	23.1	3.9	-	12	
	2020-5	5	20	20	125	37.0	18.1	3.9	-	20	
	2525-5	5	25	25	150	37.0	23.1	3.9	-	20	
	2525-5T32	5	25	25	150	56.0	23.0	3.9	-	32	
	3232-5T20	5	32	32	170	39.0	30.0	3.9	-	20	
	3232-5T32	5	32	32	170	56.0	30.0	3.9	-	32	

TTER/L

Holders for external turning and grooving





Designation	Insert seat size	Dimension (mm)								Insert
		H(HF)	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L 2020-6T12	6	20	20	125	37	17.6	4.9	-	12	TS...
2525-6T12	6	25	25	150	37	22.6	4.9	7	12	
2020-6	6	20	20	125	41	17.6	4.9	-	20	
2525-6	6	25	25	150	41	22.6	4.9	7	20	
2525-6T32	6	25	25	150	56	22.5	4.9	7	32	
3232-6T20	6	32	32	170	41	29.5	4.9	-	20	
3232-6T25	6	32	32	170	46	29.5	4.9	-	25	
3232-6T32	6	32	32	170	56	29.5	4.9	-	32	
TTER/L 2525-8T16	8	25	25	150	40	22.1	5.9	7	16	
2525-8	8	25	25	150	47	22.1	5.9	7	25	
3232-8	8	32	32	170	47	29.1	5.9	-	25	
2525-8T36	8	25	25	150	60	22.1	5.9	7	36	
3232-8T36	8	32	32	170	60	29.1	5.9	-	36	

Spare parts

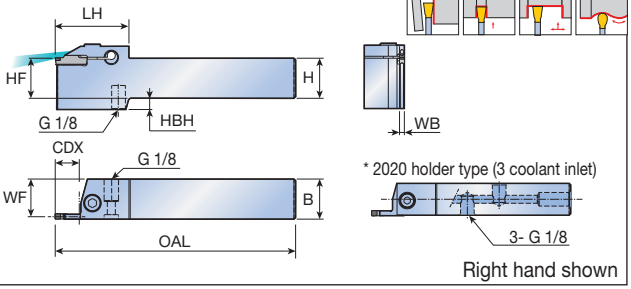
Designation	Screw	Wrench		
				
TTER/L 1616-2/3	SH M5x0.8x16	L-W 4		
TTER/L 2020-2/3	SH M5x0.8x20	L-W 4		
TTER/L 2525-2/3	SH M5x0.8x25	L-W 4		
TTER/L 3232-3	SH M5x0.8x25	L-W 4		
TTER/L 1616-4/5	SH M6x1x16	L-W 5		
TTER/L 2020-4/5	SH M6x1x20	L-W 5		
TTER/L 2525-4/5	SH M6x1x25	L-W 5		
TTER/L 3232-4/5	SH M6x1x25	L-W 5		
TTER/L 2020-6	SH M8x1.25x20	L-W 6		
TTER/L 2525-6/8	SH M8x1.25x25	L-W 6		
TTER/L 3232-6/8/10	SH M8x1.25x25	L-W 6		

TTER/L-TB

Holders for turning and grooving with high-pressure coolant



COOLBURST



Right hand shown

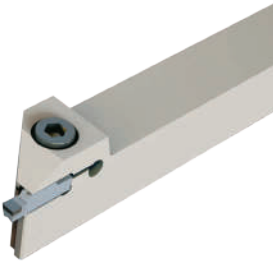
Designation		Insert seat size	Dimension (mm)								Insert
			H(HF)	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L	**2020-2T12-TB**	2	20	20	125	43	19.1	1.8	-	12	TS...
	2525-2T12-TB	2	25	25	150	43	24.1	1.8	-	12	
	2020-3-TB	3	20	20	125	43	18.8	2.4	-	12	
	2020-4-TB	4	20	20	125	46	18.5	3.0	-	15	
	2525-3-TB	3	25	25	150	43	23.8	2.4	-	12	
	2525-3T25-TB	3	25	25	150	51	23.8	2.4	-	25	
	2525-4-TB	4	25	25	150	46	23.5	3.0	-	15	
	2525-5-TB	5	25	25	150	49	23.1	3.9	-	20	
	2525-6-TB	6	25	25	150	52	22.6	4.9	7	20	
	2525-8-TB	8	25	25	150	58	22.1	5.9	7	25	

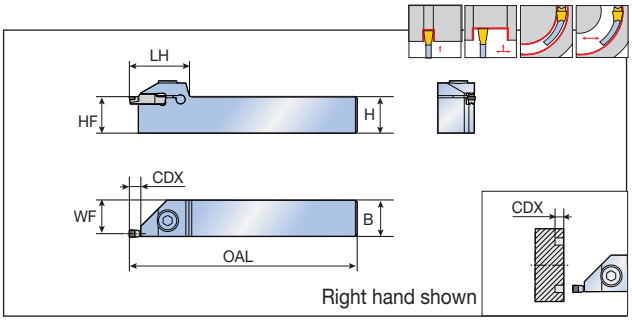
Spare parts

Designation	Screw	Plug		Wrench
				
TTER/L 2020-2/3-TB	SH M5x0.8x20	PLG G1/8-L6.5	-	L-W 4, L-W 5
TTER/L 2020-4-TB	SH M6x1.0x20	PLG G1/8-L6.5	-	L-W 5
TTER/L 2525-2/3-TB	SH M5x0.8x20	-	PLG G1/8-T8.0-L12.3	L-W 4, L-W 5
TTER/L 2525-4/5-TB	SH M6x1.0x20	-	PLG G1/8-T8.0-L12.3	L-W 5
TTER/L 2525-6/8-TB	SH M8x1.25x20	-	PLG G1/8-T8.0-L12.3	L-W 5, L-W 6

TGFR/L

Holders for shallow grooving





Designation	Insert seat size	Dimension (mm)						Insert
		H(HF)	B	OAL	LH	WF	CDX	
TGFR/L 1616-4	2, 3, 4	16	16	110	33	14.5	4.8	TS...
2020-4	2, 3, 4	20	20	125	33	18.5	4.8	
2525-4	2, 3, 4	25	25	150	33	23.5	4.8	
2020-6	5, 6	20	20	125	37	17.6	4.8	
2525-6	5, 6	25	25	150	37	22.6	4.8	

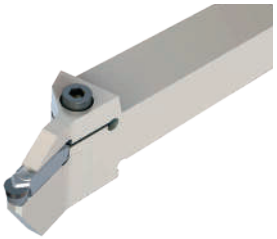
▸ External turning and grooving are available, depending on the insert type

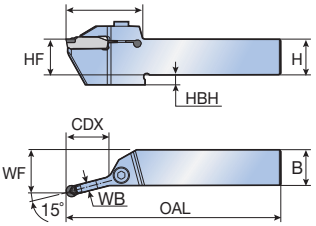
Spare parts

Designation	Screw	Wrench		
				
TGFR/L 1616	SH M6x1x16	L-W 5		
TGFR/L 2020	SH M6x1x20	L-W 5		
TGFR/L 2525	SH M6x1x25	L-W 5		

TTER/L-15A

Holders for external aluminum wheel machining





Right hand shown

Designation		Insert seat size	Dimension (mm)									Insert
			H	HF	B	OAL	LH	WF	WB	HBH	CDX	
TTER/L	**2525-6-15A**	6	25	25	25	150	51	30	4.90	7	25.0	TS...
	2525-8-15A	8	25	25	25	150	55	30	5.90	7	30.0	

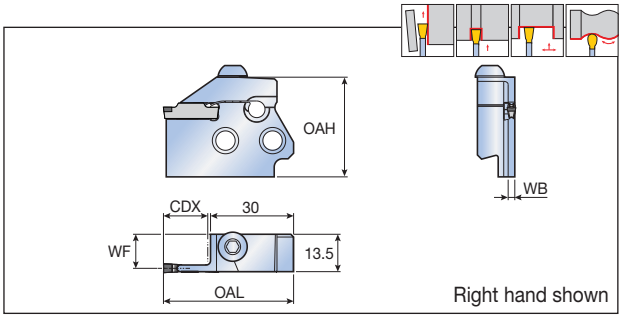
Spare parts

Designation	Screw	Wrench		
				
TTER/L	SH M6x1x25	L-W 5		

TCAER/L

Cartridges for external grooving





Designation		Insert seat size	Dimension (mm)					Holder	Insert
			OAL	WF	WB	OAH	CDX		
TCAER/L	**2T16**	2	47	12.6	1.8	36	16	TCAHR/L TCAHPL/R C..-TCAHN C..-TCAHPN	TS...
	2T22	2	53	12.3	1.8	36	22		
	3T16	3	47	12.3	2.4	36	16		
	3T22	3	53	12.3	2.4	36	22		
	4T16	4	47	12.0	3.0	36	16		
	4T22	4	53	12.0	3.0	36	22		
	5T20	5	51.5	11.6	3.9	36	20		
	5T25	5	56	11.6	3.9	36	25		
	6T20	6	51.5	11.1	4.9	36	20		
	6T25	6	56	11.1	4.9	36	25		

Spare parts

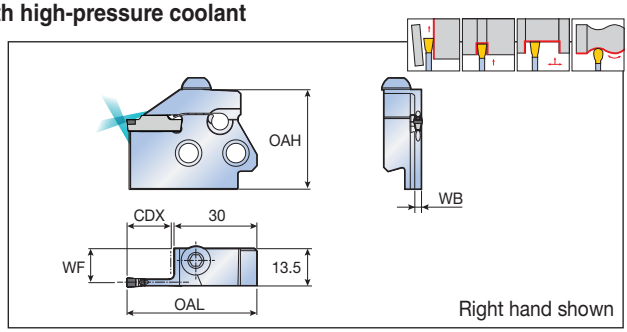
Designation	Screw	Wrench		
				
TCAER/L	BH M6x1x16	L-W 4		

TCAER/L-TB

Cartridges for external grooving with high-pressure coolant



COOLBURST



Designation		Insert seat size	Dimension (mm)					Holder	Insert
			OAL	WF	WB	OAH	CDX		
TCAER/L	**2T16-TB**	2	47	12.6	1.8	36	16	TCAHR/L-TB TCAHPL/R-TB C...TCAHN-TB C...TCAHPN-TB	TS...
	3T16-TB	3	47	12.3	2.4	36	16		
	4T16-TB	4	47	12.0	3.0	36	16		
	5T20-TB	5	51	11.5	3.9	36	20		

Spare parts

Designation	Screw	Wrench		
				
TCAER/L-TB	BH M6x1x16	L-W 4		

TCAFR/L

Cartridges for external face grooving



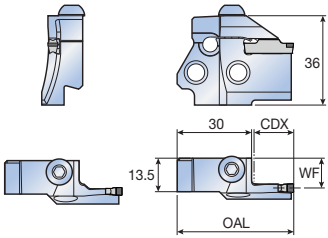


Fig. 1 **Fig. 2** Right hand shown

Designation		Insert seat size	Dimension (mm)					Fig.	Holder	Insert
			OAL	WF	CDX	DAXIN	DAXX			
TCAFR/L	**3T10-29-40 RN**	3	40	12.4	10	29	40	1	TCAHL/R TCAHPR/L C..-TCAHN C..-TCAHPN	TS...
	3T12-40-55 RN	3	47	12.4	12	40	55	1		
	3T12-55-75 RN	3	47	12.4	12	55	75	1		
	3T12-75-100 RN	3	47	12.4	12	75	100	1		
	3T12-100-140 RN	3	47	12.4	12	100	140	1		
	3T12-140-200 RN	3	47	12.4	12	140	200	1		
	4T16-34-50 RN	4	47	12.0	16	34	50	2		
	4T16-50-70 RN	4	47	12.0	16	50	70	2		
	4T16-70-100 RN	4	47	12.0	16	70	100	2		
	4T16-100-150 RN	4	47	12.0	16	100	150	2		
	4T16-150-250 RN	4	47	12.0	16	150	250	2		
	4T16-250 RN	4	47	12.0	16	250	N.L.	2		
	5T20-55-80 RN	5	51.5	11.5	20	55	80	2		
	5T20-80-120 RN	5	51.5	11.5	20	80	120	2		
	5T20-120-180 RN	5	51.5	11.5	20	120	180	2		
	5T20-180-300 RN	5	51.5	11.5	20	180	300	2		
	5T20-300 RN	5	51.5	11.5	20	300	N.L.	2		
	6T25-60-90 RN	6	56	11.0	25	60	90	2		
	6T25-90-150 RN	6	56	11.0	25	90	150	2		
	6T25-150-250 RN	6	56	11.0	25	150	250	2		
	6T25-250-400 RN	6	56	11.0	25	250	400	2		
	6T25-400 RN	6	56	11.0	25	400	N.L.	2		

▸ N.L.: No limit

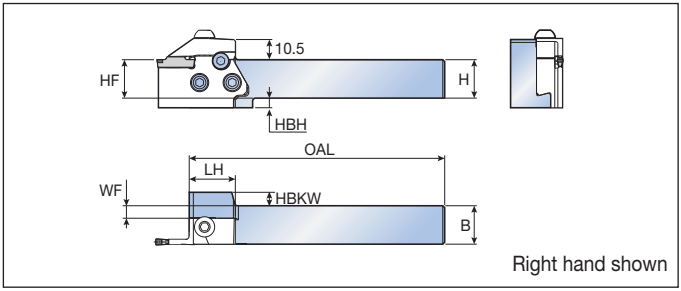
Spare parts

Designation	Screw	Wrench		
				
TCAFR/L	BH M6x1x16	L-W 4		

TCAHR/L

Parallel type holders for cartridge





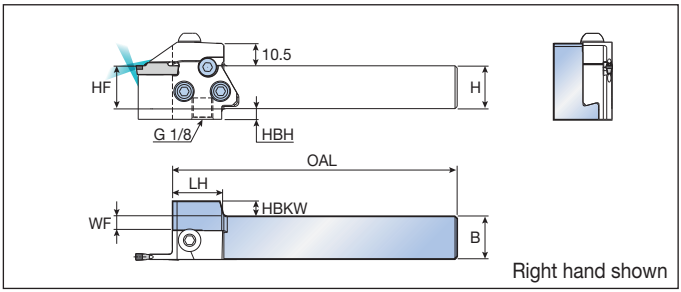
Designation		Dimension (mm)								Cartridge
		H	HF	B	OAL	WF	HBH	HBKW	LH	
TCAHR/L	**2020**	20	20	20	133	6.5	5	7	24	TCAER/L,TCAFL/R
	2525	25	25	25	133	11.5	-	2	24	
	3232	32	32	32	153	18.5	-	-	24	

▸ Cartridge sold separately

TCAHR/L-TB

Parallel type holders for cartridge with high pressure coolant





Designation		Dimension (mm)								Cartridge
		H	HF	B	OAL	WF	HBH	HBKW	LH	
TCAHR/L	**2020-TB**	20	20	20	133	6.5	5	7	24	TCAER/L-TB
	2525-TB	25	25	25	133	11.5	-	2	24	

▸ Cartridge sold separately

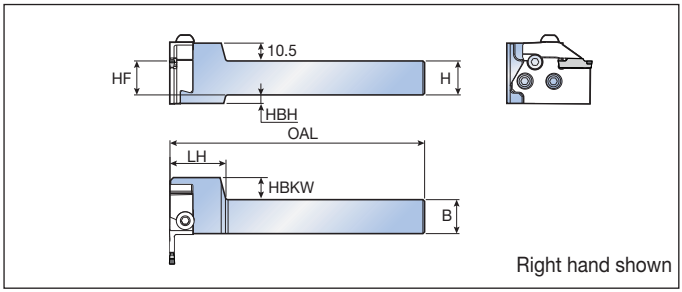
Spare parts

Designation	Screw	Security Screw	Sealing Screw	O-Ring	Wrench	
						
TCAHR/L	TS 60190I	SH M5x0.8x16	-	-	L-W 4	-
TCAHR/L-TB	TS 60190I	SH M5x0.8x16	SS M4x0.7x4-NL	O-RING ID5x1T	L-W 4	L-W 2

TCAHPR/L

Perpendicular type holders for cartridge





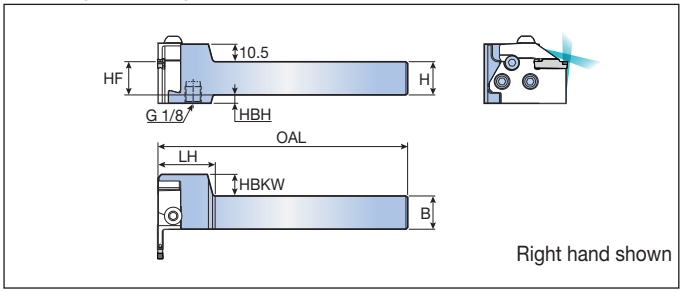
Designation	Dimension (mm)							Cartridge
	H	HF	B	OAL	HBH	HBKW	LH	
TCAHPR/L 2020	20	20	20	150	5	13	33	TCAEL/R, TCAFR/L
2525	25	25	25	150	-	8	33	
3232	32	32	32	170	-	1	33	

▸ Cartridge sold separately

TCAHPR/L-TB

Perpendicular type holders for cartridge with high-pressure coolant





Designation	Dimension (mm)							Cartridge
	H	HF	B	OAL	HBH	HBKW	LH	
TCAHPR/L 2020-TB	20	20	20	150	5	13	33	TCAEL/R-TB
2525-TB	25	25	25	150	-	8	33	

▸ Cartridge sold separately

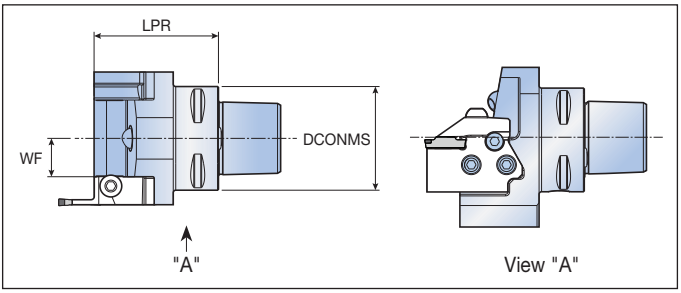
Spare parts

Designation	Screw	Security Screw	Sealing Screw	O-Ring	Wrench	
						
TCAHPR/L	TS 60190I	SH M5x0.8x16	-	-	L-W 4	-
TCAHPR/L-TB	TS 60190I	SH M5x0.8x16	SS M4X0.7x4-NL	O-RING ID5x1T	L-W 4	L-W 2

C-TCAHN

Parallel type C-Adapters





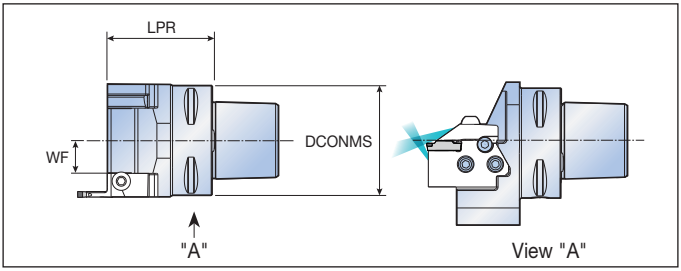
Designation	Dimension (mm)			Cartridge
	DCONMS	LPR	WF	
C4-TCAHN	40	60	18.7	TCAER/L, TCAFR/L
C5-TCAHN	50	60	18.5	
C6-TCAHN	63	60	19	

▸ Cartridge sold separately

C-TCAHN-TB

Parallel type C-Adapters with high-pressure coolant





Designation	Dimension (mm)			Cartridge
	DCONMS	LPR	WF	
C4-TCAHN-TB	40	55	11.5	TCAER/L-TB
C5-TCAHN-TB	50	58	13.7	
C6-TCAHN-TB	63	60	18.7	

▸ Cartridge sold separately

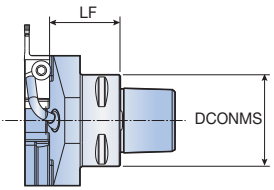
Spare parts

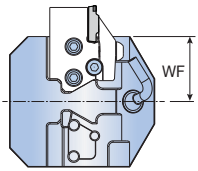
Designation	Screw	Security Screw	Sealing Screw	Nozzle	O-Ring	Wrench
C-TCAHN	TS 60190I	SH M5x0.8x16	-	NZ 125	-	L-W 4
C-TCAHN-TB	TS 60190I	SH M5x0.8x16	SS M4x0.7x4-NL	-	O-RING ID5x1T	L-W 4 / L-W 2

C-TCAHPN

Perpendicular type C-Adapters







Designation	Dimension (mm)			Cartridge
	DCONMS	LF	WF	
C4-TCAHPN	40	40.5	34	TCAER/L, TCAFR/L
C5-TCAHPN	50	38.5	35.5	
C6-TCAHPN	63	38.5	36	

▸ Cartridge sold separately

Spare parts

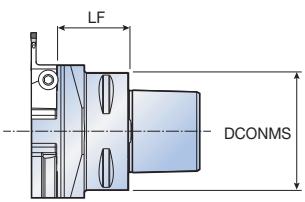
Designation	Screw	Security Screw	Nozzle	Pipe	Wrench
					
C-TCAHPN	TS 60190I	SH M5x0.8x16	NZ 125	NZP 5	L-W 4

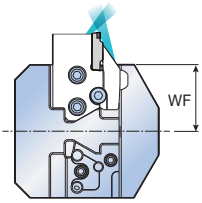
C-TCAHPN-TB

Perpendicular type C-Adapters with high-pressure coolant



COOLBURST





Designation	Dimension (mm)			Cartridge
	DCONMS	LF	WF	
C4-TCAHPN-TB	40	36.5	34	TCAER/L-TB
C5-TCAHPN-TB	50	36.5	35	
C6-TCAHPN-TB	63	38.5	35.5	

▸ Cartridge sold separately

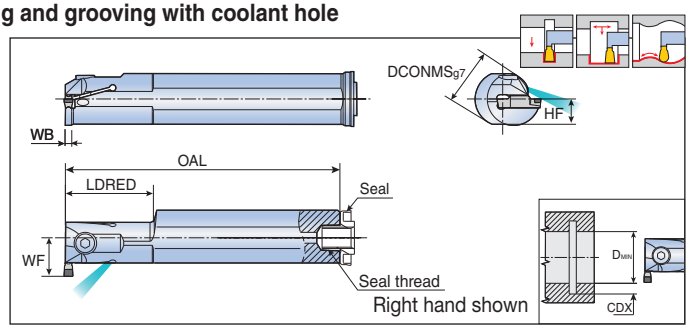
Spare parts

Designation	Screw	Security Screw	Sealing Screw	O-Ring	Wrench
					
C-TCAHPN-TB	TS 60190I	SH M5x0.8x16	SS M4x0.7x4-NL	O-RING ID5x1T	L-W 4 / L-W 2

TTIR/L-C

Internal boring bars for turning and grooving with coolant hole



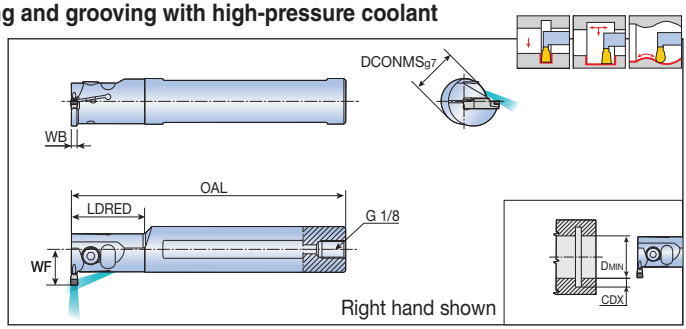


Designation		Insert seat size	Dimension (mm)								Insert
			DCONMS	OAL	LDRED	WF	HF	WB	CDX	DMIN	
TTIR/L	**16-2C**	2	16	125	-	16.5	7.5	1.8	8.5	25	TS...
	20-2C	2	20	160	40	15.8	9.0	1.6	6.0	25	
	25-2C	2	25	200	40	17.5	11.5	1.6	5.0	25	
	32-2C-T8	2	32	250	40	24.8	14.0	1.8	8.0	36	
	20-3C	3	20	160	40	15.8	9.0	2.1	6.0	25	
	25-3C	3	25	200	40	17.5	11.5	2.1	5.1	25	
	25-3C-T8	3	25	200	40	21.5	11.5	2.4	8	32	
	32-3C	3	32	250	60	20.8	14.0	2.1	4.7	31	
	32-3C-T10	3	32	250	60	27.0	15.0	2.4	10	40	
	40-3C-T12	3	40	300	65	33.0	19.0	2.4	12	50	
	20-4C	4	20	160	40	15.8	9.0	2.9	6.0	25	
	25-4C	4	25	200	40	17.5	11.5	2.9	5.2	25	
	25-4C-T8	4	25	200	40	21.5	11.5	3.0	8	32	
	32-4C	4	32	250	60	20.8	14.0	2.9	4.7	31	
	32-4C-T10	4	32	250	60	27.0	15.0	3.0	10	40	
	40-4C-T12	4	40	300	65	33.0	19.0	3.0	12	50	
	50-4C-T14	4	50	350	70	40.0	23.5	3.0	14	60	
	25-5C	5	25	200	40	17.3	11.5	3.9	5.2	31	
	32-5C	5	32	250	60	20.8	14.0	3.9	4.7	31	
	32-5C-T10	5	32	250	60	27.0	15.0	3.9	10	40	
	40-5C-T12	5	40	300	65	33.0	19.0	3.9	12	50	
	50-5C-T14	5	50	350	70	40.0	23.5	3.9	14	60	
	32-6C	6	32	250	60	20.8	14.0	4.9	4.7	31	
	32-6C-T10	6	32	250	60	27.0	15.0	4.9	10	40	
	40-6C-T12	6	40	300	65	33.0	19.0	4.9	12	50	
	50-6C-T14	6	50	350	70	40.0	23.5	4.9	14	60	
	32-8C	8	32	250	60	21.3	14.5	5.9	5.5	37	
	40-8C	8	40	300	65	25.8	19.0	5.9	5.8	42	

TTIR/L-TB

Internal boring bars for turning and grooving with high-pressure coolant





Designation		Insert seat size	Dimension (mm)							Insert
			DCONMS	OAL	LDRED	WF	WB	CDX	DMIN	
TTIR/L	**20-2T06-TB**	2	20	120	40	17	1.8	6	27	TS...
	25-2T06-TB	2	25	150	40	19.5	1.8	6	29	
	20-3T06-TB	3	20	120	40	17	2.4	6	27	
	25-3T06-TB	3	25	150	40	19.5	2.4	6	29	
	32-3T10-TB	3	32	150	60	27	2.4	10	40	
TTIR	**20-4T06-TB**	4	20	120	40	17	3	6	27	
	25-4T06-TB	4	25	150	40	19.5	3	6	29	
	32-4T10-TB	4	32	150	60	27	3	10	40	

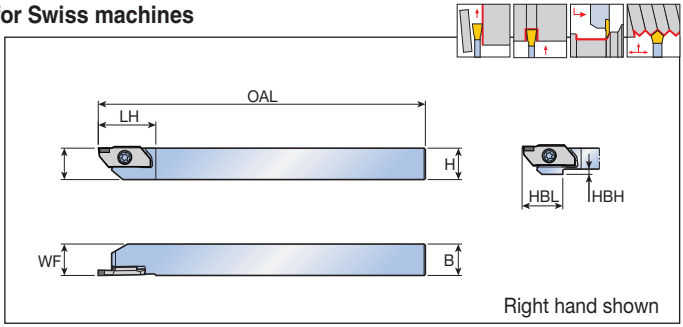
Spare parts

Designation	Screw	Wrench		
				
TTIR/L-20-TB	SH M5x0.8x12	L-W 4		
TTIR/L-25/32-TB	SH M5x0.8x16	L-W 4		

TTOER/L-A

Parting and grooving holder for Swiss machines





Right hand shown

Designation		Dimension (mm)								Insert
		H	HF	B	OAL	LH	WF	HBH	HBL	
TTOER/L	**0808-20-A**	8	8	8	100	22	8	2	15	TPAR/L
	1010-20-A	10	10	10	125	22	10	-	-	
	1212-20-A	12	12	12	125	22	12	-	-	
	1616-20-A	16	16	16	125	22	16	-	-	

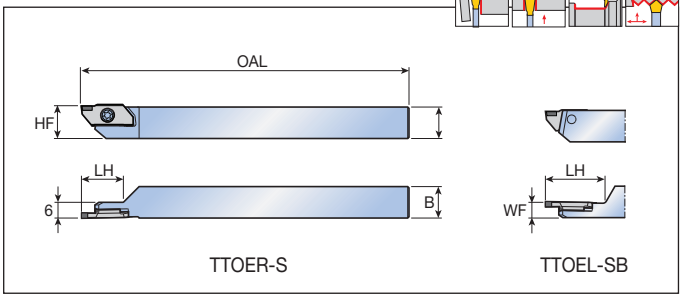
Spare parts

Designation	Screw	Wrench		
				
08...-A	TS 40057I	T 15		
10/12/16...-A	TS 40097I	T 15		

TTOER-S TTOEL-SB

Parting and grooving holder for Swiss machines





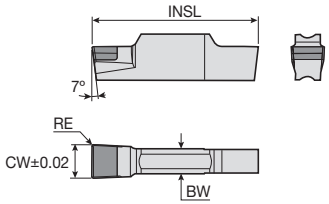
Designation		Dimension (mm)						Insert
		H	HF	B	OAL	LH	WF	
TTOER	**1010-20-S**	10	10	10	125	16	0	TPAR
	1212-20-S	12	12	12	125	16	0	
TTOEL	**1010-20-SB**	10	10	10	125	22	6	TPAL
	1212-20-SB	12	12	12	125	22	6	

Spare parts

Designation	Screw	Wrench		
				
...-S/...-SB	TS 40057I	T 15		

TSA

Single-ended PCD inserts for turning and grooving



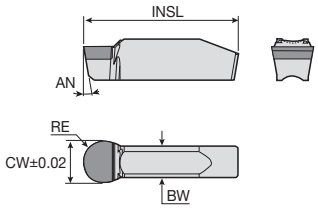
Size	Dimension (mm)				
	CW	RE	BW	INSL	
2	2.0	0.2	1.7	20.0	
3	3.0	0.2	2.25	20.0	
4	4.0	0.2	3.0	30.0	
5	5.0	0.2	4.0	25.0	
6	6.0	0.2	5.0	25.0	

Insert	Designation	Insert seat size	Turning		Grooving	PCD	
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TD1020	TD1030
	**TSA 2.00-0.20**	2	0.2-1.2	0.10-0.22	0.07-0.13	●	
	3.00-0.20	3	0.2-1.8	0.12-0.25	0.08-0.14	●	
	4.00-0.20	4	0.5-2.4	0.14-0.31	0.10-0.20	●	
	5.00-0.20	5	0.5-3.0	0.16-0.34	0.11-0.23	●	
	6.00-0.20	6	0.5-3.6	0.19-0.41	0.11-0.20	●	

●: Standard items

TSA (Full-Radius)

Single-ended PCD inserts for turning, grooving and profiling



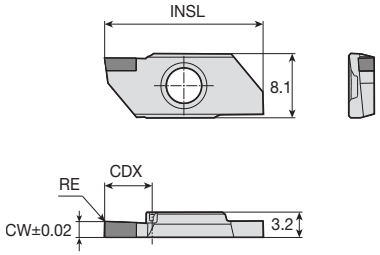
Size	Dimension (mm)				
	CW	RE	BW	INSL	AN
2	2.0	1.0	1.7	20.0	7
3	3.0	1.5	2.4	20.0	7
4	4.0	2.0	3.0	20.0	7
5	5.0	2.5	4.0	25.0	7
6	6.0	3.0	5.0	25.0	7
8	8.0	4.0	6.0	30.0	10

Insert	Designation	Insert seat size	Turning		Grooving	PCD	
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TD1020	TD1030
	**TSA 2.00-1.00**	2	0.0-1.0	0.07-0.20	0.05-0.12	●	
	3.00-1.50	3	0.0-1.5	0.10-0.25	0.05-0.15	●	
	4.00-2.00	4	0.0-2.0	0.18-0.35	0.08-0.18	●	
	5.00-2.50	5	0.0-5.5	0.20-0.42	0.10-0.20	●	
	6.00-3.00	6	0.0-3.0	0.26-0.72	0.13-0.36	●	
	8.00-4.00	8	0.0-4.0	0.24-0.67	0.14-0.38	●	

●: Standard items

TPAR/L

Single-ended inserts for turning and grooving



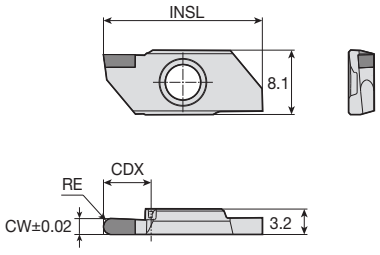
Size	Dimension (mm)				
	CW	RE	CDX		
210	1.0	0.10	3.5		
215	1.5	0.10	3.5		
220	2.0	0.10	4.0		

Insert	Designation	Turning		Grooving	PCD					
		ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TD1020	TD1030				
	**TPAR/L 21010-T35**	0.1-0.6	0.05-0.13	0.04-0.09	●					
	21510-T35	0.15-0.9	0.08-0.18	0.05-0.11	●					
	22010-T40	0.2-1.2	0.10-0.22	0.07-0.13	●					

●: Standard items

TPAR/L (Full-Radius)

Single-ended inserts for turning and grooving



Size	Dimension (mm)				
	CW	RE	CDX		
210R	1.0	0.50	3.5		
215R	1.5	0.75	3.5		
220R	2.0	1.00	4.0		

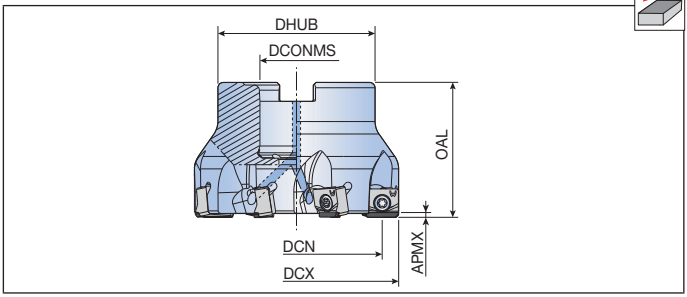
Insert	Designation	Turning		Grooving	PCD					
		ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TD1020	TD1030				
	**TPAR/L 210R-T35**	0.0-0.5	0.04-0.12	0.03-0.08	●					
	215R-T35	0.0-0.75	0.06-0.17	0.03-0.08	●					
	220R-T40	0.0-1.0	0.08-0.20	0.06-0.14	●					

●: Standard items

4W-TF90-12

Face mills for finishing





Designation		Dimension (mm)						Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DCX	DCN	DCONMS	DHUB	OAL	APMX					
4W-TF90-550-22R-12	5	50	38.9	22	45	40	0.5	●	A	0.4	SH M10x30-C	4WHU 1207...
663-22R-12	6	63	50.9	22	47	40	0.5	●	A	0.5	SH M10x30-C	
880-27R-12	8	80	66.9	27	58	50	0.5	●	A	1.1	SH M12x35-C	
8100-32R-12	8	100	86.9	32	66	50	0.5	●	A	1.6	SH M16x35-C	
10125-40R-12	10	125	110.9	40	85	63	0.5	●	A	3.1	SH M20x40-C	
10160-40R-12	10	160	145.9	40	110	63	0.5	x	C	4.1	-	

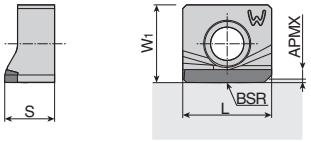
▸ DCN: Cutting diameter minimum ▸ DCX: Cutting diameter maximum

Spare parts

Designation	Screw	Wrench	Wrench handle		
4W-TF90-12	TS 40A115I	TBLD T15-W6	SW6-T		

4WHU

Inserts



Size	Dimension (mm)				
	L	W1	S	APMX	BSR
12-PCD	12	10.5	6.74	0.5	1000

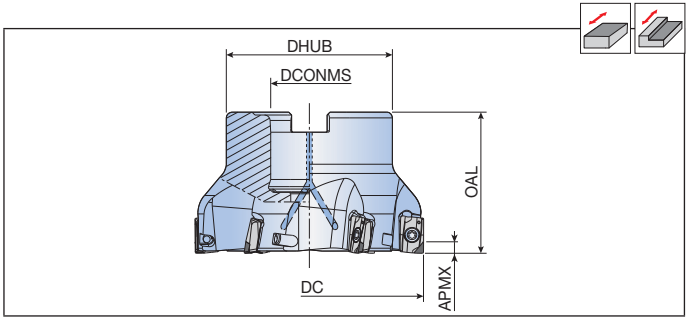
Insert	Designation	Recommended machining conditions		PCD		
		ap (mm)	Feed (mm/tooth)	TD1010	TD1020	TD1030
	**4WHU 1207-PCD**	0.25-0.5	0.25-0.10	●		

●: Standard items

TFM90AP-12

Face mills





90°

Designation		Dimension (mm)					Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DC	DCONMS	DHUB	OAL	APMX					
TFM90AP 440-16R-12	4	40	16	38	40	3.5	●	A	0.2	SH M8x25	APCT 1204...
540-16R-12	5	40	16	38	40	3.5	●	A	0.2	SH M8x25	
550-22R-12	5	50	22	45	40	3.5	●	A	0.3	SH M10x30	
650-22R-12	6	50	22	45	40	3.5	●	A	0.3	SH M10x30	
563-22R-12	5	63	22	47	40	3.5	●	A	0.5	SH M10x30	
663-22R-12	6	63	22	47	40	3.5	●	A	0.5	SH M10x30	
763-22R-12	7	63	22	47	40	3.5	●	A	0.5	SH M10x30	
680-27R-12	6	80	27	58	50	3.5	●	A	1.0	SH M10x25	
880-27R-12	8	80	27	58	50	3.5	●	A	1.0	SH M10x25	

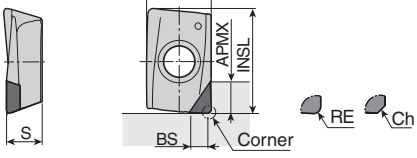
▸ Mounting bolt with coolant-through hole available on request (ordering example: SH M10x1.5x30-C)

Spare parts

Designation	Screw	Wrench			
					
TFM90AP-12	TS 35A088I/HG	TD 10P			

APCT

Inserts



Size	Dimension (mm)					
	INSL	W1	S	APMX	BS	RE(Ch)
12...R-PCD	13.3	8.2	4.5	3.5	2	0.4
12...C-PCD	13.3	8.2	4.5	3.5	2.1	(0.25)

Insert	Designation	Recommended machining conditions		PCD		
		ap (mm)	Feed (mm/tooth)	TD1010	TD1020	TD1030
	**APCT 120404R-PCD35**	0.2-3.0	0.30-0.05			●
	1204C025-PCD35	0.2-3.0	0.30-0.05			●

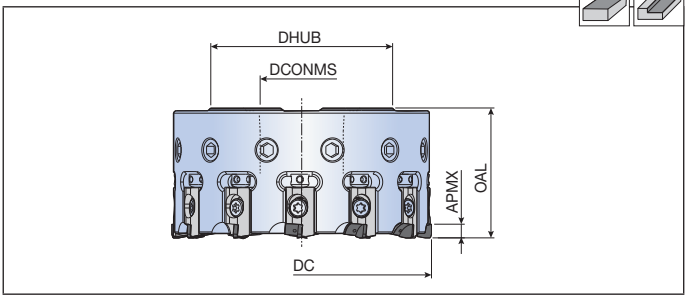
●: Standard items

AFM90B-08

Face mills







Designation		Dimension (mm)					Coolant hole	Arbor style	Kg	Max. RPM	Coolant Cover	Mounting bolt
		DC	DCONMS	DHUB	OAL	APMX						
AFM90B 650-16R-08*	6	50	16	38	50	5	●	A	0.6	37,900	-	AMS D050-CH
863-22R-08	8	63	22	47	50	5	●	A	0.4	33,700	-	AMS D063-CH
1080-27R-08	10	80	27	60	50	5	●	A	0.7	29,900	-	AMS D080-CH
12100-32R-08	12	100	32	70	50	5	●	B	1.2	26,700	-	AMS D100-CH
16125-40R-08	16	125	40	85	63	5	●	B	2.3	23,900	-	AMS D125-CH
20160-40R-08	20	160	40	85	63	5	●	B	3.5	21,100	-	AMS D125-CH
24200-60R-08	24	200	60	130	63	5	●	C	4.4	18,900	ACV200-CH	-
32250-60R-08	32	250	60	160	63	5	●	C	7.0	16,900	ACV250-CH	-

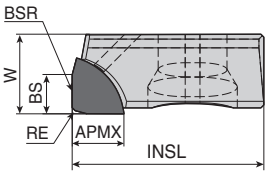
* : Steel body Cutter

Spare parts

Designation	Cartridge screw	Adj. screw	Balancing screw	Cartridge screw wrench	Adj. screw wrench
AFM90B 650-08	TS 50170I-MO	AJM 5FN	SS M8X1.25X8-NL	T-T20	TD6-AJ
AFM90B-08	TS 50170I		SS M10x1.5x10-NL		

TCT08-05R

Cartridge



Size	Dimension (mm)					
	W	INSL	APMX	BS	BSR	RE
05R	8.1	19.5	5	2.5	-	-
05R04	8.1	19.5	5	2.5	-	0.4
05R-W	8.1	19.5	5	4	150	-

Cartridge	Designation	Recommended machining conditions		PCD		
		ap (mm)	Feed (mm/tooth)	TD1010	TD1020	TD1030
	**TCT08- 05R**	2.0-4.0	0.3-0.05			●
	05R04	2.0-4.0	0.3-0.03			●
	05R-W	0.3-0.5	0.4-0.03			●

●: Available items

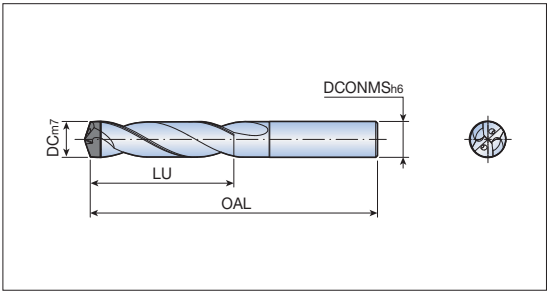
PDR

PCD twist drills



• Drilling depth: 3xdiameter





Designation	Dimension (mm)				PCD
	DC	DCONMS	OAL	LU	TD1020
PDR 030	3.0	4.0	54	10	●
040	4.0	4.0	54	15	●
050	5.0	6.0	64	20	●
060	6.0	6.0	64	25	●
070	7.0	8.0	79	30	●
080	8.0	8.0	79	35	●
090	9.0	10.0	79	40	●
100	10.0	10.0	79	40	●

●: Available items

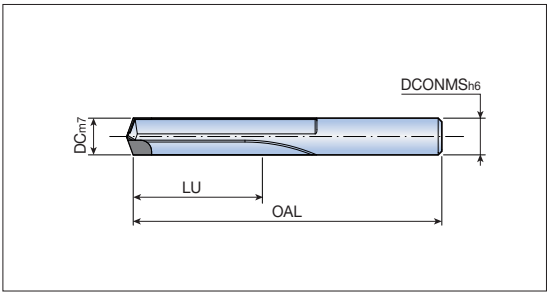
BDR

PCD burnishing drills



• Drilling depth: 5xdiameter





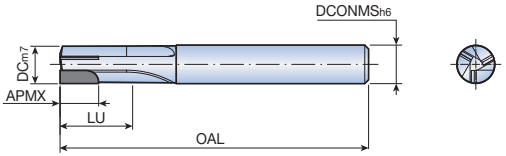
Designation	Dimension (mm)				PCD
	DC	DCONMS	OAL	LU	TD1020
BDR 402505504	4.0	4.0	55	25	●
502505506	5.0	6.0	55	25	●
603506506	6.0	6.0	65	35	●
704007508	7.0	8.0	75	40	●
804007508	8.0	8.0	75	40	●
905008410	9.0	10.0	84	50	●
105008410	10.0	10.0	84	50	●
					●

●: Available items

TPE

End mills









Designation		Dimension (mm)						PCD
		DC	NOF	OAL	APMX	LU	DCONMS	TD1020
TPE	**2060**	6	2	53	6	20	6	●
	2080	8	2	60	8	20	8	●
	3100	10	3	80	10	30	10	●
	3120	12	3	80	10	30	12	●
	4160	16	4	80	10	30	16	●

●: Available items

Special PCD drills

- Maximize productivity and extend tool life under high-speed machining conditions



Special PCD reamers

- Precise tool tolerances ensured through strict quality control processes
- Excellent workpiece tolerance and surface roughness achieved after machining



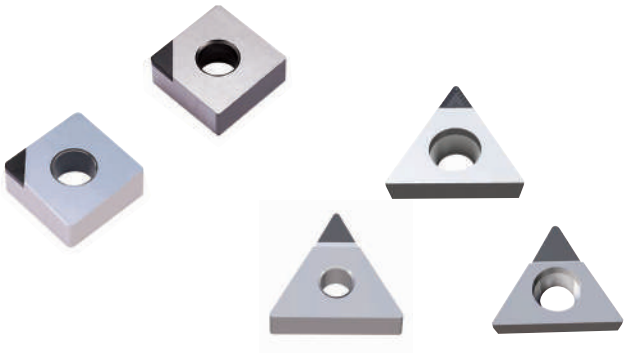
Special PCD endmills

- Suitable for a wide range of shape machining applications
- Optimally engineered for high feed and high-speed machining applications



Special PCD inserts

- Multiple grade options available to suit various machining conditions
- Offered in a range of corner radii and chip breaker types



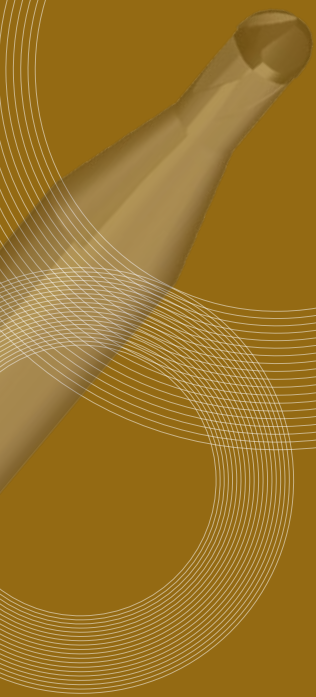
PCD mono block special tools

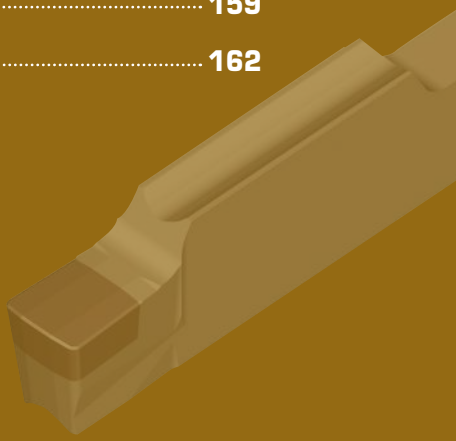
- Boost productivity with versatile, customizable tooling solutions
- Offered in both insert and brazed-tip configurations to suit various machining needs
- Optimized PCD grade selection tailored to specific workpiece materials



CBN Line

- Tool Selection Guide 84
- Turning 90
- Groove-Turn 155
- Milling 159
- End Mills 162





CBN Line

	T-Holder				08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CNGA 12**	95°		TCLNR/L TCLNR/L-TB					●	●	●	●						
		95°		A-TCLNR/L											●	●	●	●
	**DNGA 15**	93°		TDJNR/L					●	●		●						
		93°		A-TDUNR/L												●	●	●
	**SNGA 12**	45°		TSDNN					●	●	●							
		45°		TSSNR/L					●	●		●						
		75°		TSBNR						●								
		75°		TSKNR/L						●								
		75°		A-TSKNR/L											●			
	**TNGA 16**	91°		TTGNR/L					●	●								
		93°		TTJNR/L					●	●	●							
	**VNGA 16**	93°		TVJNR/L					●	●		●						
		117.5°		TVQNR/L					●	●								
	**WNGA 06/08**	95°		TWLNR/L					●	●		●						
		95°		S-TWLNR/L A-TWLNR/L										●	●	●	●	

●: Standard items



S Screw clamp

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CC...06/09/12**	90°		SCACR/L-SH SCACR/L-SH-TB	●	●	●	●										
		95°		SCLCR/L SCLCR/L-SH SCLCR/L-SH-TB	●	●	●	●	●	●								
		95°		S-SCLCR/L C-SCLCR/L									●	●	●	●	●	
	**DC...07/11**	62.5°		SDNCN SDNCN-SH SDNCN-SH-TB	●	●	●	●		●								
		93°		SDJCR/L			●	●	●	●								
		93°		SDJCR/L-SH SDJCR/L-SH-TB	●	●	●	●	●									
		93°		TMS-SDUCL TMS-SDUCR/L-TB									●	●	●			
		93°		TMY-SDJCR TMY-SDJCR-TB			●	●										
		93°		S-SDUCR/L									●	●	●	●		
		93°		S-SDZCR/L									●	●	●	●		
		107.5°		S-SDQCR/L									●	●	●			
	**SCGW 09**	45°		SSDCN			●	●										
		45°		SSSCR/L			●	●										
		75°		S-SSKCR/L									●	●				
	**TCGW 09/11/16**	91°		STFCR/L			●	●	●	●								
		91°		STGCR/L STGCR/L-SH STGCR/L-SH-TB		●	●	●	●	●								
		91°		S-STFCR/L C-STFCR/L									●	●	●	●	●	
	**TPGW 09/11/16**	91°		S-STFPR/L A-STFPR/L C-STFPR/L E-STFPR/L									●	●				

●: Standard items

CBN Line

CBN Line

S Screw clamp



					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**VBGW 11/16**	72.5°		SVVBN SVVBN-SH SVVBN-SH-TB		●	●	●	●	●	●							
		93°		SVJBR/L SVJBR/L-TB SVJBR/L-SH SVJBR/L-SH-TB		●	●	●	●	●	●	●						
		117.5°		SVPBR/L		●	●	●	●	●								
		52°		S-SVJBR/L										●	●	●	●	
		93°		S-SVUBR/L												●	●	
		108°		S-SVQBR/L											●	●	●	
		117.5°		S-SVPBR/L									●	●	●	●		

●: Standard items

C Top clamp



					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**TPGN 11/16**	90°		CTCPN					●	●								
		91°		CTFPR/L				●	●	●								
		91°		CTGPR/L			●	●	●	●								
		91°		S-CTFPR/L									●	●	●	●	●	●
	**RCGX 09/12**	45°		CRDCN-140						●	●							
		45°		CRGCR/L-140							●							

●: Standard items



T-F Flat T-Holder

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
 Full Top CBN  Solid CBN	**RNGN 09/12**	45°		TRDNN-F					●	●	●	●						
		90°		TRGNR/L-F					●	●	●	●						
 Solid CBN	**CNGN 09/12**	95°		CCLNR/L-F						●								
		95°		TCLNR/L-F					●	●		●						
 Solid CBN	**SNGN 09/12**	45°		TSDNN-F					●	●	●	●						
		75°		TSKNR/L-F						●		●						
		75°		TSRNR/L-F						●	●	●						
		45°		TSSNR/L-F						●		●						

●: Standard items



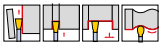
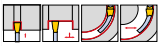
T-DA DA dimple holder

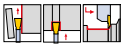
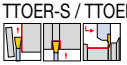
					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**SNGX 12**	45°		TSDNN-DA						●								
		75°		TSKNR/L-DA						●								
	**CNGX 12**	95°		TCLNR/L-DA						●								

●: Standard items

CBN Line

■ T-Clamp

					16 x 16	20 x 20	25 x 25	32 x 32
TSG-H CW : 2,3,4,5,6,8 	**External**		TTER/L TTER/L-TB 	CW-2	●	●	●	●
				CW-3	●	●	●	●
				CW-4	●	●	●	●
				CW-5		●	●	●
				CW-6		●	●	●
				CW-8			●	●
TSG-H (Full-Radius) CW : 2,3,4,5,6,8 			TGFR/L 	CW-2	●	●	●	
				CW-3	●	●	●	
				CW-4	●	●	●	
				CW-5		●	●	
				CW-6		●	●	
TSG-HF CW : 3,5 		 TCAER/L TCAER/L-TB (CW : 2,3,4,5,6) 	TCAHR/L TCAHR/L-TB 	Holder		●	●	●
		 TCAFR/L (CW : 3,4,5,6) 	TCAHPR/L TCAHPR/L-TB 	Holder		●	●	●
			C-TCAHN C-TCAHN-TB 	C-Adapter	C4 - C6			
			C-TCAHPN C-TCAHPN-TB 	C-Adapter	C4 - C6			
	Internal		TTIR/L-C TTIR/L-TB 	CW-2	Ø16 - Ø32			
				CW-3	Ø16 - Ø40			
				CW-4	Ø20 - Ø50			
				CW-5	Ø16 - Ø40			
				CW-6	Ø16 - Ø40			
				CW-8	Ø16 - Ø40			

				16 x 16	20 x 20	25 x 25	32 x 32
TPHR/L CW : 1, 1.5, 2 	**Miniature**		TTOER/L-A 	●	●	●	●
TPHR/L...R (Full-Radius) CW : 1, 1.5, 2 			TTOER-S / TTOEL-SB 		●	●	

▸ For holder details, see pages 54 to 70

●: Standard items

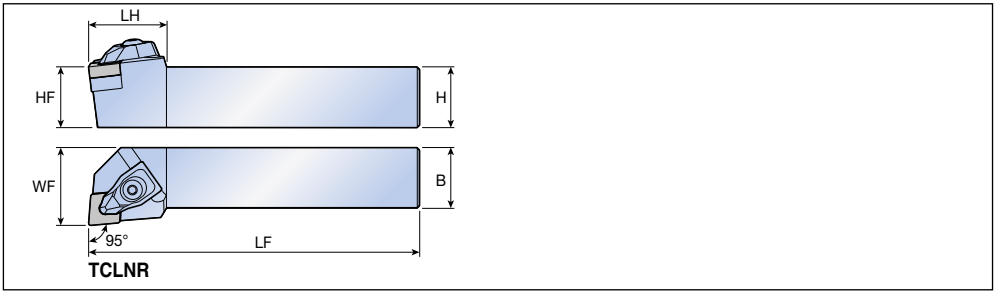
■ Milling

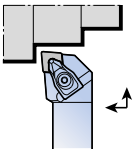
Facing		**4WHU**		4W-TF90-12
		**SNEX**		TFM90SNS-12

■ End mills

End Mills		**HSB 2CBN** 2-flute CBN ball

T-holders



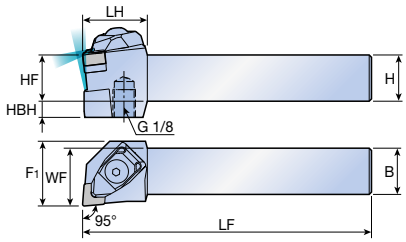
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TCLNR/L**	**2020 K12**	20	20	20	125	32	25	CNGA 1204...
		**2525 M12**	25	25	25	150	32	32	
		3225 P12	32	32	25	170	32	32	
		3232 P12	32	32	32	170	32	40	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	L-W 3	T 15	

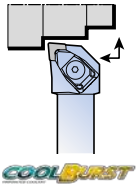
TCLNR/L-TB

T-holders



TCLNR-TB

Approach angle	Designation	Dimension (mm)							Insert
		H	HF	B	LF	LH	WF	HBH	
95°	**TCLNR/L 2525 M12-TB**	25	25	25	150	32	32	7	CNGA 1204...

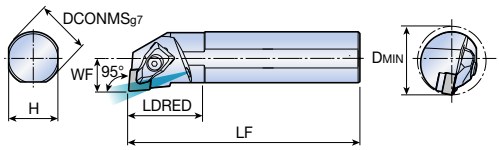


COOLBURST

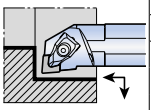
Spare parts

Designation	Clamp	Clamp screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim screw	Wrench	
									
... M12-TB	DLM 3NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x1.78	O-RING ID6.07x1.78	LSC 32 A	SO 40085I	L-W 3	T 15

T-holder type boring bars



A-TCLNR

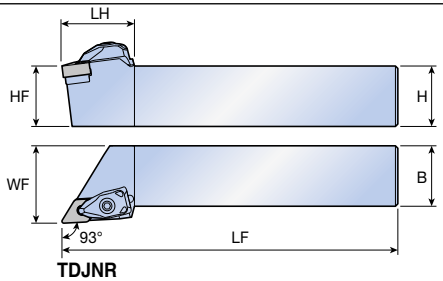
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**A25T TCLNR/L 12**	25	23	300	45	17	32	CNGA 1204...
	**A32T TCLNR/L 12**	32	30	300	45	22	40	
	A40T TCLNR/L 12	40	37	300	45	27	50	
	A50U TCLNR/L 12	50	47	350	45	35	63	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A25T...12	DLM 4	DLS 4	DSP 4	LSC 42	TS 50A105I	NZ 62	L-W 3	T 20
A32T...12	DLM 4	DLS 4	DSP 4	LSC 42	TS 50A105I	NZ 62	L-W 3	T 20
A40T...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	NZ 104	L-W 3	T 15
A50U...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	NZ 104	L-W 3	T 15

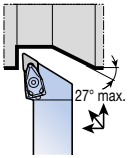
TDJNR/L

T-holders



TDJNR

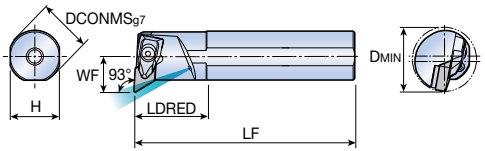
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**TDJNR/L**	**2020 K15**	20	20	20	125	39	25	DNGA 1506...
		2525 M15	25	25	25	150	39	32	
		3232 P15	32	32	32	170	39	40	
		2020 K1504	20	20	20	125	39	25	DNGA 1504...
		2525 M1504	25	25	25	150	39	32	



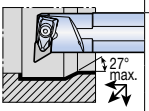
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...15	DLM 4	DLS 4	DSP 4	TSD 43	SO 40050I	L-W 3	T 15	
...1504	DLM 4	DLS 4	DSP 4	TSD 44	SO 40050I	L-W 3	T 15	

T-holder type boring bars



A-TDUNR

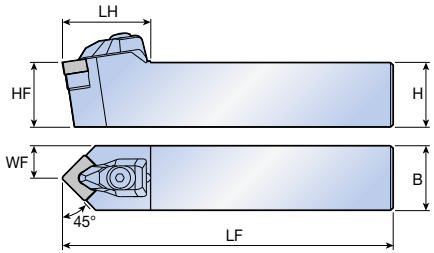
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
93°	**A32T TDUNR/L 15**	32	30	300	45	22	40	DNGA 1506...
	**A40T TDUNR/L 15**	40	37	300	45	27	50	
	A50U TDUNR/L 15	50	47	350	45	35	63	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A32T...15	DLM 4	DLS 4	DSP 4	LSD 42	TS 50A105I	NZ 62	L-W 3	T 20
...15	DLM 4	DLS 4	DSP 4	TSD 43	SO 40050I	NZ 104	L-W 3	T 15

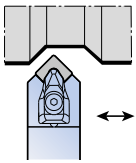
TSDNN

T-holders



TSDNN

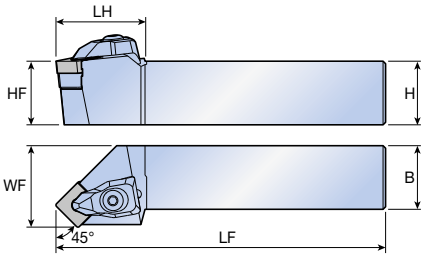
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**TSDNN**	**2020 K12**	20	20	20	125	34	10	SN... 1204...
		2525 M12	25	25	25	150	34	12.5	
		3225 P12	32	32	25	170	34	12.5	



Spare parts

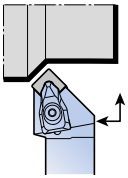
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
...12	DLM 4	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	

T-holders



TSSNR

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**TSSNR/L**	**2020 K12**	20	20	20	125	35	25	SN... 1204...
		2525 M12	25	25	25	150	35	32	
		3232 P12	32	32	32	170	40	35	

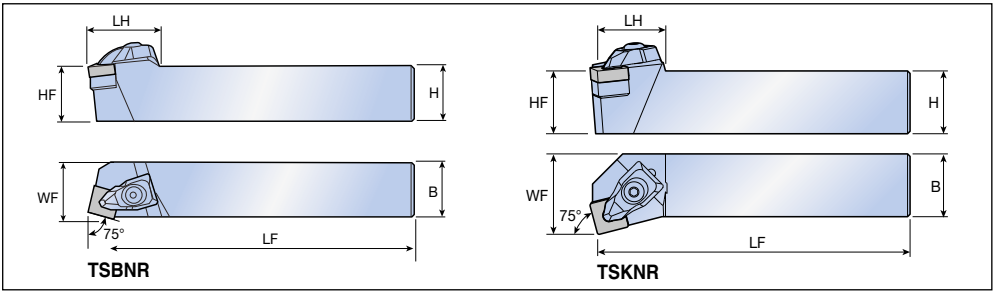


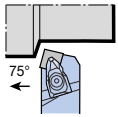
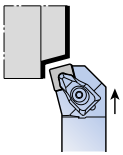
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
.. M12	DLM 4	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	

TSBNR TSKNR/L

T-holders

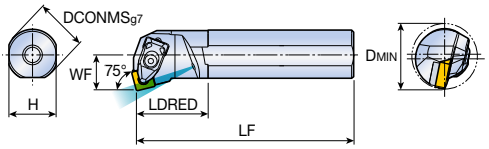


Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
75°	**TSBNR**	**2525 M12**	25	25	25	150	33.8	22.86	SNGA 1204...
									
75°	**TSKNR/L**	**2525 M12**	25	25	25	150	27	32	SNGA 1204...
									

Spare parts

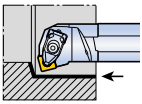
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...12	DLM 4	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	

T-holder type boring bars



A-TSKNR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
75°	**A25T TSKNR/L 12**	25	23	300	45	17	32	SN... 1204...



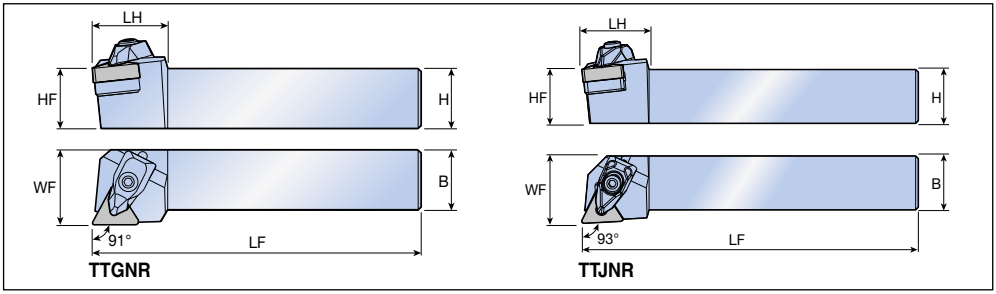
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

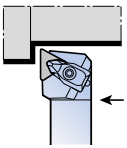
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A25T...12	DLM 4	DLS 4	DSP 4	LSS 42	TS 50A105I	NZ 62	L-W 3	T 20

TTGNR/L TTJNR/L

T-holders



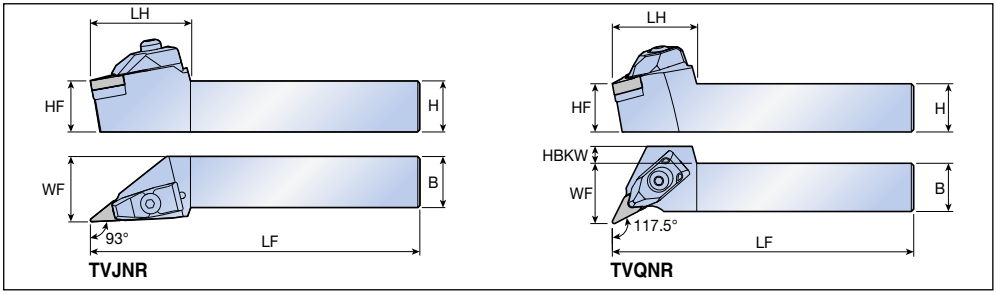
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°/93°	**TTGNR/L**	**2020 K16**	20	20	20	125	25	25	TNGA 1604...
		2525 M16	25	25	25	150	25	32	
	TTJNR/L	**2020 K16**	20	20	20	125	25	25	
		2525 M16	25	25	25	150	25	32	
	TTJNL	**3225 M16**	32	32	32	150	25	32	

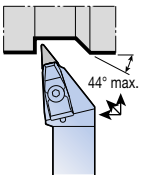
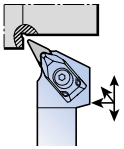


Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16	DLM 3	DLS 3	DSP 3	TST 33	SO 35080I	L-W 2.5	T 15	

T-holders



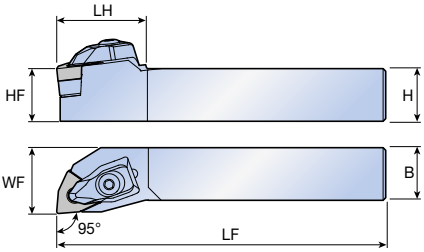
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF		
93°	**TVJNR/L**	**2020 K16**	20	20	20	125	49	25		VNGA 1604...
		**2525 M16**	25	25	25	150	49	32		
		3232 P16	32	32	32	170	49	40		
117.5°	**TVQNR/L**	**2020 K16**	20	20	20	125	42	25	8	VNGA 1604...
		**2525 M16**	25	25	25	150	42	32	2	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16	DLM 3V	DLS 5	DSP 5	TSV 33	SO 35080I	L-W 4	T 15	

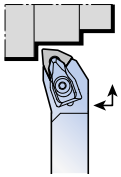
TWLNR/L

T-holders



TWLNR

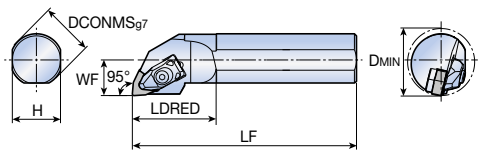
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TWLNR/L**	**2020 K06**	20	20	20	125	26	25	WNGA 0604...
		2525 M06	25	25	25	150	26	32	
		2020 K08	20	20	20	125	34.2	25	WNGA 0804...
		2525 M08	25	25	25	150	34.2	32	
		3232 P08	32	32	32	170	34.2	40	



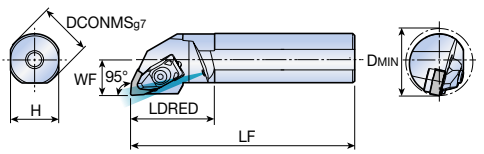
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
...06	DLM 3	DLS 3	DSP 3	PSW 32	SO 40090I	L-W 2.5	T 15	
...08	DLM 4	DLS 4	DSP 4	TSW 44	SO 40050I	L-W 3	T 15	

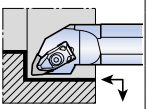
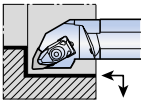
T-holder type boring bars



S-TWLNR



A-TWLNR

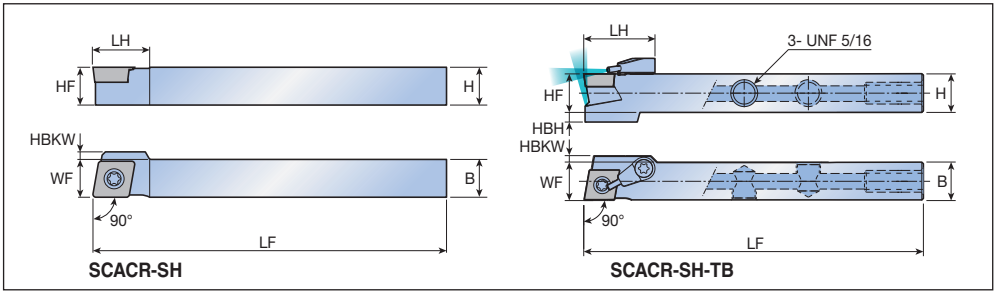
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**S25T TWLNR/L 08**	25	23	300	35	17	32	WNGA 0804...
	**S32T TWLNR/L 08**	32	30	300	45	22	40	
95°	**A20S TWLNR/L 06**	20	18	250	35	13	25	WNGA 0604...
	**A25T TWLNR/L 06**	25	23	300	40	17	32	
	A32T TWLNR/L 06	32	30	300	45	22	40	
	A25T TWLNR/L 08	25	23	300	40	17	32	WNGA 0804...
	A32T TWLNR/L 08	32	30	300	45	22	40	
	A40T TWLNR/L 08	40	37	300	45	27	50	

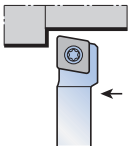
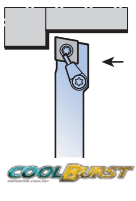
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A20S...06	DLM 3	DLS 3	DSP 3	-	-	NZ 62	L-W 2.5	-
...06	DLM 3	DLS 3	DSP 3	PSW 32	SO 40090I	NZ 62	L-W 2.5	T 15
...08	DLM 4	DLS 4	DSP 4	PSW 42	TS 50A105I	NZ 62	L-W 3	T 20
A40T...08	DLM 4	DLS 4	DSP 4	TSW 44	SO 40050I	NZ 104	L-W 3	T 15

SCACR/L-SH SCACR/L-SH-TB

Screw type holders



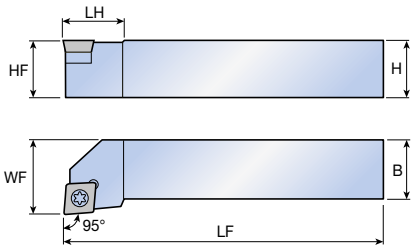
Approach angle	Designation		Dimension (mm)								Insert
			H	HF	HBH	B	LF	LH	WF	HBKW	
90°	# SCACR	0808 K06-SH	8	8	-	8	125	8	8	-	CC... 0602...
	# SCACR/L	1010 K06-SH	10	10	-	10	125	10	10	-	
		1010 K09-SH	10	10	-	10	125	15	10	2	CC... 09T3...
		1212 K09-SH	12	12	-	12	125	15	12	-	
		1616 K09-SH	16	16	-	16	125	16	16	-	
90°	# SCACR/L	1212 K09-SH-TB	12	12	3	12	125	23	12	2	CC... 09T3...
		1616 K09-SH-TB	16	16	-	16	125	23	16	-	

▸ #: TOP-MINI holders

Spare parts

Designation	Screw	Cooling unit	Plug	Wrench			
							
...06-SH	SO 25065I	-	-	T 7	-		
...09-SH	SO 35080I	-	-	T 15	-		
SCACR/L-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32		

Screw type holders



SCLCR

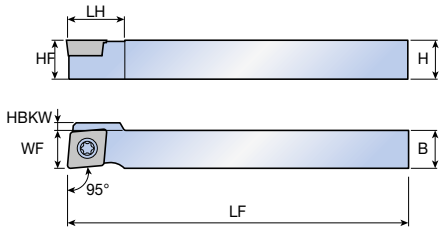
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
95°	**SCLCR/L 0808 F06**	8	8	8	80	10	10	CC... 0602...
	1010 F06	10	10	10	80	10	12	
	1212 F09	12	12	12	80	16	16	CC... 09T3...
	1616 H09	16	16	16	100	16	20	
	2020 K09	20	20	20	125	20	25	
	2525 M09	25	25	25	150	20	32	
	2020 K12	20	20	20	125	25	25	CC... 1204...
	2525 M12	25	25	25	150	26	32	

Spare parts

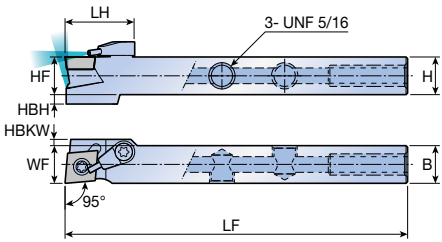
Designation	Screw	Shim	Shim screw	Wrench			
...06	SO 25065I	-	-	T 7			
...F09	SO 35080I	-	-	T 15			
...09	SO 35124I	SSC 32	SO 50090S	T 15			
...12	SO 45130I	SSC 43N	SO 60105S	T 20			

SCLCR/L-SH SCLCR/L-SH-TB

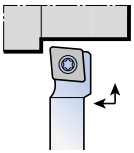
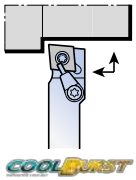
Screw type holders



SCLCR-SH



SCLCR-SH-TB

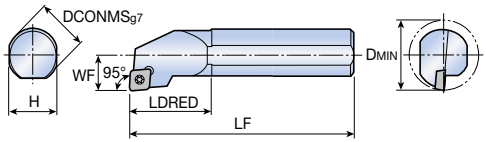
Approach angle	Designation		Dimension (mm)								Insert
			H	HF	HBH	B	LF	LH	WF	HBKW	
95°	# SCLCR/L	0808 K06-SH	8	8	-	8	125	8	8	-	CC... 0602...
		1010 K06-SH	10	10	-	10	125	10	10	-	
		1010 K09-SH	10	10	-	10	125	15	10	2	CC... 09T3...
		1212 K09-SH	12	12	-	12	125	15	12	-	
		1616 K09-SH	16	16	-	16	125	16	16	-	
95°	# SCLCR/L	1212 K09-SH-TB	12	12	3	12	125	23	12	2	CC... 09T3...
		1616 K09-SH-TB	16	16	-	16	125	23	16	-	

▸ #: TOP-MINI holders

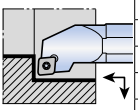
Spare parts

Designation	Screw	Cooling unit	Plug	Wrench			
							
...06-SH	SO 25065I	-	-	T 7	-		
...09-SH	SO 35080I	-	-	T 15	-		
SCLCR/L-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32		

Screw type boring bars



S-SCLCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**S08K SCLCR/L 06**	8	7	125	18	6	11	CC... 0602...
	**S10K SCLCR/L 06**	10	9	125	20	7	13	
	S12M SCLCR/L 06	12	11	150	25	9	16	
	S16R SCLCR/L 06	16	15	200	30	11	20	
	S12M SCLCR/L 09	12	11	150	23	9	16	CC... 09T3...
	S16R SCLCR/L 09	16	15	200	30	11	20	
	S20S SCLCR/L 09	20	18	250	32	13	25	
	S25T SCLCR/L 12	25	23	300	42	17	32	CC... 1204...
	S32T SCLCR/L 12	32	30	300	45	22	40	
	S40T SCLCR/L 12	40	37	300	55	27	50	

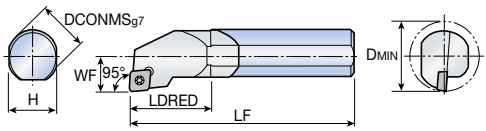
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

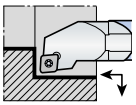
Designation	Screw	Shim	Shim screw	Wrench			
							
S...K ...06	SO 25050I	-	-	T 7	-		
...06	SO 25065I	-	-	T 7	-		
...09	SO 35080I	-	-	T 15	-		
S25T...12	SO 45100I	-	-	T 20	-		
...12	SO 45130I	SSC 43N	SO 60105S	T 20	L-W 5		

C-SCLCR/L

Screw type boring bars



C-SCLCR

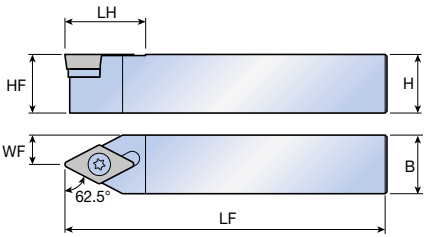
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	✓ **C08K SCLCR/L 06**	8	7	125	15	6	11	CC... 0602...
	✓ **C10K SCLCR/L 06**	10	9	125	15	7	13	
	✓ **C12M SCLCR/L 06**	12	11	150	18	9	16	
	✓ **C12M SCLCR/L 09**	12	11	150	18	9	16	CC... 09T3...
	✓ **C16R SCLCR/L 09**	16	15	200	25	11	20	
	✓ **C20S SCLCR/L 09**	20	18	250	25	13	25	

▸ ✓: Designates carbide shank ▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

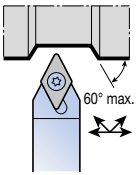
Designation	Screw	Wrench					
							
C08/C10 ...06	SO 25050I	T 7					
C12 ...06	SO 25065I	T 7					
...09	SO 35080I	T 15					

Screw type holders



SDNCN

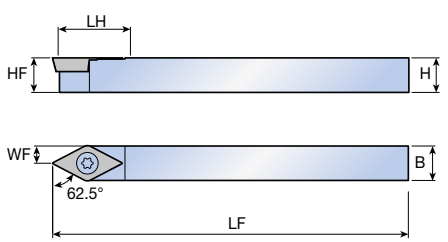
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
62.5°	**SDNCN 0808 F07**	8	8	8	80	15	4	DC... 0702...
	1010 F07	10	10	10	80	15	5	
	1616 H11	16	16	16	100	22	8	DC... 11T3...
	2525 M11	25	25	25	150	22	12.5	

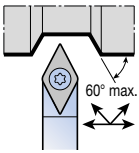
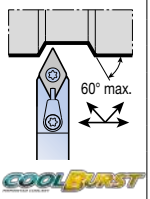


Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
SDNCN ...07	SO 25065I	-	-	T 7				
SDNCN ...11	SO 35124I	SSD 32	SO 50090S	T 15				

Screw type holders



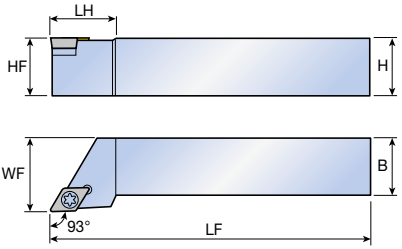
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	HBH	B	LF	LH	WF	
62.5°	# **SDNCN**	**0808 K07-SH**	8	8	-	8	125	15	4	DC... 0702...
		**1010 K07-SH**	10	10	-	10	125	15	5	
		1010 K11-SH	10	10	-	10	125	22	5	DC... 11T3...
		1212 K11-SH	12	12	-	12	125	22	6	
		1616 K11-SH	16	16	-	16	125	22	8	
62.5°	# **SDNCN**	**1212 K11-SH-TB**	12	12	4	12	125	32	6	DC... 11T3...
		**1616 K11-SH-TB**	16	16	-	16	125	32	8	

▸ #: TOP-MINI holders

Spare parts

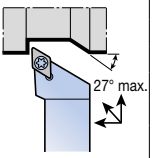
Designation	Screw	Cooling unit	Plug	Wrench				
								
...07	SO 25065I	-	-	T 7	-			
...11-SH	SO 35080I	-	-	T 7	-			
SDNCN-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32			

Screw type holders



SDJCR

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	SDJCR/L	1212 F07	12	12	12	80	15	16	DC... 0702...
		1616 H07	16	16	16	100	15	20	
		2020 K07	20	20	20	125	20	25	
		1616 H11	16	16	16	100	24	20	DC... 11T3...
		2020 K11	20	20	20	125	24	25	
		2525 M11	25	25	25	150	28	32	

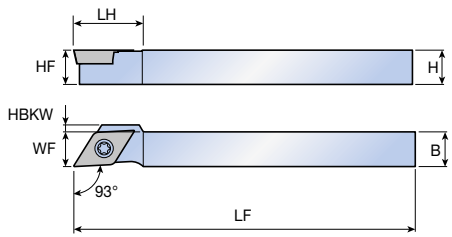


Spare parts

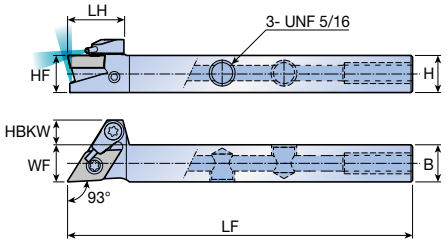
Designation	Screw	Shim	Shim screw	Wrench				
								
...07	SO 25065I	-	-	T 7				
...11	SO 35124I	SSD 32	SO 50090S	T 15				

SDJCR/L-SH SDJCR/L-SH-TB

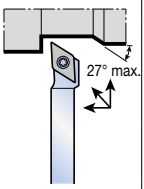
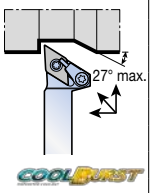
Screw type holders



SDJCR-SH



SDJCR-SH-TB

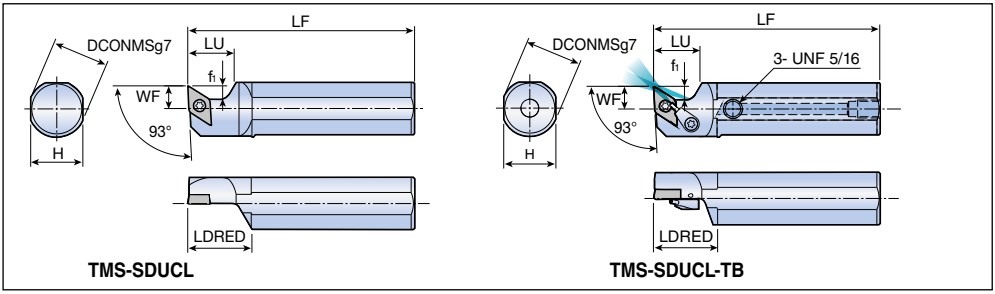
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF	HBKW	
93°	# **SDJCR/L**	**0808 K07-SH**	8	8	8	125	12.7	8	-	DC... 0702...
		**1010 K07-SH**	10	10	10	125	15	10	-	
		1010 K11-SH	10	10	10	125	20	10	2	DC... 11T3...
		1212 K11-SH	12	12	12	125	20	12	-	
		1616 K11-SH	16	16	16	125	20	16	-	
		2020 K11-SH	20	20	20	125	20	20	-	
93°	# **SDJCR/L**	**1212 K11-SH-TB**	12	12	12	125	19	12	8	DC... 11T3...
		**1616 K11-SH-TB**	16	16	16	125	19	16	4	
		2020 K11-SH-TB	20	20	20	125	20	20	-	

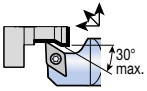
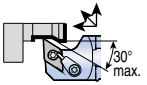
▸ #: TOP-MINI holders

Spare parts

Designation	Screw	Cooling unit	Plug	Wrench			
							
...07	SO 25065I	-	-	T 7	-		
...11-SH	SO 35080I	-	-	T 15	-		
SDJCR/L-SH-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32		

Sleeve holders



Approach angle	Designation	Dimension (mm)							Insert
		DCONMS	H	LF	f1	LU	LDRED	WF	
93°	# **TMS-16X SDUCL 11**	16	15	85	6	20	28	10	DC... 11T3...
	**19.05H SDUCL 11**	19.05	17	100	6	20	28	10	
	20H SDUCL 11	20	18	100	6	20	28	10	
	22H SDUCL 11	22	20	100	6	20	28	10	
	25H SDUCL 11	25	23	100	6	20	28	10	
93°	# **TMS-16X SDUCR 11- TB**	16	15	85	6	20	28	10	DC... 11T3...
	**19.05H SDUCL 11-TB**	19.05	17	100	6	20	28	10	
	20H SDUCL 11-TB	20	18	100	6	20	28	10	
	22H SDUCL 11-TB	22	20	100	6	20	28	10	
	25H SDUCL 11-TB	25	23	100	6	20	28	10	

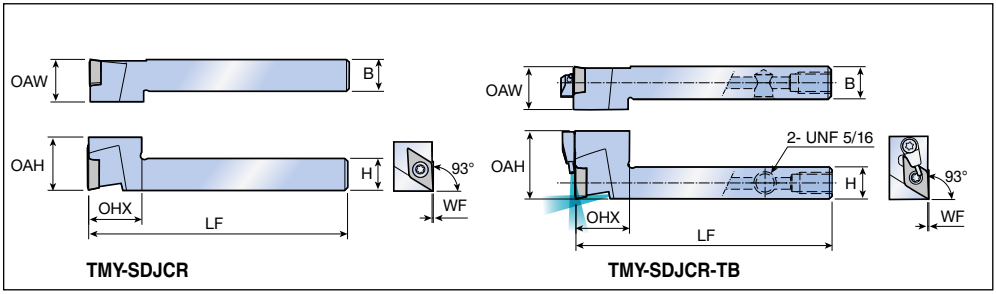
▸ #: TOP-MINI holders

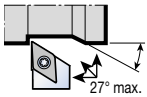
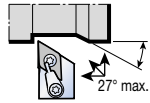
Spare parts

Designation	Screw	Cooling unit	Plug	Wrench		
						
TMS-SDUCL	SO 35080I	-	-	T 15	-	
TMS-SDUCL-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32	

TMY-SDJCR TMY-SDJCR-TB

Y-axis holders



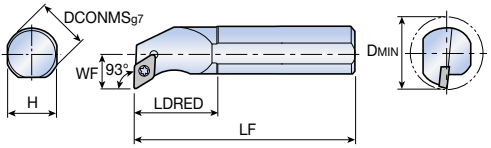
Approach angle	Designation	Dimension (mm)							Insert
		H	B	LF	OHX	OAH	OAW	WF	
93°	# **TMY-SDJCR 1212 K11**	12	12	125	21	20	16	0	DC... 11T3...
 	**SDJCR 1616 K11**	16	16	125	21	20	16	0	
93°	# **TMY-SDJCR 1212 K11-TB**	12	12	125	21	25.5	16	0	DC... 11T3...
 COOLFIRST 	**SDJCR 1616 K11-TB**	16	16	125	21	25.5	16	0	

▸ #: TOP-MINI holders

Spare parts

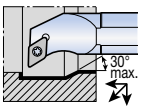
Designation	Screw	Cooling unit	Plug	Wrench		
						
TMY-SDJCR	SO 35080I	-	-	T 15	-	
TMY-SDJCR-TB	SO 35080I	S-CU-TB	PLG 5/16 UNF	T 15	L-W 5/32	

Screw type boring bars



S-SDUCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
93°	**S10K SDUCR/L 07**	10	9	125	20	7	13	DC... 0702...
	S12M SDUCR/L 07	12	11	150	23	9	16	
	S16R SDUCR/L 07	16	15	200	30	11	20	
	S16R SDUCR/L 11	16	15	200	27	11	20	DC... 11T3...
	S20S SDUCR/L 11	20	18	250	32	13	25	
	S25T SDUCR/L 11	25	23	300	42	17	32	
	S32T SDUCR/L 11	32	30	300	55	22	40	

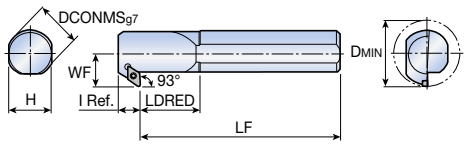


▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

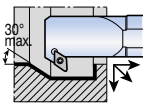
Spare parts

Designation	Screw	Wrench						
								
S ...07	SO 25065I	T 7						
S ...11	SO 35080I	T 15						

Screw type back boring bars



S-SDZCR

Approach angle	Designation	Dimension (mm)							Insert
		DCONMS	H	LF	LDRED	WF	l	DMIN	
93°	**S16R SDZCR/L 07**	16	15	200	23	13	12	22	DC... 0702...
	**S20S SDZCR/L 07**	20	18	250	28	15	12	30	
	S25T SDZCR/L 07	25	23	300	33	18	12	33	
	S20S SDZCR/L 11	20	18	250	24	15	16	27	DC... 11T3...
	S32T SDZCR/L 11	32	30	300	34	22	16	40	

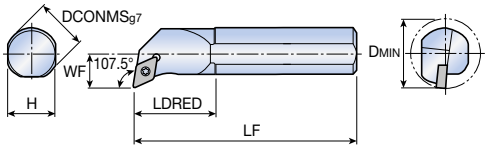
For back boring

▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

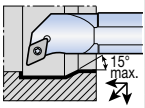
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...07	SO 25065I	-	-	T 7	-			
S20S ...11	SO 35080I	-	-	T 15	-			
S32T ...11	SO 35124I	SSD 32	SO 50090S	T 15	L-W 3.5			

Screw type boring bars



S-SDQCR



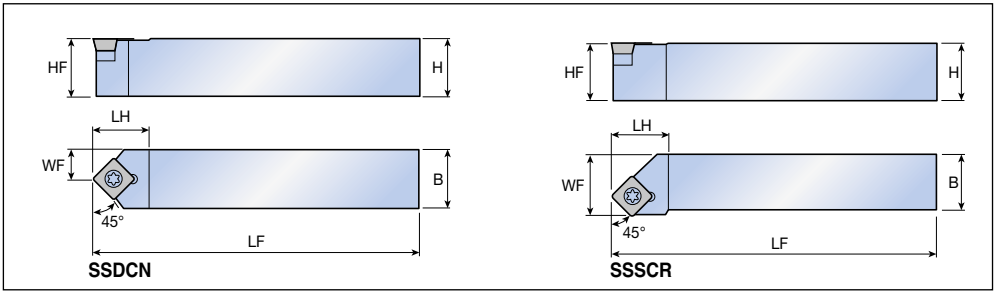
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
107.5°	**S10K SDQCR/L 07**	10	9	125	20	7	13	DC... 0702...
	S12M SDQCR/L 07	12	11	150	22	9	16	
	S16R SDQCR/L 07	16	15	200	27	11	20	
	S20S SDQCR/L 11	20	18	250	40	13	25	DC... 11T3...
	S25T SDQCR/L 11	25	23	300	50	17	32	

▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

Designation	Screw	Wrench						
								
S10 ...07	SO 25050I	T 7						
S ...07	SO 25065I	T 7						
S ...11	SO 35080I	T 15						

Screw type holders

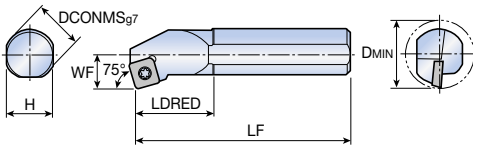


Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	SSDCN	1212 F09	12	12	12	80	15.5	6	SCGW 09T3...
		1616 H09	16	16	16	100	15.5	8	
45°	SSSCR/L	1212 F09	12	12	12	80	15.5	14	SCGW 09T3...
		1616 H09	16	16	16	100	15.5	17	

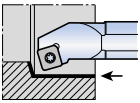
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
...F09	SO 35080I	-	-	T 15				
...H09	SO 35124I	SSS 32	SO 50090S	T 15				

Screw type boring bars



S-SSKCR

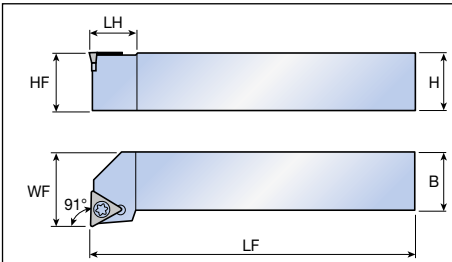
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
75°	**S16R SSKCR/L 09**	16	15	200	24.5	11	20	SCGW 09T3...
	**S20S SSKCR/L 09**	20	18	250	30	13	25	

Spare parts

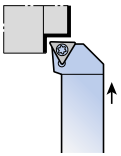
Designation	Screw	Wrench						
								
...09	SO 35080I	T 15						

STFCR/L

Screw type holders



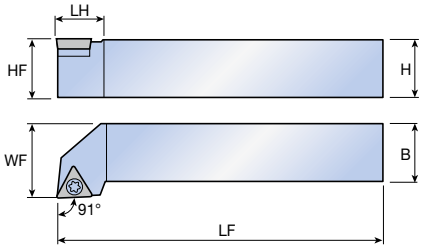
STFCR

Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
91°	**STFCR/L 1212 F1102**	12	12	12	80	14	16	TCGW 1102...
	**1616 H16**	16	16	16	100	19	20	TCGW 16T3...
	2020 K16	20	20	20	125	19	25	
	2525 M16	25	25	25	150	20	32	

Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...1102	SO 25065I	-	-	T 7				
...16	SO 35124I	SST 32	SO 50090S	T 15				

Screw type holders



STGCR

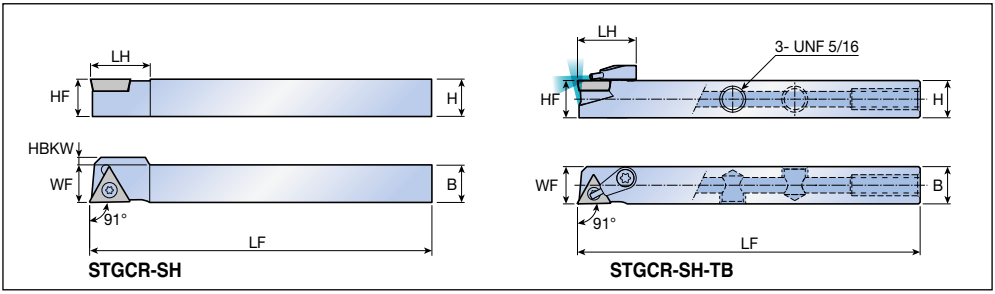
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°	STGCR/L	1010 E09	10	10	10	70	11	12	TCGW 0902...
		1212 F1102	12	12	12	80	14.3	16	TCGW 1102...
		1616 H1102	16	16	16	100	14.3	20	
		1616 H16	16	16	16	100	21	20	TCGW 16T3...
		2020 K16	20	20	20	125	21	25	
		2525 M16	25	25	25	150	21	32	

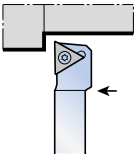
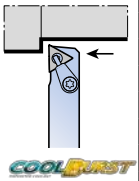
Spare parts

Designation	Screw	Shim	Shim screw	Wrench			
...09	SO 22050I	-	-	T 7			
...1102	SO 25065I	-	-	T 7			
...16	SO 35124I	SST 32	SO 50090S	T 15			

STGCR/L-SH STGCR/L-SH-TB

Screw type holders



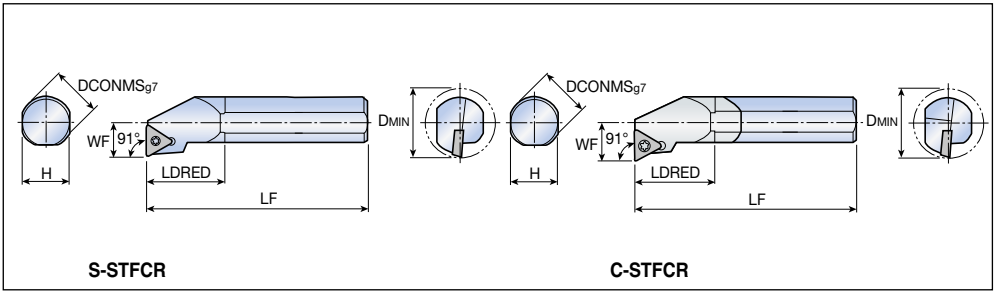
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF	HBKW	
91°	# **STGCR**	**1010 K11-SH**	10	10	10	125	16	10	2	TCGW 1103...
		**1212 K11-SH**	12	12	12	125	16	12	-	
		1616 K11-SH	16	16	16	125	16	16	-	
91°	# **STGCR**	**1212 K11-SH-TB**	12	12	12	125	20	12	-	TCGW 1103...
		**1616 K11-SH-TB**	16	16	16	125	20	16	-	

▸ #: TOP-MINI holders

Spare parts

Designation	Screw	Cooling unit	Plug	Wrench			
							
...11	SO 25065I	-	-	T 7	-		
STGCR/L-SH-TB	SO 25065I	S-CU-TB	PLG 5/16 UNF	T 7	L-W 5/32		

Screw type boring bars



S-STFCR C-STFCR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	**S08K STFCR/L 09**	8	7	125	20	5	10	TCGW 0902...
	S10K STFCR/L 09	10	9	125	22.5	6	12	
	S12M STFCR/L 09	12	11	150	30	9	16	
	S16R STFCR/L 09	16	15	200	35	11	20	
	S10K STFCR/L 1102	10	9	125	17.7	6	12	TCGW 1102...
	S12M STFCR/L 1102	12	11	150	25	9	16	
	S16R STFCR/L 1102	16	15	200	35	11	20	
	S20S STFCR/L 1102	20	18	250	36	13	25	
	S20S STFCR/L 16	20	18	250	36	13	25	TCGW 16T3...
	S25T STFCR/L 16	25	23	300	49	17	32	
	S32T STFCR/L 16	32	30	300	45	22	40	
	S40T STFCR/L 16	40	37	300	60	27	50	
91°	✓ **C10K STFCR/L 09**	10	9	125	15	7	13	TCGW 0902...
	✓ **C10K STFCR 1102**	10	9	125	15	7	13	TCGW1102...
	✓ **C12M STFCR/L 1102**	12	11	150	20	9	16	
	✓ **C16R STFCR/L 1102**	16	15	200	25	11	20	

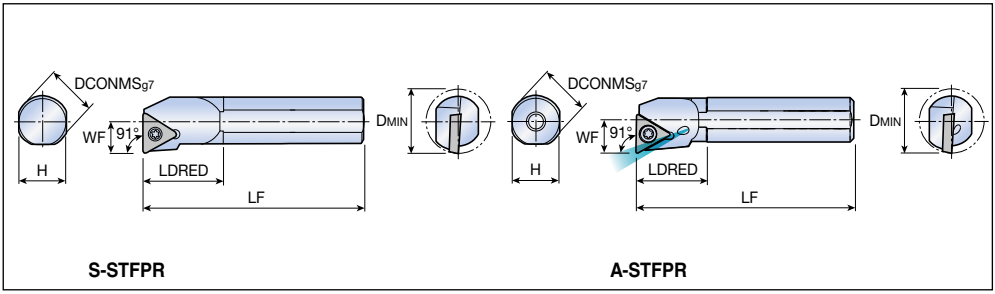
▸ ✓: Designates carbide shank ▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

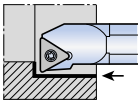
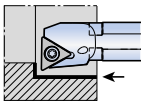
Designation	Screw	Shim	Shim screw	Wrench			
S08K...09	TS 22046I	-	-	T 7	-		
...09	SO 22050I	-	-	T 7	-		
S10K...1102	SO 22050I	-	-	T 7	-		
...1102	SO 25065I	-	-	T 7	-		
S20S...16	SO 35080I	-	-	T 15	-		
S25T...16	SO 35080I	-	-	T 15	-		
S32T...16	SO 35124I	SST 32	SO 50090S	T 15	L-W 3.5		
S40T...16	SO 35124I	SST 32	SO 50090S	T 15	L-W 3.5		

S-STFPR/L A-STFPR/L

Screw type boring bars



S-STFPR A-STFPR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	**S08K STFPR/L 09**	8	7	125	14	5	10	TPGW 0902...
	**S10K STFPR/L 1103**	10	9	125	25	6	12	TPGW 1103...
	S12M STFPR/L 1103	12	11	150	30	8	16	
	S16R STFPR/L 1103	16	15	200	35	10	20	
	S16Q STFPR/L 1103	16	15	180	30	10	20	
	S16N STFPR/L 16	16	15	160	30	10	20	TPGW 1604...
	S20S STFPR/L 16	20	18	250	36	12.5	25	
91°	**A08H STFPR/L 09**	8	7	100	16.7	6	11	TPGW 0902...
	**A10K STFPR/L 1102**	10	9	125	16.4	6	12	TPGW 1102...
	A12M STFPR/L 1102	12	11	150	19	9	16	
	A16Q STFPR/L 1102	16	15	180	20	11	20	
	A12M STFPR/L 1103	12	11	150	19	9	16	TPGW1103...
	A16Q STFPR/L 1103	16	15	180	20.5	11	20	

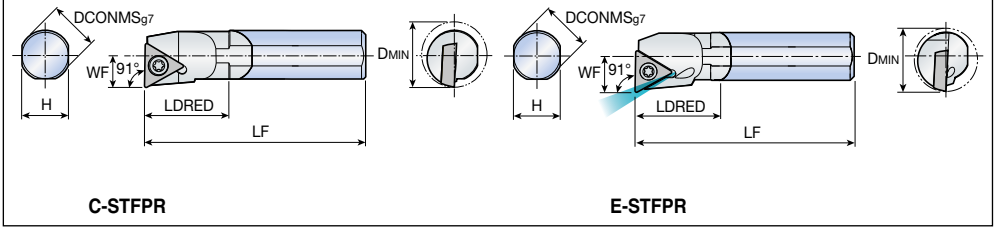
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

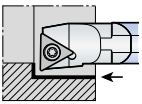
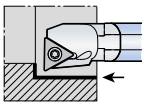
Designation	Screw	Wrench					
							
...09	TS 22046I	T 7					
S10 ...1103	SO 30055I	T 9					
S12 ...1103	SO 30100I	T 9					
S16 ...1103	SO 30040I	T 9					
A ...1102	SO 25050I	T 7					
A ...1103	SO 30100I	T 9					
...16T3	TS 35070I/HG	T 15					
...16	SO 35124I	T 15					

C-STFPR/L E-STFPR/L

Screw type boring bars



C-STFPR E-STFPR

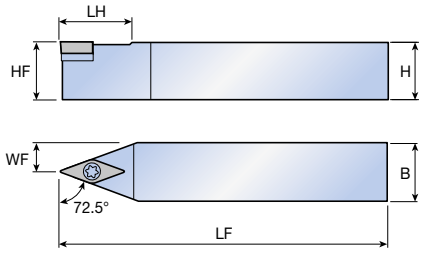
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	✓ **C10K STFPR/L 1103**	10	9	125	15	6	12	TPGW1103...
	✓ **C12M STFPR/L 1103**	12	11	150	20	8	16	
91°	✓ **E08K STFPR/L 09**	8	7	125	15	6	11	TPGW 0902...
	✓ **E12M STFPR/L 1103**	12	11	150	18	9	16	TPGW 1103...
	✓ **E16R STFPR/L 1103**	16	15	200	22	11	20	

▸ ✓: Designates carbide shank ▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

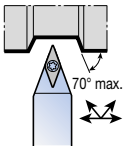
Spare parts

Designation	Screw	Wrench					
							
...09	TS 22046I	T 7					
C10K ...1103	SO 30055I	T 9					
C12M...1103	SO 30100I	T 9					
E ...1103	SO 30100I	T 9					

Screw type holders



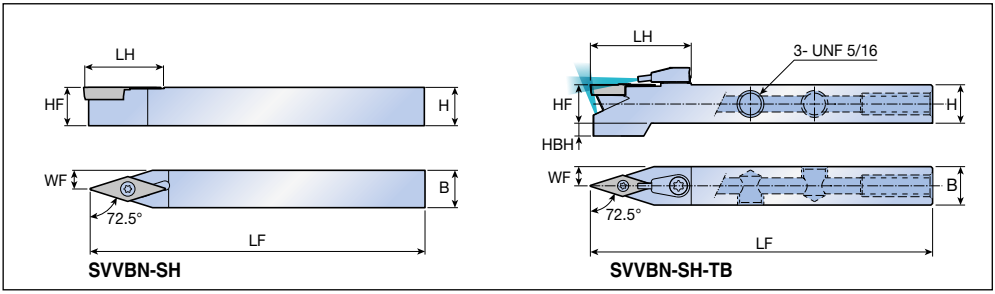
SVVBN

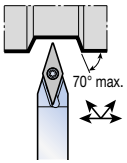
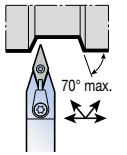
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
72.5°	**SVVBN**	**2020 K16**	20	20	20	125	31.5	10.0	VBGW 1604...
		**2525 M16**	25	25	25	150	31.5	12.5	
		3225 P16	32	32	25	170	31.5	12.5	

Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

Screw type holders



Approach angle	Designation		Dimension (mm)							Insert
			H	HF	HBH	B	LF	LH	WF	
72.5°	# **SVVBN**	**1010 K11-SH**	10	10	-	10	125	22	5	VBGW 1103...
		**1212 K11-SH**	12	12	-	12	125	22	6	
		1616 K11-SH	16	16	-	16	125	22	8	
72.5°	# **SVVBN**	**1212 K11-SH-TB**	12	12	2	12	125	31.5	6	
		**1616 K11-SH-TB**	16	16	-	16	125	31.5	8	

COOLFORST

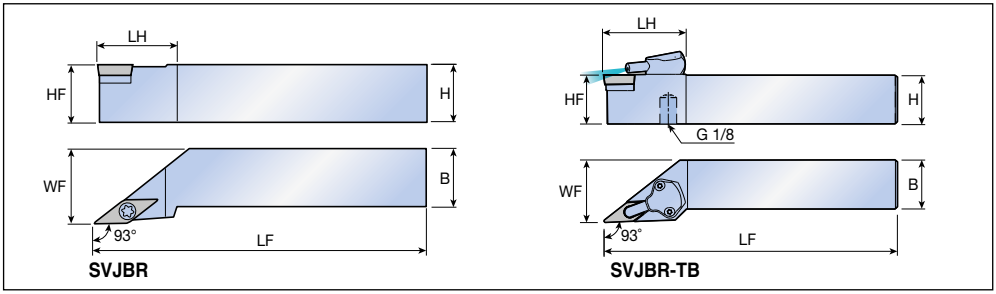
▸ #: TOP-MINI holders

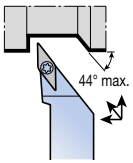
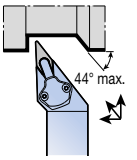
Spare parts

Designation	Screw	Cooling unit	Plug	Wrench				
								
...11	SO 25065I	-	-	T 7	-			
SVVBN-SH-TB	SO 25065I	S-CU-TB	PLG 5/16 UNF	T 7	L-W 5/32			

SVJBR/L SVJBR/L-TB

Screw type holders



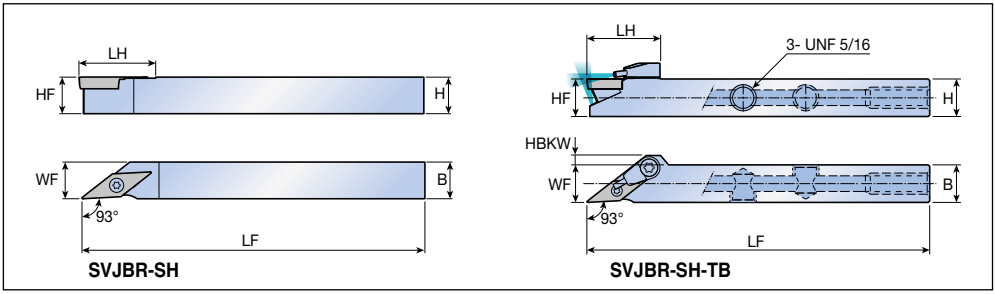
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**SVJBR/L**	**2020 K16**	20	20	20	125	35	25	VBGW 1604...
		**2525 M16**	25	25	25	150	35	32	
		3225 P16	32	32	25	170	35	32	
		3232 P16	32	32	32	170	35	40	
93°	**SVJBR/L**	**2525 M16-TB**	25	25	25	150	42	32	VBGW 1604...
									

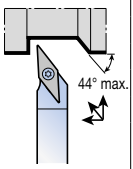
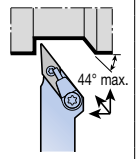
Spare parts

Designation	Screw	Shim	Shim screw	Cooling unit	O-ring	Wrench	
							
...16	SO 35124I	SSV 32	SO 50090S	-	-	T 15	-
SVJBR/L-TB	SO 35124I	SSV 32	TS 5035062S	CU-V-TB	ID 6.4x0.9	T 8, T 15	L-W 3.5

SVJBR/L-SH SVJBR/L-SH-TB

Screw type holders



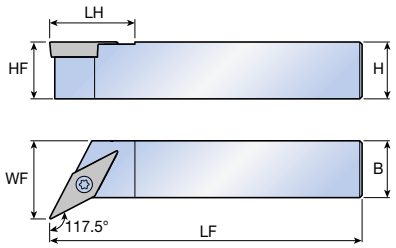
Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF	HBKW	
93°	# **SVJBR/L**	**1010 K11-SH**	10	10	10	125	21	10	-	VBGW 1103...
		**1212 K11-SH**	12	12	12	125	21	12	-	
		1616 K11-SH	16	16	16	125	21	16	-	
93°	# **SVJBR/L**	**1212 K11-SH-TB**	12	12	12	125	23.6	12	3	VBGW 1103...
		**1616 K11-SH-TB**	16	16	16	125	23.6	16	-	

▸ #: TOP-MINI holders

Spare parts

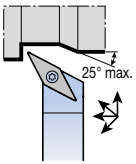
Designation	Screw	Cooling unit	Plug	Wrench			
							
...11	SO 25065I	-	-	T 7	-		
SVJBR/L-SH-TB	SO 25065I	S-CU-TB	PLG 5/16 UNF	T 7	L-W 5/32		

Screw type holders



SVPBR

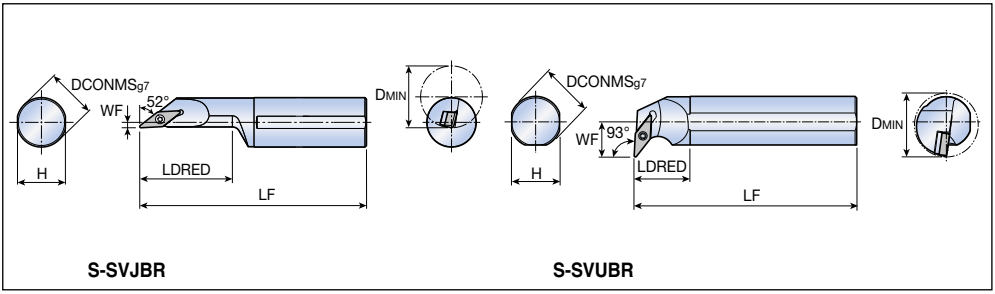
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
117.5°	**SVPBR/L**	**1010 E11**	10	10	10	70	18	14.5	VBGW 1103...
		1212 F11	12	12	12	80	18	16.5	
		1616 F11	16	16	16	80	18	20.5	
		2020 K11	20	20	20	125	18	25	
		2525 M11	25	25	25	150	18	32	
		2020 K16	20	20	20	125	25	25	VBGW 1604...
		2525 M16	25	25	25	150	25	32	



Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...11	SO 25065I	-	-	T 7	-			
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

Screw type boring bars



S-SVJBR S-SVUBR

Approach angle	Designation		Dimension (mm)						Insert
			DCONMS	H	LF	LDRED	WF	DMIN	
52°	**S20R**	**SVJBR/L 11-D25**	20	18	200	37.5	2	25	VBGW 1103..
	S25S	**SVJBR/L 11-D30**	25	23	250	45	3.5	30	
	S32S	**SVJBR/L 16**	32	30	250	60	3.5	40	VBGW 1604...
	S40T	**SVJBR/L 16**	40	37	300	75	4.5	50	
93°	**S32T**	**SVUBR/L 16**	32	30	300	45	22	40	VBGW 1604...
	S40T	**SVUBR/L 16**	40	37	300	55	27	50	

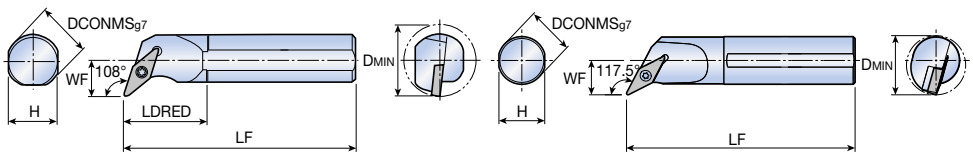
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

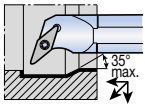
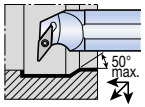
Designation	Screw	Shim	Shim screw	Wrench				
...11-...	SO 25065I	-	-	T7	-			
...16	SO 35124I	SSV32	SO 50090S	T15	L-W 3.5			

S-SVQBR/L S-SVPBR/L

Screw type boring bars



S-SVQBR S-SVPBR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
108°	**S25T SVQBR/L16**	25	23	300	40	17	32	VBGW 1604...
	**S32T SVQBR/L16**	32	30	300	45	22	40	
	S40T SVQBR/L16	40	37	300	41.5	27	50	
117.5°	**S16Q SVPBR/L 11-D22**	16	15	180	35	13.5	22	VBGW 1103...
	**S20Q SVPBR/L 11-D26**	20	18	200	41	15.5	26	
	S25S SVPBR/L 16	25	23	250	51	18	31	VBGW 1604...
	S32S SVPBR/L 16	32	30	250	54	23	40	

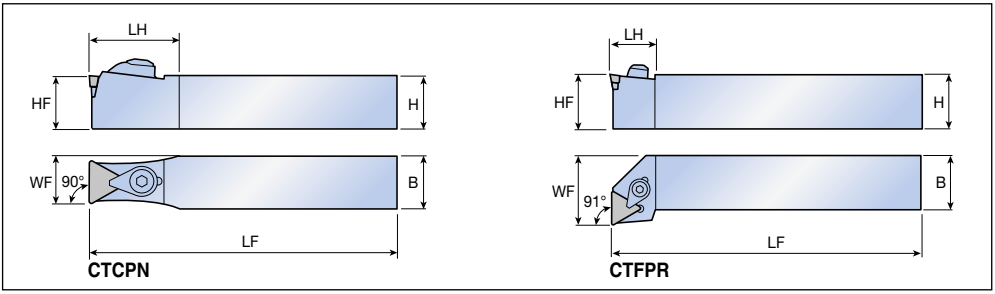
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

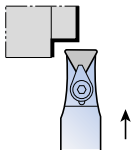
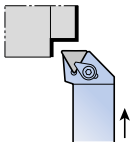
Spare parts

Designation	Screw	Shim	Shim screw	Wrench				
								
...11-...	SO 25065I	-	-	T 7	-			
S25T...16	SO 35080I	-	-	T 15	-			
...16	SO 35124I	SSV 32	SO 50090S	T 15	L-W 3.5			

CTCPN CTFPR/L

Top clamp type holders



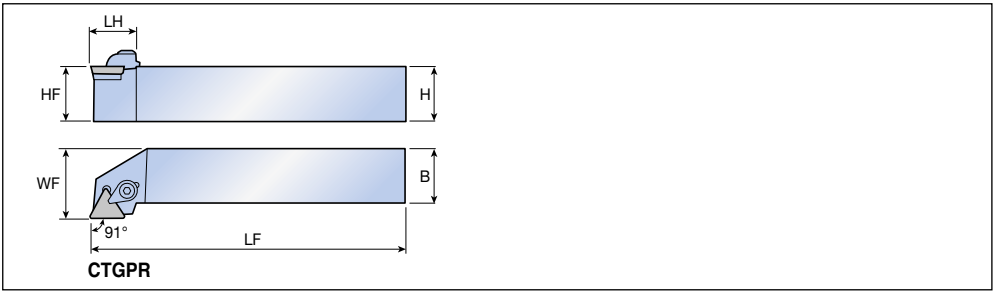
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
90°	**CTCPN**	**2009 K11**	20	20	9	125	20	9.4	TPGN 1103...
		**2513 Q16**	25	25	13	180	30	14.1	TPGN 1603...
91°	**CTFPR/L**	**1616 H11**	16	16	16	100	14.4	20	TPGN 1103...
		**2020 K11**	20	20	20	125	16	25	
		2020 K16	20	20	20	125	20	25	TPGN 1603...
		2525 M16	25	25	25	150	20	32	

Spare parts

Designation	Clamp		Screw	Shim	Shim pin	Snap ring	Wrench		
									
CTCPN ...11	CL 2C	-	CLS 2C	-	-	CSR 2C	L-W 2.5		
CTCPN ...16	CL 3C	-	CLS 3C	CST 32	CSP 3	CSR 2	L-W 3		
CTFPR/L...11	-	CL 2	CLS 2	-	-	CSR 2	L-W 2.5		
CTFPR/L...16	-	CL 3	CLS 3	CST 32	CSP 3	WSR 4	L-W 3		

CTGPR/L

Top clamp type holders



CTGPR

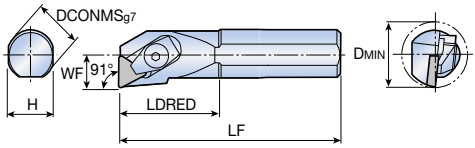
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
91°	CTGPR/L 1212 F11	12	12	12	80	19	16	TPGN 1103...
	1616 H11	16	16	16	100	18	20	
	2020 K11	20	20	20	125	19	25	
	2020 K16	20	20	20	125	25	25	TPGN 1603...
	2525 M16	25	25	25	150	25	32	

Spare parts

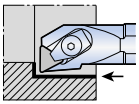
Designation	Clamp	Screw	Shim	Shim pin	Snap ring	Wrench		
...11	CL 2	CLS 2	-	-	CSR 2	L-W 2.5		
...16	CL 3	CLS 3	CST 32	CSP 3	WSR 4	L-W 3		

S-CTFPR/L

Top clamp type boring bars



S-CTFPR

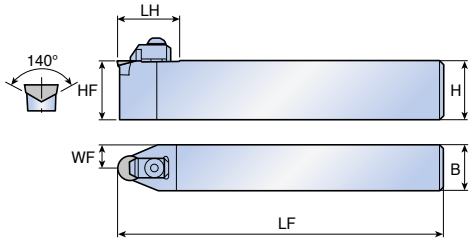
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	**S12M CTFPR/L 11**	12	11	150	30	9	16	TPGN 1103...
	**S16R CTFPR/L 11**	16	15	200	30	11	20	
	S20S CTFPR/L 11	20	18	250	35	13	25	
	S16R CTFPR/L 16	16	15	200	40	11	20	TPGN 1603...
	S20S CTFPR/L 16	20	18	250	50	13	25	
	S25T CTFPR/L 16	25	23	300	40	17	32	
	S32T CTFPR/L 16	32	30	300	45	22	40	
	S40T CTFPR/L 16	40	37	300	41.5	27	50	
	S50U CTFPR/L 16	50	47	350	56	35	63	

Spare parts

Designation	Clamp		Screw	Snap ring	Shim	Shim pin	Wrench	
								
...11	CL 2C	-	CLS 2C	CSR 2C	-	-	L-W 2.5	
S16R...16	CL 3C	-	CLS 3C	CSR 2	-	-	L-W 3	
S20S...16	CL 3C	-	CLS 3C	CSR 2	-	-	L-W 3	
S25T...16	-	CL 3	CLS 3S	WSR 4	-	-	L-W 3	
...16	-	CL 3	CLS 3	WSR 4	CST 32	CSP 3	L-W 3	

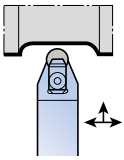
CRDCN

Top clamp type holders for V bottom insert



CRDCN-140

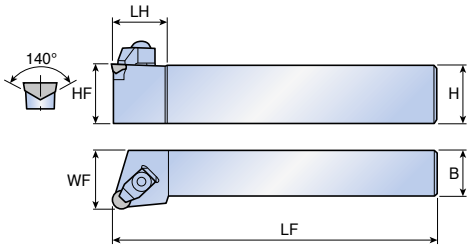
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	CRDCN	2525 M06-140	25	25	25	150	28	12.5	RCGX 0603...FT
		3225 P06-140	32	32	25	170	28	12.5	
		3225 P09-140	32	32	25	170	30	12.5	RCGX 0903...FT
		3225 P12-140	32	32	25	170	32	12.5	RCGX 1204...FT



Spare parts

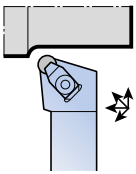
Designation	Clamp	Clamp screw	Shim	Shim screw		Wrench	
							
...06-120	BCL 6-20A	BH M6x1x25	CBRS 06	SO 40085I	-	L-W 4	T 7
...09-140	BCL 6-20A	BH M6x1x25	CBRS 09	-	BH M2.5x0.45x10	L-W 4, L-W 1.5	-
...12-140	BCL 6	BH M6x1x25	CBRS 12	-	BH M2.5x0.45x10	L-W 4, L-W 1.5	-

Top clamp type holders for V bottom insert



CRGCR-140

Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
90°	**CRGCR/L 3225 P09-140**	32	32	25	170	30	32	RCGX 0903...FT
	3225 P12-140	32	32	25	170	32	32	RCGX 1204...FT

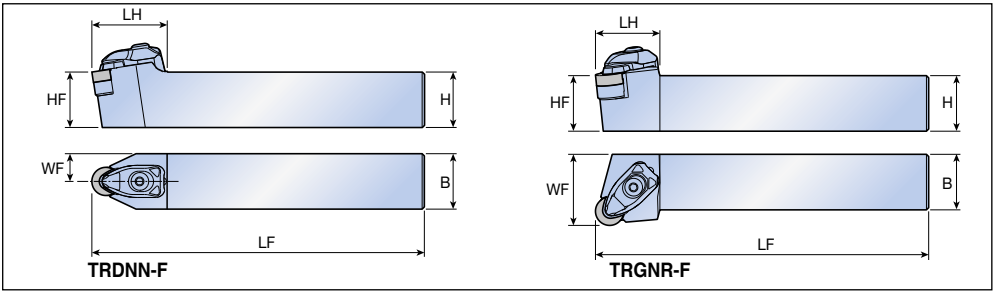


Spare parts

Designation	Clamp	Clamp screw	Shim	Shim screw	Wrench		
							
...09...	BCL 6-20A	BH M6x1x25	CERS 09	BH M2.5x0.45x10	L-W 4, L-W 1.5		
...12...	BCL 6	BH M6x1x25	CERS 12	BH M2.5x0.45x10	L-W 4, L-W 1.5		

TRDNN-F TRGNR/L-F

Combi Clamp T-holders for flat inserts



Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**TRDNN**	**2525 M0903-F**	25	25	25	150	27	12.5	RNGN 0903...
		2020 K1204-F	20	20	20	125	34	10	RNGN 1204...
		2525 M1204-F	25	25	25	150	34	12.5	
		2020 K1207-F	20	20	20	125	34	10	RNGN 1207...
		2525 M1207-F	25	25	25	150	34	12.5	
		3225 P1207-F	32	32	25	170	34	12.5	
		3232 P1207-F	32	32	32	170	34	16	
90°	**TRGNR/L**	**2525 M0903-F**	25	25	25	150	29	32	RNGN 0903...
		2020 K1204-F	20	20	20	125	29	25	RNGN 1204...
		2525 M1204-F	25	25	25	150	29	32	
		2020 K1207-F	20	20	20	125	29	25	RNGN 1207...
		2525 M1207-F	25	25	25	150	29	32	
		3225 P1207-F	32	32	25	170	29	32	
		3232 P1207-F	32	32	32	170	29	40	

15° max.

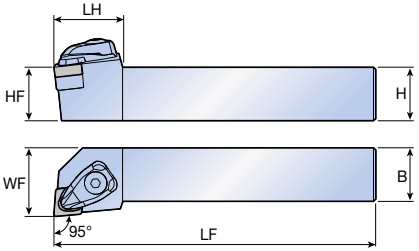
▸ RNGN 1204/1207 insert can be used in the same holder by exchanging the shim.

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim		Shim screw	Wrench	
...0903-F	DCL S-3F	DLS 3	DSP 3	LSR 32	-	SO 40085I	L-W 2.5	T 15
...1204-F	DCL S-4F	DLS 4	DSP 4	-	TSR 45	SO 40050I	L-W 3	T 15
...1207-F	DCL S-4F	DLS 4	DSP 4	-	TSR 43	SO 40050I	L-W 3	T 15

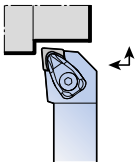
CCLNR/L-F

Combi Clamp Top holders for flat inserts



CCLNR-F

Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
95°	**CCLNR/L 2525 M1204-F**	25	25	25	150	32	32	CNGN 1204...

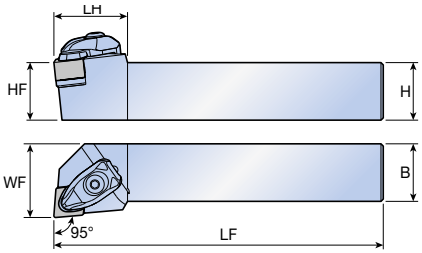


Spare parts

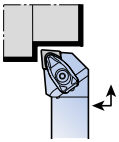
Designation	Clamp set	Shim	Shim screw	Wrench			
							
CCLNR/L...-F	CCL S-4F	TSC 44	SO 40050I	L-W 4	T 15		

TCLNR/L-F

Combi Clamp T-holders for flat inserts



TCLNR -F

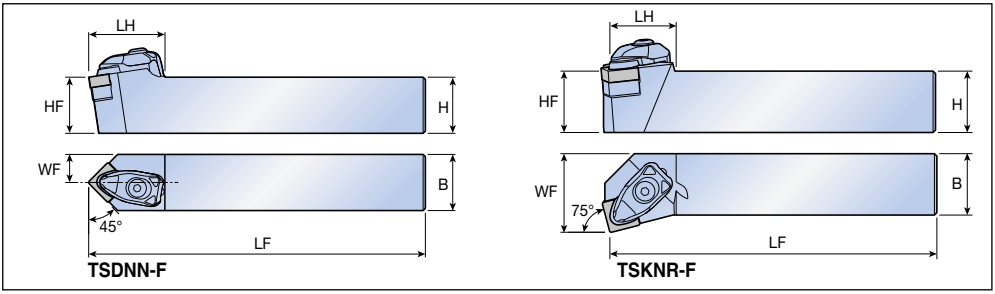
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TCLNR/L**	**2525 M0903-F**	25	25	25	150	25	32	CNGN 0903...
		**2020 K1204-F**	20	20	20	125	32	25	CNGN 1204...
		2525 M1204-F	25	25	25	150	32	32	
		2020 K1207-F	20	20	20	125	32	25	CNGN 1207...
		2525 M1207-F	25	25	25	150	32	32	
		3232 P1207-F	32	32	32	170	32	40	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...0903-F	DCL S-3F	DLS 3	DSP 3	LSC 32	SO 40085I	L-W 2.5	T 15	
...1204-F	DCL S-4F	DLS 4	DSP 4	TSC 44	SO 40050I	L-W 3	T 15	
...1207-F	DCL S-4F	DLS 4	DSP 4	TSC 42	SO 40050I	L-W 3	T 15	

TSDNN-F TSKNR/L-F

Combi Clamp T-holders for flat inserts



Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**TSDNN**	**2020 K1204-F**	20	20	20	125	34	10	SNGN 1204...
		2525 M1204-F	25	25	25	150	34	12.5	
		2525 M1207-F	25	25	25	150	34	12.5	SNGN 1207...
		3225 P1207-F	32	32	25	170	34	12.5	
		3232 P1207-F	32	32	32	170	34	16	
75°	**TSKNR/L**	**2525 M1204-F**	25	25	25	150	27	32	SNGN 1204...
		3232 P1204-F	32	32	32	170	27	40	
		2525 M1207-F	25	25	25	150	27	32	SNGN 1207...
		3232 P1207-F	32	32	32	170	27	40	

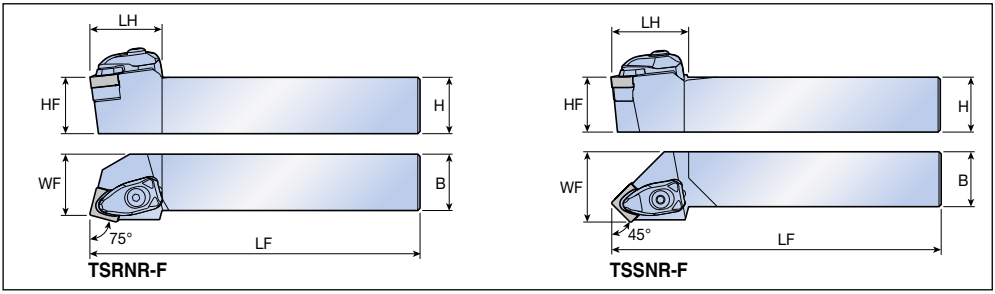
▸ SNGN 1204/1207 inserts can be used with the same holder by simply exchanging the shim

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
...1204-F	DCL S-4F	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	
...1207-F	DCL S-4F	DLS 4	DSP 4	TSS 42	SO 40050I	L-W 3	T 15	

TSRNR/L-F TSSNR/L-F

Combi Clamp T-holders for flat inserts



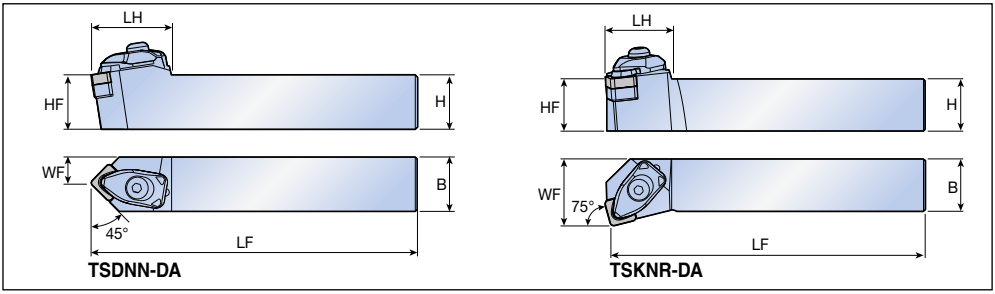
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
75°	**TSRNR/L**	**2525 M1204-F**	25	25	25	150	32	27	SNGN 1204...
		3232 P1204-F	32	32	32	170	32	35	
		2525 M1207-F	25	25	25	150	32	27	SNGN 1207...
		3225 P1207-F	32	32	25	170	32	27	
		3232 P1207-F	32	32	32	170	32	35	
45°	**TSSNR/L**	**2525 M1204-F**	25	25	25	150	35	32	SNGN 1204...
		3232 P1204-F	32	32	32	170	35	40	
		2525 M1207-F	25	25	25	150	35	32	SNGN 1207...
		3232 P1207-F	32	32	32	170	35	40	

▸ SNGN 1204/1207 inserts can be used with the same holder by simply exchanging the shim

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
...1204-F	DCL S-4F	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	
...1207-F	DCL S-4F	DLS 4	DSP 4	TSS 42	SO 40050I	L-W 3	T 15	

Combi Clamp T-holders for DA dimple inserts



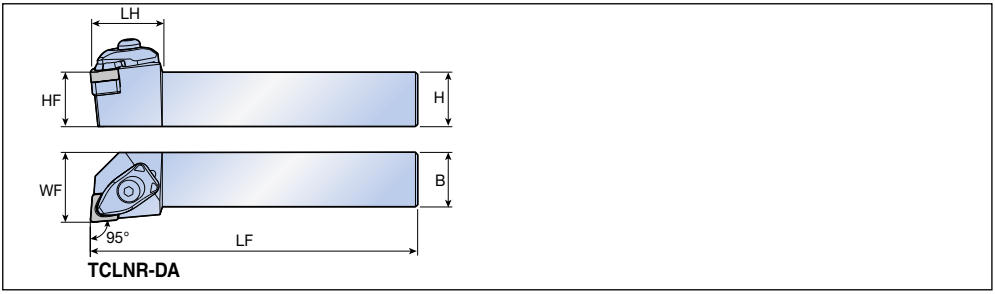
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**TSDNN**	**2525 M1204-DA**	25	25	25	150	37	12.5	SNGX 1204…DA
75°	**TSKNR/L**	**2525 M1204-DA**	25	25	25	150	29	32	SNGX 1204…DA

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...1204-DA	DCL S-4DA	DLS 5	DSP 5	TSS 44	SO 40050I	L-W 4	T 15	

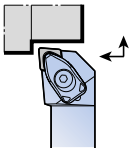
TCLNR/L-DA

Combi Clamp T-holders for DA dimple inserts



TCLNR-DA

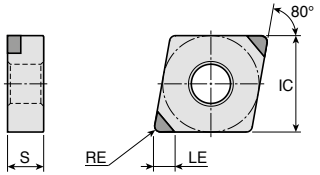
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
95°	**TCLNR/L 2525 M1204-DA**	25	25	25	150	33	32	CNGX 1204…DA



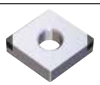
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
...1204-DA	DCL S-4DA	DLS 5	DSP 5	TSC 44	SO 40050I	L-W 4	T 15

Negative 80° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
09	9.52	3.18	0.8
12	12.7	4.76	0.4-1.6

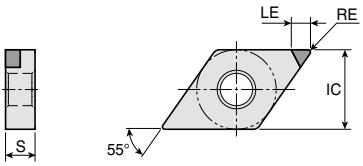
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
						TB610	TB650	TB670	TB730	TB7015	TB7020
	**CNGA**	**120404 WZ-LS2**	2.1	0.1-0.5	0.05-0.30	●	●	●			
		120408 WZ-LS2	2.1	0.1-0.5	0.05-0.30	●	●	●	●		
		120408 WZ-LS4	2.1	0.1-0.5	0.05-0.30	●	●	●			
		120412 WZ-LS2	2.5	0.1-0.5	0.05-0.30		●	●	●		
		120412 WZ-LS4	2.5	0.1-0.5	0.05-0.30			●			
	**CNGA**	**120404 LN**	4.2	0.1-0.5	0.05-0.30	●		●		●	
		120404 LS2	2.2	0.1-0.5	0.05-0.30	●	●	●	●	●	
		120404 LS4	2.2	0.1-0.5	0.05-0.30		●	●			
		120408 LN	4.0	0.1-0.5	0.05-0.30	●	●		●	●	
		120408 LN4	4.0	0.1-0.5	0.05-0.30		●				
		120408 LS2	2.1	0.1-0.5	0.05-0.30	●	●	●	●	●	
		120408 LS4	2.1	0.1-0.5	0.05-0.30		●	●	●	●	
		120412 LN	3.9	0.1-0.5	0.05-0.30	●		●		●	
		120412 LS2	2.5	0.1-0.5	0.05-0.30		●		●	●	
		120412 LS4	2.5	0.1-0.5	0.05-0.30			●	●		
 Solid CBN	**CNGN**	**090308 SD**	-	0.1-3.0	0.05-0.30						●
		120412 SD	-	0.1-4.0	0.05-0.30						●
		120416 SD	-	0.1-4.0	0.05-0.30						●
 Dimple type	**CNGX**	**120412 DA**	-	0.1-4.0	0.05-0.30						●
		120416 DA	-	0.1-4.0	0.05-0.30						●

▸ For edge preparations and land information, see page 269

●: Standard items

DNGA

Negative 55° rhombic inserts



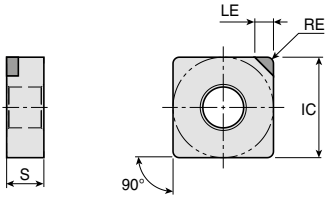
Size	Dimension (mm)		
	IC	S	RE
15	12.7	4.76-6.35	0.4-1.2

Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN									
						TB610	TB650	TB670	TB730	TB7015	TB7020				
	**DNGA**	**150404 LN**	4.2	0.1-0.5	0.05-0.30	●	●	●							
		150404 LS2	2.6	0.1-0.5	0.05-0.30	●	●	●							
		150404 LS4	2.6	0.1-0.5	0.05-0.30	●	●								
		150408 LN	3.9	0.1-0.5	0.05-0.30	●	●	●		●					
		150408 LS2	2.3	0.1-0.5	0.05-0.30	●	●	●	●						
		150408 LS4	2.3	0.1-0.5	0.05-0.30			●							
		150412 LN	3.5	0.1-0.5	0.05-0.30		●			●					
		150412 LS2	2.2	0.1-0.5	0.05-0.30			●	●						
		150412 LS4	2.2	0.1-0.5	0.05-0.30			●							
		150604 LN	4.2	0.1-0.5	0.05-0.30		●	●	●	●					
		150604 LS2	2.6	0.1-0.5	0.05-0.30	●	●	●	●						
		150608 LN	3.9	0.1-0.5	0.05-0.30	●	●	●	●						
		150608 LS2	2.3	0.1-0.5	0.05-0.30	●	●	●	●	●					
		150608 LS4	2.3	0.1-0.5	0.05-0.30			●							
		150612 LS2	2.2	0.1-0.5	0.05-0.30			●							

▸ For edge preparations and land information, see page 269

●: Standard items

Negative square inserts



Size	Dimension (mm)		
	IC	S	RE
09	9.52	3.18	1.2
12	12.7	4.76	0.4-1.6

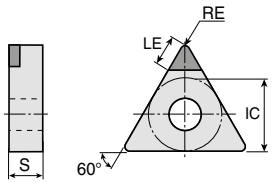
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
						TB610	TB650	TB670	TB730	TB7015	TB7020
	**SNGA**	**120404 LS2**	2.5	0.1-0.5	0.05-0.30			●	●		
		120408 LN	4.2	0.1-0.5	0.05-0.30		●			●	
		120408 LS2	2.5	0.1-0.5	0.05-0.30			●		●	
		120408 LS4	2.5	0.1-0.5	0.05-0.30			●			
		120408 LS8	2.5	0.1-0.5	0.05-0.30			●			
 Solid CBN	**SNGN**	**090312 SD**	-	0.1-3.0	0.05-0.30						●
		120416 SD	-	0.1-4.0	0.05-0.30						●
 Dimple type	**SNGX**	**120416 DA**	-	0.1-4.0	0.05-0.30						●

▸ For edge preparations and land information, see page 269

●: Standard items

TNGA

Negative triangular inserts



Size	Dimension (mm)		
	IC	S	RE
16	9.52	4.76	0.4-1.2

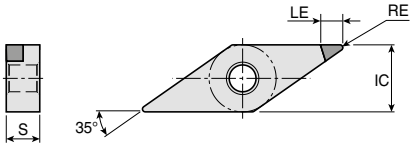
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
						TB610	TB650	TB670	TB730	TB7015	TB7020
	**TNGA**	**160404 LN**	4.3	0.1-0.5	0.05-0.30		●	●		●	
		160404 LS3	2.2	0.1-0.5	0.05-0.30	●		●	●		
		160404 LS6	2.2	0.1-0.5	0.05-0.30		●				
		160408 LN	4.0	0.1-0.5	0.05-0.30		●	●		●	
		160408 LS3	2.1	0.1-0.5	0.05-0.30	●	●	●	●	●	
		160408 LS6	2.1	0.1-0.5	0.05-0.30			●			
		160412 LS3	2.5	0.1-0.5	0.05-0.30			●			

▸ For edge preparations and land information, see page 269

●: Standard items

VNGA

Negative 35° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
16	9.52	4.76	0.4-0.8

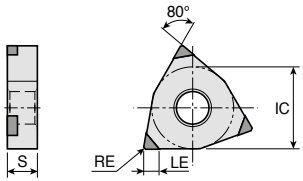
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN								
						TB610	TB650	TB670	TB730	TB7015	TB7020			
	**VNGA**	**160404 LN**	5.0	0.1-0.5	0.05-0.30		●							
		160404 LS	3.2	0.1-0.5	0.05-0.30		●							
		160404 LS2	3.2	0.1-0.5	0.05-0.30			●	●					
		160408 LN	4.1	0.1-0.5	0.05-0.30		●							
		160408 LS2	2.4	0.1-0.5	0.05-0.30	●	●	●	●					
		160408 LS4	2.4	0.1-0.5	0.05-0.30					●				

▸ For edge preparations and land information, see page 269

●: Standard items

WNGA

Negative 80° trigon inserts



Size	Dimension (mm)		
	IC	S	RE
06	9.52	4.76	0.8
08	12.7	4.76	0.8-1.2

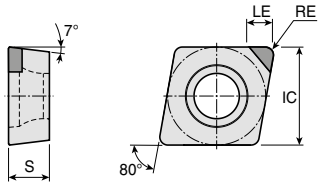
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN								
						TB610	TB650	TB670	TB730	TB7015	TB7020			
	**WNGA**	**060408 WZ-LS6**	2.1	0.05-0.50	0.05-0.30			●						
		080408 WZ-LS3	2.1	0.05-0.50	0.05-0.30	●	●	●						
		080408 WZ-LS6	2.1	0.05-0.50	0.05-0.30			●						
		080412 WZ-LS3	2.1	0.05-0.50	0.05-0.30			●						
	**WNGA**	**080408 LS3**	2.1	0.10-0.50	0.05-0.20			●						
		080408 LS6	2.1	0.10-0.50	0.05-0.20			●						

▸ For edge preparations and land information, see page 269

●: Standard items

CCGW

Positive 80° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
06	6.35	2.38	0.2-0.8
09	9.52	3.97	0.4-0.8
12	12.7	4.76	0.4-0.8

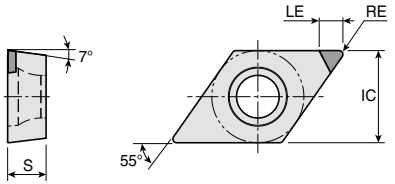
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
					TB610	TB650	TB670	TB730	TB7015	TB7020
	**CCGW 060202 LS**	2.4	0.05-0.5	0.05-0.30		●			●	
	060202 LS2	2.2	0.05-0.5	0.05-0.30			●	●		
	060204 LS	2.4	0.05-0.5	0.05-0.30		●			●	
	060204 LS2	2.1	0.05-0.5	0.05-0.30	●		●	●		
	060208 LS2	2.1	0.05-0.5	0.05-0.30	●		●	●		
	09T304 LS	2.4	0.05-0.5	0.05-0.30		●			●	
	09T304 LS2	2.4	0.05-0.5	0.05-0.30	●	●	●	●	●	
	09T304 WZ-LS	2.8	0.05-0.5	0.05-0.30		●				
	09T304 WZ-LS2	2.4	0.05-0.5	0.05-0.30			●	●		
	09T308 LS	2.3	0.05-0.5	0.05-0.30		●			●	
	09T308 LS2	2.3	0.05-0.5	0.05-0.30	●		●	●		
	09T308 WZ-LS	2.3	0.05-0.5	0.05-0.30		●				
	09T308 WZ-LS2	2.3	0.05-0.5	0.05-0.30		●		●		
	120404 LS2	2.1	0.05-0.5	0.05-0.30				●		
	120408 LS	2.5	0.05-0.5	0.05-0.30					●	
	120408 LS2	2.1	0.05-0.5	0.05-0.30				●		

▸ For edge preparations and land information, see page 269

●: Standard items

DCGW

Positive 55° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
07	6.35	2.38	0.2-0.8
11	9.52	3.97	0.4-0.8

Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
					TB610	TB650	TB670	TB730	TB7015	TB7020
	**DCGW 070202 LS**	2.6	0.05-0.5	0.05-0.30		●				
	070202 LS2	2.6	0.05-0.5	0.05-0.30	●		●	●		
	070204 LS	2.4	0.05-0.5	0.05-0.30		●			●	
	070204 LS2	2.4	0.05-0.5	0.05-0.30	●		●	●		
	070208 LS2	2.6	0.05-0.5	0.05-0.30				●		
	11T304 LS	2.6	0.05-0.5	0.05-0.30		●			●	
	11T304 LS2	3.4	0.05-0.5	0.05-0.30	●		●	●		
	11T308 LS	2.2	0.05-0.5	0.05-0.30		●			●	
	11T308 LS2	2.2	0.05-0.5	0.05-0.30	●		●	●		

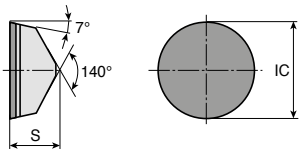
▸ For edge preparations and land information, see page 269

●: Standard items

TaeguTec
Member IMC Group

RCGX-FT

Positive round inserts



Size	Dimension (mm)	
	IC	S
06	6.35	3.18
09	9.52	3.18
12	12.7	4.76

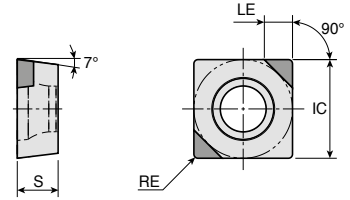
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
					TB610	TB650	TB670	TB730	TB7015	TB7020
 Full Top CBN	**RCGX 060300 FT**	-	0.10-1.50	0.05-0.30					●	
	090300 FT	-	0.10-1.50	0.05-0.30					●	
	120400 FT	-	0.10-1.50	0.05-0.30					●	

▸ For edge preparations and land information, see page 269

●: Standard items

SCGW

Positive square inserts



Size	Dimension (mm)		
	IC	S	RE
09	9.52	3.97	0.4-0.8

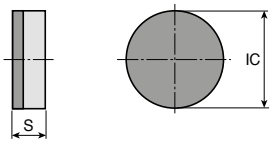
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
					TB610	TB650	TB670	TB730	TB7015	TB7020
	**SCGW 09T304 LS2**	2.7	0.05-0.50	0.05-0.30				●		
	09T308 LS2	2.7	0.05-0.50	0.05-0.30				●		

▸ For edge preparations and land information, see page 269

●: Standard items

RNGN-FT/SD

Negative round inserts



Size	Dimension (mm)	
	IC	S
09	9.52	3.18
12	12.7	3.18-4.76

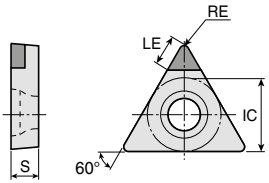
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
					TB610	TB650	TB670	TB730	TB7015	TB7020
 Full Top CBN	**RNGN 090300 FT**	-	0.10-1.00	0.05-0.30		●	●		●	
	120300 FT	-	0.10-1.50	0.05-0.30					●	
	120400 FT	-	0.10-1.50	0.05-0.30					●	
 Solid CBN	**RNGN 090300 SD**	-	0.10-2.00	0.05-0.30						●
	120400 SD	-	0.10-3.00	0.05-0.30						●

▸ For edge preparations and land information, see page 269

●: Standard items

TCGW TPGN TPGW

Positive triangular inserts



Size	Dimension (mm)		
	IC	S	RE
09	5.56	2.38	0.4-0.8
11	6.35	2.38-3.18	0.2-0.8
16	9.52	3.18-4.76	0.4-0.8

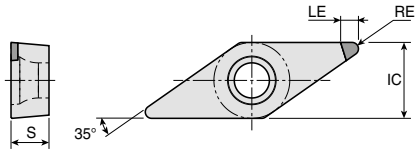
Insert	Designation		LE (mm)	ap (mm)	Feed (mm/rev)	CBN					
						TB610	TB650	TB670	TB730	TB7015	TB7020
	**TCGW**	**090204 LS3**	2.3	0.05-0.5	0.05-0.30			●	●		
		110204 LS	2.3	0.05-0.5	0.05-0.30		●			●	
		110204 LS3	2.3	0.05-0.5	0.05-0.30	●		●	●		
		110208 LS	2.1	0.05-0.5	0.05-0.30		●			●	
		110208 LS3	2.1	0.05-0.5	0.05-0.30			●	●		
		16T304 LS	2.8	0.05-0.5	0.05-0.30		●			●	
		16T304 LS3	2.8	0.05-0.5	0.05-0.30			●	●		
		16T308 LS	2.5	0.05-0.5	0.05-0.30		●			●	
		16T308 LS3	2.5	0.05-0.5	0.05-0.30	●		●	●		
	**TPGN**	**090204 LS3**	2.3	0.05-0.5	0.05-0.30	●					
		110302 LS3	2.8	0.05-0.5	0.05-0.30				●		
		110304 LS	2.6	0.05-0.5	0.05-0.30		●			●	
		110304 LS3	2.6	0.05-0.5	0.05-0.30				●		
		110308 LS3	2.3	0.05-0.5	0.05-0.30	●		●			
		160304 LS	2.8	0.05-0.5	0.05-0.30		●				
		160304 LS3	2.8	0.05-0.5	0.05-0.30	●		●			
		160308 LS	2.5	0.05-0.5	0.05-0.30		●				
		160308 LS3	2.5	0.05-0.5	0.05-0.30	●		●	●		
	**TPGW**	**090204 LS3**	2.3	0.05-0.5	0.05-0.30			●	●		
		090208 LS3	2.0	0.05-0.5	0.05-0.30			●			
		110302 LS3	2.8	0.05-0.5	0.05-0.30	●					
		110304 LS	2.6	0.05-0.5	0.05-0.30		●	●			
		110304 LS3	2.6	0.05-0.5	0.05-0.30	●			●		
		110308 LS3	2.3	0.05-0.5	0.05-0.30	●		●			
		160404 LS3	2.8	0.05-0.5	0.05-0.30			●			

▸ For edge preparations and land information, see page 269

●: Standard items

VBGW

Positive 35° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
11	6.35	3.18	0.4
16	9.52	4.76	0.2-0.8

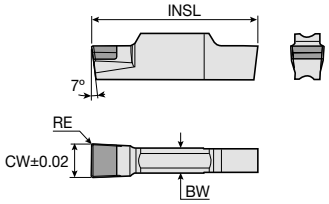
Insert	Designation	LE (mm)	ap (mm)	Feed (mm/rev)	CBN								
					TB610	TB650	TB670	TB730	TB7015	TB7020			
	**VBGW 110304 LS2**	3.2	0.05-0.5	0.05-0.30			●						
	160402 LS2	3.6	0.05-0.5	0.05-0.30			●						
	160404 LS	3.2	0.05-0.5	0.05-0.30		●			●				
	160404 LS2	3.2	0.05-0.5	0.05-0.30	●		●	●					
	160408 LS	2.3	0.05-0.5	0.05-0.30		●			●				
	160408 LS2	2.3	0.05-0.5	0.05-0.30	●		●	●					

▸ For edge preparations and land information, see page 269

●: Standard items

TSG-H

Single-ended CBN inserts for turning and grooving



Size	Dimension (mm)				
	CW	RE	BW	INSL	
2	2.0	0.2	1.7	20.0	
3	3.0	0.2	2.25	20.0	
4	4.0	0.2	3.0	20.0	
5	5.0	0.4	4.0	25.0	
6	6.0	0.4	5.0	25.0	
8	8.0	0.4	6.0	30.0	

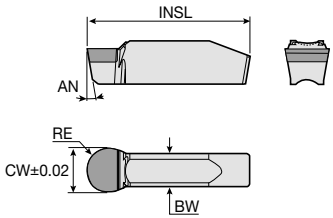
Insert	Designation	Insert seat size	Turning		Grooving	CBN						
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	
	**TSG 2.00H-0.20**	2	0.0-0.3	0.02-0.07	0.02-0.05				●			
	3.00H-0.20	3	0.0-0.3	0.02-0.07	0.02-0.05				●			
	4.00H-0.20	4	0.0-0.4	0.03-0.09	0.02-0.07				●			
	5.00H-0.40	5	0.0-0.5	0.05-0.13	0.03-0.10				●			
	6.00H-0.40	6	0.0-0.6	0.05-0.15	0.04-0.12				●			
	8.00H-0.40	8	0.0-0.8	0.07-0.20	0.05-0.16				●			

▸ For holder details, see pages 54 to 68

●: Standard items

TSG-H (Full-Radius)

Single-ended CBN inserts for turning, grooving and profiling



Size	Dimension (mm)				
	CW	RE	BW	INSL	AN
2	2.0	1.0	1.7	20.0	7
3	3.0	1.5	2.4	20.0	7
4	4.0	2.0	3.0	20.0	7
5	5.0	2.5	4.0	25.0	7
6	6.0	3.0	5.0	25.0	7
8	8.0	4.0	6.0	30.0	10

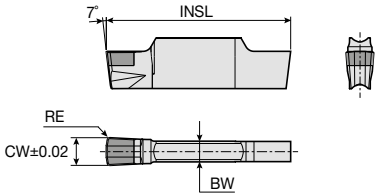
Insert	Designation	Insert seat size	Turning		Grooving	CBN						
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	
	**TSG 2.00H-1.00**	2	0.0-0.3	0.03-0.10	0.02-0.06				●			
	3.00H-1.50	3	0.0-0.3	0.03-0.10	0.02-0.06				●			
	4.00H-2.00	4	0.0-0.4	0.04-0.14	0.02-0.09				●			
	5.00H-2.50	5	0.0-0.5	0.05-0.18	0.03-0.11				●			
	6.00H-3.00	6	0.0-0.6	0.06-0.22	0.04-0.13				●			
	8.00H-4.00	8	0.0-0.8	0.08-0.29	0.05-0.17				●			

▸ For holder details, see pages 54 to 68

●: Standard items

TSG-HF

Single-ended CBN inserts for high feed turning



Size	Dimension (mm)				
	CW	RE	BW	INSL	
3	3.0	0.3	2.2	20	
5	5.0	0.3	4.0	25	

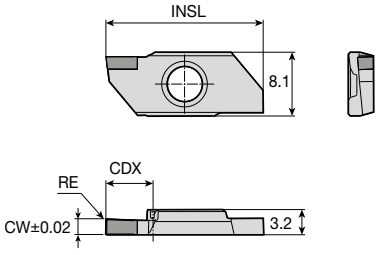
Insert	Designation	Insert seat size	Turning		CBN					
			ap (mm)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020
	**TSG 3.0-0.3-HF**	3	0.08-0.12	0.40-0.80				●		
	5.0-0.3-HF	5	0.08-0.12	0.40-1.20				●		

▸ For holder details, see pages 54 to 68

●: Standard items

TPHR/L

Single-ended inserts for turning and grooving



Size	Dimension (mm)				
	CW	RE	CDX		
210	1.0	0.10	3.5		
215	1.5	0.10	3.5		
220	2.0	0.10	4.0		

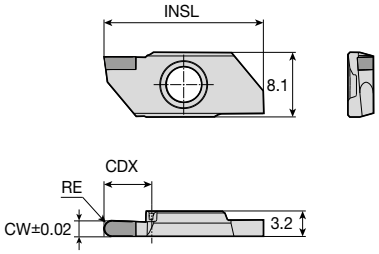
Insert	Designation	Turning		Grooving	CBN							
		ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	KB90	
	**TPHR/L 21010-T35**	0.0-0.2	0.01-0.04	0.01-0.04				●				
	21510-T35	0.0-0.2	0.01-0.04	0.01-0.04				●				
	22010-T40	0.0-0.3	0.02-0.07	0.02-0.05				●				

▸ For holder details, see pages 69 to 70

●: Standard items

TPHR/L (Full-Radius)

Single-ended inserts for turning and grooving



Size	Dimension (mm)				
	CW	RE	CDX		
210R	1.0	0.50	3.5		
215R	1.5	0.75	3.5		
220R	2.0	1.00	4.0		

Insert	Designation	Turning		Grooving	CBN							
		ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	KB90	
	**TPHR/L 210R-T35**	0.0-0.2	0.01-0.05	0.01-0.04				●				
	215R-T35	0.0-0.2	0.01-0.05	0.01-0.04				●				
	220R-T40	0.0-0.3	0.02-0.07	0.02-0.05				●				

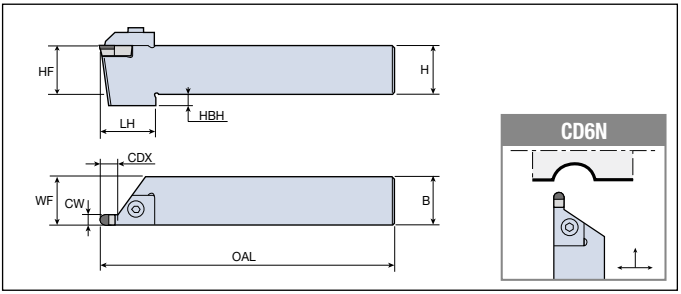
▸ For holder details, see pages 69 to 70

●: Standard items

CD6N CD8N

Holders

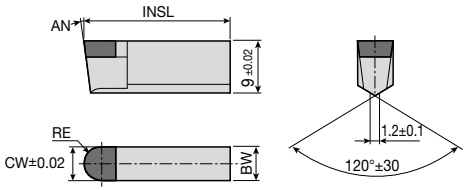




Designation	Dimension (mm)								Insert	Spare parts			
	H (HF)	B	OAL	LH	WF	CW	HBH	CDX		Clamp	Clamping screw	Shim screw	Wrench
CD6N -4040-S	40	40	240	45	40.5	6	10	11	CBN-3R	CBRS 06	CBRS 06	CBRS 06	L-W4
CD8N -4040-S	40	40	240	45	40.5	8	10	13	CBN-4R	CBRS 09	CBRS 09	CBRS 09	

CBN-R

Tailor-made inserts



Size	Dimension (mm)				
	CW	RE	BW	INSL	AN
2	4.0	2.0	4.0	25.0	6
3	6.0	3.0	6.0	25.0	6
4	8.0	4.0	8.0	25.0	6

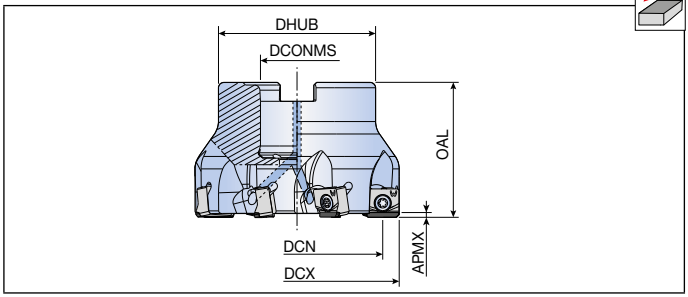
Insert	Designation	Insert seat size	Turning		Grooving	CBN								
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	TB610	TB650	TB670	TB2015	TB7015	TB7020	KB90		
	**CBN -2R**	2	0.0-0.4	0.04-0.14	0.02-0.09							●		
	-3R	3	0.0-0.6	0.06-0.22	0.04-0.13							●		
	-4R	4	0.0-0.8	0.08-0.29	0.05-0.17							●		

●: Available items

4W-TF90-12

Face mills for finishing





Designation		Dimension (mm)						Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DCX	DCN	DCONMS	DHUB	OAL	APMX					
4W-TF90-550-22R-12	5	50	38.9	22	45	40	0.5	●	A	0.4	SH M10x30-C	4WHU 1207...
663-22R-12	6	63	50.9	22	47	40	0.5	●	A	0.5	SH M10x30-C	
880-27R-12	8	80	66.9	27	58	50	0.5	●	A	1.1	SH M12x35-C	
8100-32R-12	8	100	86.9	32	66	50	0.5	●	A	1.6	SH M16x35-C	
10125-40R-12	10	125	110.9	40	85	63	0.5	●	A	3.1	SH M20x40-C	
10160-40R-12	10	160	145.9	40	110	63	0.5	x	C	4.1	-	

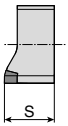
▸ DCN: Cutting diameter minimum ▸ DCX: Cutting diameter maximum

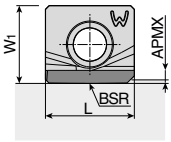
Spare parts

Designation	Screw	Wrench	Wrench handle		
					
4W-TF90-12	TS 40A115I	TBLD T15-W6	SW6-T		

4WHU

Inserts





Size	Dimension (mm)				
	L	W1	S	APMX	BSR
12-CBN	12	10.63	6.71	0.5	1000

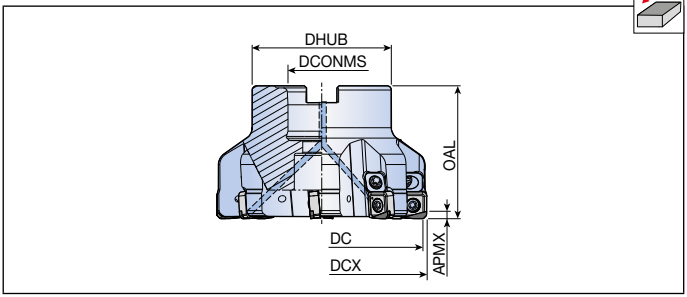
Insert	Designation	Recommended machining conditions		CBN										
		ap (mm)	Feed (mm/tooth)	TB610	TB650	TB670	TB2015	TB7015	TB7020					
	**4WHU 1207-CBN**	0.25-0.5	0.25-0.10					●						

●: Standard items

TFM90SNS-12

Face mills for finishing





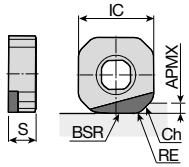
Designation		Dimension (mm)						Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DCX	DC	DCONMS	DHUB	OAL	APMX					
TFM90SNS 350-22R-12	3	50	43.35	22	45	50	1.0	●	A	0.5	SH M10x40	SNEX 1204...
463-22R-12	4	63	56.35	22	47	50	1.0	●	A	0.7	SH M10x40	
680-27R-12	6	80	73.35	27	58	50	1.0	●	A	1.0	SH M12x35	
8100-32R-12	8	100	93.35	32	66	63	1.0	●	A	2.0	SH M16x30	
12100-32R-12	12	100	93.35	32	66	63	1.0	●	A	2.0	SH M16x30	
10125-40R-12	10	125	118.35	40	85	63	1.0	x	B	2.9	-	
16125-40R-12	16	125	118.35	40	85	63	1.0	x	B	2.9	-	
12160-40R-12	12	160	153.35	40	110	63	1.0	x	C	4.4	-	
20160-40R-12	20	160	153.35	40	110	63	1.0	x	C	4.4	-	
16200-60R-12	16	200	193.35	60	130	63	1.0	x	C	6.0	-	
24200-60R-12	24	200	193.35	60	130	63	1.0	x	C	6.0	-	
30250-60R-12	30	250	243.35	60	160	63	1.0	x	C	10.8	-	

- Recommended for high-stability machining conditions in cast iron and steel
- Mounting bolt with coolant-through hole is available upon request (ordering example: SH M10x1.5x30-C)

Spare parts

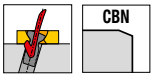
Designation	Screw	Adj. wedge	Adj. screw	Wrench	
TFM90SNS-12	TS 35C110I	AJS 1010R	AWS 0620	T-T15	

Inserts



CBN

Size	Dimension (mm)					
	IC	S	APMX	RE	BSR	Ch
1204R-CBN	12.7	4.76	1.0	0.8	250	1.5
1204R-CBN-T22	12.7	4.76	1	0.8	250	1.5
1204CR-T17	12.7	4.66	1	2	250	2.3



Insert	Designation	Recommended machining conditions		CBN						
		ap (mm)	Feed (mm/tooth)	TB610	TB650	TB670	TB2015	TB7015	TB7020	KB90
	**SNEX 1204R-CBN**	0.3-0.8	0.12-0.08					●		
	**SNEX 1204R-CBN-T22**	0.3-0.8	0.12-0.08					●		●
	**SNEX 1204CR-T17**	0.3-0.8	0.12-0.08					●		

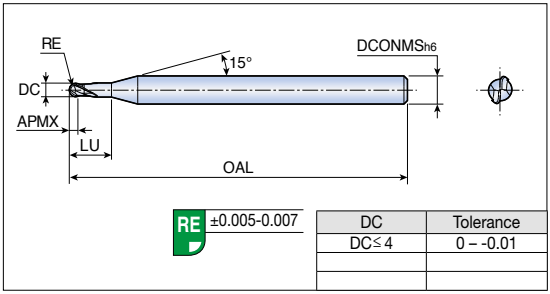
●: Standard items

HSB 2CBN

2-flute CBN ball

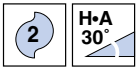






RE ±0.005-0.007

DC	Tolerance
DC≤4	0 – -0.01



Designation	Feed (mm/tooth)	Dimension (mm)						Grade
		DC	RE	OAL	APMX	LU	DCONMS	TB7015
HSB 2CBN 2004-1.5	0.007-0.009	0.4	0.2	48	0.3	1.5	4	●
2004-6.0	0.007-0.009	0.4	0.2	48	0.3	6.0	4	●
2006-1.5	0.013-0.014	0.6	0.3	48	0.5	1.5	4	●
2008-4.0	0.013-0.018	0.8	0.4	48	0.6	4.0	4	●
2010-2.5	0.022-0.028	1.0	0.5	48	0.7	2.5	4	●
2010-4.0	0.022-0.028	1.0	0.5	48	0.7	4.0	4	●
2010-6.0	0.022-0.028	1.0	0.5	48	0.7	6.0	4	●
2015-6.0	0.023-0.028	1.5	0.75	48	1.0	6.0	4	●
2020-1.2	0.032-0.040	2.0	1.0	50	1.2	-	4	●
2020-4.0	0.032-0.040	2.0	1.0	50	1.2	4.0	4	●
2040-8.0	0.035-0.040	4.0	2.0	66	2.4	8.0	6	●

●: Standard items



Ceramic Line

- Tool Selection Guide 164
- Turning 169
- Groove-Turn 217
- Milling 218
- End Mills 244







T T-Holder

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	40 x 40	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CNGA 12/16/19 CNMG 12**	75°		TCBNR/L					●	●		●							
		75°		TCKNR/L						●									
		95°		TCLNR/L TCLNR/L-TB					●	●	●	●							
		95°		A-TCLNR/L												●	●	●	●
	**DNGA 15 DNMG 15**	93°		TDJNR/L					●	●		●							
		93°		A-TDUNR/L													●	●	●
	**TNGA 16/22 TNMG 16**	91°		TTGNR/L					●	●									
		93°		TTJNR/L					●	●	●								
	**SNGA 12/19 SNMG 12**	45°		TSDNN					●	●	●	●							
		45°		TSSNR/L					●	●		●							
		75°		TSBNR						●		●	●						
		75°		TSKNR/L						●									
		75°		A-TSKNR/L												●			
	**VNGA 16/22**	93°		TVJNR/L					●	●		●							
		117.5°		TVQNR/L					●	●									
	**WNGA 08**	95°		TWLNR/L					●	●		●							
		95°		S-TWLNR/L A-TWLNR/L												●	●	●	

●: Standard items



T-F Flat T-Holder

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	40 x 40	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CNGN 12**	95°		TCLNR/L-F					●	●		●							

●: Standard items



T-F
Flat T-Holder

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**DNGN 15**	93°		TDJNR/L-F						●		●						
	**SNGN 12**	45°		TSDNN-F					●	●	●	●						
		75°		TSKNR/L-F						●		●						
		75°		TSRNR/L-F						●	●	●						
		45°		TSSNR/L-F						●		●						
	**TNGN 16**	93°		TTJNR/L-F					●	●								
	**RNGN 09/12**	45°		TRDNN-F					●	●	●	●						
		90°		TRGNR/L-F					●	●	●	●						
	**ENGN 13**	91°		TEGNR/L-F						●								
		97.5°		TEQNR/L-F						●								

●: Standard items



T-CH
CH dimple holder

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**CNGX 12**	75°		TCBNR/L-CH						●	●							
		75°		TCKNR/L-CH						●								
		95°		TCLNR/L-CH						●	●							
		95°		S-TCLNR/L-CH													●	●
	**DNGX 15**	62.5°		TDNNN-CH						●								
		95°		TDJNR/L-CH						●	●							
	**SNGX 12**	45°		TSSNR/L-CH						●		●						
	**VNGX 16**	72.5°		TVVNN-CH						●								
	**HNGX 05**	45°		THSNR/L-CH						●		●						

●: Standard items



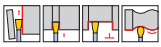
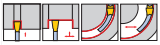
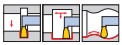
C Top clamp

					08 x 08	10 x 10	12 x 12	16 x 16	20 x 20	25 x 25	32 x 25	32 x 32	Ø08 x Ø16	Ø20	Ø25	Ø32	Ø40	Ø50
	**RCGX 06/09/12**	45°		CRDCN-120						●	●							
		45°		CRDCN-T								●						
		45°		CRDCR/L-T							●	●						
		90°		CRGCR/L-120						●	●							
	**TPGN 11/16/22**	90°		CTCPN					●	●								
		91°		CTFPR/L				●	●	●								
		91°		CTGPR/L			●	●	●	●		●						
		91°		S-CTFPR/L									●	●	●	●	●	●
	**SPGN 12**	45°		CSDPN					●	●								
		75°		S-CSKPR/L										●	●			
	**RPGN 06/12**																	
	**RPGX 09/12**																	
	**T11-**																	
	**LNU**																	
	**T32-**																	

●: Standard items

Ceramic Line

Groove-Turn

					16 x 16	20 x 20	25 x 25	32 x 32
TDGK CW : 3,4,5,6,8 	**External**		TTER/L 	CW-3	●	●	●	●
				CW-4	●	●	●	●
				CW-5		●	●	●
				CW-6		●	●	●
				CW-8			●	●
TDGK **(Full Radius)** CW : 3,4,5,6,8 			TGFR/L 	CW-3	●	●	●	
				CW-4	●	●	●	
				CW-5		●	●	
				CW-6		●	●	
		 TCAER/L TCAER/L-TB (CW : 3,4,5,6) 	TCAHR/L 	Holder		●	●	●
		 TCAFR/L (CW : 3,4,5,6) 	TCAHPR/L 	Holder		●	●	●
			C-TCAHN 	C-Adapter	C4 - C6			
			C-TCAHPN 	C-Adapter	C4 - C6			
	Internal		TTIR/L-C 	CW-3	Ø16 - Ø40			
				CW-4	Ø20 - Ø50			
				CW-5	Ø16 - Ø40			
				CW-6	Ø16 - Ø40			
				CW-8	Ø16 - Ø40			

▸ For holder details, see pages 54 to 68

●: Standard items

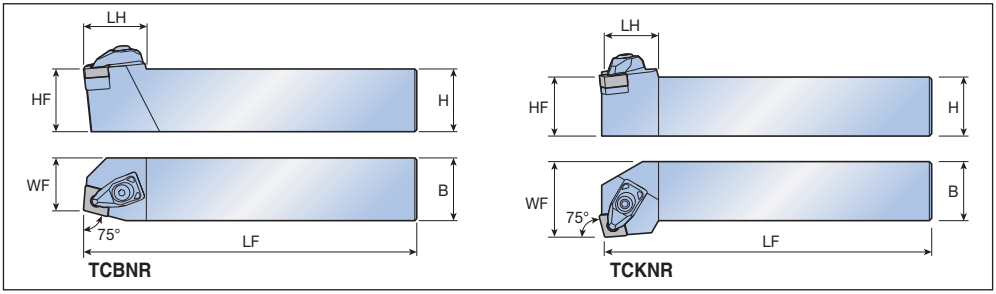
■ Milling

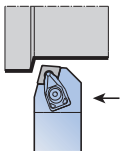
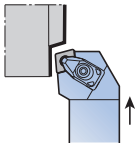
High Feed Mill		**BNGX 06**		TEBN-06CH TEBN-M-06CH
		BNGX 09		TEBN-09CH TFMBN-09CH
		**BNGX 12**		TFMBN-12
		**RNGN 12-FL**		TFMBN-12
		**RPGN 09/12-FL**		TERP-09 TERP-12
Face Mill		**HXKU 06/10** **43°**		12D-TF45-06 12D-TF45-10
		**SQKU 11/14** **43°**		8D-TF45-11 8D-TF45-14
		**XNHU 09** **45°**		14D-F45XN-09 14D-F45XNH-09
		**XNHU 09** **45°**		14D-F45XNW-09
		**SNGX 13** **SNKX 13** **90°**		TFM90SN
		**LNHX 13**		TFM88LN-13CE
Finish Mill		**SNEX 12**		TFM90SNS-12CB

■ End mills

MXCRF	6	Ø10- Ø16	
CRFB 6	6	Ø6 - Ø16	
CRF 4	4	Ø6 - Ø16	
CRF 6	6	Ø6 - Ø16	
CRH 4	4	Ø6 - Ø16	

T-holders

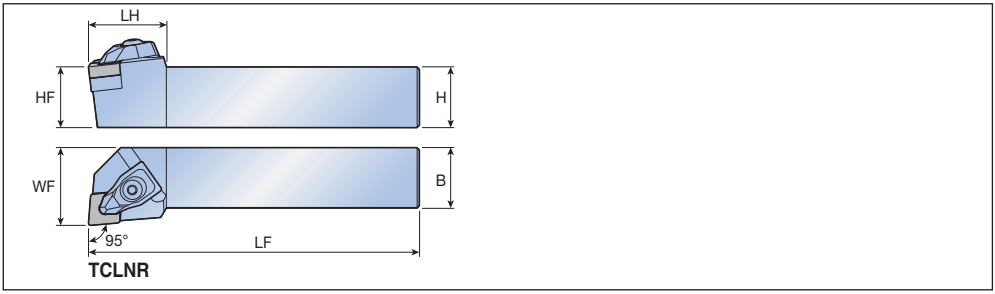


Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
75°	TCBNR/L	2020 K12	20	20	20	125	31	17.5	CN... 1204...
		2525 M12	25	25	25	150	32	22.5	
		3232 P12	32	32	32	170	32	27	
		3232 P19	32	32	32	170	42	27	CN... 1906...
75°	TCKNR/L	2525 M12	25	25	25	150	25	32	CN... 1204...
									

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw		Wrench	
								
...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	-	L-W 3	T 15
...19	DLM 6	DLS 5	DSP 5	LSC 63	-	SO 80180I	L-W 4	-

T-holders



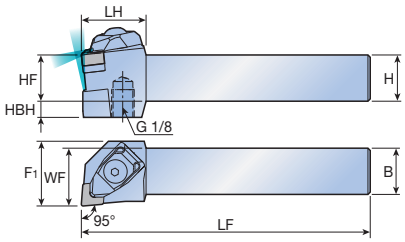
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TCLNR/L**	**2020 K12**	20	20	20	125	32	25	CN... 1204...
		2525 M12	25	25	25	150	32	32	
		3225 P12	32	32	25	170	32	32	
		3232 P12	32	32	32	170	32	40	
		2525 M16	25	25	25	150	36	32	CN... 1606...
		3232 P16	32	32	32	170	36	40	
		3232 P19	32	32	32	170	42	40	CN... 1906...

Spare parts

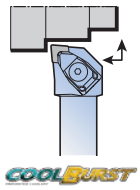
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw		Wrench	
...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	-	L-W 3	T 15
...16	DLM 5	DLS 5	DSP 5	TSC 54	SO 50090I	-	L-W 4	T 20
...19	DLM 6	DLS 5	DSP 5	LSC 63	-	SO 80180I	L-W 4	-

TCLNR/L-TB

T-holders



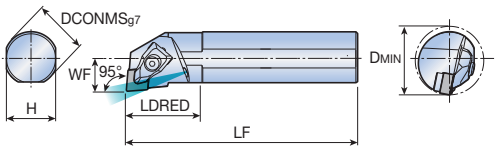
TCLNR-TB

Approach angle	Designation	Dimension (mm)							Insert
		H	HF	B	LF	LH	WF	HBH	
95°	**TCLNR/L 2525 M12-TB**	25	25	25	150	32	32	7	CN... 1204...
	**2525 M12-TB**	25	25	25	150	32	32	7	

Spare parts

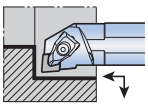
Designation	Clamp	Clamp screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim screw	Wrench	
									
... M12-TB	DLM 3NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x1.78	O-RING ID6.07x1.78	LSC 32 A	SO 40085I	L-W 3	T 15

T-holder type boring bars



A-TCLNR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**A25T TCLNR/L 12**	25	23	300	45	17	32	CN... 1204...
	A32T TCLNR/L 12	32	30	300	45	22	40	
	A40T TCLNR/L 12	40	37	300	45	27	50	
	A50U TCLNR/L 12	50	47	350	45	35	63	

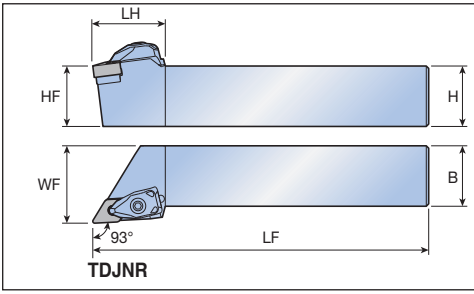


Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
A25T...12	DLM 4	DLS 4	DSP 4	LSC 42	TS 50A105I	NZ 62	L-W 3	T 20
A32T...12	DLM 4	DLS 4	DSP 4	LSC 42	TS 50A105I	NZ 62	L-W 3	T 20
A40T...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	NZ 104	L-W 3	T 15
A50U...12	DLM 4	DLS 4	DSP 4	TSC 44	SO 40050I	NZ 104	L-W 3	T 15

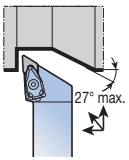
TDJNR/L

T-holders



TDJNR

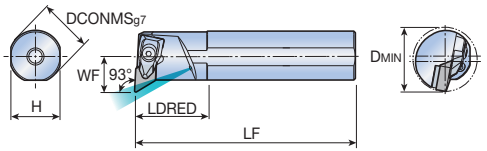
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**TDJNR/L**	**2020 K15**	20	20	20	125	39	25	DN... 1506...
		2525 M15	25	25	25	150	39	32	
		3232 P15	32	32	32	170	39	40	
		2020 K1504	20	20	20	125	39	25	DN... 1504...
		2525 M1504	25	25	25	150	39	32	



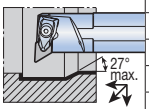
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...15	DLM 4	DLS 4	DSP 4	TSD 43	SO 40050I	L-W 3	T 15	
...1504	DLM 4	DLS 4	DSP 4	TSD 44	SO 40050I	L-W 3	T 15	

T-holder type boring bars



A-TDUNR

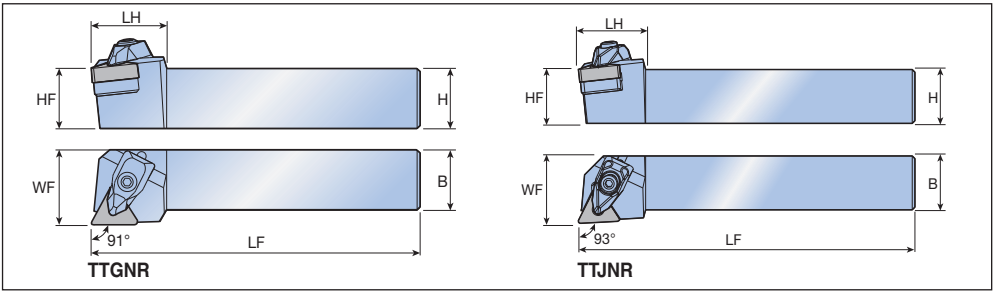
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
93°	**A32T TDUNR/L 15**	32	30	300	45	22	40	DN... 1506...
	**A40T TDUNR/L 15**	40	37	300	45	27	50	
	A50U TDUNR/L 15	50	47	350	45	35	63	

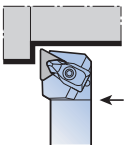
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A32T...15	DLM 4	DLS 4	DSP 4	LSD 42	TS 50A105I	NZ 62	L-W 3	T 20
...15	DLM 4	DLS 4	DSP 4	TSD 43	SO 40050I	NZ 104	L-W 3	T 15

TTGNR/L TTJNR/L

T-holders

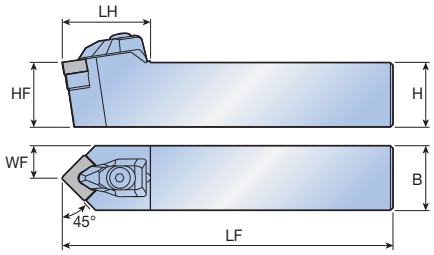


Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°/93°	**TTGNR/L**	**2020 K16**	20	20	20	125	25	25	TNGA 1604...
		**2525 M16**	25	25	25	150	25	32	
	TTJNR/L	**2020 K16**	20	20	20	125	25	25	
		2525 M16	25	25	25	150	25	32	
	TTJNL	**3225 M16**	32	32	32	150	25	32	

Spare parts

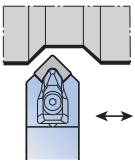
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16	DLM 3	DLS 3	DSP 3	TST 33	SO 35080I	L-W 2.5	T 15	

T-holders



TSDNN

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	TSDNN	2020 K12	20	20	20	125	34	10	SN... 1204...
		2525 M12	25	25	25	150	34	12.5	
		3225 P12	32	32	25	170	34	12.5	
		3232 P19	32	32	32	170	44	16	SN... 1906...

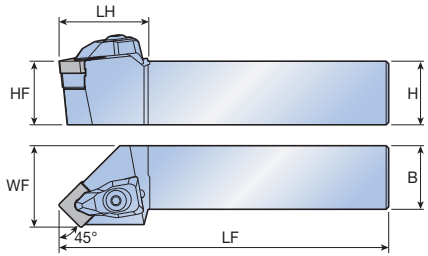


Spare parts

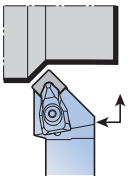
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw		Wrench	
								
...12	DLM 4	DLS 4	DSP 4	TSS 44	SO 40050I	-	L-W 3	T 15
...19	DLM 6	DLS 5	DSP 5	LSS 63	-	SO 80180I	L-W 4	-

TSSNR/L

T-holders



TSSNR

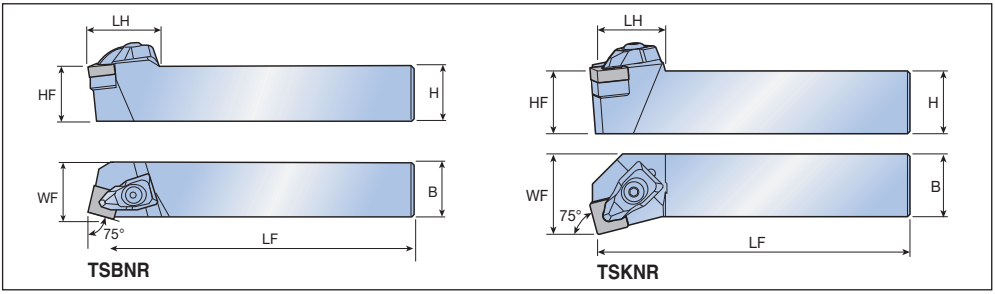
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
45°	**TSSNR/L 2020 K12**	20	20	20	125	35	25	SN... 1204...
	**2525 M12**	25	25	25	150	35	32	
	3232 P12	32	32	32	170	40	35	

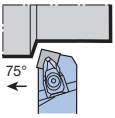
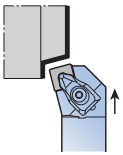
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
.. M12	DLM 4	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	

TSBNR TSKNR/L

T-holders



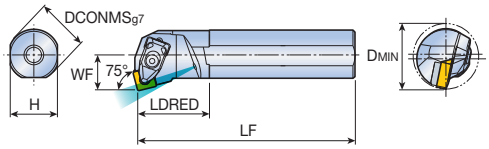
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
75°	**TSBNR**	**2525 M12**	25	25	25	150	33.8	22.86	SNGA 1204...
		**3232 P19**	32	32	32	170	43	31.7	SNGA 1906...
		4040 S19	40	40	40	250	43	39.7	
75°	**TSKNR/L**	**2525 M12**	25	25	25	150	27	32	SNGA 1204...
									

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
.. M12	DLM 4	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	
.. 19	DLM 6	DLS 5	DSP 5	LSS 63	SO 80180I	L-W 4	-	

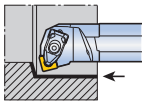
A-TSKNR/L

T-holder type boring bars



A-TSKNR

Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
75°	**A25T TSKNR/L 12**	25	23	300	45	17	32	SN... 1204...

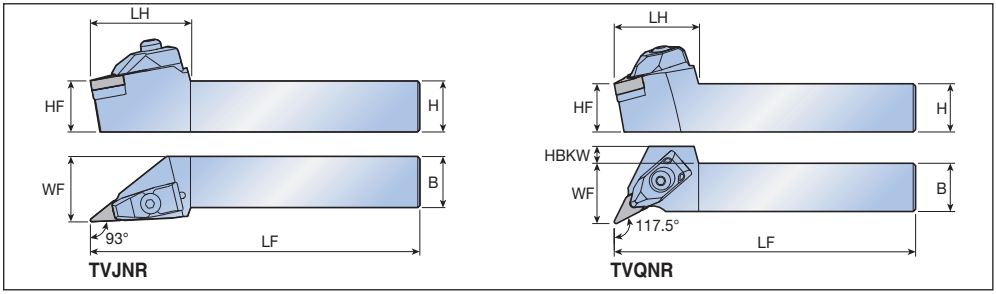


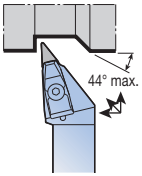
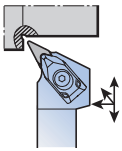
▸ L-hand insert for R-hand toolholder, R-hand insert for L-hand toolholder

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A25T ...12	DLM 4	DLS 4	DSP 4	LSS 42	TS 50A105I	NZ 62	L-W 3	T 20

T-holders

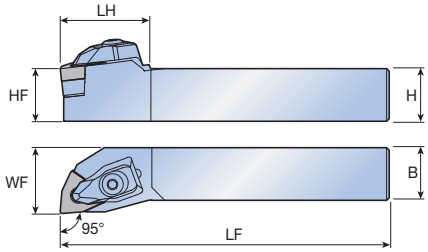


Approach angle	Designation		Dimension (mm)							Insert
			H	HF	B	LF	LH	WF		
93°	**TVJNR/L**	**2020 K16**	20	20	20	125	49	25		VNGA 1604...
		**2525 M16**	25	25	25	150	49	32		
		3232 P16	32	32	32	170	49	40		
117.5°	**TVQNR/L**	**2020 K16**	20	20	20	125	42	25	8	VNGA 1604...
		**2525 M16**	25	25	25	150	42	32	2	

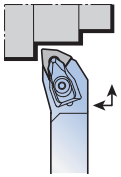
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16	DLM 3V	DLS 5	DSP 5	TSV 33	SO 35080I	L-W 4	T 15	

T-holders



TWLNR

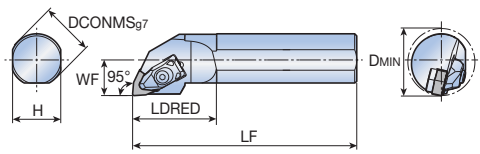
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TWLNR/L**	**2020 K08**	20	20	20	125	34.2	25	WNGA 0804...
		**2525 M08**	25	25	25	150	34.2	32	
		3232 P08	32	32	32	170	34.2	40	

Spare parts

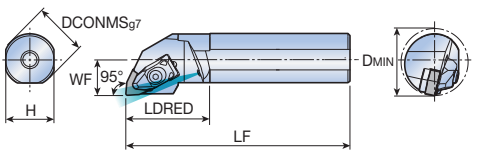
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...08	DLM 4	DLS 4	DSP 4	TSW 44	SO 40050I	L-W 3	T 15	

S-TWLNR/L A-TWLNR/L

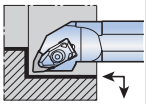
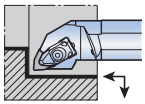
T-holder type boring bars



S-TWLNR



A-TWLNR

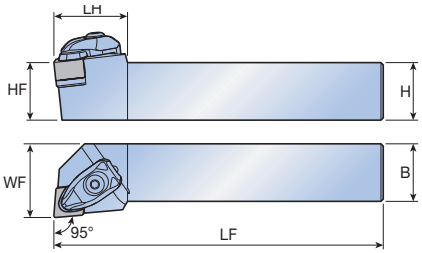
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**S25T TWLNR/L 08**	25	23	300	35	17	32	WNGA 0804...
	**S32T TWLNR/L 08**	32	30	300	45	22	40	
95°	**A25T TWLNR/L 08**	25	23	300	40	17	32	WNGA 0804...
	**A32T TWLNR/L 08**	32	30	300	45	22	40	
	A40T TWLNR/L 08	40	37	300	45	27	50	

Spare parts

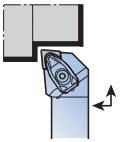
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
								
A20S...08	DLM 4	DLS 4	DSP 4	PSW 42	TS 50A105I	NZ 62	L-W 3	T 20
A40T...08	DLM 4	DLS 4	DSP 4	TSW 44	SO 40050I	NZ 104	L-W 3	T 15

TCLNR/L-F

Combi Clamp T-holders for flat inserts



TCLNR -F

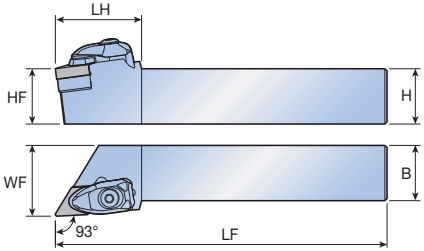
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TCLNR/L**	**2020 K1204-F**	20	20	20	125	32	25	CNGN 1204...
		**2525 M1204-F**	25	25	25	150	32	32	
		2020 K1207-F	20	20	20	125	32	25	CNGN 1207...
		2525 M1207-F	25	25	25	150	32	32	
		3232 P1207-F	32	32	32	170	32	40	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...1204-F	DCL S-4F	DLS 4	DSP 4	TSC 44	SO 40050I	L-W 3	T 15	
...1207-F	DCL S-4F	DLS 4	DSP 4	TSC 42	SO 40050I	L-W 3	T 15	

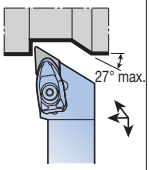
TDJNR/L-F

Combi Clamp T-holders for flat inserts



TDJNR-F

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
93°	**TDJNR/L**	**2525 M1504-F**	25	25	25	150	39	32	DNGN 1504...
		2525 M1507-F	25	25	25	150	39	32	DNGN 1507...
		3232 P1507-F	32	32	32	170	39	40	

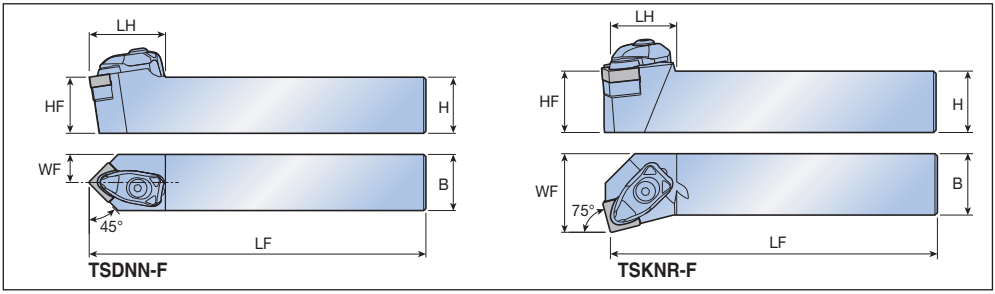


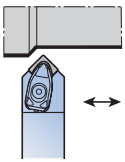
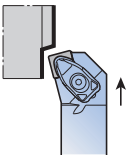
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...1504-F	DCL S-4F	DLS 4	DSP 4	TSD 44	SO 40050I	L-W 3	T 15	
...1507-F	DCL S-4F	DLS 4	DSP 4	TSD 42	SO 40050I	L-W 3	T 15	

TSDNN-F TSKNR/L-F

Combi Clamp T-holders for flat inserts

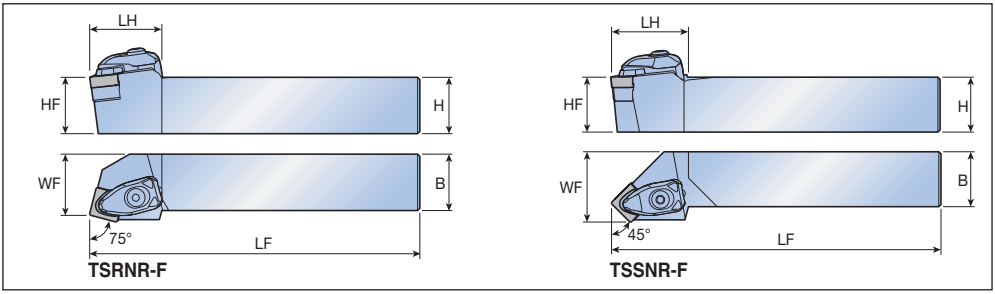


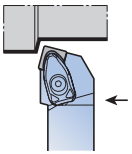
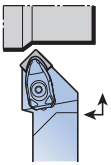
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**TSDNN**	**2020 K1204-F**	20	20	20	125	34	10	SNGN 1204...
		**2525 M1204-F**	25	25	25	150	34	12.5	
		2525 M1207-F	25	25	25	150	34	12.5	SNGN 1207...
		3225 P1207-F	32	32	25	170	34	12.5	
		3232 P1207-F	32	32	32	170	34	16	
75°	**TSKNR/L**	**2525 M1204-F**	25	25	25	150	27	32	SNGN 1204...
		**3232 P1204-F**	32	32	32	170	27	40	
		2525 M1207-F	25	25	25	150	27	32	SNGN 1207...
		3232 P1207-F	32	32	32	170	27	40	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...1204-F	DCL S-4F	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	
...1207-F	DCL S-4F	DLS 4	DSP 4	TSS 42	SO 40050I	L-W 3	T 15	

Combi Clamp T-holders for flat inserts



Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
75°	**TSRNR/L**	**2525 M1204-F**	25	25	25	150	32	27	SNGN 1204...
		**3232 P1204-F**	32	32	32	170	32	35	
		2525 M1207-F	25	25	25	150	32	27	SNGN 1207...
		3225 P1207-F	32	32	25	170	32	27	
		3232 P1207-F	32	32	32	170	32	35	
45°	**TSSNR/L**	**2525 M1204-F**	25	25	25	150	35	32	SNGN 1204...
		**3232 P1204-F**	32	32	32	170	35	40	
		2525 M1207-F	25	25	25	150	35	32	SNGN 1207...
		3232 P1207-F	32	32	32	170	35	40	

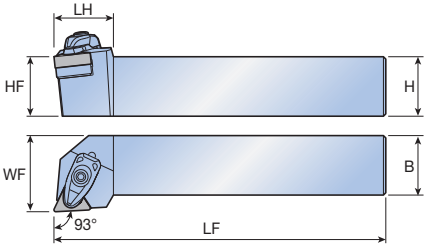
▸ SNGN 1204/1207 inserts can be used with the same holder by simply exchanging the shim

Spare parts

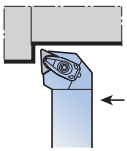
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...1204-F	DCL S-4F	DLS 4	DSP 4	TSS 44	SO 40050I	L-W 3	T 15	
...1207-F	DCL S-4F	DLS 4	DSP 4	TSS 42	SO 40050I	L-W 3	T 15	

TTJNR/L-F

Combi Clamp T-holders for flat inserts



TTJNR-F

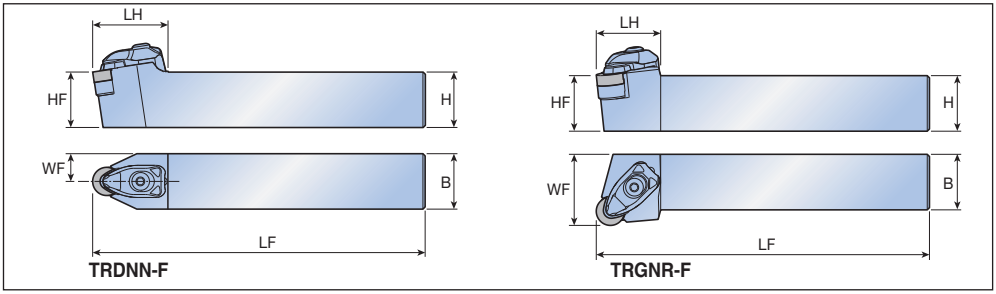
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
93°	**TTJNR/L 2020 K1604-F**	20	20	20	125	25	25	TNGN 1604...
	**2525 M1604-F**	25	25	25	150	25	32	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16-F	DCL S-3F	DLS 3	DSP 3	TST 33	SO 40050I	L-W 3	T 15	

TRDNN-F TRGNR/L-F

Combi Clamp T-holders for flat inserts



Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	TRDNN	2525 M0903-F	25	25	25	150	27	12.5	RNGN 0903...
		2020 K1204-F	20	20	20	125	34	10	RNGN 1204...
		2525 M1204-F	25	25	25	150	34	12.5	
		2020 K1207-F	20	20	20	125	34	10	RNGN 1207...
		2525 M1207-F	25	25	25	150	34	12.5	
		3225 P1207-F	32	32	25	170	34	12.5	
		3232 P1207-F	32	32	32	170	34	16	
90°	TRGNR/L	2525 M0903-F	25	25	25	150	29	32	RNGN 0903...
		2020 K1204-F	20	20	20	125	29	25	RNGN 1204...
		2525 M1204-F	25	25	25	150	29	32	
		2020 K1207-F	20	20	20	125	29	25	RNGN 1207...
		2525 M1207-F	25	25	25	150	29	32	
		3225 P1207-F	32	32	25	170	29	32	
		3232 P1207-F	32	32	32	170	29	40	

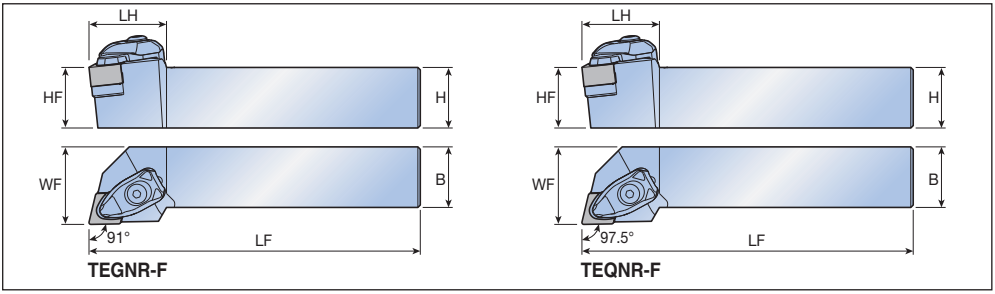
▸ SNGN 1204/1207 inserts can be used with the same holder by simply exchanging the shim

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim		Shim screw	Wrench	
...0903-F	DCL S-3F	DLS 3	DSP 3	LSR 32	-	SO 40085I	L-W 2.5	T 15
...1204-F	DCL S-4F	DLS 4	DSP 4	-	TSR 45	SO 40050I	L-W 3	T 15
...1207-F	DCL S-4F	DLS 4	DSP 4	-	TSR 43	SO 40050I	L-W 3	T 15

TEGNR/L-F TEQNR/L-F

Combi Clamp T-holders for flat inserts



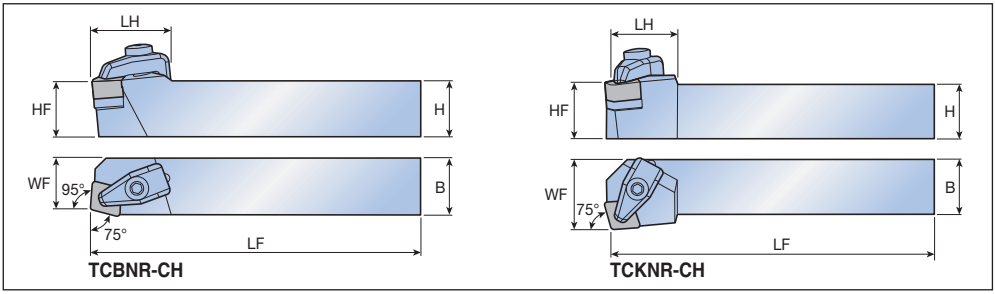
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
91°	**TEGNR/L 2525 M1307-F**	25	25	25	150	32	23	ENGN 1307...
97.5°	**TEQNR/L 2525 M1307-F**	25	25	25	150	32	23	ENGN 1307...

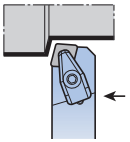
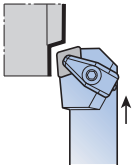
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
...1307-F	DCL S-4F	DLS 4	DSP 4	E 43	BH M5x0.8x10	L-W 3		

TCBNR/L-CH TCKNR/L-CH

T-holders for CH dimple insert



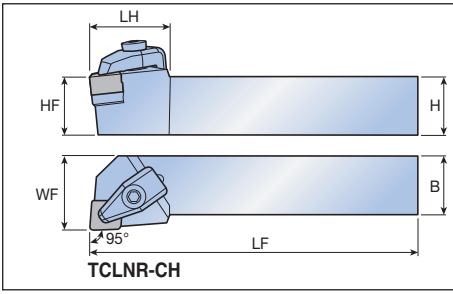
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
75°	**TCBNR/L 2525 M12-CH**	25	25	25	150	34.7	23	CNGX 1207...CH
	**3225 P12-CH**	32	32	25	170	34	24	
75°	**TCKNR/L 2525 M12-CH**	25	25	25	150	28	32	CNGX 1207...CH
								

Spare parts

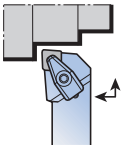
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
...12-CH	CCL-4	CSC 4	DSP 5	TSC 43	SO 40050I	L-W 4	T 15

TCLNR/L-CH

T-holders for CH dimple insert



TCLNR-CH

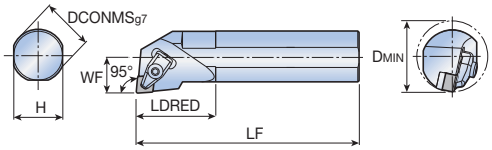
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
95°	**TCLNR/L**	**2525 M12-CH**	25	25	25	150	33	32	CNGX 1207...CH
		**3225 P12-CH**	32	32	25	170	33	32	

Spare parts

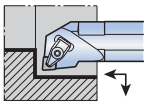
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
...12-CH	CCL-4	CSC 4	DSP 5	TSC 43	SO 40050I	L-W 4	T 15

S-TCLNR/L-CH

T-holder type boring bars for CH dimple insert



S-TCLNR-CH

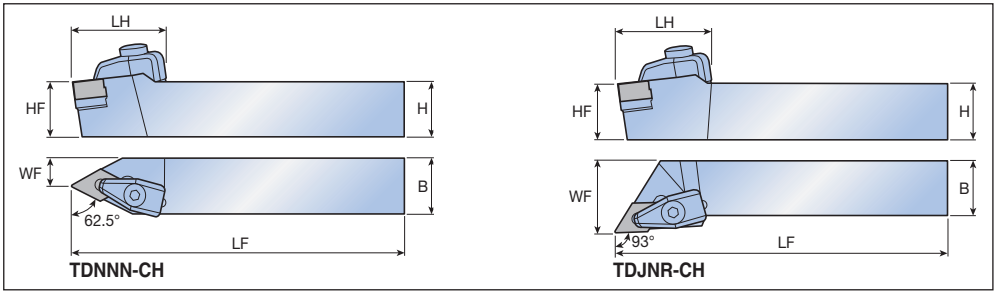
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
95°	**S40T TCLNR/L 1207-CH**	40	37	300	50	27	70	CNGX 1207...CH
	**S50U TCLNR/L 1207-CH**	50	47	350	50	32	70	

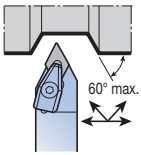
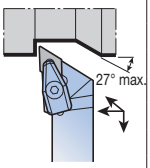
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
...1207-CH	CCL 4	CSC 4	DSP 5	TSC 43	SO 40050I	L-W 4	T 15

TDNNN-CH TDJNR/L-CH

T-holders for CH dimple insert



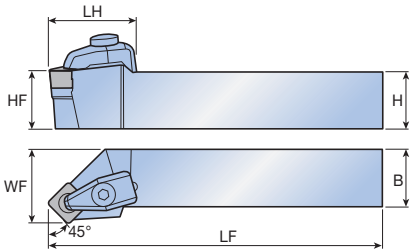
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
62.5°	**TDNNN**	**2525 M15-CH**	25	25	25	150	40	12.5	DNGX 1507...CH
									
93°	**TDJNR/L**	**2525 M15-CH**	25	25	25	150	38	32	DNGX 1507...CH
		**3225 P15-CH**	32	32	25	170	38	32	

Spare parts

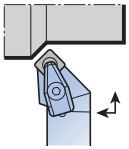
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
							
...15-CH	CCL-4	CSC 4	DSP 5	TSD 43	SO 40050I	L-W 4	T 15

TSSNR/L-CH

T-holders for CH dimple insert



TSSNR-CH

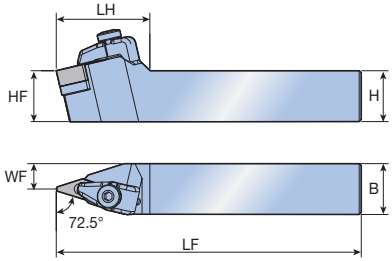
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
45°	**TSSNR/L 2525 M12-CH**	25	25	25	150	35	32	SNGX 1207...CH
	**3232 P12-CH**	32	32	32	170	35	40	

Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...12-CH	CCL-4	CSC 4	DSP 5	TSS 43	SO 40050I	L-W 4	T 15	

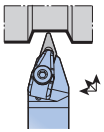
TVVNN-CH

T-holders for CH dimple insert



TVVNN-CH

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
72.5°	**TVVNN**	**2525 M16-CH**	25	25	25	150	46	12.5	VNGX 1607...CH

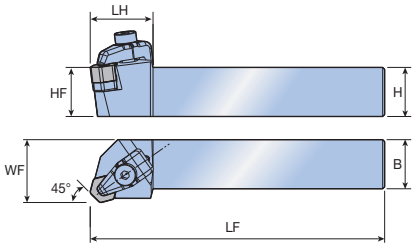


Spare parts

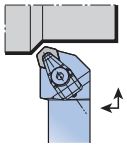
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...16-CH	CCL-4	CSC 4	DSP 5	TSH 43	BH M4X0.7X10	L-W 4		

THSNR/L-CH

T-holders for CH dimple insert



THSNR-CH

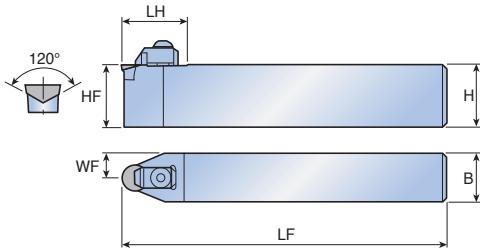
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
45°	**THSNR/L 2525 M05-CH**	25	25	25	150	32	32	HNGX 0507...CH
	**THSNRL 3232 M05-CH**	32	32	32	150	35	40	

Spare parts

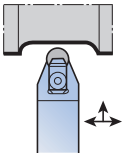
Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench		
								
...05-CH	CCL-4	CSC 4	DSP 5	TSH 44	SO 40050I	L-W 3	T 15	

CRDCN-120

Top clamp type holders for V-bottom insert



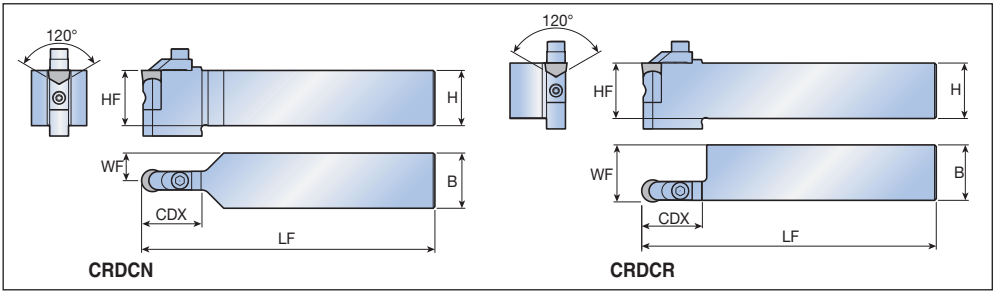
CRDCN-120

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
45°	**CRDCN**	**2525 M06-120**	25	25	25	150	28	12.5	RCGX 0606...
		**3225 P06-120**	32	32	25	170	28	12.5	
		3225 P09-120	32	32	25	170	30	12.5	RCGX 0907...
		3225 P12-120	32	32	25	170	32	12.5	RCGX 1207...

Spare parts

Designation	Clamp	Clamp screw	Shim	Shim screw		Wrench	
							
...06-120	BCL 6-20A	BH M6x1x25	CERS 06	SO 22050I	-	L-W 4	T 7
...09-120	BCL 6-20A	BH M6x1x25	CERS 09	-	BH M2.5x0.45x10	L-W 4, L-W 1.5	-
...12-120	BCL 6	BH M6x1x25	CERS 12	-	BH M2.5x0.45x10	L-W 4, L-W 1.5	-

Narrow top clamp type holders for V-bottom insert



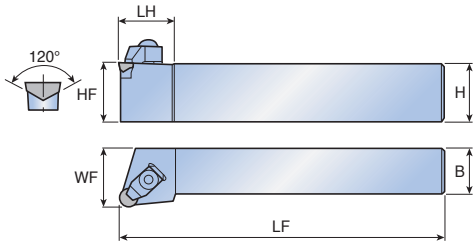
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	CDX	WF	
45°	CRDCN	3232 P0907-120-T30	32	32	32	170	30	16	RCGX 0907…
		3232 P1207-120-T35	32	32	32	170	35	16	RCGX 1207…
45°	CRDCR/L	3232 P0907-120-T30	32	32	32	170	30	32.8	RCGX 0907…
	CRDCR	3225 P0907-120-T30	32	32	25	170	30	32.8	
	CRDCL	3232 P1207-120-T35	32	32	32	170	35	32.9	RCGX 1207…

Spare parts

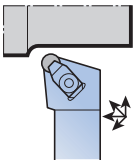
Designation	Clamp	Clamp screw	Shim	Shim screw	Wrench	
...0907...	HCL 09-M	SH M5X0.8X12	CERS 09-T	SO 35124I	L-W 4	T 15
...1207...	HCL 12-M	SH M6X1X16	CERS 12-T	TS 40140AJ/HG	L-W 5	T 20

CRGCR/L-120

Top clamp type holders for V-bottom insert



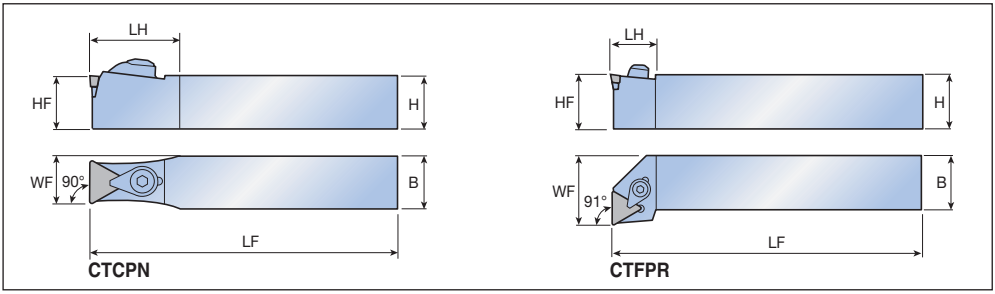
CRGCR-120

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
90°	**CRGCR/L**	**2525 M06-120**	25	25	25	150	28	32	RCGX 0606...
		**3225 P06-120**	32	32	25	170	28	32	
		3225 P09-120	32	32	25	170	30	32	RCGX 0907...
		3225 P12-120	32	32	25	170	32	32	RCGX 1207...

Spare parts

Designation	Clamp	Clamp screw	Shim	Shim screw		Wrench	
							
...06...	BCL 6-20A	BH M6x1x25	CERS 06	SO 22050I	-	L-W 4	T 7
...09...	BCL 6-20A	BH M6x1x25	CERS 09	-	BH M2.5x0.45x10	L-W 4, L-W 1.5	-
...12...	BCL 6	BH M6x1x25	CERS 12	-	BH M2.5x0.45x10	L-W 4, L-W 1.5	-

Top clamp type holders



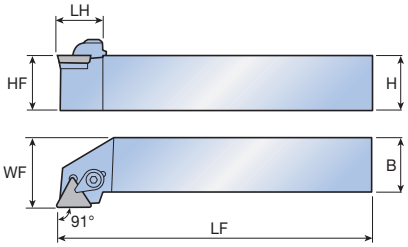
Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
90°	**CTCPN**	**2009 K11**	20	20	9	125	20	9.4	TPGN 1103...
		2513 Q16	25	25	13	180	30	14.1	TPGN 1603...
		2525 M22	25	25	25	150	50	19.4	TPGN 2204...
91°	**CTFPR/L**	**1616 H11**	16	16	16	100	14.4	20	TPGN 1103...
		2020 K11	20	20	20	125	16	25	
		2020 K16	20	20	20	125	20	25	TPGN 1603...
		2525 M16	25	25	25	150	20	32	

Spare parts

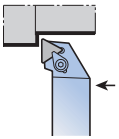
Designation	Clamp			Screw		Shim	Shim pin	Snap ring	Wrench
CTCPN...11	CL 2C	-	-	CLS 2C	-	-	-	CSR 2C	L-W 2.5
CTCPN...16	CL 3C	-	-	CLS 3C	-	CST 32	CSP 3	CSR 2	L-W 3
CTCPN...22	-	CLM 12	-	-	XNSM 0825	CST 43	CSP 16K	CSR 4	L-W 4
CTFPR/L...11	-	-	CL 2	CLS 2	-	-	-	CSR 2	L-W 2.5
CTFPR/L...16	-	-	CL 3	CLS 3	-	CST 32	CSP 3	WSR 4	L-W 3

CTGPR/L

Top clamp type holders



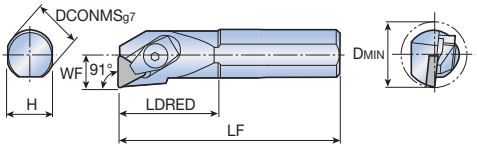
CTGPR

Approach angle	Designation		Dimension (mm)						Insert
			H	HF	B	LF	LH	WF	
91°	**CTGPR/L**	**1212 F11**	12	12	12	80	19	16	TPGN 1103...
		**1616 H11**	16	16	16	100	18	20	
		2020 K11	20	20	20	125	19	25	
		2020 K16	20	20	20	125	25	25	TPGN 1603...
		2525 M16	25	25	25	150	25	32	
		2525 M22	25	25	25	150	30	32	TPGN 2204...
		3232 P22	32	32	32	170	30	40	

Spare parts

Designation	Clamp	Screw	Shim	Shim pin	Snap ring	Wrench		
								
...11	CL 2	CLS 2	-	-	CSR 2	L-W 2.5		
...16	CL 3	CLS 3	CST 32	CSP 3	WSR 4	L-W 3		
...22	CL 4	CLS 4	CST 43	CSP 16K	CSR 4	L-W 4		

Top clamp type boring bars



S-CTFPR

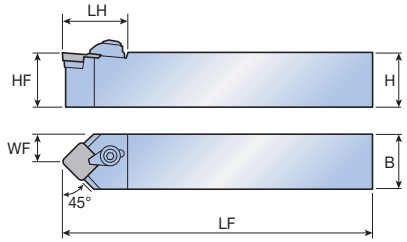
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
91°	**S12M CTFPR/L 11**	12	11	150	30	9	16	TPGN 1103...
	S16R CTFPR/L 11	16	15	200	30	11	20	
	S20S CTFPR/L 11	20	18	250	35	13	25	
	S16R CTFPR/L 16	16	15	200	40	11	20	TPGN 1603...
	S20S CTFPR/L 16	20	18	250	50	13	25	
	S25T CTFPR/L 16	25	23	300	40	17	32	
	S32T CTFPR/L 16	32	30	300	45	22	40	
	S40T CTFPR/L 16	40	37	300	41.5	27	50	
	S50U CTFPR/L 16	50	47	350	56	35	63	
	S40T CTFPR/L 22	40	37	300	41.5	27	50	TPGN 2204...
	S50U CTFPR/L 22	50	47	350	56	35	63	

Spare parts

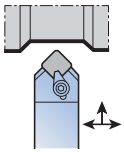
Designation	Clamp		Screw	Snap ring	Shim	Shim pin	Wrench	
								
...11	CL 2C	-	CLS 2C	CSR 2C	-	-	L-W 2.5	
S16R...16	CL 3C	-	CLS 3C	CSR 2	-	-	L-W 3	
S20S...16	CL 3C	-	CLS 3C	CSR 2	-	-	L-W 3	
S25T...16	-	CL 3	CLS 3S	WSR 4	-	-	L-W 3	
...16	-	CL 3	CLS 3	WSR 4	CST 32	CSP 3	L-W 3	
...22	-	CL 4	CLS 4	CSR 4	CST 43	CSP 16K	L-W 4	

CSDPN

Top clamp type holders



CSDPN

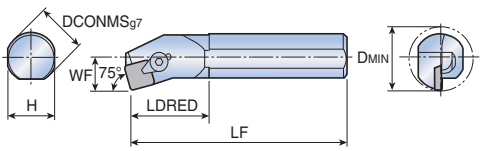
Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
45°	CSDPN 2020 K12	20	20	20	125	29	10	SPGN 1203...
	2525 M12	25	25	25	150	29	12.5	

Spare parts

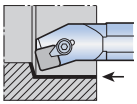
Designation	Clamp	Screw	Shim	Shim pin	Snap ring	Wrench		
								
...12	CL 3	CLS 3	CSS 42	CSP 3	WSR 4	L-W 3		

S-CSKPR/L

Top clamp type boring bars



S-CSKPR

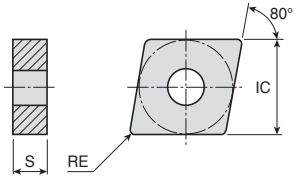
Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
75°	S20R CSKPR/L 12	20	18	200	34	13	25	SPGN1203...
	S25T CSKPR/L 12	25	23	300	42	17	32	

Spare parts

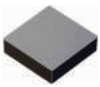
Designation	Clamp		Screw	Snap ring	Shim	Shim pin	Wrench	
								
S20R...12	CL 3C	-	CLS 3C	CSR 2	CSS 42	CSP 3	L-W 3	
S25T ...12	-	CL 3	CLS 3S	WSR 4	CSS 42	CSP 3	L-W 3	

CNGA CNGN

Negative 80° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
12	12.7	4.76	0.4-1.6
16	15.88	6.35	0.8-1.6
19	19.05	6.35	0.8-1.2

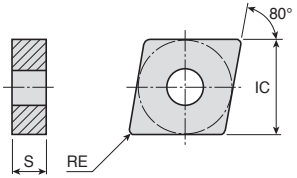
Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**CNGA**	**120404**	0.1-3.0	0.05-0.15	●	●	●							
		120404 T2	0.1-3.0	0.05-0.15			●							
		120404 T7	0.1-3.0	0.05-0.15					●					
		120404 T7-WZ	0.1-3.0	0.05-0.15	●									
		120408	0.1-3.0	0.05-0.20	●	●	●		●	●	●			
		120408 E	0.1-3.0	0.05-0.20								●	●	●
		120408 S7	0.1-3.0	0.05-0.20	●									
		120408 T2	0.1-3.0	0.05-0.20		●	●							
		120408 T6	0.1-3.0	0.05-0.20		●						●	●	●
		120408 T6-WZ	0.1-3.0	0.05-0.20							●			
		120408 T7	0.1-3.0	0.05-0.20				●	●					
		120408 T7-WZ	0.1-3.0	0.05-0.20	●	●								
		120412	0.1-3.0	0.05-0.25	●	●	●			●	●			
		120412 T2	0.1-3.0	0.05-0.25		●								
		120412 T6-WZ	0.1-3.0	0.05-0.25						●				
		120412 T7	0.1-3.0	0.05-0.25					●					
		120412 T7-WZ	0.1-3.0	0.05-0.25	●	●								
		120416	0.1-3.0	0.05-0.30		●	●			●	●			
		160608	0.1-3.5	0.05-0.20		●								
		160612	0.1-3.5	0.05-0.25			●							
		160616	0.1-3.5	0.05-0.30			●							
		190608	0.1-4.5	0.05-0.20			●							
		190612	0.1-4.5	0.05-0.25			●							
	**CNGN**	**120404**	0.1-3.0	0.05-0.15			●							
		120404 T6	0.1-3.0	0.05-0.15								●		
		120408	0.1-3.0	0.05-0.20	●	●	●				●			
		120408 E	0.1-3.0	0.05-0.20								●	●	●
		120408 T6	0.1-3.0	0.05-0.20								●		
		120408 T7	0.1-3.0	0.05-0.20					●					
		120412 E	0.1-3.0	0.05-0.25								●	●	●
		120412 T6	0.1-3.0	0.05-0.25								●		
		120412 T7	0.1-3.0	0.05-0.25				●						
		120416	0.1-3.0	0.05-0.30							●			
		120416 T6	0.1-3.0	0.05-0.30								●		

▸ For edge preparations and land information, see page 270

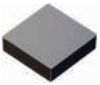
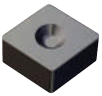
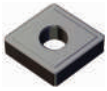
●: Standard items

CNGN CNGX-CH CNMG-CE

Negative 80° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
12	12.7	4.76-7.94	0.4-1.6

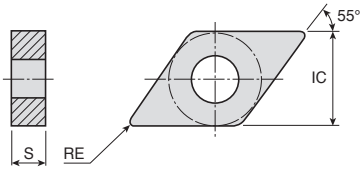
Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic										
					AB2010	AB20	AB30	AW120	SC500	AS500	SC10	AS10	TC430	TC3020	TC3030
	**CNGN**	**120708**	0.1-3.0	0.05-0.20	●	●	●								
		120708 E	0.1-3.0	0.05-0.20									●	●	●
		120708 T6	0.1-3.0	0.05-0.20									●	●	●
		120712	0.1-3.0	0.05-0.25			●					●			
		120712 E	0.1-3.0	0.05-0.25									●	●	●
		120712 T6	0.1-3.0	0.05-0.25									●	●	●
		120712 T7	0.1-3.0	0.05-0.25				●							
		120716	0.1-3.0	0.05-0.30			●				●				
		120716 T6	0.1-3.0	0.05-0.30									●	●	●
		120716 T7	0.1-3.0	0.05-0.30				●							
 Dimple type	**CNGX**	**120712 CH**	0.1-3.5	0.05-0.30								●			
		120712 T7-CH	0.1-3.5	0.05-0.30					●	●		●			
		120716 CH	0.1-3.5	0.05-0.35							●	●			
		120716 T7-CH	0.1-3.5	0.05-0.35						●					
 Pressed type	**CNMG**	**120404 CE**	0.1-3.0	0.05-0.15			●								
		120408 CE	0.1-3.0	0.05-0.20		●	●								

▸ For edge preparations and land information, see page 270

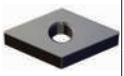
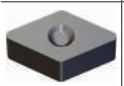
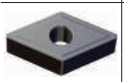
●: Standard items

DNGA DNGN DNGX-CH DNMG-CE

Negative 55° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
15	12.7	4.76-8.0	0.4-1.6

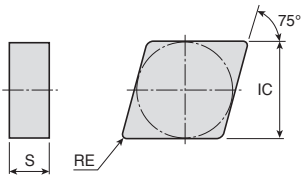
Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**DNGA**	**150404**	0.1-2.5	0.05-0.15		●	●							
		150408	0.1-2.5	0.05-0.20	●	●	●							
		150412	0.1-2.5	0.05-0.25	●	●	●							
		150604	0.1-2.5	0.05-0.15	●	●	●							
		150608	0.1-2.5	0.05-0.20	●	●	●				●			
		150612	0.1-2.5	0.05-0.25	●	●	●				●			
		150616	0.1-2.5	0.05-0.30		●	●							
	**DNGN**	**150408**	0.1-2.5	0.05-0.20		●								
		150704	0.1-2.5	0.05-0.15			●							
		150708	0.1-2.5	0.05-0.20			●							
		150708 T6	0.1-2.5	0.05-0.20									●	
		150708 T7	0.1-2.5	0.05-0.20				●						
		150712 T6	0.1-2.5	0.05-0.25									●	
		150712 T7	0.1-2.5	0.05-0.25				●						
 Dimple type	**DNGX**	**150708 T7-CH**	0.1-3.0	0.05-0.25							●			
		150712 CH	0.1-3.0	0.05-0.30						●	●			
		150712 T7-CH	0.1-3.0	0.05-0.30					●					
		150716 CH	0.1-3.5	0.05-0.35							●			
		150716 T7-CH	0.1-3.5	0.05-0.35							●			
 Pressed type	**DNMG**	**150608 CE**	0.1-2.5	0.05-0.20			●							

▸ For edge preparations and land information, see page 270

●: Standard items

ENGN

Negative 75° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
13	12.7	7.94	0.8-1.6

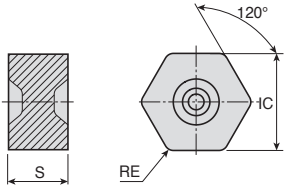
Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**ENGN**	**130708**	0.1-2.5	0.05-0.20	●	●	●							
		130712 T5	0.1-2.5	0.05-0.25			●							
		130716	0.1-2.5	0.05-0.30		●								
		130716 U2	0.1-2.5	0.05-0.30			●							

▸ For edge preparations and land information, see page 270

●: Standard items

HNGX-CH

Negative 120° hexagonal inserts



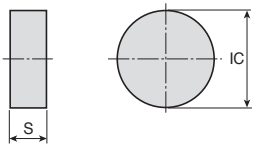
Size	Dimension (mm)		
	IC	S	RE
05	12.7	7.94	1.2-1.6

Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
 Dimple type	**HNGX**	**050712 CH**	0.05-0.25	0.10-2.00							●			
		050712 T7-CH	0.05-0.25	0.10-2.00					●					
		050716 CH	0.05-0.3	0.10-2.00							●			

▸ For edge preparations and land information, see page 270

●: Standard items

Negative round inserts



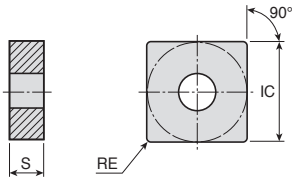
Size	Dimension (mm)	
	IC	S
09	9.52	3.18-4.76
12	12.7	4.76-7.94

Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic									
				AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**RNGN 090300**	0.1-2.5	0.05-0.15		●	●							
	090300 T6	0.1-2.5	0.05-0.15								●		
	090400 T6	0.1-2.5	0.05-0.15								●		
	120400	0.1-4.0	0.05-0.20	●	●	●							
	120400 E	0.1-4.0	0.05-0.20								●		●
	120400 T6	0.1-4.0	0.05-0.20								●		
	120700	0.1-4.0	0.05-0.20	●	●	●							
	120700 E	0.1-4.0	0.05-0.20									●	●
	120700 E04	0.1-4.0	0.05-0.20									●	
	120700 S6	0.1-4.0	0.05-0.20									●	●
	120700 T6	0.1-4.0	0.05-0.20								●	●	●

▸ For edge preparations and land information, see page 270

●: Standard items

Negative square inserts



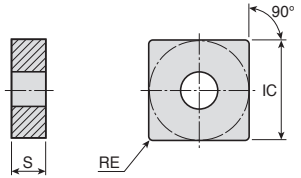
Size	Dimension (mm)		
	IC	S	RE
12	12.7	4.76-7.94	0.4-1.6
19	19.05	6.35	0.8-1.2

Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic									
				AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**SNGA 120404**	0.1-3.0	0.05-0.15	●	●	●							
	120408	0.1-3.0	0.05-0.20	●	●	●							
	120408 S7	0.1-3.0	0.05-0.20	●									
	120412	0.1-3.0	0.05-0.25	●	●	●				●			
	120416	0.1-3.0	0.05-0.30						●	●			
	190608	0.1-4.5	0.05-0.20			●							
	190612	0.1-4.5	0.05-0.25			●							
	**SNGN 120404**	0.1-3.0	0.05-0.15	●	●	●							
	120404 T7	0.1-3.0	0.05-0.15				●						
	120408	0.1-3.0	0.05-0.20	●	●	●				●			
	120408 T6	0.1-3.0	0.05-0.20								●	●	●
	120412	0.1-3.0	0.05-0.25	●	●	●				●			
	120412 T6	0.1-3.0	0.05-0.25								●		●
	120412 T7	0.1-3.0	0.05-0.25				●						
	120416	0.1-3.0	0.05-0.30	●	●	●				●			
	120416 T6	0.1-3.0	0.05-0.30								●		
	120416 T7	0.1-3.0	0.05-0.30				●						
	120708	0.1-3.0	0.05-0.20	●	●	●							
	120708 T6	0.1-3.0	0.05-0.20								●		
	120708 T7	0.1-3.0	0.05-0.20				●						
	120712	0.1-3.0	0.05-0.25	●	●	●			●				
	120712 T6	0.1-3.0	0.05-0.25								●	●	●
	120712 T7	0.1-3.0	0.05-0.25				●						
	120716	0.1-3.0	0.05-0.30	●		●							
	120716 T7	0.1-3.0	0.05-0.30				●						

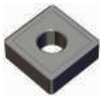
▸ For edge preparations and land information, see page 270

●: Standard items

Negative square inserts



Size	Dimension (mm)		
	IC	S	RE
12	12.7	4.76-7.94	0.8-1.6

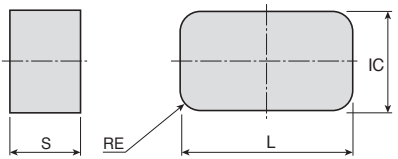
Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic										
				AB2010	AB20	AB30	AW120	SC500	AS500	SC10	AS10	TC430	TC3020	TC3030
 Dimple type	**SNGX 120712 CH**	0.1-3.0	0.05-0.30							●	●			
	120716 CH	0.1-3.0	0.05-0.35							●	●			
	120716 T7-CH	0.1-3.0	0.05-0.35					●	●		●			
 Pressed type	**SNMG 120408 CE**	0.1-3.0	0.05-0.20			●								

▸ For edge preparations and land information, see page 270

●: Standard items

LNU T32-

Negative square inserts



Size	Dimension (mm)			
	L	IC	S	RE
LNU	38.1	19.05	12.77	3.2
T32	31.75	19.05	12.7	2.0

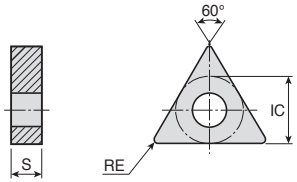
Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic										
				AB2010	AB20	AB30	AW120	SC500	AS500	SC10	AS10	TC430	TC3020	TC3030
	**LNU 6688 T**	1.0-20.0	0.20-1.00		●	●			●					
	**T32- 32**	1.0-15.0	0.20-0.25		●	●			●					

▸ For edge preparations and land information, see page 270

●: Standard items

TNGA TNGN TNMG-CE

Negative triangular inserts



Size	Dimension (mm)		
	IC	S	RE
16	9.52	4.76	0.4-1.6
22	12.7	4.76	0.4-1.6

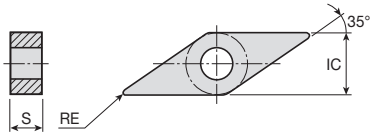
Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**TNGA**	**160404**	0.1-2.5	0.05-0.15	●	●	●							
		160404 T2	0.1-2.5	0.05-0.15			●							
		160408	0.1-2.5	0.05-0.20	●	●	●							
		160408 T2	0.1-2.5	0.05-0.20			●							
		160412	0.1-2.5	0.05-0.25	●	●	●							
		160412 T2	0.1-2.5	0.05-0.25			●							
		160416	0.1-2.5	0.05-0.30		●								
		220404	0.1-3.0	0.05-0.15		●	●							
		220408	0.1-3.0	0.05-0.20	●	●	●							
		220412	0.1-3.0	0.05-0.25		●	●							
		220416	0.1-3.0	0.05-0.30		●	●							
	**TNGN**	**160404**	0.1-2.5	0.05-0.15		●	●							
		160408	0.1-2.5	0.05-0.20	●	●	●				●			
		160408 T7	0.1-2.5	0.05-0.20				●						
		160412	0.1-2.5	0.05-0.25		●	●							
		160412 T7	0.1-2.5	0.05-0.25				●	●					
		160416 T7	0.1-1.0	0.05-0.20				●						
 Pressed type	**TNMG**	**160408 CE**	0.1-2.5	0.05-0.20			●							

▸ For edge preparations and land information, see page 270

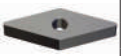
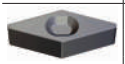
●: Standard items

VNGA VNGX-CH

Negative 35° rhombic inserts



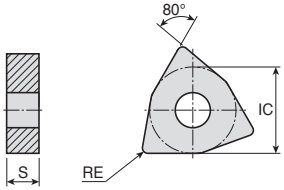
Size	Dimension (mm)		
	IC	S	RE
16	9.52	4.76-7.94	0.4-1.2
22	12.7	4.76	1.2

Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**VNGA**	**160404**	0.05-1.0	0.05-0.10	●	●	●							
		160408	0.05-1.0	0.05-0.15	●	●	●							
		160412	0.05-1.5	0.05-0.20		●	●							
		220412	0.05-2.0	0.05-0.20			●							
	**VNGX**	**160712 T7-CH**	0.05-1.5	0.05-0.20							●			
Dimple type														

▸ For edge preparations and land information, see page 270 ●: Standard items

WNGA

Negative 80° trigon inserts



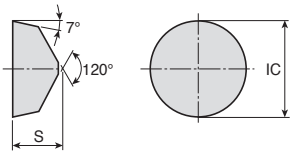
Size	Dimension (mm)		
	IC	S	RE
08	12.7	4.76	0.8-1.2

Insert	Designation		ap (mm)	Feed (mm/rev)	Ceramic									
					AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**WNGA**	**080408**	0.1-2.5	0.05-0.25	●	●	●			●	●			
		080408 T7-WZ	0.1-2.5	0.05-0.25	●	●								
		080412	0.1-2.5	0.05-0.25	●	●	●			●	●			
		080412 T7	0.1-2.5	0.05-0.25					●					

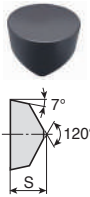
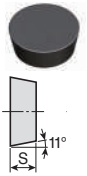
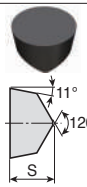
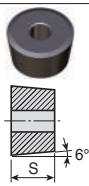
▸ For edge preparations and land information, see page 270 ●: Standard items

RCGX RPGN RPGX T11-

Positive round inserts



Size	Dimension (mm)	
	IC	S
06	6.35	3.18-6.35
09	9.52	7.94
12	12.7	4.76-7.94
T11	31.9	19.05

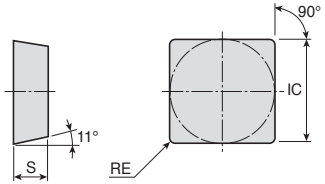
Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic									
				AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**RCGX 060600 T6**	0.1-2.0	0.05-0.25								●		
	060600 U1	0.1-2.0	0.05-0.25			●							
	090700 E	0.1-3.0	0.05-0.35									●	●
	090700 E04	0.1-3.0	0.05-0.30									●	●
	090700 T6	0.1-3.0	0.05-0.30								●	●	●
	090700 U1	0.1-3.0	0.05-0.30		●	●							
	120700	0.1-4.0	0.05-0.35			●							
	120700 E	0.1-4.0	0.05-0.35									●	●
	120700 E04	0.1-4.0	0.05-0.35									●	●
	120700 T6	0.1-4.0	0.05-0.35								●	●	●
	120700 U2	0.1-4.0	0.05-0.35		●	●							
	**RPGN 060300 E**	0.1-2.0	0.05-0.25										●
	120400 E	0.1-4.0	0.05-0.35									●	●
	120400 T6	0.1-4.0	0.05-0.35								●	●	●
	**RPGX 090700 E**	0.1-3.0	0.05-0.35									●	●
	090700 T6	0.1-3.0	0.05-0.35								●	●	●
	120700 E	0.1-4.0	0.05-0.35									●	●
	120700 T6	0.1-4.0	0.05-0.35								●	●	●
	**T11- 3219**	0.1-5.0	0.05-0.35		●								

▸ For edge preparations and land information, see page 270

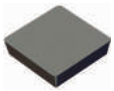
●: Standard items

SPGN

Positive square inserts



Size	Dimension (mm)		
	IC	S	RE
12	12.7	3.18-4.76	0.8-1.2

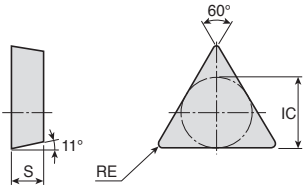
Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic									
				AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**SPGN 120308**	0.1-3.5	0.05-0.20			●				●			
	120412	0.1-3.5	0.05-0.20							●			

▸ For edge preparations and land information, see page 270

●: Standard items

TPGN

Positive triangular inserts



Size	Dimension (mm)		
	IC	S	RE
11	6.35	3.18	0.4-0.8
16	9.52	3.18	0.4-0.8
22	12.7	4.76	0.8

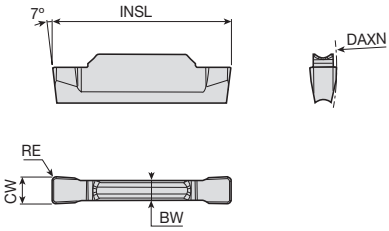
Insert	Designation	ap (mm)	Feed (mm/rev)	Ceramic									
				AB2010	AB20	AB30	AW120	AS500	SC10	AS10	TC430	TC3020	TC3030
	**TPGN 110304**	0.1-2.0	0.05-0.10	●	●	●							
	110308	0.1-2.0	0.05-0.10	●	●	●							
	160304	0.1-2.5	0.05-0.15	●	●	●							
	160308	0.1-2.5	0.05-0.20	●	●	●							
	160308 T6	0.1-2.5	0.05-0.20								●		
	220408	0.1-3.0	0.05-0.20			●							

▸ For edge preparations and land information, see page 270

●: Standard items

TDGK

Double-ended ceramic inserts for grooving, turning and profiling



Size	Dimension (mm)				
	CW	RE	BW	INSL	DAXN
3	3.0	0.4	2.25	20.0	36
4	4.0	0.2	3.0	20.0	40
4.76	5.0	0.8	4.0	25.0	55
5	5.0	0.8	4.0	25.0	55
6	6.0	0.8	5.0	25.0	65
8	8.0	0.8	6.0	30.0	80

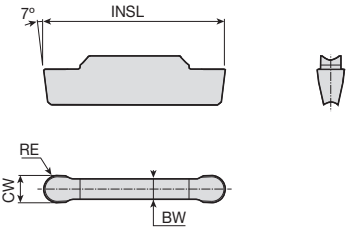
Insert	Designation	Insert seat size	Turning		Grooving	Ceramic		
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	AS10	AS500	AW120
	**TDGK 3.0-0.4-TM**	3	0.4-1.8	0.15-0.20	0.07-0.22		●	
	4.0-0.4-TM	4	0.5-2.4	0.18-0.30	0.09-0.35		●	
	4.76-0.8-TM	5	0.5-2.4	0.18-0.30	0.09-0.35	●	●	
	5.0-0.8-TM	5	0.8-3.0	0.23-0.35	0.10-0.38	●	●	
	6.0-0.8-TM	6	1.0-3.6	0.24-0.42	0.13-0.40	●	●	
	8.0-0.8-TM	8	1.0-4.8	0.28-0.50	0.14-0.50		●	

▸ For holder details, see pages 54 to 68

●: Standard items

TDGK (Full-Radius)

Double-ended Ceramic inserts for grooving, turning and profiling



Size	Dimension (mm)				
	CW	RE	BW	INSL	
3	3.0	1.5	2.25	20.0	
4	4.0	2.0	3.0	20.0	
5	5.0	2.5	4.0	25.0	
6	6.0	3.0	5.0	25.0	
8	8.0	4.0	6.0	30.0	

Insert	Designation	Insert seat size	Turning		Grooving	Ceramic		
			ap (mm)	Feed (mm/rev)	Feed (mm/rev)	AS10	AS500	AW120
	**TDGK 3.0-1.5-TM**	3	0.0-1.5	0.15-0.22	0.10-0.18		●	
	4.0-2.0-TM	4	0.0-2.0	0.18-0.33	0.13-0.30		●	
	5.0-2.5-TM	5	0.0-2.5	0.23-0.38	0.13-0.35		●	
	6.0-3.0-TM	6	0.0-3.0	0.24-0.46	0.15-0.35		●	
	8.0-4.0-TM	8	0.0-4.0	0.28-0.55	0.15-0.40		●	

▸ For holder details, see pages 54 to 68

●: Standard items

TEBN-06CH TEBN-M-06CH

High feed end mills and modular heads



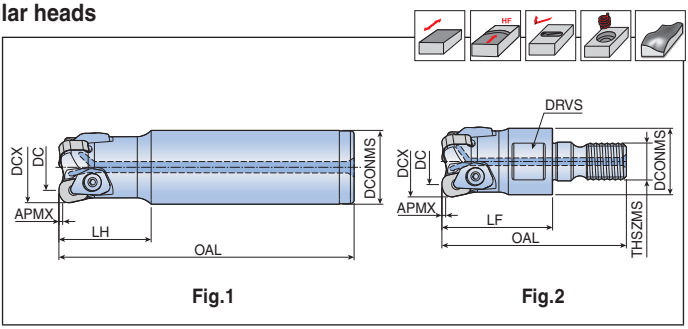


Fig.1 Fig.2

Designation		Dimension (mm)									Air[1] hole	Fig.	Insert
		DCX	DC	DCONMS	LF	OAL	THSZMS	LH	APMX	DRVS			
TEBN 216-16-06CH-L80	2	16	8.6	16	-	80	-	25	1.0	-	x	1	BNGX 0603...
320-20-06CH-L80	3	20	12.5	20	-	80	-	25	1.0	-	●	1	
425-25-06CH-L100	4	25	17.4	25	-	100	-	40	1.0	-	●	1	
532-32-06CH-L120	5	32	24.3	32	-	120	-	40	1.0	-	●	1	
TEBN 216-M08-06CH	2	16	8.6	13	25	42.5	8	-	1.0	10	x	2	
320-M10-06CH	3	20	12.5	18	30	50	10	-	1.0	15	●	2	
425-M12-06CH	4	25	17.4	21	35	57	12	-	1.0	17	●	2	
532-M16-06CH	5	32	24.3	29	43	68	16		1.0	25	●	2	
								-					

▸ Matched with T-FLEXTEC holder (Fig. 2)
▸ [1] Use only air (coolant is prohibited)

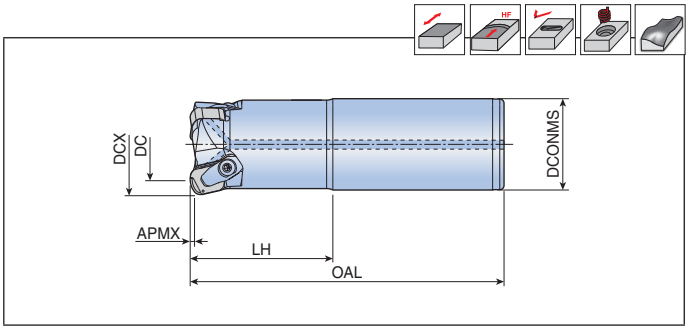
Spare parts

Designation	Clamp	Screw	Snap ring	Wrench	
					
TEBN-06CH	CCL-2S	CLS-25A080/HG	CSR M2.5	L-W 1.5	

TEBN-09CH

High feed end mills





Designation		Dimension (mm)						Air (1) hole	Insert
		DCX	DC	DCONMS	OAL	LH	APMX		
TEBN 225-25-09CH-L100	2	25	14.8	25	100	40	1.5	x	BNGX 0904...
325-25-09CH-L100	3	25	14.8	25	100	40	1.5	x	
332-32-09CH-L120	3	32	21.5	32	120	40	1.5	●	
440-32-09CH-L120	4	40	29.4	32	120	40	1.5	●	

▸ (1) Use only air (coolant is prohibited)

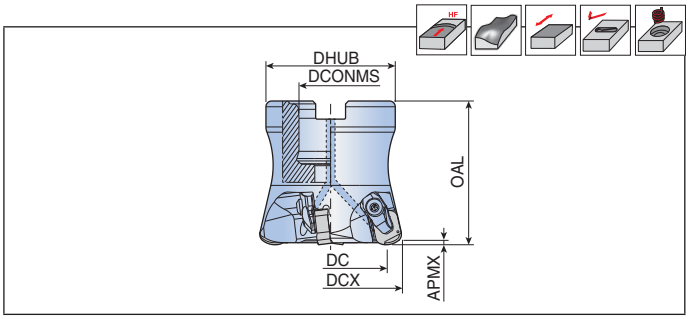
Spare parts

Designation	Clamp	Screw	Snap ring	Wrench	
					
TEBN-09CH	CCL-3S	CLS-35A120/HG	CSR 1.25	L-W 2	

TFMBN-09CH

High feed face mills





Designation			Dimension (mm)						Air hole[1]	Arbor style	Kg	Mounting bolt	Insert
			DCX	DC	DCONMS	DHUB	OAL	APMX					
TFMBN	**440-16R-09CH**	4	40	29.4	16	38	40	1.5	●	A	0.2	SH M8x30	BNGX 0904...
	350-22R-09CH	3	50	39.4	22	45	40	1.5	●	A	0.5	SH M10x30	
	550-22R-09CH	5	50	39.4	22	45	40	1.5	●	A	0.4	SH M10x30	

▸ Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
▸ [1] Use only air (coolant is prohibited)

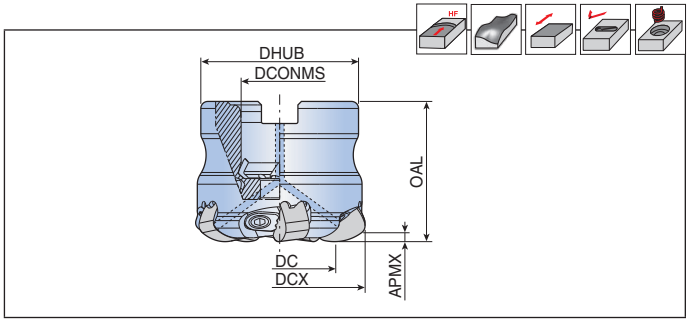
Spare parts

Designation	Clamp	Screw	Snap ring	Wrench	
					
TFMBN-09CH	CCL-3S	CLS-35A120/HG	CSR 1.25	L-W 2	

TFMBN-12

High feed face mills





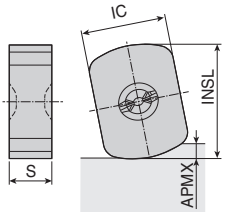
Designation		Dimension (mm)						Air hole[1]	Arbor style	Kg	Mounting bolt	Insert
		DCX	DC	DCONMS	DHUB	OAL	APMX					
TFMBN 450-22R-12	4	50	32.8	22	45	40	2.5	●	A	0.3	SH M10x30	BNGX 1207...
550-22R-12	5	50	32.8	22	45	40	2.5	●	A	0.3	SH M10x30	
663-22R-12	6	63	45.7	22	47	40	2.5	●	A	0.4	SH M10x30	
763-22R-12	7	63	45.7	22	47	40	2.5	●	A	0.4	SH M10x30	
780-27R-12	7	80	62.6	27	70	50	2.5	●	A	1.2	SH M12x35	
880-27R-12	8	80	62.6	27	70	50	2.5	●	A	1.2	SH M12x35	

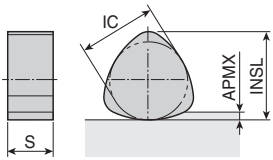
▸ Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
▸ [1] Use only air (coolant is prohibited)

Spare parts

Designation	Wedge	Screw	Wrench		
					
TFMBN-12	WFZ 6-C	WS 6	T-W 3		

High feed inserts





Size	Dimension (mm)					
	INSL	IC	S	APMX		
06	8	6	3	1.0		
09	12	9	5	1.5		
12	13.6	12	7	2.5		

Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**BNGX 0603 CH-E04**	0.4-0.8	0.30-0.10			●
	0904 CH-E04	0.5-1.0	0.35-0.15			●
	**BNGX 1207-E04**	1.0-2.0	0.35-0.15			●

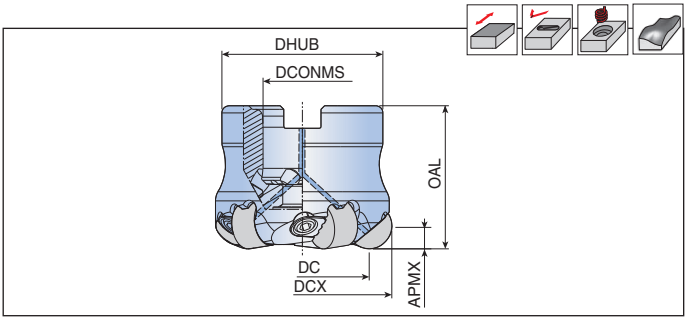
▸ E04: Honing 0.04-0.05 mm

●: Standard items

TFMRN-12

Face mills





Designation			Dimension (mm)						Air hole(1)	Arbor style	Kg	Mounting bolt	Insert
			DCX	DC	DCONMS	DHUB	OAL	APMX					
TFMRN	**450-22R-1207**	4	50	37.3	22	45	40	6.3	●	A	0.4	SH M10x30	RNGN 1207
	550-22R-1207	5	50	37.3	22	45	40	6.3	●	A	0.4	SH M10x30	FL...
	463-22R-1207	4	63	50.3	22	47	40	6.3	●	A	0.6	SH M10x30	
	663-22R-1207	6	63	50.3	22	47	40	6.3	●	A	0.6	SH M10x30	
	763-22R-1207	7	63	50.3	22	47	40	6.3	●	A	0.6	SH M10x30	
	580-27R-1207	5	80	67.3	27	58	50	6.3	●	A	1.1	SH M12x35	
	780-27R-1207	7	80	67.3	27	58	50	6.3	●	A	1.1	SH M12x35	
	880-27R-1207	8	80	67.3	27	58	50	6.3	●	A	1.1	SH M12x35	

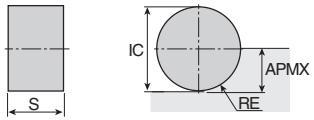
▸ Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
▸ (1) Use only air (coolant is prohibited)

Spare parts

Designation	Wedge	Screw	Wrench		
					
TFMRN-12	WFZ 6-C	WS 6	T-W 3		

RNGN 12-FL

Inserts



Size	Dimension (mm)					
	RE	IC	S	APMX		
12	6.35	12.7	7.94	6.3		

Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**RNGN 1207 FL-E**	0.5-3.0	0.25-0.10		●	●
	1207 FL-E04	0.5-3.0	0.25-0.10		●	●
	1207 FL-T6	0.5-3.0	0.25-0.10		●	●

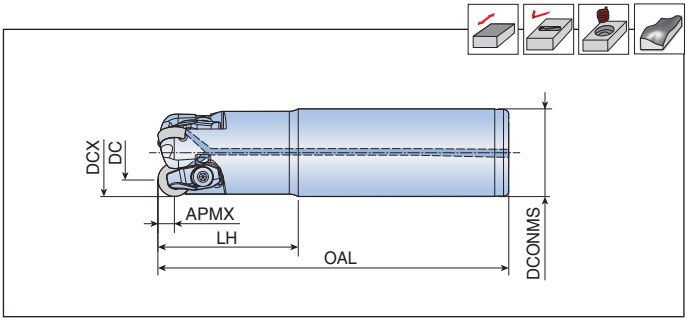
▸ Edge preparations
E: 0.02-0.03 mm honing, E04: 0.04-0.05 mm honing, T6: 0.1 mm x 20° land

●: Standard items

TERP-09

End mills





Designation		Dimension (mm)						Air hole[1]	Insert
		DCX	DC	DCONMS	OAL	LH	APMX		
TERP 220-20-09FL-L80	2	20	10.6	20	80	30	4.7	x	RPGN 0903 FL...
325-25-09FL-L100	3	25	15.6	25	100	40	4.7	●	
432-32-09FL-L120	4	32	22.5	32	120	40	4.7	●	

▸ [1] Use only air (coolant is prohibited)

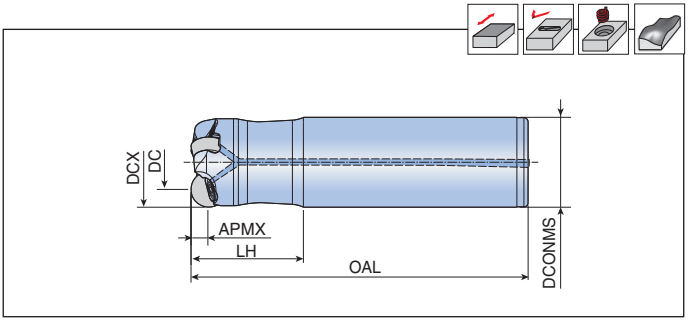
Spare parts

Designation	Clamp	Screw	Snap ring	Wrench	
					
TERP-09	CCL-3S-F	CLS-35A120	CSR 1.25	L-W 2	

TERP-12

End mills





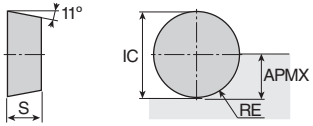
Designation		Dimension (mm)						Air hole (1)	Insert
		DCX	DC	DCONMS	OAL	LH	APMX		
TERP 332-32-12-L120	3	32	19.3	32	120	40	6.3	●	RPGN 1204 FL...
440-32-12-L120	4	40	27.3	32	120	40	6.3	●	

▸ (1) Use only air (coolant is prohibited)

Spare parts

Designation	Clamp	Screw	Wrench		
					
TERP-12	WFZ 6-C	WS 6	T-W 3		

RPGN 09/12-FL



Size	Dimension (mm)					
	RE	IC	S	APMX		
09	4.76	9.52	3.18	4.7		
12	6.35	12.7	4.76	6.3		

Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**RPGN 0903 FL-E04**	0.5-1.5	0.15-0.07		●	●
	1204 FL-E	0.5-2.0	0.20-0.07		●	●
	1204 FL-E04	0.5-2.0	0.20-0.07		●	●
	1204 FL-T6	0.5-2.0	0.20-0.07		●	●

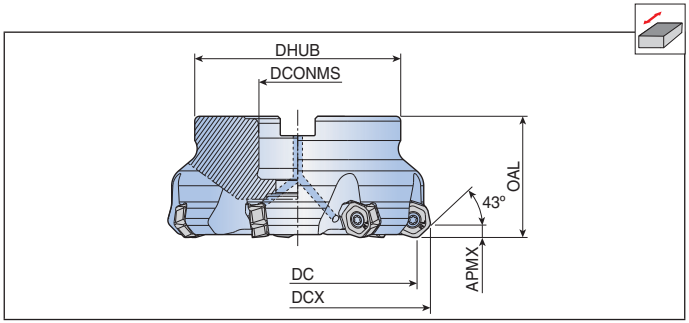
▸ Edge preparations
E: 0.02-0.03 mm honing, E04: 0.04-0.05 mm honing, T6: 0.1 mm x 20° land

●: Standard items

12D-TF45-06

Face mills







Designation		Dimension (mm)						Air hole[1]	Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
12D-TF45-450-22R-06	4	50	60.8	22	45	40	3.0	●	A	0.5	LH M10x25	HXKU 0605-CE
650-22R-06	6	50	60.8	22	45	40	3.0	●	A	0.5	LH M10x25	
563-22R-06	5	63	73.8	22	47	40	3.0	●	A	0.7	LH M10x25	
763-22R-06	7	63	73.8	22	47	40	3.0	●	A	0.7	LH M10x25	
480-27R-06	4	80	90.8	27	70	50	3.0	●	A	1.4	SH M12x35	
680-27R-06	6	80	90.8	27	70	50	3.0	●	A	1.5	SH M12x35	
1080-27R-06	10	80	90.8	27	70	50	3.0	●	A	1.5	SH M12x35	
5100-32R-06	5	100	110.8	32	85	50	3.0	●	A	2.0	LH M16x35	
7100-32R-06	7	100	110.8	32	85	50	3.0	●	A	2.2	LH M16x35	
12100-32R-06	12	100	110.8	32	85	50	3.0	●	A	2.2	LH M16x35	
6125-40R-06	6	125	135.8	40	85	63	3.0	●	A	3.5	SH M20x40	
10125-40R-06	10	125	135.8	40	85	63	3.0	●	A	3.6	SH M20x40	
16125-40R-06	16	125	135.8	40	85	63	3.0	●	A	3.6	SH M20x40	
8160-40R-06	8	160	170.8	40	110	63	3.0	x	C	4.7	-	
12160-40R-06	12	160	170.8	40	110	63	3.0	x	C	4.9	-	
20160-40R-06	20	160	170.8	40	110	63	3.0	x	C	4.9	-	

- Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
- [1] Use only air (coolant is prohibited)
- The approach angle of 43° is an approximate lower limit. When the carbide insert is mounted, the actual angle becomes 45°
- Cannot be used in combination with carbide inserts (different approach angles)
- Compared to mounting carbide inserts, variations in diameter and overall length may occur due to factors such as differences in ceramic insert geometry, pocket compatibility, and seating stability

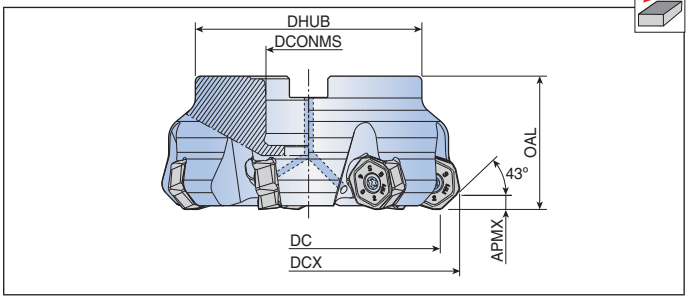
Spare parts

Designation	Screw	Wrench	Wrench handle		
					
12D-TF45-06	TS 40B 100I	TBLD T15-W6	SW6-T		

12D-TF45-10

Face mills





43°

Designation		Dimension (mm)						Air hole[1]	Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
12D-TF45-563-22R-10	5	61.6	77	22	47	50.2	5.0	●	A	0.9	SH M10x30	HXKU 1007-CE
763-22R-10	7	61.6	77	22	47	50.2	5.0	●	A	0.9	SH M10x30	
680-27R-10	6	78.6	94	27	70	50.2	5.0	●	A	1.6	SH M12x35	
980-27R-10	9	78.6	94	27	70	50.2	5.0	●	A	1.6	SH M12x35	
7100-32R-10	7	98.6	114	32	85	50.2	5.0	●	A	2.4	LH M16x35	
11100-32R-10	11	98.6	114	32	85	50.2	5.0	●	A	2.4	LH M16x35	
8125-40R-10	8	123.6	139	40	85	63.2	5.0	●	A	4.1	SH M20x40	
10125-40R-10	10	123.6	139	40	85	63.2	5.0	●	A	4.0	SH M20x40	
14125-40R-10	14	158.6	174	40	85	63.2	5.0	x	A	4.0	SH M20x40	
10160-40R-10	10	158.6	174	40	110	63.2	5.0	x	C	5.6	-	
16160-40R-10	16	198.6	214	40	110	63.2	5.0	x	C	5.6	-	
14200-60R-10	14	198.6	214	60	130	63.2	5.0	x	C	7.9	-	
21200-60R-10	21	248.6	264	60	130	63.2	5.0	x	C	7.9	-	
16250-60R-10	16	248.6	264	60	160	63.2	5.0	x	C	12.4	-	
28250-60R-10	28	248.6	264	60	160	63.2	5.0	x	C	12.4	-	

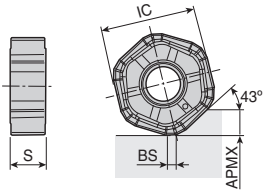
- Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
- [1] Use only air (coolant is prohibited)
- The approach angle of 43° is an approximate lower limit. When the carbide insert is mounted, the actual angle becomes 45°
- Cannot be used in combination with carbide inserts (different approach angles)
- Compared to mounting carbide inserts, variations in diameter and overall length may occur due to factors such as differences in ceramic insert geometry, pocket compatibility, and seating stability

Spare parts

Designation	Screw	Wrench	Wrench handle		
					
12D-TF45-10	TS 50C130I/HG	TBLD T20-M6	SW6-T		

HXKU

Inserts



Size	Dimension (mm)					
	IC	S	APMX	BS		
06-CE	14	5.4	3.0	1.0		
10-CE	19.05	6.3	5.0	1.2		

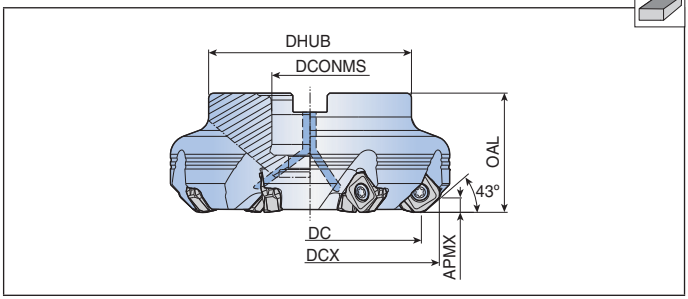
Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**HXKU 0605-CE**	1.0-2.5	0.25-0.13	●		
	1007-CE	1.0-4.0	0.25-0.15	●		

●: Standard items

8D-TF45-11

Face mills





43°

Designation		Dimension (mm)						Air hole[1]	Arbor type	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
8D-TF45-440-16R-11	4	41	51	16	38	40	4.0	●	A	0.4	SH M8x25	SQKU 1105-CE
640-16R-11	6	41	51	16	38	40	4.0	●	A	0.4	SH M8x25	
650-22R-11	6	51	61	22	45	40	4.0	●	A	0.5	LH M10x25	
850-22R-11	8	51	61	22	45	40	4.0	●	A	0.5	LH M10x25	
763-22R-11	7	64	74	22	47	50	4.0	●	A	1.0	SH M10x30	
1063-22R-11	10	64	74	22	47	50	4.0	●	A	1.0	SH M10x30	
880-27R-11	8	81	91	27	70	50	4.0	●	A	1.6	LH M12x30	
1280-27R-11	12	81	91	27	70	50	4.0	●	A	1.6	LH M12x30	
9100-32R-11	9	101	111	32	85	50	4.0	●	A	2.4	LH M16x35	
14100-32R-11	14	101	111	32	85	50	4.0	●	A	2.5	LH M16x35	
8125-40R-11	8	126	136	40	85	63	4.0	●	A	4.1	SH M20x40	
12125-40R-11	12	126	136	40	85	63	4.0	●	A	4.0	SH M20x40	
18125-40R-11	18	126	136	40	85	63	4.0	●	A	4.1	SH M20x40	
10160-40R-11	10	161	171	40	110	63	4.0	x	C	5.7	-	
16160-40R-11	16	161	171	40	110	63	4.0	x	C	5.6	-	
24160-40R-11	24	161	171	40	110	63	4.0	x	C	5.6	-	

- Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
- [1] Use only air (coolant is prohibited)
- Do not use 20° inserts
- The approach angle of 43° is an approximate lower limit. When the carbide insert is mounted, the actual angle becomes 45°
- Cannot be used in combination with carbide inserts (different approach angles)
- Compared to mounting carbide inserts, variations in diameter and overall length may occur due to factors such as differences in ceramic insert geometry, pocket compatibility, and seating stability

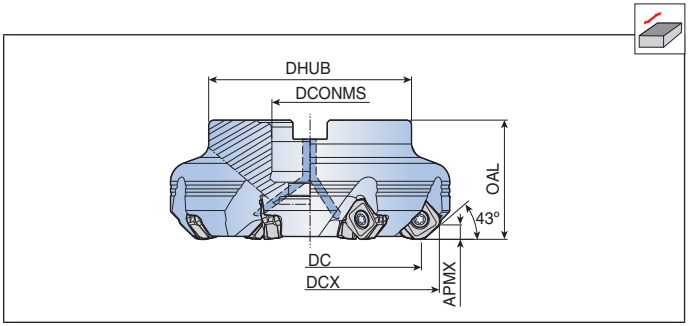
Spare parts

Designation	Screw	Wrench	Wrench handle		
					
8D-TF45-11	TS 40A115I	TBLD T15-W6	SW6-T		

8D-TF45-14

Face mills





43°

Designation		Dimension (mm)						Air hole[1]	Arbor type	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
8D-TF45-450-22R-14	4	51.75	65.3	22	45	40	5.5	●	A	0.6	LH M10x25	SQKU 1406-CE
650-22R-14	6	51.75	65.3	22	45	40	5.5	●	A	0.6	LH M10x25	
663-22R-14	6	64.75	78.3	22	47	50	5.5	●	A	1.1	SH M10x30	
863-22R-14	8	64.75	78.3	22	47	50	5.5	●	A	1.0	SH M10x30	
780-27R-14	7	81.75	95.3	27	70	50	5.5	●	A	1.7	LH M12x30	
1080-27R-14	10	81.75	95.3	27	70	50	5.5	●	A	1.7	LH M12x30	
8100-32R-14	8	101.75	115.3	32	85	50	5.5	●	A	2.6	LH M16x35	
12100-32R-14	12	101.75	115.3	32	85	50	5.5	●	A	2.5	LH M16x35	
6125-40R-14	6	126.75	140.3	40	85	63	5.5	●	A	4.1	SH M20x40	
10125-40R-14	10	126.75	140.3	40	85	63	5.5	●	A	4.4	SH M20x40	
16125-40R-14	16	126.75	140.3	40	85	63	5.5	●	A	4.3	SH M20x40	
7160-40R-14	7	161.75	175.3	40	110	63	5.5	x	C	5.6	-	
12160-40R-14	12	161.75	175.3	40	110	63	5.5	x	C	5.9	-	
20160-40R-14	20	161.75	175.3	40	110	63	5.5	x	C	5.9	-	
8200-60R-14	8	201.75	215.3	60	130	63	5.5	x	C	8.0	-	
18200-60R-14	18	201.75	215.3	60	130	63	5.5	x	C	8.4	-	
26200-60R-14	26	201.75	215.3	60	130	63	v	x	C	8.3	-	

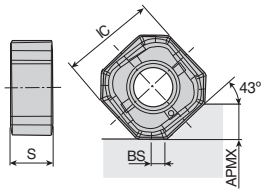
- Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
- [1] Use only air (coolant is prohibited)
- Do not use 20° inserts
- The approach angle of 43° is an approximate lower limit. When the carbide insert is mounted, the actual angle becomes 45°
- Cannot be used in combination with carbide inserts (different approach angles)
- Compared to mounting carbide inserts, variations in diameter and overall length may occur due to factors such as differences in ceramic insert geometry, pocket compatibility, and seating stability

Spare parts

Designation	Screw	Wrench	Wrench handle		
					
8D-TF45-14	TS 50C130I/HG	TBLD T20-W6	SW6-T		

SQKU 11/14

Inserts



Size	Dimension (mm)					
	IC	S	APMX	BS		
11	11.2	5.0	4.0	1.45		
14	14.5	6.35	5.5	1.70		

Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**SQKU 1105-CE**	1.0-3.0	0.25-0.13	●		
	1406-CE	1.5-4.5	0.25-0.15	●		

●: Standard items

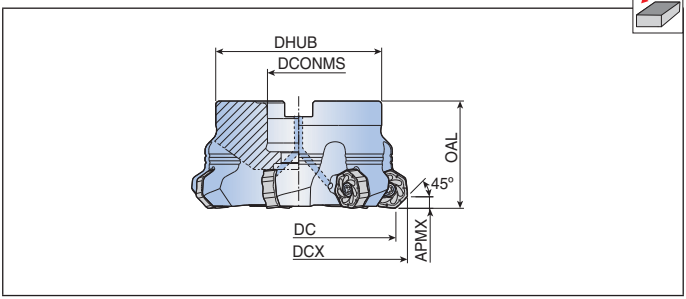
14D-F45XN-09

Face mills









Designation		Dimension (mm)						Air hole[1]	Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
14D-F45XN 563-22R-09	5	63	74.9	22	47	50	5.0	●	A	0.9	SH M10x35	XNHU 0906...
663-22R-09	6	63	74.9	22	47	50	5.0	●	A	0.9	SH M10x35	
680-27R-09	6	80	91.9	27	70	50	5.0	●	A	1.4	SH M12x35	
780-27R-09	7	80	91.9	27	70	50	5.0	●	A	1.5	SH M12x35	
7100-32R-09	7	100	112	32	85	55	5.0	●	A	2.4	SH M16x35	
9100-32R-09	9	100	112	32	85	55	5.0	●	A	2.5	SH M16x35	
8125-40R-09	8	125	137	40	85	63	5.0	●	A	3.5	SH M20x40	
10125-40R-09	10	125	137	40	85	63	5.0	●	A	3.6	SH M20x40	
12125-40R-09	12	125	137	40	85	63	5.0	●	A	3.4	SH M20x40	
10160-40R-09	10	160	172	40	110	63	5.0	x	C	4.8	-	
12160-40R-09	12	160	172	40	110	63	5.0	x	C	4.8	-	
14160-40R-09	14	160	172	40	110	63	5.0	x	C	4.8	-	
12200-60R-09	12	200	212	60	130	63	5.0	x	C	6.8	-	
16200-60R-09	16	200	212	60	130	63	5.0	x	C	6.9	-	
16250-60R-09	16	250	262	60	160	63	5.0	x	C	11.5	-	
20250-60R-09	20	250	262	60	160	63	5.0	x	C	11.5	-	

▸ Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
▸ [1] Use only air (coolant is prohibited)

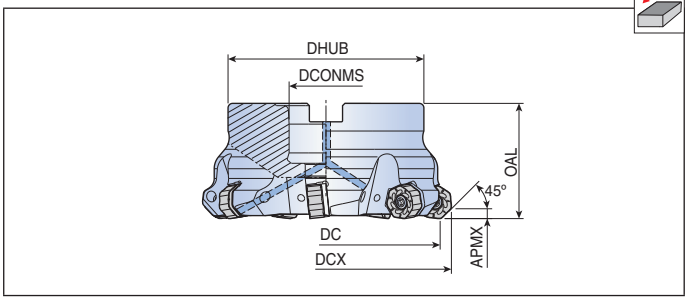
Spare parts

Designation	Screw	Wrench			
					
14D-F45XN-09	TS 50C130I/HG	T-T20			

14D-F45XNH-09

Shim type face mills





45°

Designation		Dimension (mm)						Air hole(1)	Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
14D-F45XNH 563-22R-09	5	63	75.1	22	47	40	5.0	●	A	0.6	SH M10x35	XNHU 0906...
680-27R-09	6	80	92.1	27	70	50	5.0	●	A	1.5	SH M12x35	
7100-32R-09	7	100	112.1	32	85	50	5.0	●	A	2.2	SH M16x35	
9125-40R-09	9	125	137.0	40	85	63	5.0	●	A	3.6	SH M20x40	

▸ Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
▸ (1) Use only air (Coolant is prohibited)

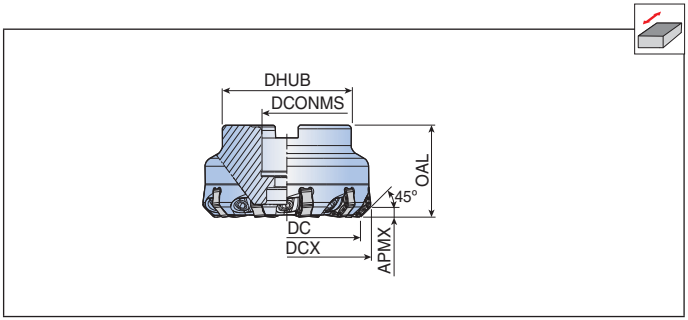
Spare parts

Designation	Screw	Shim	Shim screw	Wrench	Wrench handle
14D-F45XNH-09	TS 50C130I/HG	TSXN 09N	TS 8050110S	TBLD T20-W6	SW6-T

14D-F45XNW-09

Face mill





45°

Designation		Dimension (mm)						Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX				
14D-F45XNW 1080-27R-09	10	80	91.9	27	70	50	5.0	A	1.5	SH M12x35	XNHU 0906...
14100-32R-09	14	100	112	32	85	55	5.0	A	2.9	SH M16x35	
18125-40R-09	18	125	137	40	85	63	5.0	B	3.8	-	
18160-40R-09	18	160	172	40	110	63	5.0	C	5.6	-	
22160-40R-09	22	160	172	40	110	63	5.0	C	5.6	-	
28200-60R-09	28	200	212	60	130	63	5.0	C	7.9	-	
36250-60R-09	36	250	262	60	160	63	5.0	C	12.7	-	
44315-60R-09	44	315	327	60	220	63	5.0	D	19.9	-	

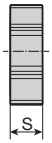
▸ Recommended for very stable machining conditions in cast iron and steel

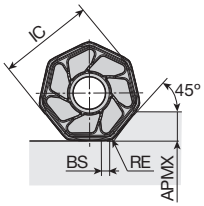
Spare parts

Designation	Wedge	Wedge screw	Wrench		
					
14D-F45XNW-09	WFZ 8H	WS 8	T-W 4		

XNHU 09

Inserts





Size	Dimension (mm)						
	IC	S	APMX	BS	RE	BSR	HOLE
09-CE	18.5	6.35	5.0	1.0	1.0	-	O
09-CE-EM	18.5	6.35	5.0	1.0	1.0	250	X



CE

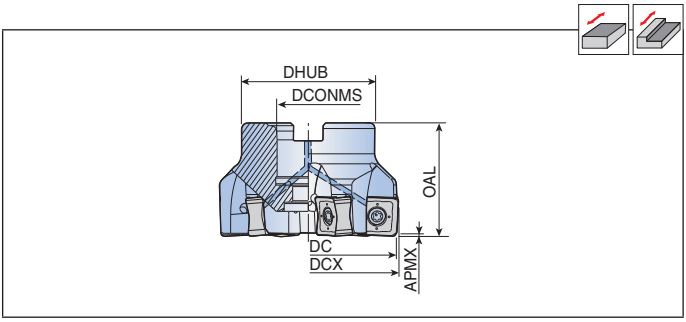
Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**XNHU 0906 ANTN-CE**	1.5-4.0	0.25-0.135	●		
	**XNHU 0906 ANTN-CE-EM**	1.5-4.0	0.25-0.135	●		

●: Standard items

TFM90SN-13

Face mills







90°

Designation		Dimension (mm)						Air hole(1)	Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
TFM90SN 550-22R-13	5	50	50.7	22	45	40	12.0	●	A	0.3	SH M10x30	SNG(K)X 1306 ...
663-22R-13	6	63	63.7	22	47	40	12.0	●	A	0.5	SH M10x30	
780-27R-13	7	80	80.7	27	70	50	12.0	●	A	1.2	SH M12x35	
980-27R-13*	9	80	80.7	27	70	50	12.0	●	A	1.2	SH M12x35	
8100-32R-13	8	100	100.8	32	85	50	12.0	●	A	1.9	SH M16x30	
13100-32R-13*	13	100	100.8	32	85	50	12.0	●	A	1.9	SH M16x30	
10125-40R-13	10	125	125.8	40	85	63	12.0	x	B	2.8	-	
16125-40R-13*	16	125	125.8	40	85	63	12.0	x	B	2.8	-	

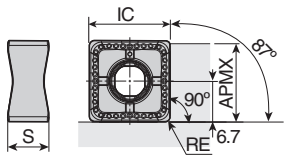
- *: Fine-pitch cutter designed for cast iron machining
- Mounting bolt with air-through hole is available upon request (ordering example: SH M10x1.5x30-C)
- (1) Use only air (coolant is prohibited)

Spare parts

Designation	Screw	Wrench			
					
TFM90SN	TS 40B100I	T-T15			

SNG(K)X 13

Inserts



Size	Dimension (mm)					
	IC	S	APMX	RE		
SNGX 13	13.5	6.8	12	0.8		
SNKX 13	13.5	6.8	12	0.8		

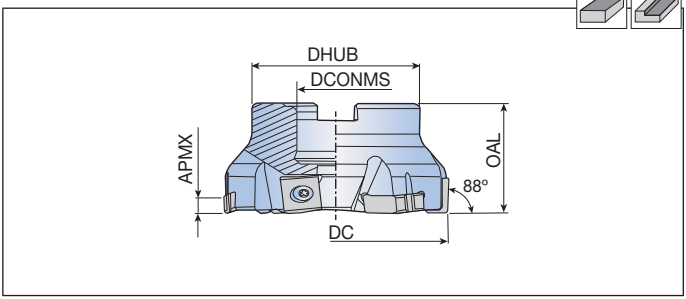
Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**SNGX 130608-CE**	3.5-10.0	0.25-0.13	●		
	**SNKX 130608-CE**	3.5-10.0	0.25-0.13	●		

●: Standard items

TFM88LN-13CE

Face mill





88°

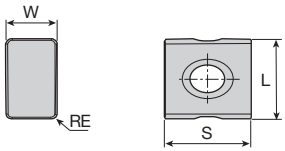
Designation			Dimension (mm)					Arbor style	Kg	Mounting bolt	Insert
			DC	DCONMS	DHUB	OAL	APMX				
TFM88LN	**650-22R-13CE**	6	50	22	45	40	5.0	A	0.4	SH M10x30	LNHX 13...
	663-22R-13CE	6	63	22	47	40	5.0	A	0.5	SH M10x30	
	880-27R-13CE	8	80	27	58	50	5.0	A	1.1	SH M12x35	

Spare parts

Designation	Screw	Wrench			
					
TFM88LN	TS 40G110I	TD 15			

LNHX 13

Inserts



Size	S	L	W	RE		
13-CE	11	13	6.5	0.87		

Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**LNHX 130608-CE**	3.5-11.0	0.25-0.13	●		

●: Standard items

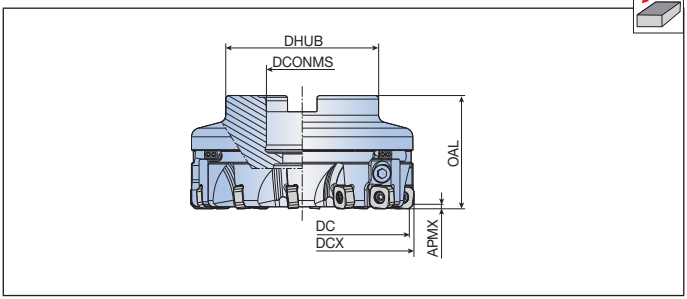
TFM90SNS-12CB

Face mills









Designation		Dimension (mm)						Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DC	DCX	DCONMS	DHUB	OAL	APMX					
TFM90SNS 680-27R-12CB	4+2	73.3	80	27	70	50	1.0	x	A	1.3	SH M12x35	SNEX 12 -CE SNEX12 -WC
12125-40R-12CB	9+3	118.3	125	40	85	63	1.0	x	A	3.9	SH M20x40	
20200-60R-12CB	16+4	119.3	200	60	130	63	1.0	x	C	7.9	x	
16250-60R-12CB	12+4	120.3	250	60	160	63	1.0	x	C	13.6	x	
24250-60R-12CB	20+4	121.3	250	60	160	63	1.0	x	C	13.5	x	

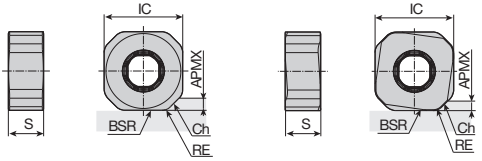
Spare parts

Designation	Screw	Wrench		Cartridge	Adjust screw
TFM90SNS-12CB					
	TS 35C110I	T-T15	T-W 5	TCT17-SN12	AJB-5H
	Cartridge screw	Adjust Wrench			
					
	SH M6X1X16-NL	SPANNER-7MM			

Ceramic Line

SNEX 12

Inserts



CE **WC**

Size	Dimension (mm)					
	IC	S	APMX	RE	BSR	Ch
1205R-CE	12.7	5.7	1	2	-	2.5
1205-WC	12.7	5.7	1	2	-	2.5

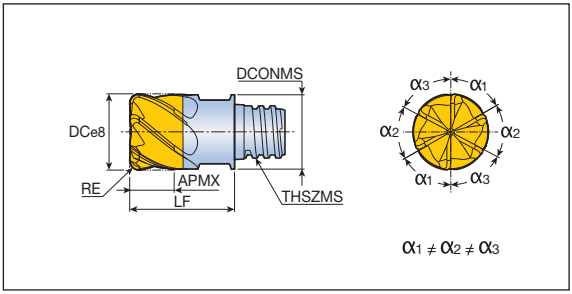
Insert	Designation	Recommended machining conditions		Ceramic		
		ap (mm)	Feed (mm/tooth)	AS10	TC3020	TC3030
	**SNEX 1205R-CE**	0.3-0.8	0.12-0.08	●		
	**SNEX 1205-WC**	0.3-0.8	0.12-0.08	●		

●: Standard items

MXCRF

6-flute, ceramic brazing head





6 | H·A 40°

Designation		Feed (mm/tooth)	Dimension (mm)						Grade
			DC	RE	APMX	LF	THSZMS	DCONMS	TC3030
MXCRF	100L07R10-06S06	0.02-0.04	10	1.0	7	13.0	S06	9.7	●
	120L07R15-06S08	0.03-0.05	12	1.5	7	16.5	S08	11.7	●
	160L09R20-06S10	0.03-0.05	16	2.0	9	20.5	S10	15.3	●

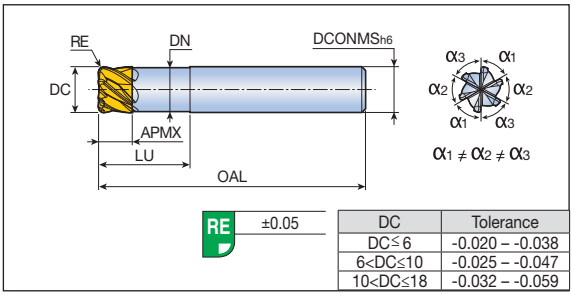
▸ Wrench sold separately

●: Standard items

CRFB 6

6-flute, ceramic brazing head





DC	Tolerance
DC≤6	-0.020 – -0.038
6<DC≤10	-0.025 – -0.047
10<DC≤18	-0.032 – -0.059

6 | H·A 40°

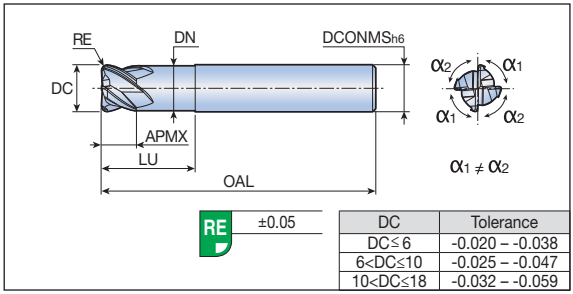
Designation		Feed (mm/tooth)	Dimension (mm)							Grade
			DC	RE	OAL	APMX	LU	DN	DCONMS	TC3030
CRFB	6060 050 120	0.02-0.03	6	0.5	50	4.5	12	5.8	6	●
	6080 100 160	0.02-0.03	8	1.0	57	6.0	16	7.7	8	●
	6100 100 200	0.02-0.04	10	1.0	63	7.5	20	9.6	10	●
	6120 150 240	0.03-0.05	12	1.5	70	9.0	24	11.5	12	●
	6160 200 320	0.03-0.05	16	2.0	83	12.0	32	15.5	16	●

CRF 4

4-flute, ceramic end mills







DC	Tolerance
DC≤6	-0.020 – -0.038
6<DC≤10	-0.025 – -0.047
10<DC≤18	-0.032 – -0.059

Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DC	RE	OAL	APMX	LU	DN	DCONMS	TC3030
CRF 4060 050 120	0.02-0.03	6	0.5	50	4.5	12	5.8	6	●
4080 100 160	0.02-0.03	8	1.0	57	6.0	16	7.7	8	●
4100 100 200	0.02-0.04	10	1.0	63	7.5	20	9.6	10	●
4120 150 240	0.03-0.05	12	1.5	70	9.0	24	11.5	12	●
4160 200 320	0.03-0.05	16	2.0	83	12.0	32	15.5	16	●

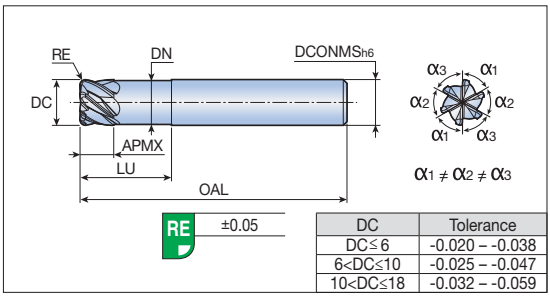
●: Standard items

CRF 6

6-flute, ceramic end mills







DC	Tolerance
DC≤6	-0.020 – -0.038
6<DC≤10	-0.025 – -0.047
10<DC≤18	-0.032 – -0.059

Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DC	RE	OAL	APMX	LU	DN	DCONMS	TC3030
CRF 6060 050 120	0.02-0.03	6	0.5	50	4.5	12	5.8	6	●
6080 100 160	0.02-0.03	8	1.0	57	6.0	16	7.7	8	●
6100 100 200	0.02-0.04	10	1.0	63	7.5	20	9.6	10	●
6120 150 240	0.03-0.05	12	1.5	70	9.0	24	11.5	12	●
6160 200 320	0.03-0.05	16	2.0	83	12.0	32	15.5	16	●

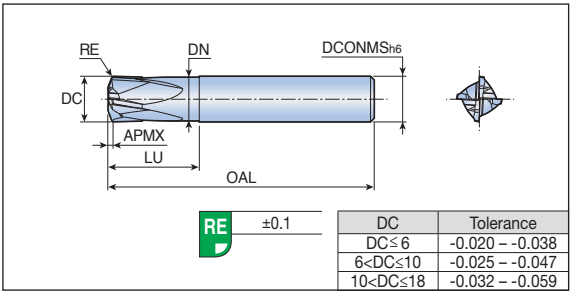
●: Standard items

CRH 4

4-flute, ceramic end mills for high feed milling





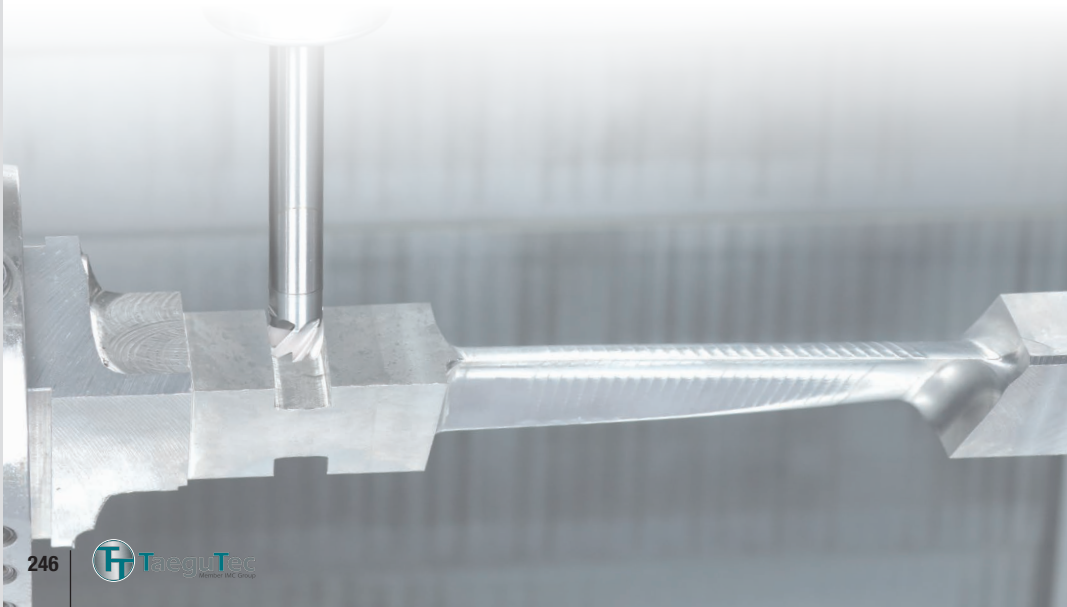


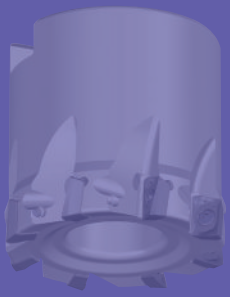
DC	Tolerance
DC≤ 6	-0.020 – -0.038
6<DC≤10	-0.025 – -0.047
10<DC≤18	-0.032 – -0.059

Designation	Feed (mm/tooth)	Dimension (mm)							Grade
		DC	RE	OAL	APMX	LU	DN	DCONMS	TC3030
CRH 4060	0.1-0.15	6	0.7	50	0.55	12	5.8	6	●
4080	0.1-0.2	8	0.9	57	0.75	16	7.7	8	●
4100	0.1-0.2	10	1.0	63	0.85	20	9.6	10	●
4120	0.1-0.3	12	1.4	70	1.15	24	11.5	12	●
4160	0.1-0.3	16	1.8	83	1.55	32	15.5	16	●

▸ RE: Program corner R

●: Standard items





Dia-Coating Line

- Tool Selection Guide 248
- Milling 249
- Holemaking 259
- End Mill 260





Milling

Facing		AXCT 06 APCT 12		TFM90AX-06 TFM90AP-12
				TFM90AX-06 TE90AX-M(S)-06 TE90AP-12 TE90AP-M-12
		3PHT 15		3P TF90-15
				3P TF90-15

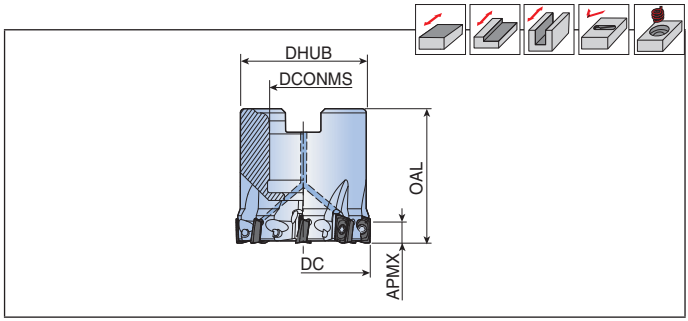
Holemaking & End mills

Holemaking	CDF	Ø3 - Ø12.7	
End Mills	DMB 2	Ø0.6 - Ø2.0	
	DEB 2...S	Ø3 - Ø12	
	DEB 2...L	Ø3 - Ø12	
	DMR 2	Ø0.6 - Ø2.0	
	DER 3...S	Ø3 - Ø12	
	DER 3...L	Ø4 - Ø12	
	RDCF	Ø4 - Ø12	
	RCOM	Ø6 - Ø12	
	RRFE	Ø4 - Ø12	
	RCFE	Ø4 - Ø12	
	RCME	Ø4 - Ø12	
	RCDE	Ø4 - Ø12	

TFM90AX-06

Face mills





90°

Designation			Dimension (mm)					Coolant hole	Arbor style	Kg	Mounting bolt	Insert
			DC	DCONMS	DHUB	OAL	APMX					
TFM90AX	**832-16R-06**	8	32	16	30	32	5.5	●	A	0.1	SH M8x25	AXCT 0602...
	1040-16R-06	10	40	16	38	40	5.5	●	A	0.2	SH M8x25	
	1040-22R-06	10	40	22	38	40	5.5	●	A	0.2	SH M10x30	

▸ Mounting bolt with coolant-through hole is available upon request (ordering example: SH M10x1.5x30-C)

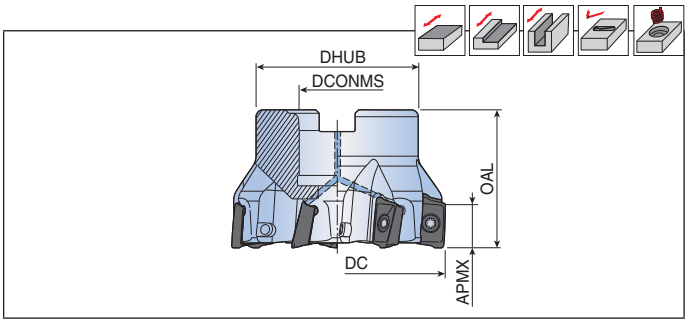
Spare parts

Designation	Screw	Wrench			
					
TFM90AX	TS 18041I/HG	TD 6P			

TFM90AP-12

Face mills





90°

Designation		Dimension (mm)					Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DC	DCONMS	DHUB	OAL	APMX					
TFM90AP 440-16R-12	4	40	16	38	40	12	●	A	0.2	SH M8x25	APCT 1204...
540-16R-12	5	40	16	38	40	12	●	A	0.2	SH M8x25	
550-22R-12	5	50	22	45	40	12	●	A	0.3	SH M10x30	
650-22R-12	6	50	22	45	40	12	●	A	0.3	SH M10x30	
563-22R-12	5	63	22	47	40	12	●	A	0.5	SH M10x30	
663-22R-12	6	63	22	47	40	12	●	A	0.5	SH M10x30	
763-22R-12	7	63	22	47	40	12	●	A	0.5	SH M10x30	
680-27R-12	6	80	27	58	50	12	●	A	1.0	SH M10x25	
880-27R-12	8	80	27	58	50	12	●	A	1.0	SH M10x25	

▸ Mounting bolt with coolant-through hole is available upon request (ordering example: SH M10x1.5x30-C)

TE90AX-06

End mills



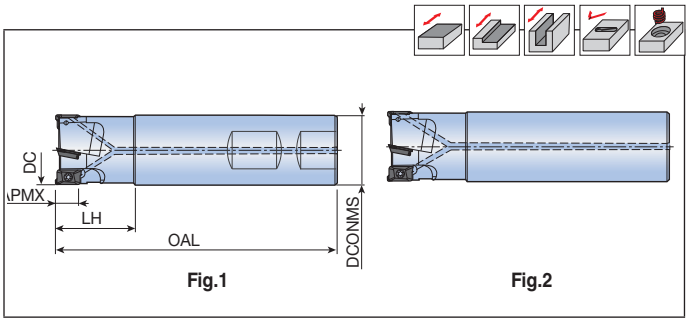


Fig.1

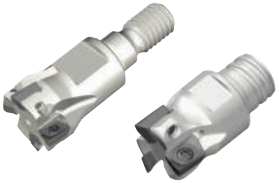
Fig.2

90°

Designation			Dimension (mm)					Coolant hole	Fig.	Insert
			DC	DCONMS	OAL	LH	APMX			
TE90AX	**108-08-06-C**	1	8	8	80	17	5.5	●	2	AXCT 0602 ...
	210-09-06-L120	2	10	9	120	17	5.5	x	2	
	210-10-06-C	2	10	10	80	17	5.5	●	2	
	211-10-06	2	11	10	80	17	5.5	x	2	
	212-12-06-C	2	12	12	80	18	5.5	●	2	
	212-12-06-L	2	12	12	130	18	5.5	x	2	
	212-11-06-L120	2	12	11	120	20	5.5	x	2	
	312-12-06-C	3	12	12	80	18	5.5	●	2	
	313-12-06-C	3	13	12	90	20	5.5	●	2	
	314-12-06	3	14	12	80	18	5.5	x	2	
	415-12-06	4	15	12	80	18	5.5	x	2	
	316-16-06-C	3	16	16	110	20	5.5	●	2	
	316-16-06-L	3	16	16	150	20	5.5	x	2	
	416-W16-06-C	4	16	16	90	20	5.5	●	1	
	417-16-06	4	17	16	90	20	5.5	x	2	
	418-W16-06-C	4	18	16	90	20	5.5	●	1	
	418-16-06-L	4	18	16	150	20	5.5	x	2	
	419-W16-06	4	19	16	90	20	5.5	x	1	
	420-20-06	4	20	20	160	25	5.5	x	2	
	420-W20-06-C	4	20	20	160	25	5.5	●	1	
	520-19-06-L	5	20	19	160	25	5.5	x	1	
	520-W20-06-C	5	20	20	105	25	5.5	●	1	
	521-20-06	5	21	20	105	25	5.5	x	2	
	725-W20-06-C	7	25	20	115	25	5.5	●	1	
	725-W25-06	7	25	25	120	30	5.5	x	1	
	832-W25-06-C	8	32	25	130	32	5.5	●	1	
	1040-W32-06-C	10	40	32	140	40	5.5	●	1	

TE90AX-M(S)-06

Modular heads



90°

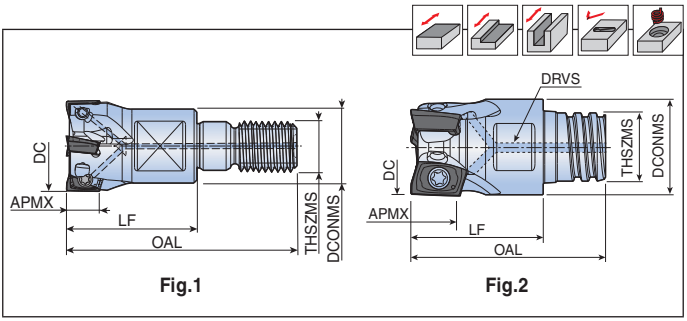


Fig.1 Fig.2

Designation		Dimension (mm)							Coolant hole	Fig.	Insert
		DC	DCONMS	LF	OAL	THSZMS	APMX	DRVS			
TE90AX 210-M06-06	2	10	9.7	17	31.5	M06	5.5	8	●	1	AXCT 0602 ...
312-M06-06	3	12	11	17	31.5	M06	5.5	8	●	1	
416-M08-06	4	16	13	23	40.5	M08	5.5	10	●	1	
520-M10-06	5	20	18	23	43	M10	5.5	15	●	1	
725-M12-06	7	25	21	27	49	M12	5.5	17	●	1	
832-M16-06	8	32	29	27	52	M16	5.5	25	●	1	
1040-M16-06	10	40	29	27	52	M16	5.5	25	●	1	
TE90AX 210-S06-06	2	10	9.6	15	21.3	S06	5.5	8	●	2	
312-S08-06	3	12	11.5	16	23.5	S08	5.5	10	●	2	
416-S10-06	4	16	15.2	20	31.3	S10	5.5	13	●	2	

▸ Matched with T-FLEXTEC holder (Fig. 1) and MAXI-RUSH holder (Fig. 2)

Spare parts

Designation	Screw	Wrench			
					
TE90AX-06	TS 18041I/HG	TD 6P			

TE90AP-12

End mills



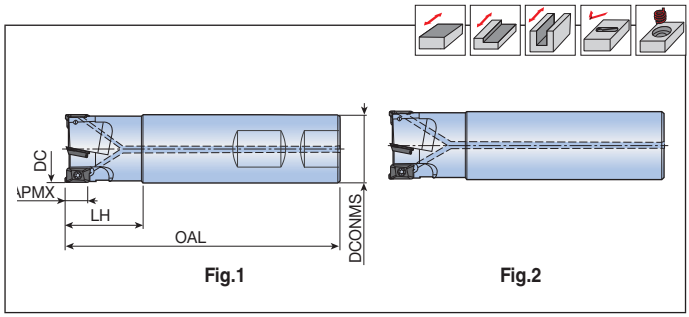


Fig.1

Fig.2

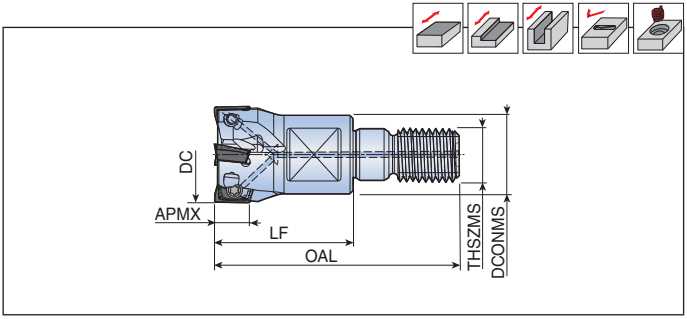
90°

Designation			Dimension (mm)					Coolant hole	Fig.	Insert
			DC	DCONMS	OAL	LH	APMX			
TE90AP	**116-W16-12-C**	1	16	16	85	26	12.0	●	1	APCT 1204....
	218-W20-12-C	2	18	20	85	26	12.0	●	1	
	220-19-12-L	2	20	19	170	30	12.0	●	2	
	220-W20-12-C	2	20	20	90	30	12.0	●	1	
	220-W20-12-L-C	2	20	20	125	30	12.0	●	1	
	220-20-12-L	2	20	20	170	30	12.0	●	2	
	220-20-12-L200	2	20	20	200	30	12.0	●	2	
	221-20-12-L200	2	21	20	200	30	12.0	●	2	
	221-20-12-L250	2	21	20	250	30	12.0	●	2	
	225-24-12-L	2	25	24	200	40	12.0	●	2	
	225-W25-12-L-C	2	25	25	145	40	12.0	●	1	
	225-25-12-L	2	25	25	210	40	12.0	●	2	
	225-25-12-L200	2	25	25	200	40	12.0	●	2	
	325-W25-12-C	3	25	25	100	40	12.0	●	1	
	226-25-12-L200	2	26	25	200	40	12.0	●	2	
	226-25-12-L250	2	26	25	250	40	12.0	●	2	
	232-25-12-L	2	32	25	250	40	12.0	●	2	
	332-W25-12-L-C	3	32	25	155	35	12.0	●	1	
	332-W32-12-C	3	32	32	110	40	12.0	●	1	
	332-32-12-L	3	32	32	250	40	12.0	●	2	
	332-32-12-L150	3	32	32	150	40	12.0	●	2	
	432-W25-12-C	4	32	25	100	40	12.0	●	1	
	233-32-12-L200	2	33	32	200	40	12.0	●	2	
	233-32-12-L250	2	33	32	250	40	12.0	●	2	
	333-32-12-L200	3	33	32	200	40	12.0	●	2	
	333-32-12-L250	3	33	32	250	40	12.0	●	2	
	435-W25-12	4	35	25	100	40	12.0	●	1	
	440-W32-12-C	4	40	32	115	45	12.0	●	1	
	440-32-12-L	4	40	32	250	40	12.0	●	2	
	540-W32-12-C	5	40	32	115	45	12.0	●	1	

TE90AP-M-12

Modular heads





90°

Designation		Dimension (mm)						Coolant hole	Insert
		DC	DCONMS	LF	OAL	THSZMS	APMX		
TE90AP 116-M08-12	1	16	13	35	52.5	M08	12.0	●	APCT 1204....
220-M10-12	2	20	18	35	55	M10	12.0	●	
325-M12-12	3	25	21	35	57	M12	12.0	●	
432-M16-12	4	32	29	43	68	M16	12.0	●	
540-M16-12	5	40	29	43	68	M16	12.0	●	
542-M16-12	5	42	29	43	68	M16	12.0	●	

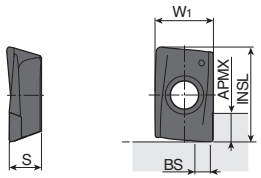
▸ Matched with T-FLEXTEC holder

Spare parts

Designation	Screw	Wrench			
					
TE90AP-12 (Ø16-Ø26)	TS 35A070I/HG	TD 10P			
TE90AP-12 (Ø32-)	TS 35A088I/HG	TD 10P			

AP(X)CT

Inserts



Size	Dimension (mm)					
	INSL	W1	S	APMX	BS	RE(Ch)
06	6.5	4.2	2.6	5.5	0.6	0.4
12	13	8.3	4.7	11.8	1.2	0.4

Insert	Designation	Recommended machining conditions		Coated		
		ap (mm)	Feed (mm/tooth)	TTD610	TTD620	TTD630
	**AXCT 060204R-L**	0.3-5.0	0.10-0.03		●	
	APCT 120404R-L	3.5-9.5	0.80-0.04		●	

●: Standard items

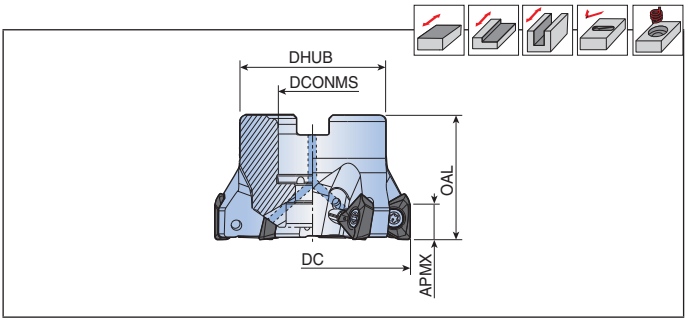
3P TF90-15

Face mills









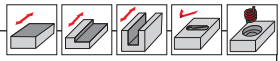
Designation		Dimension (mm)					Coolant hole	Arbor style	Kg	Mounting bolt	Insert
		DC	DCONMS	DHUB	OAL	APMX					
3P TF90-450-22R-15	4	50	22	45	40	11	●	A	0.3	SH M10x30	3PHT 1505...
550-22R-15	5	50	22	45	40	11	●	A	0.3	SH M10x30	
463-22R-15-B	4	63	22	47	40	11	●	A	0.5	SH M10x30	
463-27R-15-B	4	63	27	58	50	11	●	A	0.5	SH M12x35	
663-22R-15	6	63	22	47	40	11	●	A	0.5	SH M10x30	
480-27R-15-B	4	80	27	58	50	11	●	A	1.0	SH M12x35	
780-27R-15	7	80	27	58	50	11	●	A	1.0	SH M12x35	
880-27R-15	8	80	27	58	50	11	●	A	1.0	SH M12x35	
6100-32R-15-B	6	100	32	85	50	11	●	A	1.8	LH M16x35	
8100-32R-15	8	100	32	85	50	11	●	A	1.9	LH M16x35	
10100-32R-15	10	100	32	85	50	11	●	A	1.9	LH M16x35	
7125-40R-15-B	7	125	40	85	63	11	●	A	3.0	SH M20x40	
8125-40R-15	8	125	40	85	63	11	●	A	3.0	SH M20x40	
10125-40R-15	10	125	40	85	63	11	●	A	3.1	SH M20x40	
12125-40R-15	12	125	40	85	63	11	●	A	3.1	SH M20x40	
8160-40R-15	8	160	40	85	63	11	x	C	4.4	-	
12160-40R-15	12	160	40	110	63	11	x	C	4.4	-	
15160-40R-15	15	160	40	110	63	11	x	C	4.4	-	
15200-60R-15	15	200	60	130	63	11	x	C	6.0	-	
18200-60R-15	18	200	60	130	63	11	x	C	5.8	-	

▸ Mounting bolt with coolant-through hole is available upon request (ordering example: SH M10x1.5x30-C)

3P TE90-15

End mills





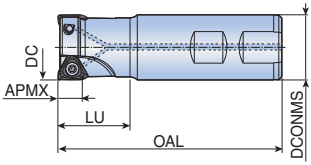
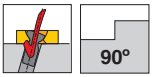


Fig.1



Fig.2

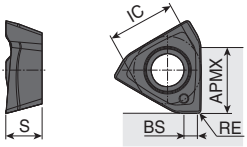


Designation		Dimension (mm)					Coolant hole	Fig.	Insert
		DC	DCONMS	OAL	LU	APMX			
3P TE90-232-W32-15	2	32	32	110	40	11.0	●	1	3PHT 1505...
232-32-15-L250	2	32	32	250	60	11.0	●	2	
332-W25-15	3	32	25	100	40	11.0	●	1	
332-W25-15-L155	3	32	25	155	35	11.0	●	2	
332-W32-15	3	32	32	110	40	11.0	●	1	
332-32-15-L150	3	32	32	150	40	11.0	●	2	
332-32-15-L250	3	32	32	250	60	11.0	●	2	
233-32-15-L200	2	33	32	200	40	11.0	●	2	
233-32-15-L250	2	33	32	250	40	11.0	●	2	
335-W32-15	3	35	32	110	40	11.0	●	1	
340-W32-15	3	40	32	110	40	11.0	●	1	
340-32-15-L200	3	40	32	200	40	11.0	●	2	
440-W32-15	4	40	32	110	40	11.0	●	1	

Spare parts

Designation	Screw	Wrench			
					
3P TE90-15	TS 40B100I	TD 15			

Inserts



Size	Dimension (mm)					
	IC	S	APMX	BS	RE	
15	10.7	5.0	11.0	2.0	0.4	



Insert	Designation	Recommended machining conditions		Coated		
		ap (mm)	Feed (mm/tooth)	TTD610	TTD620	TTD630
	**3PHT 150504R-L**	0.5-3.0	0.08-0.04		●	

●: Standard items

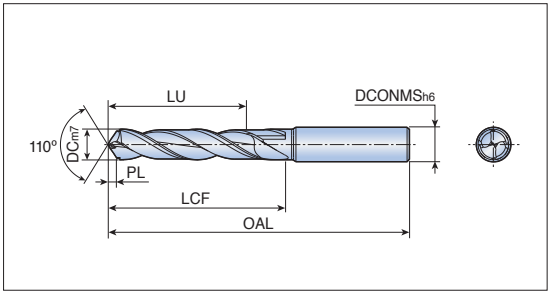
CDF

Solid carbide drills for composite materials



• Drilling depth: 3xdiameter





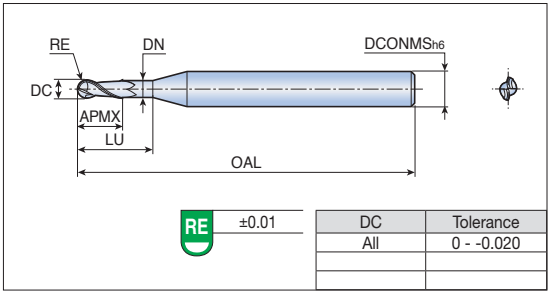
Designation	Dimension (mm)							Grade
	DC (Metric)	DC (Inch)	DCONMS	OAL	LU	LCF	PL	TTD610
CDF 030-027-06	3	-	6	72.7	28	34.7	0.7	●
040-027-06	4	-	6	73.0	28	35.0	1.0	●
0476-034-06	4.76	3/16	6	81.3	35	43.3	1.3	●
050-034-06	5	-	6	81.3	35	43.3	1.3	●
060-034-06	6	-	6	81.7	36	43.7	1.7	●
0635-040-08	6.35	-	8	89.7	42	51.7	1.7	●
070-040-08	7	-	8	89.9	42	51.9	1.9	●
0794-040-08	7.94	5/16	8	90.2	42	52.2	2.2	●
080-040-08	8	-	8	90.2	42	52.2	2.2	●
090-045-10	9	-	10	101.5	48	59.5	2.5	●
0952-045-10	9.52	3/8	10	101.6	48	59.6	2.6	●
100-045-10	10	-	10	101.8	48	59.8	2.8	●
110-052-12	11	-	12	117.1	55	70.1	3.1	●
1111-052-12	11.11	7/16	12	117.1	55	70.1	3.1	●
120-052-12	12	-	12	117.4	55	70.4	3.4	●
127-055-14	12.7	1/2	14	122.6	59c	75.6	3.6	●

●: Standard items

DMB 2

2-flute miniature ball





DC	Tolerance
All	0 - -0.020

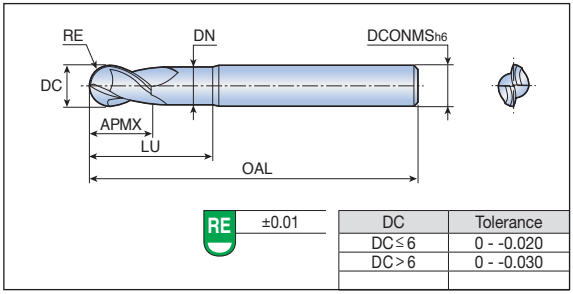
Designation		Dimension (mm)							Grade
		DC	RE	OAL	APMX	LU	DN	DCONMS	TTD620
DMB	**2006-0.6x3.0**	0.6	0.3	40	0.6	3.0	0.55	3	●
	2010-1.0x5.0	1.0	0.5	40	1.0	5.0	0.95	3	●
	2010-1.0x8.5	1.0	0.5	40	1.0	8.5	0.95	3	●
	2015-1.5x7.5	1.5	0.75	50	1.5	7.5	1.4	3	●
	2015-1.5x12.0	1.5	0.75	50	1.5	12.0	1.4	3	●
	2020-2.2x10.0	2.0	1.0	60	2.2	10.0	1.9	3	●
	2020-2.2x16.0	2.0	1.0	60	2.2	16.0	1.9	3	●

●: Standard items

DEB 2...S

2-flute short ball





DC	Tolerance
DC≤6	0 - -0.020
DC>6	0 - -0.030

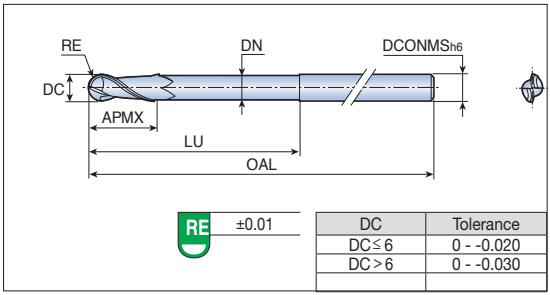
Designation		Dimension (mm)							Grade
		DC	RE	OAL	APMX	LU	DN	DCONMS	TTD620
DEB	**2030S**	3	1.5	60	4.5	6.5	2.8	6	●
	2040S	4	2.0	65	6.0	8.0	3.7	6	●
	2060S	6	3.0	75	9.0	12.0	5.6	6	●
	2120S	12	6.0	90	18.0	36.0	11.4	12	●

●: Standard items

DEB 2...L

2-flute long neck ball





2 H•A 30°

RE ±0.01

DC	Tolerance
DC≤6	0 - -0.020
DC>6	0 - -0.030

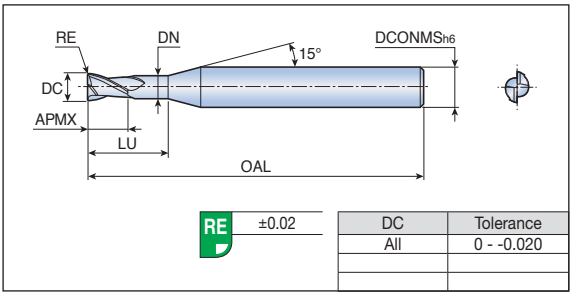
Designation		Dimension (mm)							Grade
		DC	RE	OAL	APMX	LU	DN	DCONMS	TTD620
DEB	2030L-4	3	1.5	80	15	25	2.9	4	●
	2040L-4	4	2.0	80	20	30	3.9	4	●
	2050L	5	2.5	100	30	50	4.9	6	●
	2060L	6	3.0	100	30	50	5.5	6	●
	2080L	8	4.0	110	40	60	7.5	8	●
	2120L	12	6.0	130	55	75	11.5	12	●

●: Standard items

DMR 2

2-flute miniature corner radius





2 H•A 30°

RE ±0.02

DC	Tolerance
All	0 - -0.020

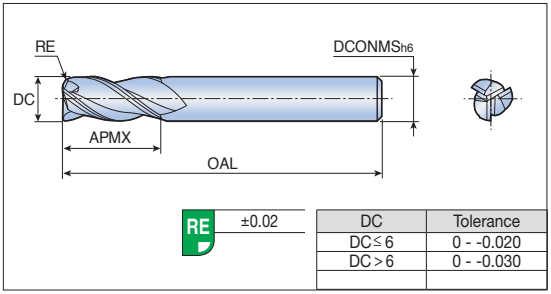
Designation		Feed (mm/tooth)	Dimension (mm)							Grade
			DC	RE	OAL	APMX	LU	DN	DCONMS	TTD620
DMR	2006-0.9x3.0	0.006-0.010	0.6	0.05	40	0.9	3.0	0.55	3	●
	2008-1.2x4.0	0.008-0.015	0.8	0.05	40	1.2	4.0	0.75	3	●
	2010-1.5x5.0	0.010-0.020	1.0	0.1	40	1.5	5.0	0.95	3	●
	2010-1.5x8.5	0.010-0.020	1.0	0.1	40	1.5	8.5	0.95	3	●
	2012-1.8x6.0	0.010-0.025	1.2	0.1	50	1.8	6.0	1.15	3	●
	2015-2.2x7.5	0.015-0.035	1.5	0.15	50	2.2	7.5	1.4	3	●
	2015-2.2x12.0	0.015-0.030	1.5	0.15	50	2.2	12.0	1.4	3	●
	2020-2.2x10.0	0.015-0.040	2.0	0.15	60	2.2	10.0	1.9	3	●
	2020-2.2x16.0	0.015-0.035	2.0	0.15	60	2.2	16.0	1.9	3	●

●: Standard items

DER 3...S

3-flute short corner radius





RE	±0.02

DC	Tolerance
DC ≤ 6	0 - -0.020
DC > 6	0 - -0.030

3 H•A 40°

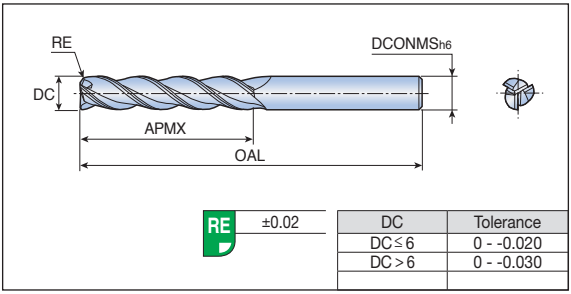
Designation		Feed (mm/tooth)	Dimension (mm)					Grade
			DC	RE	OAL	APMX	DCONMS	TTD620
DER	3030S-3	0.025-0.050	3	0.15	40	12	3	●
	3040S-4	0.040-0.060	4	0.2	50	14	4	●
	3050S-5	0.050-0.080	5	0.3	50	16	5	●
	3060S	0.060-0.090	6	0.3	65	20	6	●
	3080S	0.070-0.100	8	0.5	65	20	8	●
	3100S	0.080-0.130	10	0.5	75	25	10	●
	3120S	0.100-0.150	12	0.5	75	25	12	●

●: Standard items

DER 3...L

3-flute long corner radius





RE	±0.02

DC	Tolerance
DC ≤ 6	0 - -0.020
DC > 6	0 - -0.030

3 H•A 40°

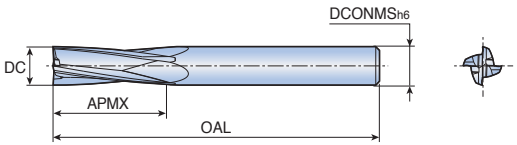
Designation		Feed (mm/tooth)	Dimension (mm)					Grade
			DC	RE	OAL	APMX	DCONMS	TTD620
DER	3040L-4	0.03-0.05	4	0.2	60	30	4	●
	3050L-5	0.04-0.07	5	0.3	70	35	5	●
	3060L	0.05-0.08	6	0.3	100	40	6	●
	3080L	0.06-0.09	8	0.5	100	40	8	●
	3100L	0.07-0.12	10	0.5	100	40	10	●
	3120L	0.09-0.14	12	0.5	100	45	12	●

●: Standard items

RDCF

4- to 8-flutes for finishing composite materials (low helix angle)





DC	Tolerance
All	-0.02 - -0.04

4-8 | H·A 10°

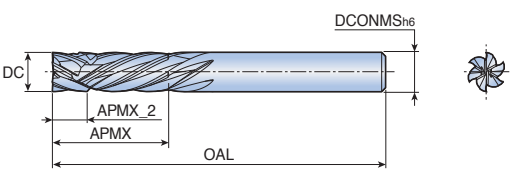
Designation	Feed (mm/tooth)	Dimension (mm)					Grade
		DC	NOF	OAL	APMX	DCONMS	TTD610
RDCF 4040	0.01-0.03	4	4	50	12	4	●
6040	0.01-0.03	4	6	50	12	4	●
4060	0.02-0.04	6	4	65	18	6	●
6060	0.02-0.04	6	6	65	18	6	●
4080	0.03-0.05	8	4	75	24	8	●
6080	0.03-0.05	8	6	75	24	8	●
4100	0.04-0.06	10	4	85	30	10	●
8100	0.04-0.06	10	8	85	30	10	●
4120	0.04-0.08	12	4	100	36	12	●
8120	0.04-0.08	12	8	100	36	12	●

▸ NOF: Number of flutes

●: Standard items

4- and 6-flutes for finishing composite materials (left and right hand helix type)





DC	Tolerance
All	-0.02 - -0.04



Designation	Feed (mm/tooth)	Dimension (mm)						Grade
		DC	NOF	OAL	APMX	APMX_2	DCONMS	TTD610
RCOM 4060	0.02-0.04	6	4	65	18	6.7	6	●
4080	0.02-0.05	8	4	75	24	9.2	8	●
6100	0.03-0.06	10	6	85	30	7.9	10	●
6120	0.04-0.08	12	6	100	36	9.2	12	●

▸ NOF: Number of flutes

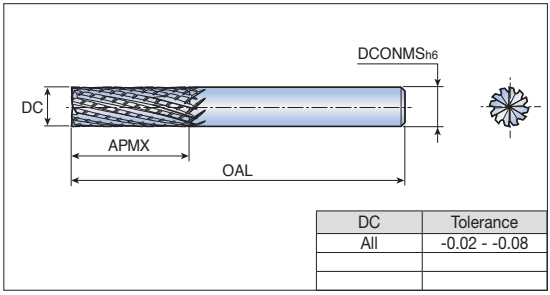
●: Standard items

▸ Notice: For optimal machining performance, the end mill's intersection point (APMX_2) should be positioned at the center of the workpiece thickness.

RRFE

Roughing for composite materials (with chip splitter)





DC	Tolerance
All	-0.02 - -0.08

6-12 H·A 15°

Designation		Feed (mm/tooth)	Dimension (mm)					Grade
			DC	NOF	OAL	APMX	DCONMS	TTD610
RRFE	**040**	0.01-0.02	4	6	50	12	4	●
	060	0.01-0.02	6	8	65	18	6	●
	080	0.01-0.03	8	10	75	24	8	●
	100	0.02-0.04	10	12	85	30	10	●
	120	0.02-0.05	12	12	100	36	12	●

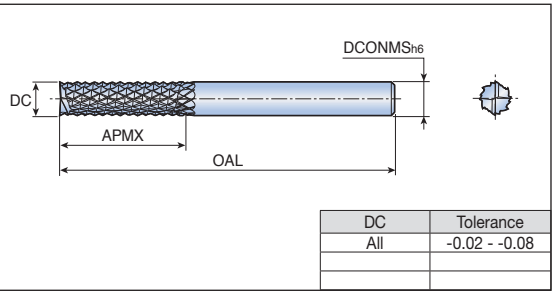
▸ NOF: Number of flutes

●: Standard items

RCFE

Roughing for composite materials (with multi-flute)





DC	Tolerance
All	-0.02 - -0.08

H·A 28°

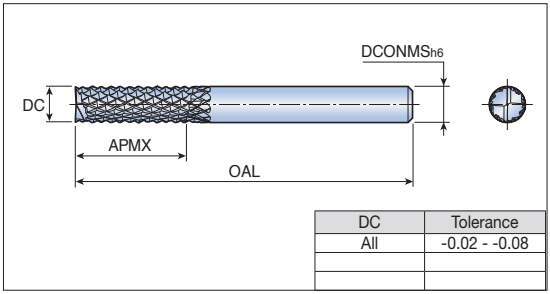
Designation		Feed (mm/rev)	Dimension (mm)				Grade
			DC	OAL	APMX	DCONMS	TTD610
RCFE	**040**	0.03-0.06	4	50	12	4	●
	060	0.07-0.15	6	65	18	6	●
	080	0.10-0.20	8	75	24	8	●
	100	0.15-0.30	10	85	30	10	●
	120	0.20-0.40	12	100	36	12	●

●: Standard items

RCME

Medium to finishing for composite materials (multi-flute)





DC	Tolerance
All	-0.02 - -0.08

H·A 28°

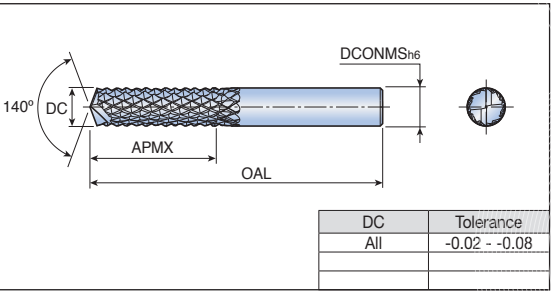
Designation		Feed (mm/rev)	Dimension (mm)				Grade
			DC	OAL	APMX	DCONMS	TTD610
RCME	040	0.03-0.06	4	50	12	4	●
	060	0.07-0.15	6	65	18	6	●
	080	0.10-0.20	8	75	24	8	●
	100	0.15-0.30	10	85	30	10	●
	120	0.20-0.40	12	100	36	12	●

●: Standard items

RCDE

Medium to finishing for composite materials (cutting edge for drilling + multi-flute)





DC	Tolerance
All	-0.02 - -0.08

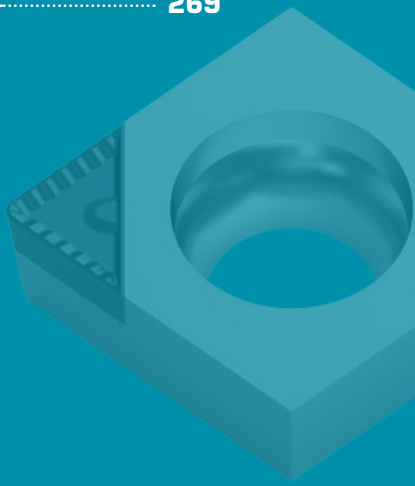
H·A 28°

Designation		Feed (mm/rev)	Dimension (mm)				Grade
			DC	OAL	APMX	DCONMS	TTD610
RCDE	040	0.03-0.06	4	50	12	4	●
	060	0.07-0.15	6	65	18	6	●
	080	0.10-0.20	8	75	24	8	●
	100	0.15-0.30	10	85	30	10	●
	120	0.20-0.40	12	100	36	12	●

●: Standard items

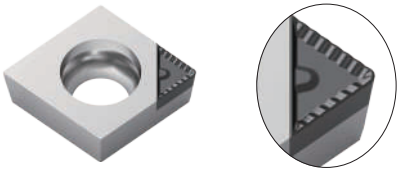
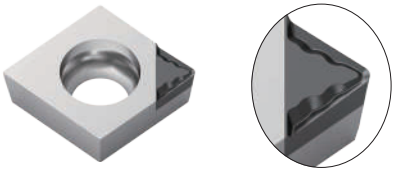
Technical Information

- PCD Chip Breakers 268
- Turning Insert Grades 269



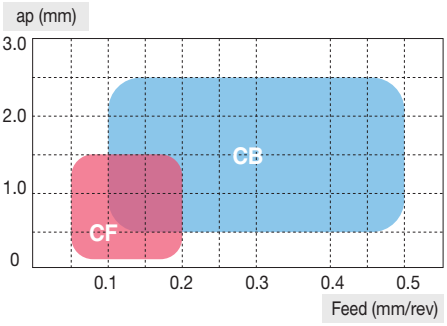
PCD Chip Breakers

■ CF, CB Geometric PCD insert

CB: For roughing to medium	CF: For finishing
	

- CB: The CB chip breaker insert provides excellent chip control when machining aluminum and exhibits outstanding chipping resistance during interrupted cutting.
- CF: The CF chip breaker is capable of fine chip segmenting even in low depth of cut machining applications. Furthermore, the chip segmenting reduces machine downtime caused by long chips, resulting in higher productivity.

Chip control range

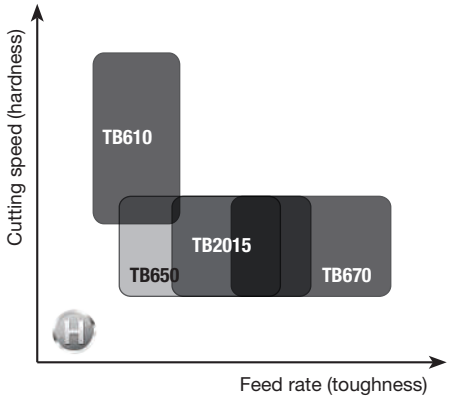


– Insert: DCGT 11T304 CB/CF TD1020
– Cutting speed (V): 800 m/min
– Material: Aluminum alloy (AC4C-T6)

Turning Insert Grades

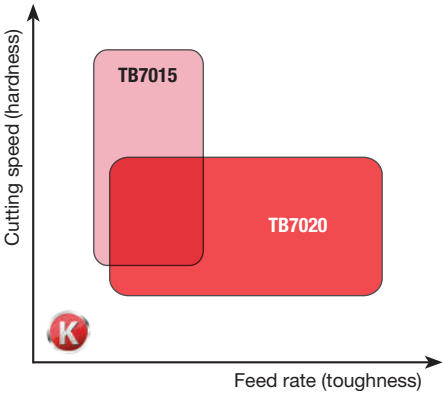
Selection guide for CBN and PCD grades

For hardened steel (HRc ≥ 50, CBN)

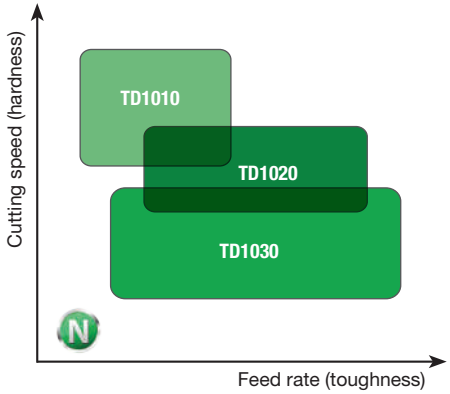


▸ TB730 for general turning of sintered or powder metals metals

For cast iron (CBN)



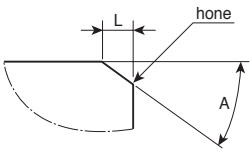
For non-ferrous materials (PCD)



Information of CBN/PCD type

CBN	LS	Brazed small size CBN tip, 1 corner
	LS2	Brazed small size CBN tip, 2 corners
	LN	Brazed large size CBN tip, 1 corner
	LN2	Brazed large size CBN tip, 2 corners
	SD	Solid type
	FT	Full Top type
	DA	Dimple type
	WZ	Wiper geometry
PCD	LN-7	Rake angle 7°
	LN-10	Rake angle10°
	CB	Chip Breaker - roughing medium
	CF	Chip Breaker - finishing

Edge preparations for CBN inserts

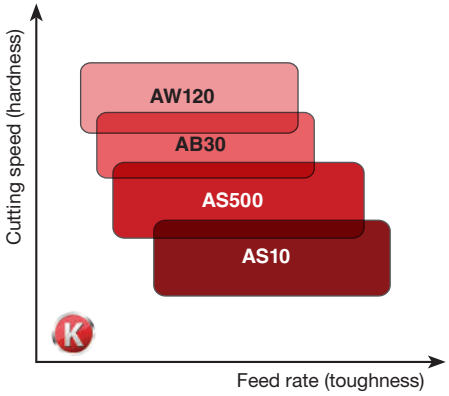
Single land				
Symbol	Width (mm) X angle L X A	Symbol	Width (mm) X angle L X A	Shape
TL	0.13X15°	SL	0.13X15°+ honed	
TM	0.13X25°	SM	0.13X25°+ honed	
TH	0.13X35°	SH	0.13X35°+ honed	

▸ Edge preparations for non-symbol items depend on the grades.
TB610, TB2015, TB650, TB670: 0.13x20°+honed
TB730, TB7015 : 0.13x20°+no honed
TB7020 : 0.20x20°+honed

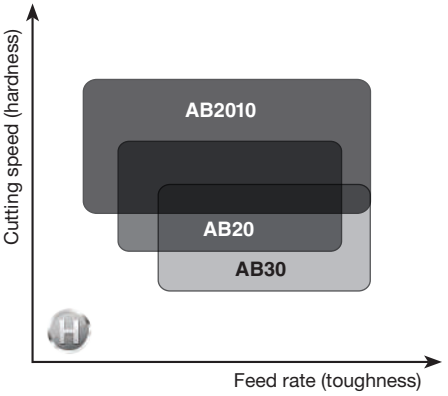
Turning Insert Grades

Selection guide for ceramic grades

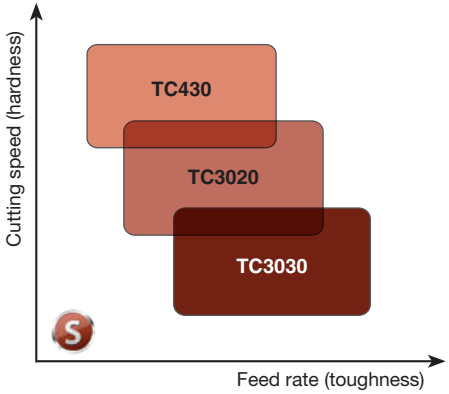
For cast iron



For hardened steel (HRc 40~60)



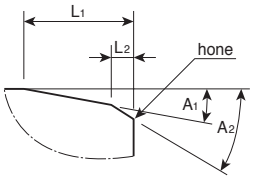
For super alloys



Information about ceramic type

CE	Pressed type
CH	Dimple type
WZ	Wiper geometry

Edge preparations for ceramic inserts

Single land		Double land			
Symbol	Width (mm) X angle	Symbol	Width (mm) X angle		Shape
			L1 X A1	L2 X A2	
T2	0.10 X 30°	U1	0.7 X 15°	0.15 X 30°	
T3	0.15 X 30°	U2	1.5 X 15°	0.15~0.2 X 30°	
T4	0.20 X 30°	U3	2.0 X 15°	0.2 X 30°	
T5	0.30 X 20°	- All items are honed			
T6	0.10 X 20°				
T7	0.20 X 20°				

▸ Edge preparations for non-symbol items is 0.2 X 25°, with no hone, except for □NMG-CE 0.25 X 20° with hone

Turning Insert Grades

CBN, PCD, Ceramic grades

Grades	ISO	Characteristics and Applications
TB610 CBN	H05 – H10	• High speed continuous turning of hardened steel
TB2015 CBN	H10 – H20	• Light interrupted turning of hardened steel
TB650 CBN	H10 – H20	• General turning of hardened steel
TB670 CBN	H20 – H30	• Medium interrupted turning of hardened steel
TB7015 CBN	H25 – H35 K10 – K20	• High speed turning of cast iron and general turning of carbide roll
TB7020 Solid CBN	K10 – K25	• High speed and light interrupted turning of cast iron. Solid CBN insert
TB730 CBN	K05 – K10 P10 – P20	• General turning of sintered or powder metals
AW120 Ceramic, Al_2O_3+Zr_O2	K05 – K15	• High speed continuous turning of white cast iron
AB2010 Ceramic, PVD coated	H05 – H10	• High speed finish turning of hardened steel
AB20 Ceramic, Al_2O_3	H05 – H15	• Continuous and finish turning of hardened steel
AB30 Ceramic, Al_2O_3	H10 – H15 K05 – K15	• General turning of hardened steel under HRC 55 and cast iron
TC430 Ceramic, Whisker	S05 – S15	• High speed turning of super alloys especially for Ni-based super alloy
TC3020 Ceramic, SiAlON	S15 – S25	• General turning and milling of super alloy
TC3030 Ceramic, SiAlON	S25 – S35	• Rough turning and milling of super alloy
AS500 Ceramic, SiAlON	K15 – K25	• General and light interrupted turning of gray cast iron
SC10 Ceramic, CVD coated	K25 – K35	• General turning of ductile cast iron
AS10 Ceramic, Si_3N_4	K25 – K35	• Interrupted turning of gray cast iron
TD1010 PCD	N05 – N15	• Bi-modal composition for high speed turning of non-ferrous materials, high Si aluminum alloy, ceramic and sintered tungsten carbide
TD1020 PCD	N10 – N25	• General turning of non-ferrous materials and finish turning of carbide roll
TD1030 PCD	N20 – N35	• Low Si aluminum alloys and composite plastics (CFRP, GFRP)

PCD·CBN·CERAMIC
Solutions

Tool CutZZ

Your Knowledge Machining Link!



Scan me!

Google play

Scan me!

Download on the App Store

6287026

- Cat.No: 6287026
- English Version: CT 05/2025

- ©TaeguTec LTD.

TaeguTec
Member IMC Group