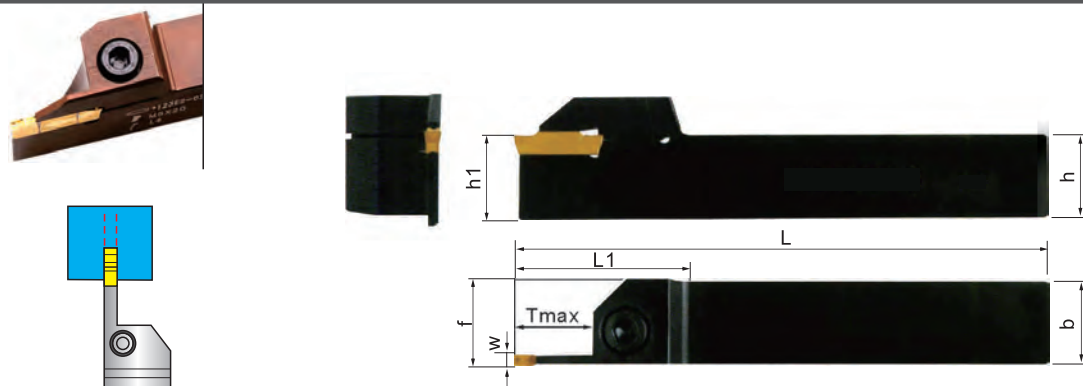


N123

Application	Dimensioning	Product Image	Specification	Dimension							Cutting Environment															
				W	FE	L	B	H	θ	PCD	CBN-K	CBN-S	ZN60	ZN90	ZK01	ZC250	ZC251	ZC32S	ZP152	ZP153	ZP163	ZK50	ZK50S			
Cut-off / Grooving			N123 D2-0150-0002-CM	1.5	0.2	12.9	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
			E2-0200-0002-CM	2.0	0.2	19.0	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			F2-0250-0002-CM	2.5	0.2	18.9	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			G2-0300-0002-CM	3.0	0.2	18.9	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			H2-0400-0002-CM	4.0	0.2	24.1	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Cut-off / Grooving			N123 G2-0300-0004-TM	3.0	0.4	18.4	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
			H2-0400-0004-TM	4.0	0.4	23.4	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			H2-0400-0008-TM	4.0	0.8	23.4	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			J2-0500-0004-TM	5.0	0.4	23.4	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			J2-0500-0008-TM	5.0	0.8	23.4	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

RF123

External Cut-Off / Grooving



(Inserts): A39/B99 (Toolholder Parts): P01-P04 R-Type

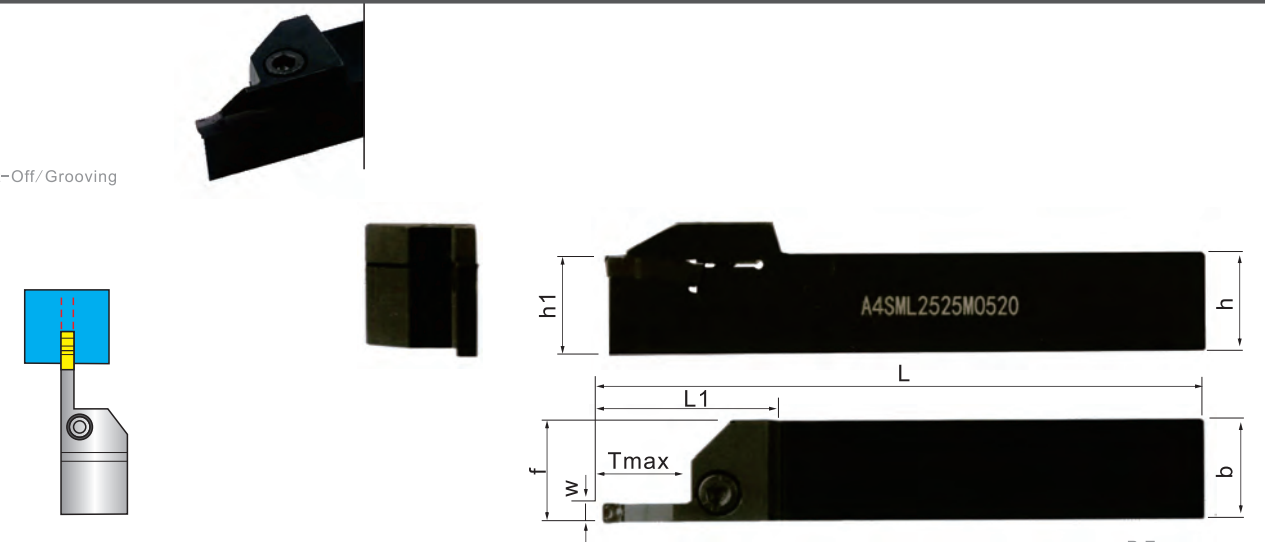
Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number	
	W	b	h	L	h1	f	Tmax				R	L		
R/L F123E	1010J-2T12	2	10	10	110	10	10	12	N123E2..	M4x16	T15	•	•	253610
	1212J-2T12	2	12	12	110	12	12	•				•	253612	
	1616H-2T17	2	16	16	100	16	16	•				•	253614	
	2020K-2T17	2	20	20	125	20	20	•				•	253616	
R/L F123F	1616H-2.5T18	2.5	16	16	100	16	16	18	N123F2..	M5x20	L4	•	•	253620
2020K-2.5T18	2.5	20	20	125	20	20	18	•				•	253622	
2525M-2.5T18	2.5	25	25	150	25	25	18	•				•	253624	
R/L F123G	1616H-3T20	3	16	16	100	16	16	20	N123G2..	M5x20	L4	•	•	253626
	2020K-3T20	3	20	20	125	20	20	20				•	•	253628
	2525M-3T20	3	25	25	150	25	25	20				•	•	253630
R/L F123H	1616H-4T25	4	16	16	100	16	16	25	N123H2..	M5x20	L4	•	•	253632
	2020K-4T25	4	20	20	125	20	20	25				•	•	253634
R/L F123J	1616H-4T25	4	25	25	150	25	25	25	N123J2..	M5x20	L4	•	•	253636
	2020K-5T25	5	20	20	125	20	20	25				•	•	253638
	2525M-5T25	5	25	25	150	25	25	25	•	•	•	•	•	253640

A4.

Application	Dimensioning	Product Image	Specification	Dimension							Cutting Environment															
				W	FE	L	B	H	θ	PCD	CBN-K	CBN-S	ZN60	ZN90	ZK01	ZC250	ZC251	ZC32S	ZP152	ZP153	ZP163	ZK50	ZK50S			
Cut-off / Grooving			A4G 0205M02U02GMN	2.05	0.2	20	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
			0255M2B002GMN	2.62	0.2	20	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			0305M03U02GMN	3.05	0.2	20	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0305M03U04GMN	3.05	0.4	20	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0405M04U04GMN	4.05	0.4	20	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0405M04U08GMN	4.05	0.8	20	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0505M05U04GMN	5.05	0.4	25	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0505M05U08GMN	5.05	0.8	25	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0605M06U04GMN	6.05	0.4	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0605M06U08GMN	6.05	0.8	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0605M08U12GMN	6.05	1.2	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			0805M08U08GMN	8.05	0.8	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
0805M08U12GMN	8.05	1.2	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
1005M10U08GMN	10.0	0.5	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
1005M10U12GMN	10.0	1.2	30	-	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			

A4SMR

External Cut-Off / Grooving



(Inserts): A37/B100 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	W	b	h	L	h1	f	Tmax				R	L	
A4SM R/L 2020K0317	3	20	20	125	20	20.3	17	A4G0300M3..	M5x20	L4	•	•	253630
	2525K0317	3	25	25	150	25	25.3				17	•	•
A4SM R/L 2020K0417	4	20	20	125	20	20.3	17	A4G0400M4..	M5x20	L4	•	•	253634
2525K0417	4	25	25	150	25	25.3	17				•	•	253636
A4SM R/L 2020K0520	5	20	20	125	20	20.3	20	A4G0500M5..	M5x20	L4	•	•	253638
2525K0520	5	25	25	150	25	25.3	20				•	•	253640
A4SM R/L 2020K0626	6	25	25	150	25	25.3	26	A4G0600M5..	M5x20	L4	•	•	253642
	3232P0626	6	32	32	170	32	32.3				26	•	•
A4SM R/L 2525M0626	6	25	25	150	25	25.3	26	A4G0605M5..	M5x20	L4	•	•	253646
3232P0626	6	32	32	170	32	32.3	26				•	•	253648

DG

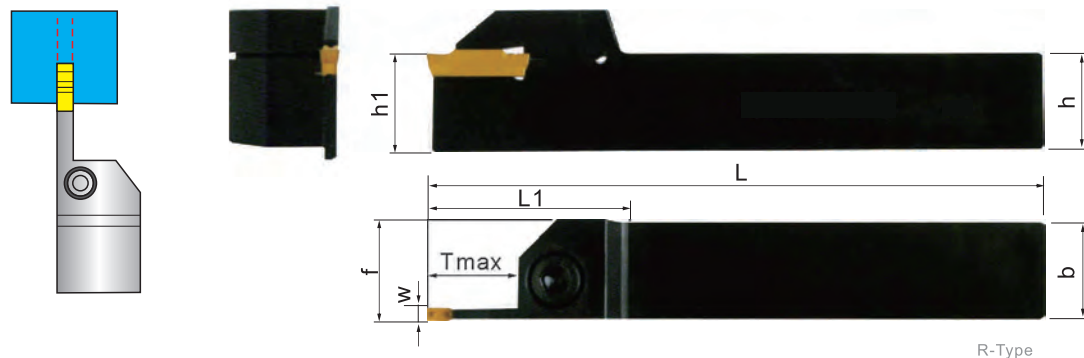
Application		Cutting Environment									
		● Stable Cutting	● General Cutting	✘ Unstable Cutting							
P	Steel	●	●	✘	✘	✘	✘	✘	✘	✘	✘
M	Stainless Steel	●	●	✘	✘	✘	✘	✘	✘	✘	✘
K	Iron	●	●	✘	✘	✘	✘	✘	✘	✘	✘
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	●	●	●	●	●	●	●	●	●	●
S	Carbide/Powder Metallurgy	●	●	●	●	●	●	●	●	●	●
H	Titanium/Superalloy/Carbon Fiber	●	●	●	●	●	●	●	●	●	●

Application	Dimensioning	Product Image	Specification	Dimension							Material								
				W	FE	L	B	H	θ	PCD	CBN-K	CBN-S	ZN80	ZK01	ZC250	ZP152	ZP153		
External Grooving			DGN 2002C	2.0	0.2	19.9	-	-	-	-	-	-	●	●	●	●	●	●	
			DGN 2502C	2.5	0.2	20.7	-	-	-	-	-	-	-	●	●	●	●	●	●
			DGN 3102C	3.1	0.2	20.1	-	-	-	-	-	-	-	●	●	●	●	●	●
			DGN 4003C	4.0	0.3	18.8	-	-	-	-	-	-	-	●	●	●	●	●	●
			DGN 5003C	5.0	0.3	19.1	-	-	-	-	-	-	-	●	●	●	●	●	●
Internal Grooving			DGN 2002J	2.0	0.2	19.9	-	-	-	-	-	-	●	●	●	●	●	●	
			DGN 3102J	3.1	0.2	20.1	-	-	-	-	-	-	-	●	●	●	●	●	●
			DGN 4003J	4.0	0.3	18.8	-	-	-	-	-	-	-	●	●	●	●	●	●
			DGN 5003J	5.0	0.3	19.1	-	-	-	-	-	-	-	●	●	●	●	●	●

DGTR



External Cut-Off/ Grooving



R-Type

(Inserts): A37/B101 (Toolholder Parts): P01-P04

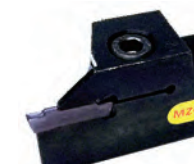
Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number	
	W	b	h	L	h1	f	Tmax						
DGTR/L 10B-2D30	2	10	10	125	10	10	30	DGN2..	M5X16	L4	●	○	253300
12B-2D30	2	12	12	125	12	12	30	DGN2..			●	○	253302
16B-2D32	2	16	16	125	16	16	32	DGN2..			●	○	253304
16B-3D35	3	16	16	125	16	16	35	DGN3..	●	○	253306		
20B-2D35	2	20	20	125	20	20	35	DGN2..	M5X20	L4	●	○	253308
20B-3D40	3	20	20	125	20	20	40	DGN3..			●	○	253310
25B-2D35	2	25	25	150	25	25	35	DGN2..			●	○	253312
25B-3D40	3	25	25	150	25	25	40	DGN3..	●	○	253314		

GC

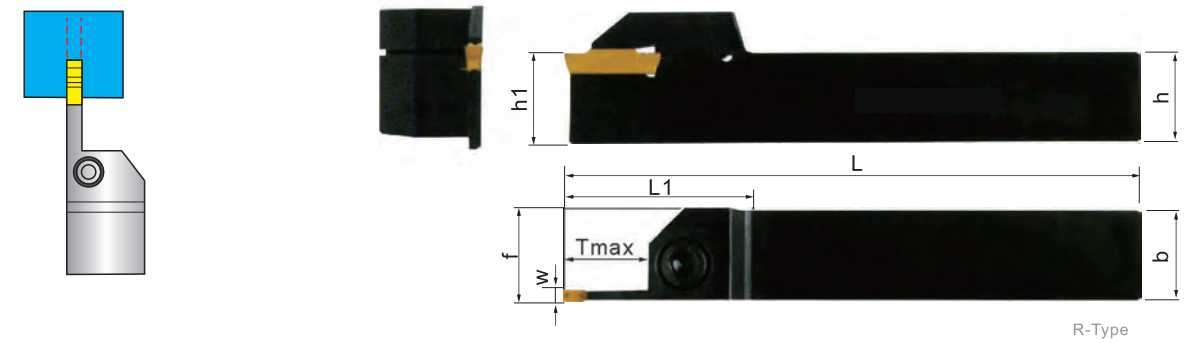
Application		Cutting Environment									
		● Stable Cutting	● General Cutting	✘ Unstable Cutting							
P	Steel	●	●	✘	✘	✘	✘	✘	✘	✘	✘
M	Stainless Steel	●	●	✘	✘	✘	✘	✘	✘	✘	✘
K	Iron	●	●	✘	✘	✘	✘	✘	✘	✘	✘
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	●	●	●	●	●	●	●	●	●	●
S	Carbide/Powder Metallurgy	●	●	●	●	●	●	●	●	●	●
H	Titanium/Superalloy/Carbon Fiber	●	●	●	●	●	●	●	●	●	●

Application	Dimensioning	Product Image	Specification	Dimension							Material								
				W	FE	L	B	H	θ	PCD	CBN-K	CBN-S	ZN80	ZK01	ZC250	ZP152	ZP153		
External Grooving			GCMN3004-MG	3.0	0.4	21.1	-	-	-	-	-	-	●	●	●	●	●	●	
			GCMN 4008-MG	4.0	0.8	26.4	-	-	-	-	-	-	-	●	●	●	●	●	●
			GCMN 5008-MG	5.0	0.8	26.4	-	-	-	-	-	-	-	●	●	●	●	●	●
			GCMN 6008-MG	6.0	0.8	26.4	-	-	-	-	-	-	-	●	●	●	●	●	●
			GCMN 7008-MG	7.0	0.8	28.7	-	-	-	-	-	-	-	●	●	●	●	●	●
GCMN 8008-MG	8.0	0.8	28.7	-	-	-	-	-	-	-	●	●	●	●	●	●			
Internal Grooving			GCMN 3015-RG	3.0	1.5	21.1	-	-	-	-	-	-	●	●	●	●	●	●	
			GCMN 4020-RG	4.0	2.0	26.4	-	-	-	-	-	-	-	●	●	●	●	●	●
			GCMN 5025-RG	5.0	2.5	27.2	-	-	-	-	-	-	-	●	●	●	●	●	●
			GCMN 6030-RG	6.0	3.0	27.9	-	-	-	-	-	-	-	●	●	●	●	●	●
			GCMN 7035-RG	7.0	3.5	29.0	-	-	-	-	-	-	-	●	●	●	●	●	●
GCMN 8040-RG	8.0	4.0	29.0	-	-	-	-	-	-	-	●	●	●	●	●	●			

GNDLR



External Cut-Off/ Grooving

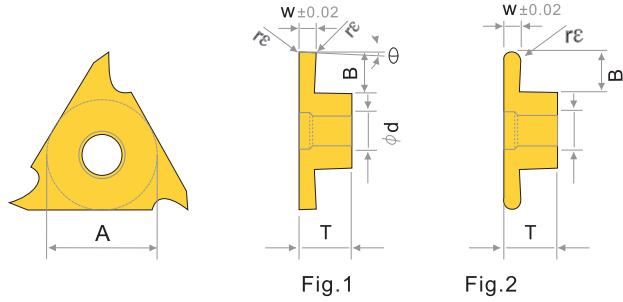


R-Type

(Inserts): A38/B102 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number	
	W	b	h	L	h1	f	Tmax						
GNDL R/L 2020K-216	2	20	20	125	20	20.3	16	GCMN2002-GG	M6×20	L5	●	●	253650
2525M-216	2	25	25	150	25	25.3	16				●	●	253652
3232P-216	2	32	32	170	32	32.3	16				●	●	253654
GNDL R/L 2020K-320	3	20	20	125	20	20.3	20	GCMN3002-GG	M6×20	L5	●	●	253656
2525M-320	3	25	25	150	25	25.3	20				●	●	253658
3232P-320	3	32	32	170	32	32.3	20				●	●	253660
GNDL R/L 2020K-425	4	20	20	125	20	20.3	25	GCMN4002-GG	M6×20	L5	●	●	253662
2525M-425	4	25	25	150	25	25.3	25				●	●	253664
3232P-425	4	32	32	170	32	32.3	25				●	●	253666

GBA



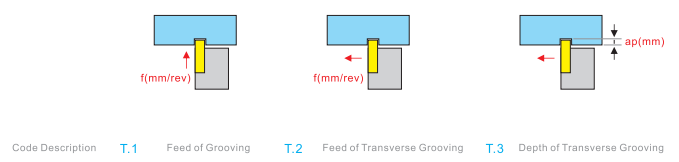
Material	PCD	CBN-K	CBN-S	ZN60	ZK01	ZM826	ZP15	ZM856
P	150-600			150-600		60-250	70-250	100-250
M	150-350		10-30	200-300		50-150	50-150	70-150
K	300-1500	400-800	100-300	100-200		130-210	150-200	150-300
N	300-1200			300-1200		100-160	100-150	150-230
S	10-30			10-30				
H	100-200			100-200		20-50	20-50	20-60

Material	Stable Cutting	General Cutting	General Cutting (Second recommend)	Unstable Cutting
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	●	●	●	●
S	●	●	●	●
H	●	●	●	●

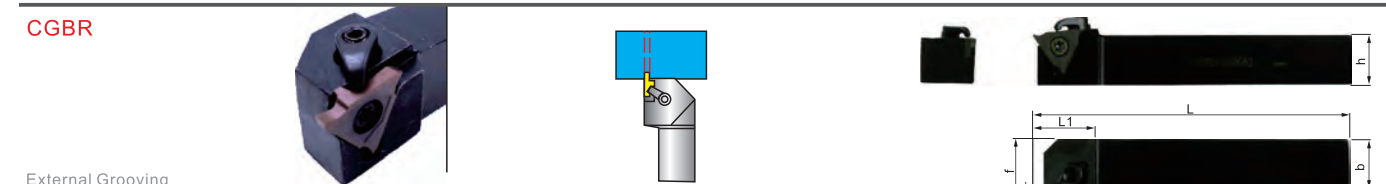
Material	Stable Cutting	General Cutting	General Cutting (Second recommend)	Unstable Cutting
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	●	●	●	●
S	●	●	●	●
H	●	●	●	●

Specification	Dimension							Application
	W±0.02	B	rE	A	T	φd	Fig	
GBA43% 100-010	1.00							●●●●●●●●
120-010	1.20							●●●●●●●●
125-010	1.25							●●●●●●●●
125-020	1.25			12.7	4.76	5.5	Fig.1	2°
140-020	1.40							●●●●●●●●
145-020	1.45							●●●●●●●●
150-010	1.50							●●●●●●●●
150-020	1.50							●●●●●●●●
170-020	1.70							●●●●●●●●
175-020	1.75							●●●●●●●●
180-020	1.80							●●●●●●●●
185-020	1.85			12.7	4.76	5.5	Fig.1	2°
190-020	1.90							●●●●●●●●
195-020	1.95							●●●●●●●●
200-010	2.00							●●●●●●●●
200-020	2.00							●●●●●●●●
220-020	2.20							●●●●●●●●
225-020	2.25							●●●●●●●●
230-020	2.30			12.7	4.76	5.5	Fig.1	2°
250-010	2.50							●●●●●●●●
250-030	2.50							●●●●●●●●
260-030	2.60							●●●●●●●●
265-030	2.65							●●●●●●●●
270-030	2.70							●●●●●●●●
280-030	2.80			12.7	4.76	5.5	Fig.1	2°
290-030	2.90							●●●●●●●●
300-010	3.00							●●●●●●●●
300-030	3.00							●●●●●●●●
310-030	3.10							●●●●●●●●
320-030	3.20							●●●●●●●●
325-030	3.25							●●●●●●●●
330-030	3.30			12.7	4.76	5.5	Fig.1	2°
340-030	3.40							●●●●●●●●
350-010	3.50							●●●●●●●●
350-030	3.50							●●●●●●●●
360-030	3.60							●●●●●●●●
370-030	3.70							●●●●●●●●
380-030	3.80			12.7	4.76	5.5	Fig.1	2°
390-030	3.90							●●●●●●●●
400-010	4.00							●●●●●●●●
400-040	4.00							●●●●●●●●
410-040	4.10							●●●●●●●●
420-040	4.20							●●●●●●●●
430-040	4.30			12.7	4.76	5.5	Fig.1	2°
440-040	4.40							●●●●●●●●
450-010	4.50							●●●●●●●●
450-040	4.50							●●●●●●●●
460-040	4.60			12.7	4.76	5.5	Fig.1	2°
470-040	4.70							●●●●●●●●
480-040	4.80							●●●●●●●●
490-040	4.90			12.7	5.00	5.5	Fig.1	2°
500-010	5.00							●●●●●●●●
500-040	5.00							●●●●●●●●
510-040	5.10			12.7	5.10	5.5	Fig.1	2°

Specification	Dimension							Application
	W±0.02	B	rE	A	T	φd	Fig	
GBA43% 100-R050	1.00							●●●●●●●●
150-R075	1.50							●●●●●●●●
200-R100	2.00			12.7	4.76	5.5	Fig.2	2°
250-R125	2.50							●●●●●●●●
300-R150	3.00							●●●●●●●●
400-R200	4.00							●●●●●●●●

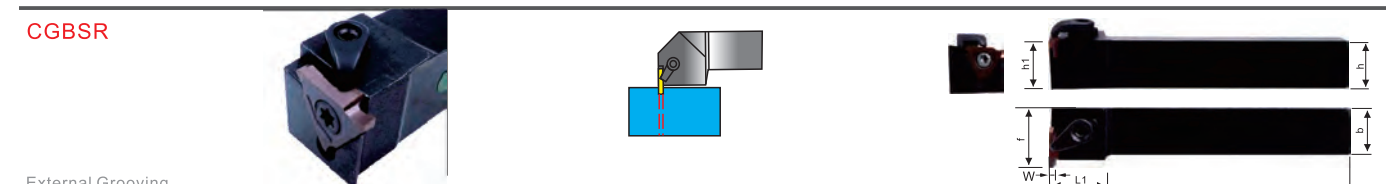


Application	Processed Material	Cutting Parameter														
		GBA43% 100-150			GBA43% 150-200			GBA43% 210-300			GBA43% 310-400			GBA43% 410-510		
		T.1	T.2	T.3	T.1	T.2	T.3	T.1	T.2	T.3	T.1	T.2	T.3	T.1	T.2	T.3
P	Steel	0.03	-	-	0.04	0.04	0.02	0.05	0.05	0.02	0.05	0.05	0.02	0.05	0.05	0.02
M	Stainless Steel	0.03	-	-	0.04	0.04	0.02	0.05	0.05	0.02	0.05	0.05	0.02	0.05	0.05	0.02
K	Iron	0.03	-	-	0.04	0.04	0.02	0.05	0.05	0.02	0.05	0.05	0.02	0.05	0.05	0.02
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	0.12	-	-	0.15	0.15	0.5	0.15	0.15	0.8	0.15	0.15	0.8	0.15	0.15	0.8
S	Carbide/Powder Metallurgy	0.01	-	-	0.02	-	-	0.03	0.01	0.01	0.03	0.03	0.01	0.03	0.03	0.01
H	Titanium/Superalloy/Carbon Fiber	0.01	-	-	0.02	-	-	0.03	0.01	0.01	0.03	0.03	0.01	0.03	0.03	0.01



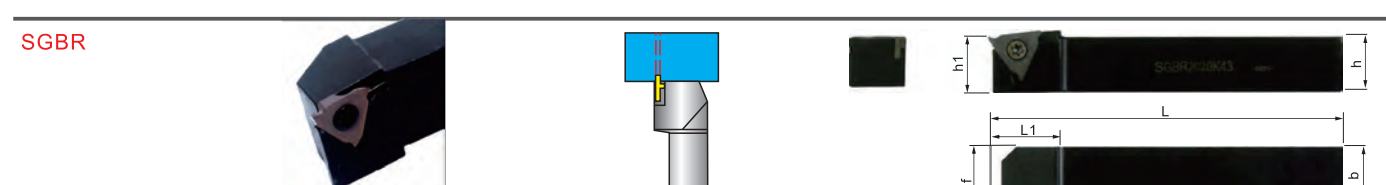
External Grooving (Inserts): A26/B103 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions							Insert	Clamp	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f					R	L	
CGBR/L 1616H32	0.5-2.5	16	16	100	22	16	20	GBA32R/L	HL1808	M3.5x10 ML0520	T15 L2.5	●	●	254600
2020K32	0.5-2.5	20	20	125	26	20	25					●	●	254602
2525M32	0.5-2.5	25	25	150	26	25	32					●	●	254604
CGBR/L 2020K43	1.25-4.5	20	20	125	26	20	25	GBA43R/L125-450	HL1808	M5x12 ML0520	T20 L2.5	○	○	254606
2020K43-1	1.25-1.85	20	20	125	26	20	25					○	○	254608
2020K43-2	2.0-2.8	20	20	125	26	20	25					○	○	254610
CGBR/L 2525M43	1.25-4.5	25	25	150	26	25	32	GBA43R/L125-450	HL1808	M5x12 ML0520	T20 L2.5	●	●	254614
2525M43-1	1.25-1.85	25	25	150	26	25	32					○	○	254616
2525M43-2	2.0-2.8	25	25	150	26	25	32					○	○	254618
2525M43-3	3.0-4.5	25	25	150	26	25	32	○	○	254620				



External Grooving (Inserts): A26/B103 (Toolholder Parts): P01-P04 R-Type

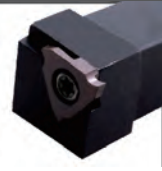
Ordering code	Dimensions							Insert	Clamp	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f					R	L	
CGBSR/L 1616H32	0.5-2.5	16	16	100	22	16	20	GBA32R/L	HL1808	M3.5x10 ML0520	T15 L2.5	●	●	254700
2020K32	0.5-2.5	20	20	125	26	20	25					●	●	254702
2525M32	0.5-2.5	25	25	150	26	25	32					●	●	254704
CGBSR/L 2020K43	1.25-4.5	20	20	125	26	20	25	GBA43R/L125-450	HL1808	M5x12 ML0520	T20 L2.5	●	●	254706
2525M43	1.25-4.5	25	25	150	26	25	32					●	●	254708



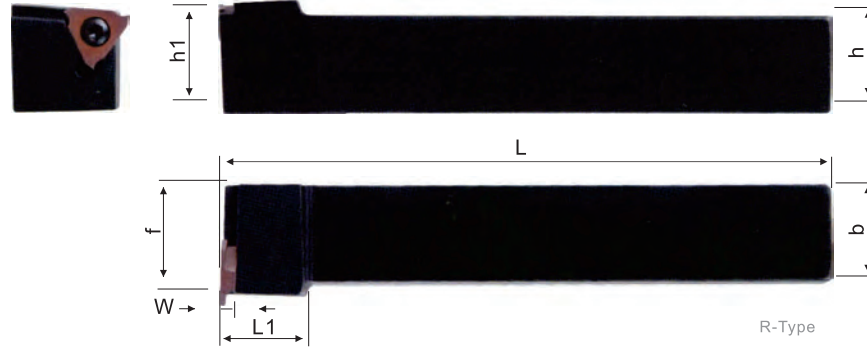
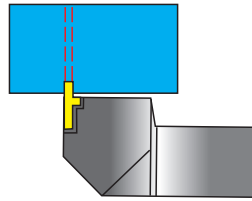
External Grooving (Inserts): A26/B103 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f				R	L	
SGBR/L 1616H32	0.33-2.5	16	16	100	22	16	20	GBA32R/L	M4x10	T15	●	●	255200
2020K32	0.33-2.5	20	20	125	26	20	25				●	●	255202
2525M32	0.33-2.5	25	25	150	26	25	32				●	●	255204
SGBR/L 2020K43	1.25-4.5	20	20	125	26	20	25	GBA43R/L125-450	M5x12	T20	○	○	255206
2020K43-1	1.25-1.85	20	20	125	26	20	25				○	○	255208
2020K43-2	2.0-2.8	20	20	125	26	20	25				○	○	255210
SGBR/L 2525M43	1.25-4.5	25	25	150	26	25	32	GBA43R/L125-450	M5x12	T20	●	●	255214
2525M43-1	1.25-1.85	25	25	150	26	25	32				○	○	255216
2525M43-2	2.0-2.8	25	25	150	26	25	32				○	○	255218
2525M43-3	3.0-4.5	25	25	150	26	25	32	○	○	255220			

SGBSR



External Grooving



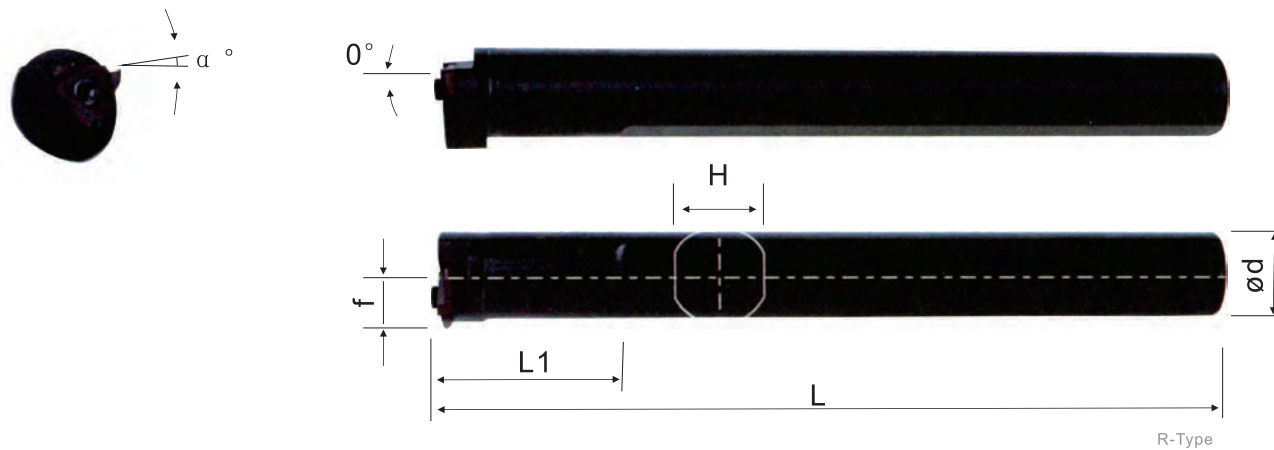
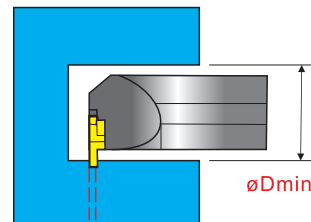
(Inserts): A26/B103 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f				R	L	
SGBSR/L 1616H32	0.5-2.5	16	16	100	22	16	20	GBA32R/L	M4×10	T15	●	●	255222
2020K32	0.5-2.5	20	20	125	26	20	25				●	●	255224
2525M32	0.5-2.5	25	25	150	26	25	32				●	●	255226
SGBSR/L 2020K43	1.25-4.5	20	20	125	26	20	25	GBA43R/L125-450	M5×12	T20	●	●	255228
2525M43	1.25-4.5	25	25	150	26	25	32				●	●	255230

S..SGBR



External Grooving



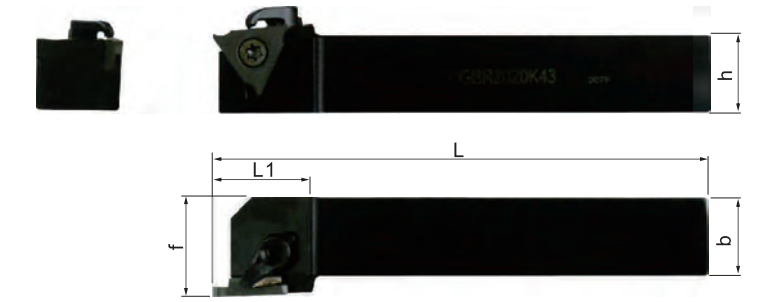
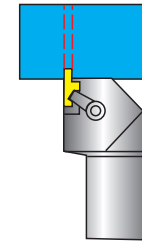
(Inserts): A26/B103 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	$\varnothing D_{min}$	d	f	L	L1	H	W				R	L	
S16N-SGBR/L16	20	16	11	160	30	15	0.3-3	GBA32L/R 32	M4×9	T15	●	●	256401
S20R-SGBR/L 32	24	20	12.8	200	40	19	0.3-3				●	●	256400
S25S-SGBR/L 32	29	25	15.3	250	40	23	0.3-3				●	●	256402
S32T-SGBR/L 43	40	32	21.5	300	50	30	1.5-5	GBA43L/R 43	M5×12	T20	●	●	256404

MGHR



Internal Grooving Processing



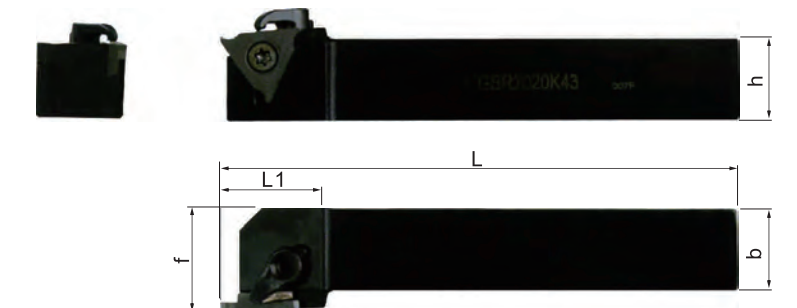
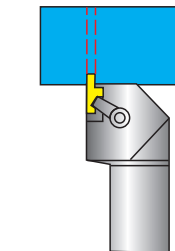
(Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Clamp	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f					R	L	
MGHR/L 2020K3315	1.25-2.3	20	20	125	17	20	20.2	MGTR/L33125-33470	HL1808	M3.5×10 ML0520	T15 L2.5	●	●	254800
2020K3323	2.3-3.3	20	20	125	17	20	20.2					●	●	254802
2525M3315	1.25-2.3	25	25	150	17	25	25.2					●	●	254804
2525M3323	2.3-3.3	25	25	150	17	25	25.2					●	●	254806
2525M3333	3.3-4.7	25	25	150	17	25	25.2	●	●	254808				
MGHR/L 2020K4315	1.25-2.3	20	20	125	26	20	20.2	MGTR/L43125-43470	HL1808	M5×12 ML0520	T20 L2.5	●	●	254810
2020K4323	2.3-3.3	20	20	125	26	20	20.2					●	●	254812
2020K4333	3.3-4.7	20	20	125	26	20	20.2					●	●	254814
2525M4315	1.25-2.3	25	25	150	26	25	25.2					●	●	254816
2525M4323	2.3-3.3	25	25	150	26	25	25.2					●	●	254818
2525M4333	3.3-4.7	25	25	150	26	25	25.2					●	●	254820
2525M4447	4.7-6.3	25	25	150	26	25	25.2	MGTR/L44500-44600				●	●	254822

GWCR



External Grooving



(Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Clamp	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f					R	L	
GWCR/L 1010-3	0.33-2.80	10	10	125	17	10	10	TGAR/L3033-3280	HL1808	M3.5×10 ML0520	T15 L2.5	●	●	254906
1212-3	0.33-2.80	12	12	125	17	12	12					●	●	254908
1616-3	0.33-2.80	16	16	125	17	16	16					●	●	254910
2020-3	0.33-2.80	20	20	125	17	20	20					●	●	254912
2525-3	0.33-2.80	25	25	150	17	25	25					●	●	254914
GWCR/L 2020-15	1.00-1.45	20	20	125	17	20	20	TGAR/L4125-4145	HL1808	M5×12 ML0520	T20 L2.5	●	●	254916
2020-25	1.50-2.30	20	20	125	17	20	20	TGAR/L4150-4230				●	●	254918
2020-35	2.50-4.80	20	20	125	17	20	20	TGAR/L4250-4480				●	●	254920
2525-15	1.00-1.45	25	25	150	17	25	25	TGAR/L4125-4145				●	●	254922
2525-25	1.50-2.30	25	25	150	17	25	25	TGAR/L4150-4230				●	●	254924
2525-35	2.50-4.80	25	25	150	17	25	25	TGAR/L4250-4480				●	●	254926

TGF

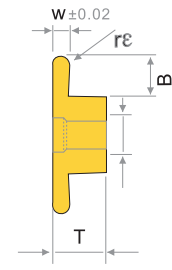
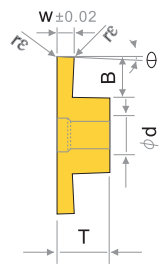
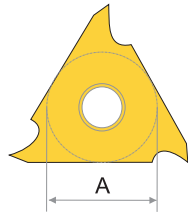


Fig.1

Fig.2



(Cutting Speed): m/min¹ (mm)

Material	PCD	CBN-K	CBN-S	ZN60	ZK01	ZM26	ZP15	ZM856
P	150-600		150-350		60-250	70-250	100-250	
M			100-300		50-150	50-150	70-150	
K		300-1500	100-300		130-210	150-200	150-300	
N	300-1200	400-800	100-200		100-160	100-150	150-230	
S	10-30			300-1200				
H	100-200			300-1500				

Cutting Environment ● Stable Cutting ● General Cutting ○ General Cutting(Second recommend) ✖ Unstable Cutting

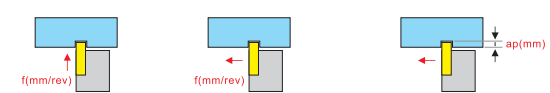
Material	Stable	General	General(2nd)	Unstable
P Steel	●	●	○	✖
M Stainless Steel	●	●	○	✖
K Iron	●	●	○	✖
N Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	●	●	○	✖
S Carbide/Powder Metallurgy	●	●	○	✖
H Titanium/Superalloy/Carbon Fiber	●	●	○	✖

Specification	Dimension							PCD	CBN-K	CBN-S	ZN60	ZK01	ZM26	ZP15	ZM856	
	W±0.02	B	r _e	A	T	φd	Fig									
TGF32% 030-005	0.30															
033-005	0.33	0.05														
040-005	0.40															
045-005	0.45	1.25	0.05	9.525	3.18	4.5	Fig.1	2°								
050-005	0.50															
050L220	0.50	2.2														
055-005	0.55															
060-005	0.60	1.25	0.05													
065-010	0.65															
070-010	0.70															
075-010	0.75															
080-010	0.80	2.05		9.525	3.18	4.5	Fig.1	2°								
085-010	0.85		0.1													
090-010	0.90															
095-010	0.95															
100L330	1.00	3.3														
100-010	1.00															
105-010	1.05															
110-010	1.10															
115-010	1.15															
120-010	1.20															
125-010	1.25	2.2														
130-010	1.30		0.1	9.525	3.18	4.5	Fig.1	2°								
135-010	1.35															
140-010	1.40															
145-010	1.45															
150-010	1.50															
150L380	1.50	3.8														
155-010	1.55	2.4														
160-015	1.60		0.15													
165-015	1.65	2.4														
170-015	1.70															
175-010	1.75	2.4	0.1													
175-015	1.75															
180-015	1.80	2.4														
185-015	1.85		0.15	9.525	3.18	4.5	Fig.1	2°								
190-015	1.90															
195-015	1.95															
200-010	2.00	2.7	0.1													
200-015	2.00	2.7	0.15													
200L400	2.00	4.0	0.1													
210-015	2.10															
215-015	2.15															
220-015	2.20															
225-015	2.25	2.7	0.15													
230-015	2.30			9.525	3.18	4.5	Fig.1	2°								
240-015	2.40															
250-010	2.50	3.0	0.1													
250-015	2.50	3.0	0.15													
250L400	2.50	4.0	0.1													
260-015	2.60															
265-015	2.65															
270-015	2.70	3.0	0.15													
280-015	2.80			9.525	3.18	4.5	Fig.1	2°								
290-015	2.90															
300-020	3.00	3.4	0.2													
320-020	3.20															

Cutting Environment ● Stable Cutting ● General Cutting ○ General Cutting(Second recommend) ✖ Unstable Cutting

Material	Stable	General	General(2nd)	Unstable
P Steel	●	●	○	✖
M Stainless Steel	●	●	○	✖
K Iron	●	●	○	✖
N Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	●	●	○	✖
S Carbide/Powder Metallurgy	●	●	○	✖
H Titanium/Superalloy/Carbon Fiber	●	●	○	✖

Specification	Dimension							PCD	CBN-K	CBN-S	ZN60	ZK01	ZM26	ZP15	ZM856	
	W±0.02	B	r _e	A	T	φd	Fig									
TGF32% 100-R050	1.00	2.2	0.50													
150-R075	1.50	2.2	0.75													
200-R100	2.00	2.7	1.00	9.525	3.18	4.5	Fig.2	2°								
250-R125	2.50	3.0	1.25													
300-R150	3.00	3.2	1.50													



Material	Processed Material	Cutting Parameter														
		TGF32% 033-055			TGF32% 055-095			TGF32% 100-145			TGF32% 150-250			TGF32% 255-320		
		T.1	T.2	T.3	T.1	T.2	T.3	T.1	T.2	T.3	T.1	T.2	T.3	T.1	T.2	T.3
P	Steel	0.01	-	0.02	-	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.02
M	Stainless Steel	0.04	-	0.06	-	0.07	0.05	0.2	0.1	0.08	0.3	0.1	0.09	0.3	0.1	0.09
K	Iron	0.01	-	0.02	-	0.03	0.02	0.02	0.03	0.02	0.02	0.03	0.02	0.03	0.02	0.02
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	0.01	-	0.02	-	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.02
S	Carbide/Powder Metallurgy	0.01	-	0.02	-	0.03	-	-	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02
H	Titanium/Superalloy/Carbon Fiber	0.01	-	0.01	-	0.01	-	-	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02

KTGFR



External Grooving

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f				R	L	
KTGFR/L1010F-16	0.33-2.5	10	10	80	18.5	10	12	TGF32R/L	M4×7	T15	●	●	255300
1212H-16	0.33-2.5	12	12	100	18.5	12	16				●	●	255302
1616H-16	0.33-2.5	16	16	100	18.5	16	20				●	●	255304
2020K-16	0.33-2.5	20	20	125	20	20	25				●	●	255306
2525M-16	0.33-2.5	25	25	150	20	25	32				●	●	255308
Unbiased Head (Aor Automatic Lathe Back)													
KTGFR/L0808H-16F	0.33-2.5	8	8	100	18.5	8	8	TGF32R/L	M4×7	T15	●	●	255310
1010K-16F	0.33-2.5	10	10	125	18.5	10	10				●	●	255312
1212K-16F	0.33-2.5	12	12	125	18.5	12	12				●	●	255314
1212M-16F	0.33-2.5	12	12	150	18.5	12	12				●	●	255316
1616K-16F	0.33-2.5	16	16	150	18.5	16							

CTGFR

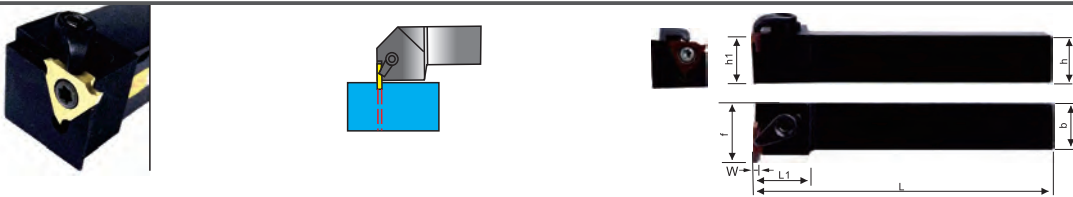


External Grooving

(Inserts): A25/B107 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Clamp	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f					R	L	
CTGFR/L1010F-16	0.33-2.5	10	10	80	18.5	10	12	TGF32R/L	HL1808	M4×7 ML0520	T15 L2.5	●	●	255100
1212H-16	0.33-2.5	12	12	100	18.5	12	16					●	●	255102
1616H-16	0.33-2.5	16	16	100	18.5	16	20					●	●	255104
2020K-16	0.33-2.5	20	20	125	20	20	25					●	●	255106
2525M-16	0.33-2.5	25	25	150	20	25	32					●	●	255108
Unbiased Head (for Automatic Lathe Back)														
CTGFR/L0808H-16F	0.33-2.5	8	8	100	18.5	8	8	TGF32R/L	HL1808	M4×7 ML0520	T15 L2.5	●	●	255110
1010K-16F	0.33-2.5	10	10	125	18.5	10	10					●	●	255112
1212K-16F	0.33-2.5	12	12	125	18.5	12	12					●	●	255114
1212M-16F	0.33-2.5	12	12	150	18.5	12	12					●	●	255116
1616K-16F	0.33-2.5	16	16	150	18.5	16	16					●	●	255118

CTGFSR

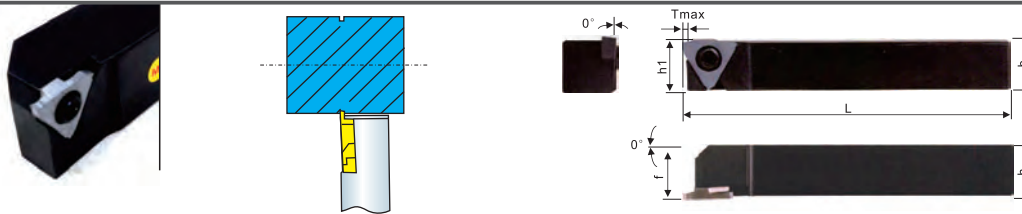


External Grooving

(Inserts): A25/B107 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Clamp	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f					R	L	
CTGFSR/L1616H-16	0.33-2.5	16	16	100	18.5	16	20	TGF32R/L	HL1808	M4×7 ML0520	T15 L2.5	●	●	255120
2020K-16	0.33-2.5	20	20	125	20	20	25					●	●	255122
2525M-16	0.33-2.5	25	25	150	20	25	32					●	●	255124

GTTR

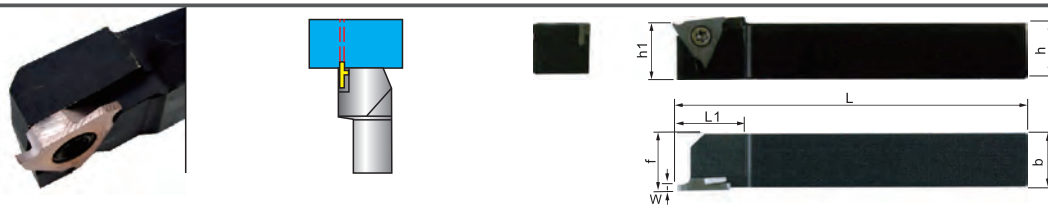


External Grooving

(Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f				R	L	
GTTR/L 08F00	0.33-3.0	8	8	80	3	8	8	GTM.32R/L..	M4×10	T15	●	●	255400
10F00	0.33-3.0	10	10	80	3	10	10				●	●	255402
12F00	0.33-3.0	12	12	100	3	12	12				●	●	255404
16F00	0.33-3.0	16	16	100	3	16	16				●	●	255406
20F00	0.33-3.0	20	20	120	3	20	20				●	●	255408
25F00	0.33-3.0	25	25	150	3	25	25				●	●	255410

JSTGR



External Grooving

(Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	W	b	h	L	L1	h1	f				R	L	
JSTGR/L 1010K3	0.33-3.0	10	10	125	18.5	10	10	JTGR/L3	M4×7	T15	●	●	255326
1212K3	0.33-3.0	12	12	125	18.5	12	12				●	●	255328
1616K3	0.33-3.0	16	16	125	18.5	16	16				●	●	255330

PENTA

Application	Dimensioning	Specification	Dimension							Application	Dimensioning	Specification	Dimension								
			W	re	L	B	H	θ	PCD				CBN-K	CBN-S	ZN60	ZK01	ZC250	ZC251	ZP152	ZP153	
Cut-off/Grooving	Grinding groove (finishing)	PENTA24N 050P005	0.50	0.05	2.0	-	-	-	-	●	Cut-off/Grooving	PENTA24N 050J	With chip breaker (roughing)	0.5	0.05	2.0	-	-	-	-	●
		075P005	0.75	0.05	3.0	-	-	-	-	●				1.0	0.10	2.5	-	-	-	-	●
		100P005	1.00	0.05	4.0	-	-	-	-	●				1.5	0.10	8.0	-	-	-	-	●
		120P005	1.20	0.05	4.0	-	-	-	-	●				2.0	0.10	6.0	-	-	-	-	●
		150P005	1.50	0.05	4.0	-	-	-	-	●				2.5	0.20	6.0	-	-	-	-	●
		185P005	1.85	0.05	4.0	-	-	-	-	●				3.0	0.20	6.0	-	-	-	-	●
		200P005	2.00	0.05	4.0	-	-	-	-	●				-	-	-	-	-	-	-	●
		230P005	2.30	0.05	4.5	-	-	-	-	●				-	-	-	-	-	-	-	●
		250P005	2.50	0.05	4.5	-	-	-	-	●				-	-	-	-	-	-	-	●
		270P005	2.70	0.05	4.5	-	-	-	-	●				-	-	-	-	-	-	-	●
300P005	3.00	0.05	4.5	-	-	-	-	●	-	-	-	-	-	-	-	●					

PCHR

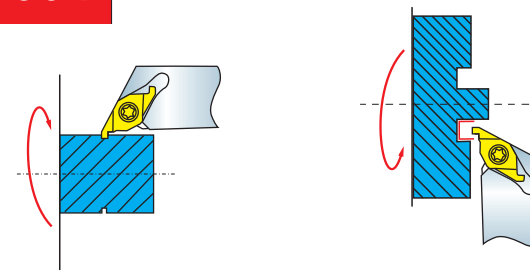


External Grooving

(Inserts): A37/B110 (Toolholder Parts): P01-P04

Ordering code	Dimensions					Insert	Screw	Wrench	Stock		Order Number
	b	h	L	h1	f				R	L	
PCHR/L 16-24	16	16	100	26	16.6	PENTA24N239J015	M4,5×10	T20	●	●	255500
16-20	20	20	125	26	20.6				●	●	255502
16-25	25	25	150	26	25.5				●	●	255504

FVC 1604



Machining of outer circular groove

End face grooving

Application	Dimensioning	Specification	Dimension							Application	Dimensioning	Specification	Dimension							
			W	re	L	B	H	θ	PCD				CBN-K	CBN-S	ZN60	ZK01	ZC250	ZC251	ZP152	ZP153
Bore	FVC1604R	100	1.0	0.05	-	-	-	-	-	●	Bore	FVC1604R	100	1.0	0.05	-	-	-	-	●
			150	1.5	0.1	-	-	-	-	●				2.2	16	15.7	7°	●		
			200	2.0	0.1	-	-	-	-	●				●	●	●	●	●		
			250	2.5	0.2	-	-	-	-	●				●	●	●	●	●		
300	3.0	0.2	-	-	-	-	●	●	●	●	●	●	●							

SFVCR



External Grooving

(Inserts): B110 (Toolholder Parts): P01-P04

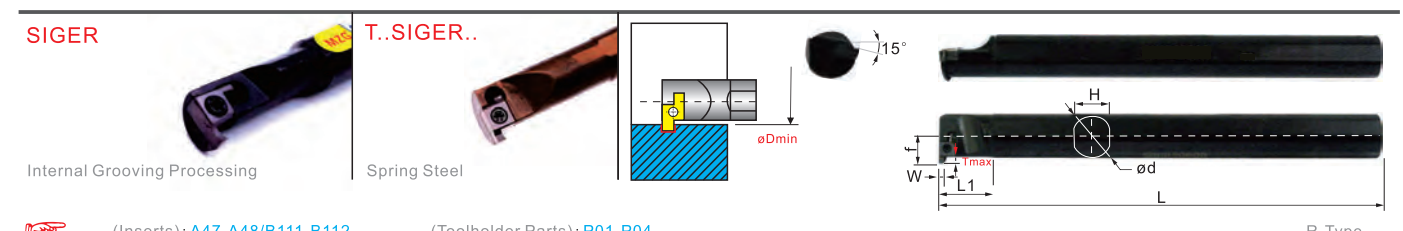
Ordering code	Dimensions					Insert	Screw	Wrench	Stock		Order Number
	b	h	L	h1	f				R	L	
SFVCR/L 2020K16	20	20	125	20	25	FVC1604..	M4×10	T15	●	●	255600
2525M16	25	25	150	25	32				●	●	255602

GER

Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZN60	ZK01	ZC250	ZP152	ZP153
				W	re	B	A	L	Ød								
P	Steel																
M	Stainless Steel																
K	Iron																
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood																
S	Carbide/Powder Metallurgy																
H	Titanium/Superalloy/Carbon Fiber																

Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZN60	ZK01	ZC250	ZP152	ZP153
				W	re	B	A	L	Ød								
P	Steel																
M	Stainless Steel																
K	Iron																
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood																
S	Carbide/Powder Metallurgy																
H	Titanium/Superalloy/Carbon Fiber																

Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZN60	ZK01	ZC250	ZP152	ZP153
				W	re	B	A	L	Ød								
Burroop			GER 150-075DR 200-100DR 250-125DR 300-150DR	1.5 2.0 3.0	0.75 1.0 1.5	3.2 4.5 4.5	6.8 16.4 16.4	3.4									
Burroop			GER 100-E 150-E 170-E 185-E 195-E 200-E 225-E 230-E 250-E 275-E 280-E 300-E 330-E 350-E 400-E 430-E 450-E 460-E 500-E	1.0 1.5 1.7 1.85 1.95 2.0 2.25 2.3 2.5 2.75 2.8 3.0 3.3 3.5 4.0 4.3 4.5 4.6 5.0	0.05 0.7 1.0 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	2.5 3.0 3.0 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	9.54 21.7 21.7 4.4	4.4									
Burroop			GER 250-125ER 300-150ER 350-175ER 400-200ER 450-225ER 500-250ER	2.5 3.0 3.5 4.0 4.5 5.0	1.25 1.5 1.75 2.0 2.25 2.5	5.5 5.5 5.5 5.5 5.5 5.5	9.54 21.7 21.7 4.4	4.4									
End face Grooving			GER 100DM06-D 150DM10-D 200DM10-D 250DM15-D 300DM15-D 400DM15-D	1.0 1.5 2.0 2.5 3.0 4.0	0.05 0.1 0.1 0.2 0.2 0.2	2.5 2.8 3.5 4.5 4.5 4.5	6.8 16.4 16.4 3.4										



(Inserts): A47-A48/B111-B112 (Toolholder Parts): P01-P04

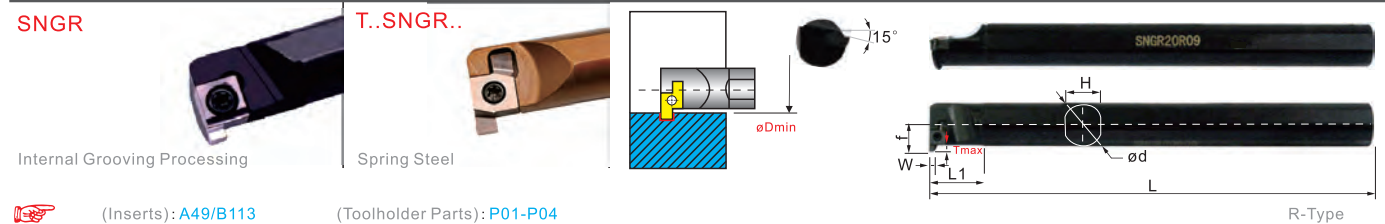
Ordering code	Dimensions				Insert	Screw	Wrench	Stock	Order Number
	Dmin	Tmax	Ød	f					
SIGER R/L 0606A-EH	6	1.5	6	3.8	20	100	4.5	••	257601
0808A-EH	8	1.5	8	4.8	20	100	7.2	••	257600
1010B-EH	10	2.2	10	6.2	25	125	9	••	257602
1210B-EH	12	2.2	10	7	30	125	9	••	257604
SIGER R/L 1412C-EH	14	2.5	12	8	33	150	11.4	••	257606
1612C-EH	16	2.5	12	8.5	20	150	11.4	••	257608
1616C-EH	16	2.5	16	9	36	160	15	••	257610
SIGER R/L 2020D-EH	20	4.5	20	12.1	40	180	19	••	257612
SIGER R/L 2525E-EH	25	6.5	25	15.6	45	200	24	••	257614
3232E-EH	32	6.5	32	19	55	220	30.4	••	257616
4032E-EH	40	6.5	32	23	45	250	30.4	••	257618

Spring Steel Shock-Proof Toolholder (Shock-Proof Effect > 4 Times Toolholder Diameter)

Ordering code	Dimensions				Insert	Screw	Wrench	Stock	Order Number
	Dmin	Tmax	Ød	f					
T-SIGER R/L 0808A-EH	8	1.5	8	4.8	20	100	7.2	••	257630
1010B-EH	10	2.2	10	6.2	25	125	9	••	257632
1210B-EH	12	2.2	10	7	30	125	9	••	257634
1212B-EH	12	2.2	12	7	30	150	11.4	••	257636
T-SIGER R/L 1412C-EH	14	2.5	12	8	33	150	11.4	••	257638
1612C-EH	16	2.5	12	8.5	20	150	11.4	••	257640
1616C-EH	16	2.5	16	9	36	160	15	••	257642
T-SIGER R/L 2020D-EH	20	4.5	20	12.1	40	180	19	••	257644
2525D-EH	25	4.5	25	15.6	45	200	24	••	257646
T-SIGER R/L 2520E-EH	25	6.5	20	16	40	180	19	••	257648
2525E-EH	25	6.5	25	16	45	200	24	••	257650



Application	Dimensioning	Product Image	Specification	Dimension							PCD	CBN-K	CBN-S	ZK01	ZK02	ZC250	ZC251	ZP152	ZP153		
				W	B	A	L	H	Ød												
Bore Grooving			6GR 100	1.0	1.5	5.56	6.44	2.34	2.3	•	•	•	•	•	•	•	•	•	•	•	
			6GR 150	1.5	2.0	5.56	6.44	2.34	2.3	•	•	•	•	•	•	•	•	•	•	•	•
			6GR 200	2.0	2.5	5.56	6.44	2.34	2.3	•	•	•	•	•	•	•	•	•	•	•	•
Bore Grooving			7GR 100	1.0	1.5	5.56	7.36	3.08	2.58	•	•	•	•	•	•	•	•	•	•	•	
			7GR 150	1.5	2.0	5.56	7.36	3.08	2.58	•	•	•	•	•	•	•	•	•	•	•	•
			7GR 200	2.0	2.5	5.56	7.36	3.08	2.58	•	•	•	•	•	•	•	•	•	•	•	•
Bore Grooving			8GR 100	1.0	1.5	5.56	10.2	3.87	2.58	•	•	•	•	•	•	•	•	•	•	•	
			8GR 150	1.5	2.0	5.56	10.2	3.87	2.58	•	•	•	•	•	•	•	•	•	•	•	•
			8GR 200	2.0	2.5	5.56	10.2	3.87	2.58	•	•	•	•	•	•	•	•	•	•	•	•
Bore Grooving			9GR 100	1.0	1.5	6.35	13.0	4.66	2.86	•	•	•	•	•	•	•	•	•	•	•	
			9GR 150	1.5	2.0	6.35	13.0	4.66	2.86	•	•	•	•	•	•	•	•	•	•	•	•
			9GR 200	2.0	2.5	6.35	13.0	4.66	2.86	•	•	•	•	•	•	•	•	•	•	•	•
Bore Grooving			15GR 100	1.0	1.5	9.2	20.8	5.1	4.8	•	•	•	•	•	•	•	•	•	•	•	
			15GR 150	1.5	2.0	9.2	20.8	5.1	4.8	•	•	•	•	•	•	•	•	•	•	•	•
			15GR 200	2.0	2.5	9.2	20.8	5.1	4.8	•	•	•	•	•	•	•	•	•	•	•	•

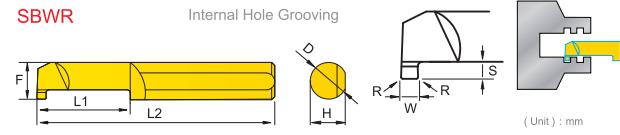


Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	Dmin	Tmax	ød	f	L1	L	H				R	L	
SNG R/L	0806J06	10	2	8	4.7	15	100	7	M2.2x4	T7	•	•	257500
	08J07	10	2	8	5.8	15	100	7			•	•	257502
	10K07	12	2	10	6.8	15	125	8			•	•	257504
	10K08	14	3.5	10	7.6	20	125	8	M2.5x6	T8	•	•	257506
	12M08	16	3.5	12	8.6	20	150	11			•	•	257508
	16Q09	20	3.5	16	11.6	20	180	14.8			•	•	257510
20R09	25	3.5	20	13.6	20	200	18.4	•	•	257512			
Spring Steel Shock-Proof Toolholder (Shock-Proof Effect > 4 Times Toolholder Diameter)													
T-SNG R/L	0806J06	10	2	8	4.7	15	100	7	M2.2x4	T7	•	•	257520
	08J07	10	2	8	5.8	15	100	7			•	•	257522
	10K07	12	2	10	6.8	15	125	8			•	•	257524
	10K08	14	3.5	10	7.6	20	125	8	M2.5x6	T8	•	•	257526
	12M08	16	3.5	12	8.6	20	150	11			•	•	257528
	16N08	20	3.5	16	11.6	20	160	14.8			•	•	257530
	12M09	16	3.5	12	8.6	20	150	11	•	•	257532		
	16N09	20	3.5	16	11.6	20	160	14.8	•	•	357534		
20Q09	25	3.5	20	13.6	20	180	18.4	•	•	357536			

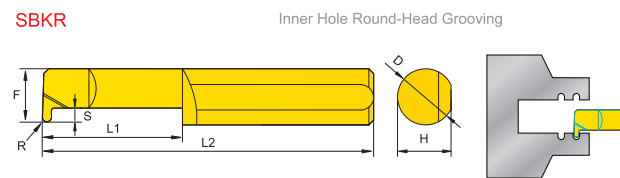
End Face Grooving Turning System

The diagram illustrates the End Face Grooving Turning System with various tool configurations and their applications. It includes sub-diagrams for Internal End Face Grooving, End Face Grooving, and Boring. The tools are categorized by material and application, with specific part numbers and dimensions provided for each.

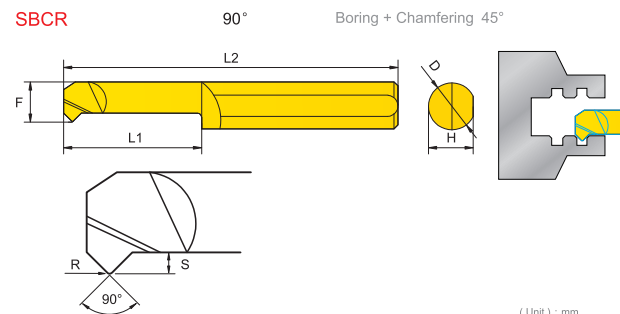
Material	Application	Tool Part Number	Dimensions
Steel	Internal End Face Grooving	STFPR B117	TP.. Ø20-Ø25
Stainless Steel	Internal End Face Grooving	CBSNR B117	SNMF.. Ø20-Ø25
Iron	Internal End Face Grooving	C..Q.DR B95	ZR.. Ø40-Ø50
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Internal End Face Grooving	SMFR AB29	Ø6-Ø10
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Internal End Face Grooving	SMVR AB29	CSV.. Ø6-Ø10
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Internal End Face Grooving	SGIEFR B116	VC.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Internal End Face Grooving	SGIVFR B118	VC.. Ø16-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Internal End Face Grooving	T-SGIVFR B118	VC.. Ø10-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Internal End Face Grooving	MFHR B118	MGMN.. Ø16-Ø40
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGH..R B129	MGMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFHR B121	MFMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGH..L B130	MGMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFHL B121	MFMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGH..R B127	MGMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFHL B122	MFMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	FGH..R B119	FMM.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	OF..L B123	Z.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	SEGEL B116	GER.. Ø10-Ø32
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	SMFL AB29	GER.. Ø6-Ø10
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGH..L B128	MGMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFHL B122	MFMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	FGH..L B119	FMM.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	OF..R B123	Z.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	SSACN B117	SC.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	SSACN B117	SC.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFV..R B125	MGMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFVR B122	MFMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	FGVH..R B120	FMM.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFV..L B126	MGMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	MGFVL B122	MFMN.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	End Face Grooving	FGVH..L B120	FMM.. Ø20-Ø25
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	MGIVR B89	MGMN.. Ø16-Ø40
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	T-MGIVR B89	MGMN.. Ø16-Ø40
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	KIGMR B93	GMM.. Ø16-Ø32
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	TTIR B92	TD.. Ø16-Ø40
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	C-QE..R B96	Z.. Ø20-Ø40
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	S-SGBR B105	GBA.. Ø16-Ø32
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	SIGER B112	GER.. Ø6-Ø32
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	T-SIGER B112	GER.. Ø6-Ø32
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	SNGR B113	GR.. Ø6-Ø20
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	T-SNGR B113	.GR.. Ø6-Ø20
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	S-KTGR B108	TGF.. Ø16-Ø32
Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	Boring	T-KTGR B108	TGF.. Ø16-Ø32



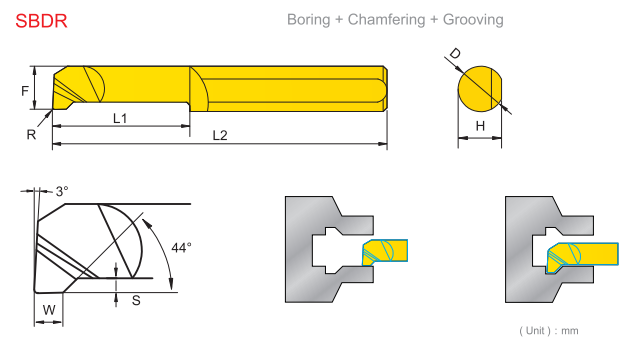
Model	W	S	L1	R	F	D	L2	H	Stock	Processing Diameter	Order No.
SBWR05100R005-D4	0.5	1.0	10	0.05	3.8	D4	50	3.7	○	4mm	207241
SBWR08100R005-D4	0.8	1.0	10	0.05	3.8	D4	50	3.7	○	4mm	207242
SBWR10100R005-D4	1.0	1.5	10	0.05	3.8	D4	50	3.7	○	4mm	207243
SBWR15100R005-D4	1.5	1.5	10	0.05	3.8	D4	50	3.7	○	4mm	207244
SBWR10100R10-D5	1.0	1.5	10	0.1	4.8	D5	50	4.7	○	5mm	207245
SBWR12100R10-D5	1.2	1.5	10	0.1	4.8	D5	50	4.7	○	5mm	207246
SBWR15100R10-D5	1.5	2.0	10	0.1	4.8	D5	50	4.7	○	5mm	207247
SBWR20100R10-D5	2.0	2.0	10	0.1	4.8	D5	50	4.7	○	5mm	207248
SBWR10120R15-D6	1.0	2.0	12	0.15	5.8	D6	50	5.7	○	6mm	207249
SBWR15120R15-D6	1.5	2.0	12	0.15	5.8	D6	50	5.7	○	6mm	207250
SBWR20120R15-D6	2.0	2.0	12	0.15	5.8	D6	50	5.7	○	6mm	207251
SBWR25160R15-D6	2.5	2.5	16	0.15	5.8	D6	50	5.7	○	6mm	207252
SBWR15160R15-D8	1.5	2.0	16	0.15	7.8	D8	50	7.7	○	8mm	207253
SBWR20160R15-D8	2.0	3.0	16	0.15	7.8	D8	50	7.7	○	8mm	207254
SBWR25160R15-D8	2.5	3.0	16	0.15	7.8	D8	50	7.7	○	8mm	207255



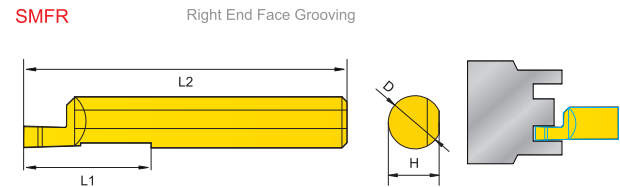
Model	F	S	L1	R	D	L2	H	Stock	Processing Diameter	Order No.
SBKR40100R05-D4	3.8	1.0	10	0.5	D4	50	3.7	○	4mm	207261
SBKR40100R075-D4	3.8	1.0	10	0.75	D4	50	3.7	○	4mm	207262
SBKR60150R05-D6	5.8	1.5	15	0.5	D6	50	5.7	○	6mm	207263
SBKR60150R075-D6	5.8	1.5	15	0.75	D6	50	5.7	○	6mm	207264
SBKR60150R100-D6	5.8	1.5	15	1.0	D6	50	5.7	○	6mm	207265



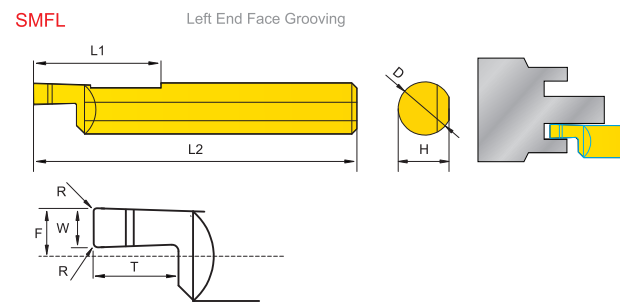
Model	F	L1	S	R	D	L2	H	Stock	Order No.
SBCR30100R20-D4	2.6	10	0.5	0.2	D4	50	3.7	○	207321
SBCR40150R20-D4	3.7	15	0.8	0.2	D4	50	3.7	○	207322
SBCR50150R20-D5	4.7	15	1.2	0.2	D5	50	4.7	○	207323
SBCR60150R20-D6	5.7	15	1.6	0.2	D6	50	5.7	○	207324



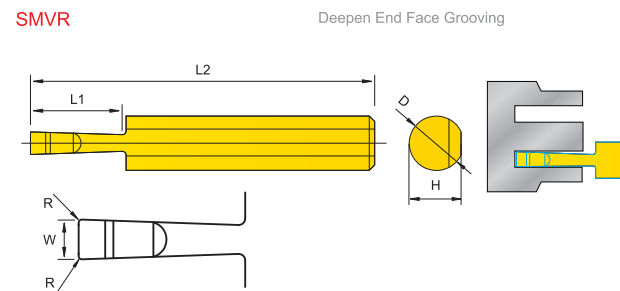
Model	F	L1	S	R	D	L2	H	Stock	Processing Diameter	Order No.
SBDR40100R20-D4	3.8	10.0	0.8	0.2	D4	50	3.7	○	4mm	207331
SBDR50150R20-D5	4.8	15.0	1.2	0.2	D5	50	4.7	○	5mm	207332
SBDR60150R20-D6	5.8	15.0	1.4	0.2	D6	50	5.7	○	6mm	207333



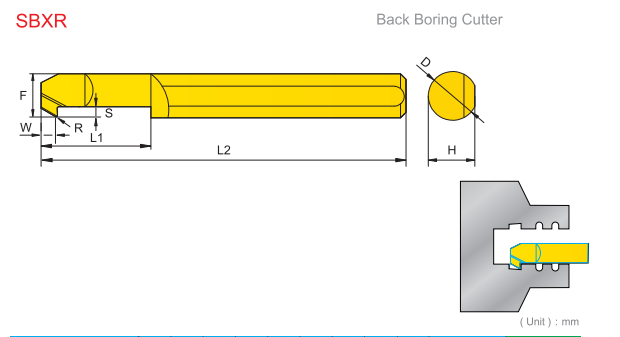
Model	F	L1	T	W	R	D	L2	H	Stock	Processing Diameter	Order No.
SMFR60150W0.75-D6	2.95	15	1.5	0.75	0.1	D6	50	5.7	○	8.0	207271
SMFR60150W1.0-D6	2.95	15	2.0	1.0	0.1	D6	50	5.7	○	8.0	207272
SMFR80200W2.0-D8	3.95	20	4.0	2.0	0.2	D8	50	7.7	○	10.0	207273
SMFR80200W2.5-D8	3.95	20	5.0	2.5	0.2	D8	50	7.7	○	10.0	207274
SMFR80200W3.0-D8	3.95	20	6.0	3.0	0.2	D8	50	7.7	○	10.0	207275



Model	F	L1	T	W	R	D	L2	H	Stock	Processing Diameter	Order No.
SMFL60150W0.75-D6	2.95	15	1.5	0.75	0.1	D6	50	5.7	○	8.0	207281
SMFL60150W1.0-D6	2.95	15	2.0	1.0	0.1	D6	50	5.7	○	8.0	207282
SMFL80200W2.0-D8	3.95	20	4.0	2.0	0.2	D8	50	7.7	○	8.0	207283
SMFL80200W2.5-D8	3.95	20	5.0	2.5	0.2	D8	50	7.7	○	10.0	207284
SMFL80200W3.0-D8	3.95	20	6.0	3.0	0.2	D8	50	7.7	○	10.0	207285



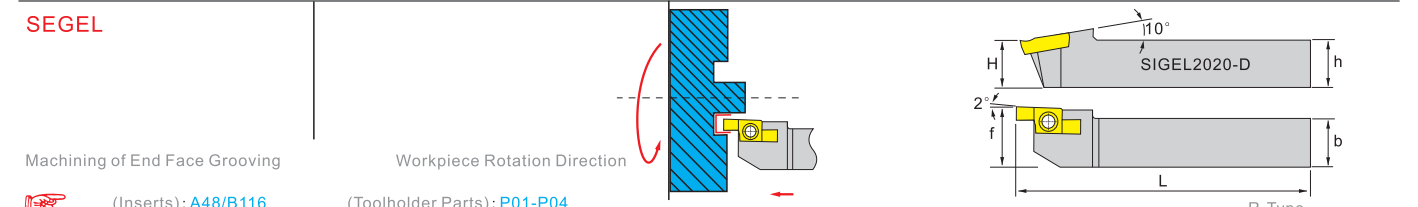
Model	L1	W	R	D	L2	H	Stock	Processing Diameter	Order No.
SMVR10150W2.0-D10	15	2.0	0.2	D10	50	9	○	15	207291
SMVR10150W3.0-D10	15	3.0	0.2	D10	50	9	○	15	207292
SMVR10150W4.0-D10	15	4.0	0.2	D10	50	9	○	15	207293



Model	F	W	S	L1	R	D	L2	H	Stock	Processing Diameter	Order No.
SBXR40100R010-D4	3.8	1.5	1.0	10	0.1	D4	50	3.7	○	4mm	207335
SBXR50150R015-D5	4.8	2.0	1.5	15	0.15	D5	50	4.7	○	5mm	207336
SBXR60200R020-D6	5.8	2.0	2.0	20	0.2	D6	50	5.7	○	6mm	207337

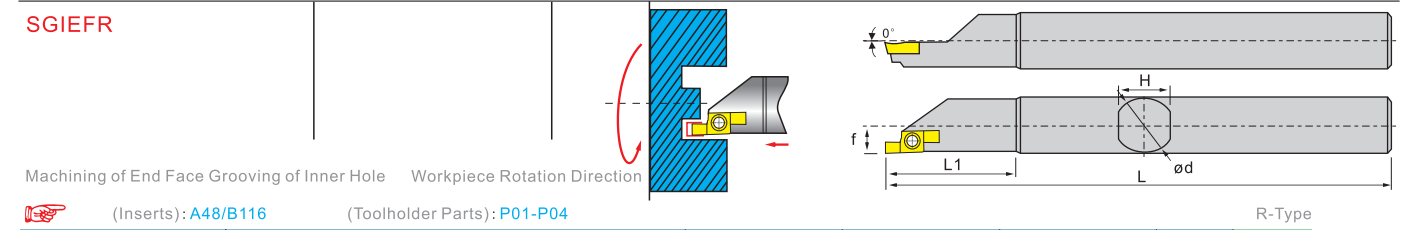


Application	Dimensioning	Product Image	Specification	Dimension						CBN-K	CBN-S	ZK01	ZK02	ZC250	ZC251	ZP152	ZP153	
				W	re	B	A	L	∅d									
End Face Grooving			GER 100DM06-D 150DM10-D 200DM10-D 250DM15-D 300DM15-D 400DM15-D	1.0	0.05	2.5												
End Face Grooving			GER 150DM10-D 200DM10-D 250DM15-D 300DM15-D 400DM15-D 500DM15-D	1.5	0.1	3.6												
End Face Grooving			GER 150DM10R075-D 200DM10R100-D 250DM15R125-D 300DM15R150-D 400DM15R200-D	1.5	0.75	3.6												



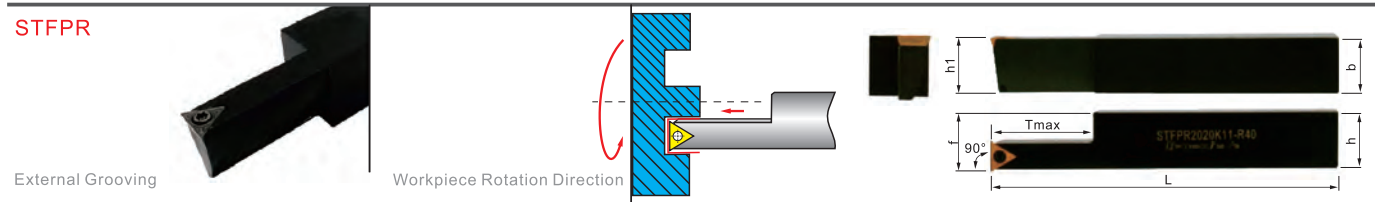
Ordering code	Dimensions						Insert	Screw	Wrench	Stock	Order Number
	∅Dmin	h	f	b	H	L					
SEGEL 1010H-D	6.0	10	10	10	10	100	GER..D	M3×10	T10	○ ●	257651
1212H-D	6.0	12	12	12	12	100				○ ●	257652
1616K-D	6.0	16	16	16	16	125				○ ●	257653
2020K-D	6.0	20	20	20	20	125				○ ●	257654
2525M-D	6.0	25	25	25	25	150				○ ●	257655
SEGEL 1616H-E	10.0	16	16	16	16	100	GER..E	M4×10	T15	○ ●	257657
2020K-E	10.0	20	20	20	20	125				○ ●	257658
2525M-E	10.0	25	25	25	25	150				○ ●	257659
3232M-E	10.0	32	32	32	32	150				○ ●	257660

Application	Dimensioning	Product Image	Specification	Dimension						CBN-K	CBN-S	ZK01	ZK02	ZC250	ZC251	ZP152	ZP153	
				W	re	B	A	L	∅d									
End Face Grooving			GEL 150DM10-E 200DM10-E 250DM15-E 300DM15-E 400DM15-E 500DM15-E	1.5	0.1	3.6												
End Face Grooving			GEL 150DM10R075-E 200DM10R100-E 250DM15R125-E 300DM15R150-E 400DM15R200-E 500DM15R250-E	1.5	0.75	3.6												



Ordering code	Dimensions						Insert	Screw	Wrench	Stock	Order Number
	∅Dmin	∅d	f	L1	L	H					
SGIEFR 0020K-E	10	20	10.3	30	125	19	GEL..DM..E	M4×10	T15	○ ●	257661
0025M-E	10	25	12.8	30	150	24				○ ●	257662

STFPR



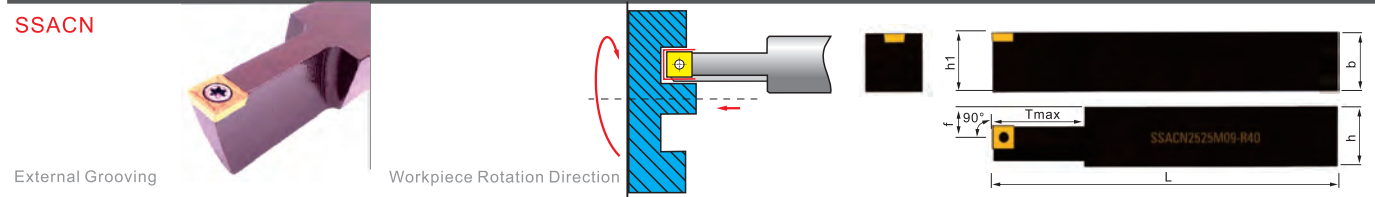
External Grooving

Workpiece Rotation Direction

(Inserts): A21-A22 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions								Insert	Screw	Wrench	Stock		Order Number
	b=h1	h	L	Dmin	Dmax	Tmax	f	R				L		
TPA0920R/L	33-20/80	20	20	125	20	80	33	21	TP..0902..	M2.5x6	T8	●	●	255610
	35-40/160	20	20	125	40	160	35	21				●	●	255611
	37-70/800	20	20	125	70	800	37	21				●	●	255612
TPA0925R/L	33-20/80	25	25	150	20	80	33	26	TP..1103..	M3x8	T10	●	●	255613
	35-40/160	25	25	150	40	160	35	26				●	●	255614
	37-70/800	25	25	150	70	800	37	26				●	●	255615
TPA1120R/L	33-20/80	20	20	125	20	80	33	21	TP..1103..	M3x8	T10	●	●	255616
	38-40/160	20	20	125	40	160	38	21				●	●	255617
	40-70/800	20	20	125	70	800	40	21				●	●	255618
TPA1125R/L	33-20/80	25	25	150	20	80	33	26	TP..1103..	M3x8	T10	●	●	255619
	38-40/160	25	25	150	40	160	38	26				●	●	255620
	40-70/800	25	25	150	70	800	40	26				●	●	255621

SSACN



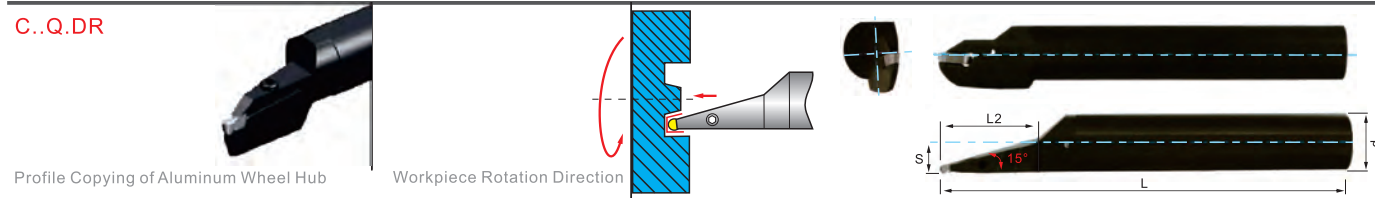
External Grooving

Workpiece Rotation Direction

(Inserts): A20 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions								Insert	Screw	Wrench	Stock		Order Number
	b=h1	h	L	Dmin	Dmax	Tmax	f	R				L		
SSACN	2020K09-R35	20	20	125	80	500	35	10	SC..09T3..	M4x10	T15	●	●	255625
	2525M09-R40	25	25	150	80	500	40	12.5				●	●	255626

C..Q.DR



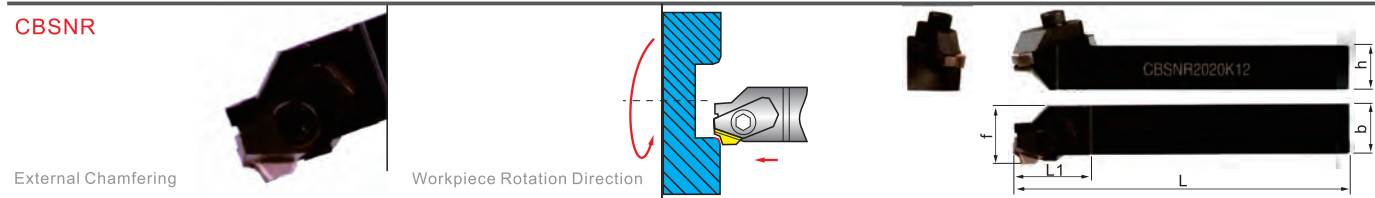
Profile Copying of Aluminum Wheel Hub

Workpiece Rotation Direction

(Inserts): A41 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions					Insert	Screw	Wrench	Stock		Order Number
	øDmin	ød	S	L1	L2				R	L	
C40T-QLDR/L65-15A	160	40	21	300	65	ZRLD08-LH	M6x20	L5	●	●	255630
C40T-QLDR/L80-15A	160	40	21	300	80				●	●	255631
C50U-QLDR/L80-15A	160	50	26	350	80				●	●	255632
C40T-QKDR/L60-15A	160	40	21	300	60	ZRKD06-LH	M6x20	L5	●	●	255633
C40T-QKDR/L75-15A	160	40	21	300	75				●	●	255634
C50U-QKDR/L75-15A	160	50	26	350	75				●	●	255635

CBSNR



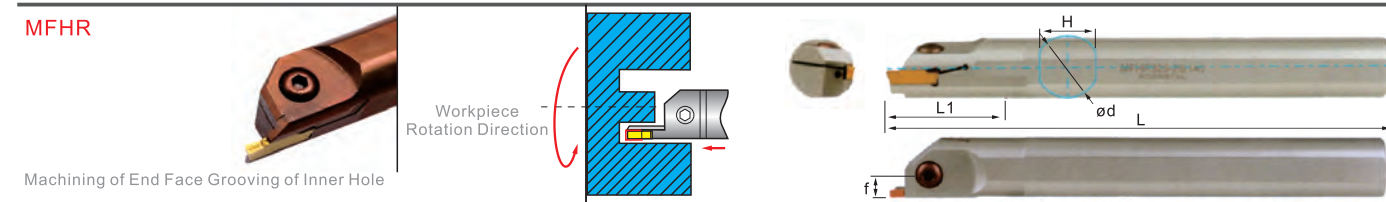
External Chamfering

Workpiece Rotation Direction

(Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions					Insert	Clamp	Screw	Wrench	Stock		Order Number
	h	b	L	L1	f					R	L	
CBSNR/L	2020K12	20	20	125	32	SNMF1204	CP-RCR	M6x20	L5	●	●	255650
	2525M12	25	25	150	32					●	●	255652

MFHR



Machining of End Face Grooving of Inner Hole

Workpiece Rotation Direction

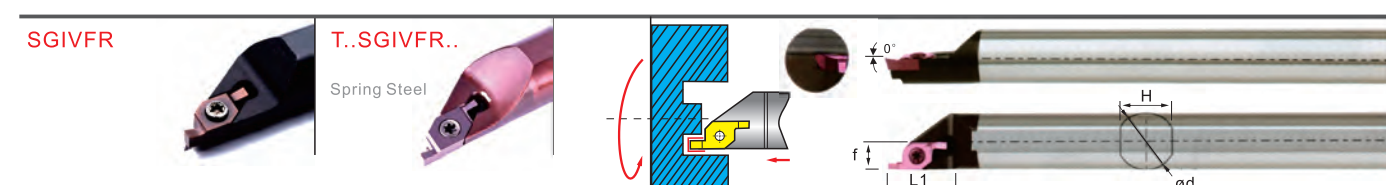
(Inserts): A35-A36/B87/B124 (Toolholder Parts): P01-P04 R-Type

Ordering code	Dimensions							Screw	Wrench	Insert	Stock		Order Number	
	øDmin	ød	f	L	H	Dmin	Dmax				R	L		
MFH216R/L	06-20/140	6	16	8.3	160	14.8	20	140	M4x10	L3	MGMN200..	●	●	255660
	08-20/140	8	16	8.3	160	14.8	20	140				●	●	255661
MFH220R/L	06-25/140	6	20	10.3	180	18.4	26	140	M5x12	L4	MGMN200..	●	●	255662
	08-25/140	8	20	10.3	180	18.4	26	140				●	●	255663
MFH225R/L	06-25/140	6	25	12.8	200	23.4	28	140	M5x16	L4	MRMN200..	●	●	255664
	08-25/140	8	25	12.8	200	23.4	28	140				●	●	255665
MFH316R/L	06-20/140	6	16	8.3	160	14.8	20	140	M4x10	L3	MGMN200..	●	●	255666
	08-20/140	8	16	8.3	160	14.8	20	140				●	●	255667
MFH320R/L	06-25/140	6	20	10.3	180	18.4	26	140	M5x12	L4	MGMN300..	●	●	255668
	08-25/140	8	20	10.3	180	18.4	26	140				●	●	255669
MFH325R/L	06-25/140	6	25	12.8	200	23.4	28	140	M5x16	L4	MGMN300..	●	●	255670
	08-25/140	8	25	12.8	200	23.4	28	140				●	●	255671
MFH332R/L	06-32/200	6	32	16.3	250	30	35	200	M6x20	L5	MRMN300..	●	●	255672
	08-32/200	8	32	16.3	250	30	35	200				●	●	255673
MFH420R/L	08-25/140	8	20	10.3	180	18.4	26	140	M5x12	L4	MGMN400..	●	●	255674
	10-25/140	10	20	10.3	180	18.4	26	140				●	●	255675
MFH425R/L	08-25/140	8	25	12.8	200	23.4	28	140	M5x16	L4	MGMN400..	●	●	255676
	10-25/140	10	25	12.8	200	23.4	28	140				●	●	255677
MFH432R/L	08-32/200	8	32	16.3	250	30	35	200	M6x20	L5	MGMN400..	●	●	255678
	10-32/200	10	32	16.3	250	30	35	200				●	●	255679
MFH440R/L	08-40/500	8	40	20.3	300	38	41	500	M8x25	L6	MRMN400..	●	●	255680
	10-40/500	10	40	20.3	300	38	41	500				●	●	255681
MFH540R/L	12-40/500	12	40	20.3	300	38	41	500	M8x25	L6	MGMN500..	●	●	255682
	15-40/500	15	40	20.3	300	38	41	500				●	●	255683

VC 1604

Application	Dimensioning	Specification	Dimension						PCD	CBN-K	CBN-S	CBN-20	ZK01	ZC250	ZC251	ZP152		
			W	RE	T	B	H	θ										
Finishing		FVC1604R 100	1.0	0.05	3.5	7.4	7°											
			150	1.5	0.1													3.5
			200	2.0	0.1													3.5
			250	2.5	0.2													4.5
		300	3.0	0.2	4.5													

SGIVFR



Machining of End Face Grooving of Inner Hole

Workpiece Rotation Direction

(Inserts): B118 (Toolholder Parts): P01-P04 R-Type

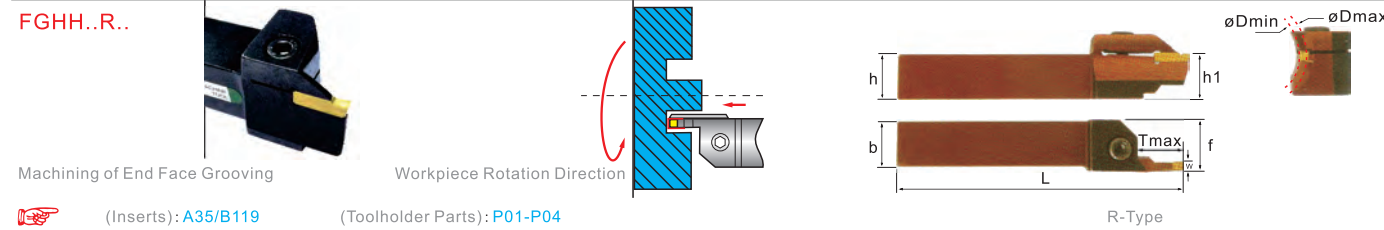
Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number
	øDmin	ød	f	L1	L	H	R				L		
SGIVFR	16N16	17	16	8	30	160	14.8	VC1604R..	M4x10	T15	●	●	255690
	20Q16	21	20	10	30	180	18.4				●	●	255691
	25R16	26	25	12.5	30	200	23.4				●	●	255692
T-SGIVFR	10K11	11	10	5.5	12	125	9	VC1103R..	M2.5x6	T8	●	○	255693
	12M11	13	12	6.5	12	150	11				●	○	255694
	16N16	17	16	8.5	20	160	14.8				●	○	255695
	20Q16	21	20	10.5	20	180	18.4				●	○	255696
	25R16	26	25	13	20	200	23.4				●	○	255697

FG

Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZK00	ZK01	ZC250	ZC251	ZP152	ZP153			
				W	re	L	B	H	Ø												
End Face Grooving			FGD 300R-03 400R-04 500R-04	3.0	0.3	15.0	2.0	4.0	-	-	-	-	-	-	-	-	-	-	-	-	
				4.0	0.4	15.0	3.0	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-
				5.0	0.4	15.0	4.0	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			FGM 300R-03 400R-04 500R-04	3.0	0.3	15.0	2.0	4.0	-	-	-	-	-	-	-	-	-	-	-	-	
				4.0	0.4	15.0	3.0	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-
				5.0	0.4	15.0	4.0	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-

Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZK00	ZK01	ZC250	ZC251	ZP152	ZP153				
				W	re	L	B	H	Ø													
End Face Grooving			FGD 300R-03 400R-04 500R-04	3.0	0.3	15.0	2.0	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
				4.0	0.4	15.0	3.0	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				5.0	0.4	15.0	4.0	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			FGM 300R-03 400R-04 500R-04	3.0	0.3	15.0	2.0	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
				4.0	0.4	15.0	3.0	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				5.0	0.4	15.0	4.0	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FGHH..R..



Machining of End Face Grooving

Workpiece Rotation Direction

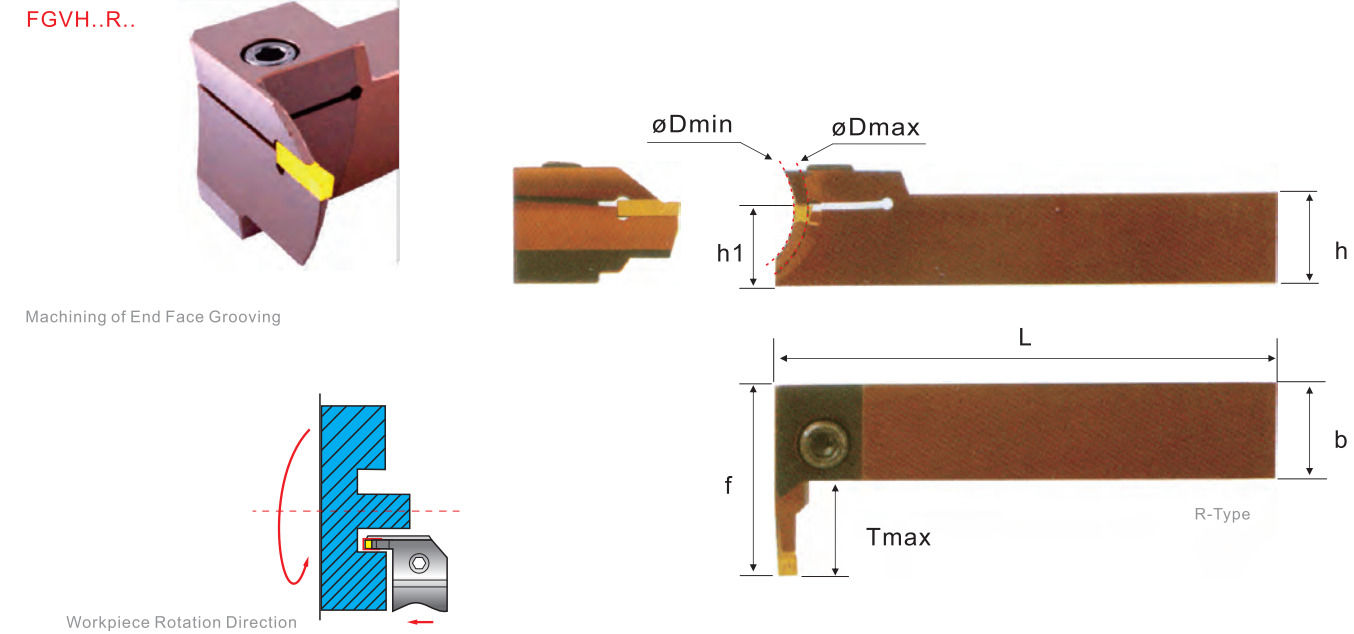
(Inserts): A35/B119

(Toolholder Parts): P01-P04

R-Type

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number	
	øDmin	øDmax	f	b=h1	h	L	Tmax				R	L		
FGHH320R/L-	25/30	25	30	20.6	20	20	125	12	FMM300R-03	M5×20	L5	●	●	261100
	30/35	30	35	20.6	20	20	125	12				●	●	261102
	35/48	35	48	20.6	20	20	125	12				●	●	261104
	48/60	48	60	20.6	20	20	125	22				●	●	261106
	60/75	60	75	20.6	20	20	125	22				●	●	261108
	75/100	75	100	20.6	20	20	125	22				●	●	261110
FGHH325R/L-	25/30	25	30	25.6	25	25	150	12	FMM300R-03	M5×20	L5	●	●	261114
	30/35	30	35	25.6	25	25	150	12				●	●	261116
	35/48	35	48	25.6	25	25	150	12				●	●	261118
	48/60	48	60	25.6	25	25	150	22				●	●	261120
	60/75	60	75	25.6	25	25	150	22				●	●	261122
	75/100	75	100	25.6	25	25	150	22				●	●	261124
FGHH420R/L-	25/30	25	30	20.6	20	20	125	12	FMM400R-04	M5×20	L5	●	●	261128
	30/35	30	35	20.6	20	20	125	12				●	●	261130
	35/48	35	48	20.6	20	20	125	12				●	●	261132
	48/60	48	60	20.6	20	20	125	25				●	●	261134
	60/75	60	75	20.6	20	20	125	25				●	●	261136
	75/100	75	100	20.6	20	20	125	25				●	●	261138
FGHH425R/L-	25/30	25	30	25.6	25	25	150	12	FMM400R-04	M5×20	L5	●	●	261142
	30/35	30	35	25.6	25	25	150	12				●	●	261144
	35/48	35	48	25.6	25	25	150	12				●	●	261146
	48/60	48	60	25.6	25	25	150	25				●	●	261148
	60/75	60	75	25.6	25	25	150	25				●	●	261150
	75/100	75	100	25.6	25	25	150	25				●	●	261152
FGHH520R/L-	25/30	25	30	20.6	20	20	125	12	FMM500R-04	M5×20	L5	●	●	261156
	30/35	30	35	20.6	20	20	125	12				●	●	261158
	35/40	35	40	20.6	20	20	125	20				●	●	261160
	40/48	40	48	20.6	20	20	125	20				●	●	261162
	48/60	48	60	20.6	20	20	125	25				●	●	261164
	60/75	60	75	20.6	20	20	125	25				●	●	261166
FGHH525R/L-	25/30	25	30	25.6	25	25	150	12	FMM500R-04	M5×20	L5	●	●	261172
	30/35	30	35	25.6	25	25	150	12				●	●	261174
	35/40	35	40	25.6	25	25	150	20				●	●	261176
	40/48	40	48	25.6	25	25	150	20				●	●	261178
	48/60	48	60	25.6	25	25	150	25				●	●	261180
	60/75	60	75	25.6	25	25	150	25				●	●	261182
FGHH525R/L-	25/30	25	30	20.6	20	20	125	12	FMM500R-04	M5×20	L5	●	●	261184
	30/35	30	35	20.6	20	20	125	12				●	●	261186
	35/40	35	40	20.6	20	20	125	20				●	●	261188
	40/48	40	48	20.6	20	20	125	20				●	●	261190
	48/60	48	60	20.6	20	20	125	25				●	●	261192
	60/75	60	75	20.6	20	20	125	25				●	●	261194

FGVH..R..



Machining of End Face Grooving

Workpiece Rotation Direction

(Inserts): A35/B119

(Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock		Order Number	
	øDmin	øDmax	f	b=h1	h	L	Tmax				R	L		
FGVH320R/L-	25/30	25	30	36.5	20	20	125	12	FMM300R-03	M5×20	L5	●	●	261188
	30/35	30	35	36.5	20	20	125	12				●	●	261190
	35/48	35	48	36.5	20	20	125	12				●	●	261192
	48/60	48	60	46.5	20	20	125	22				●	●	261194
	60/75	60	75	46.5	20	20	125	22				●	●	261196
	75/100	75	100	46.5	20	20	125	22				●	●	261198
FGVH325R/L-	25/30	25	30	41	25	25	150	12	FMM300R-03	M5×20	L5	●	●	261202
	30/35	30	35	41	25	25	150	12				●	●	261204
	35/48	35	48	41	25	25	150	12				●	●	261206
	48/60	48	60	51	25	25	150	22				●	●	261208
	60/75	60	75	51	25	25	150	22				●	●	261210
	75/100	75	100	51	25	25	150	22				●	●	261212
FGVH420R/L-	25/30	25	30	36.5	20	20	125	12	FMM400R-04	M5×20	L5	●	●	261216
	30/35	30	35	36.5	20	20	125	12				●	●	261218
	35/48	35	48	36.5	20	20	125	12				●	●	261220
	48/60	48	60	46.5	20	20	125	25				●	●	261222
	60/75	60	75	46.5	20	20	125	25				●	●	261224
	75/100	75	100	46.5	20	20	125	25				●	●	261226
FGVH425R/L-	25/30	25	30	41	25	25	150	12	FMM400R-04	M5×20	L5	●	●	261230
	30/35	30	35	41	25	25	150	12				●	●	261232
	35/48	35	48	41	25	25	150	12				●	●	261234
	48/60	48	60	51	25	25	150	25				●	●	261236
	60/75	60	75	51	25	25	150	25				●	●	261238
	75/100	75	100	51	25	25	150	25				●	●	261240
FGVH520R/L-	25/30	25	30	36.5	20	20	125	12	FMM500R-04	M5×20	L5	●	●	261244
	30/35	30	35	36.5	20	20	125	12				●	●	261246
	35/40	35	40	44.5	20	20	125	20				●	●	261248
	40/48	40	48	44.5	20	20	125	20				●	●	261250
	48/60	48	60	49.5	20	20	125	25				●	●	261252
	60/75	60	75	49.5	20	20	125	25				●	●	261254
FGVH525R/L-	25/30	25	30	41	25	25	150	12	FMM500R-04	M5×20	L5	●	●	261256
	30/35	30	35	41	25	25	150	12				●	●	261258
	35/40	35	40	49	25	25	150	20				●	●	261260
	40/48	40	48	49	25	25	150	20				●	●	261262
	48/60	48	60	54	25	25	150	25				●	●	261264
	60/75	60	75	54	25	25	150	25				●	●	261266

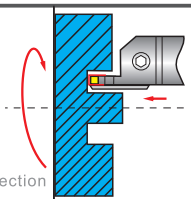


Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZN60	ZN90	ZK01	ZC250	ZC251	ZC325	ZP152	ZP153	ZP163	ZK50	ZK50S
				W	f _e	L	B	H	θ														
End Face Grooving (High Speed)			ZTED 02503-MG	2.5	0.3	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0303-MG	3.0	0.3	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0404-MG	4.0	0.4	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0504-MG	5.0	0.4	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0608-MG	6.0	0.8	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			ZRED 025-MG	2.5	1.25	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			03-MG	3.0	1.5	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			04-MG	4.0	2.0	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			05-MG	5.0	2.5	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			06-MG	6.0	3.0	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

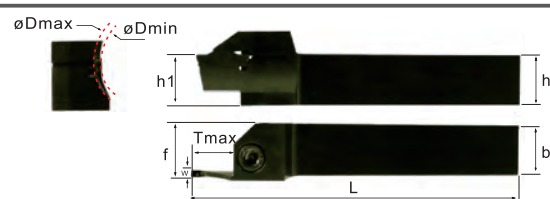
QF..R..



Machining of End Face Grooving



Workpiece Rotation Direction



R-Type

(Inserts): A41/B123

(Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number
	øDmin	øDmax	f	b=h1	h	L	Tmax					
QFFD 2020R/L 7-48H	48	66	21	20	20	125	7	ZTFD0303..	M6×20	L5	● ●	263532
10-48H	48	66	21	20	20	125	10					263534
7-60H	60	80	21	20	20	125	7					263540
10-60H	60	80	21	20	20	125	10					263542
7-74H	74	100	21	20	20	125	7					263548
10-74H	74	100	21	20	20	125	10					263550
7-100H	100	150	21	20	20	125	7					263556
10-100H	100	150	21	20	20	125	10					263558
2525R/L 10-48H	48	66	26	25	25	150	10					263536
17-48H	48	66	26	25	25	150	17					263538
10-60H	60	80	26	25	25	150	10	263544				
17-60H	60	80	26	25	25	150	17	263546				
10-74H	74	100	26	25	25	150	10	263552				
17-74H	74	100	26	25	25	150	17	263554				
10-100H	100	150	26	25	25	150	10	263560				
17-100H	100	150	26	25	25	150	17	263562				
QFGD 2020R/L 10-52H	52	72	21	20	20	125	10	ZTGD0404..	M6×20	L5	● ●	263564
13-52H	52	72	21	20	20	125	13					263566
10-64H	64	100	21	20	20	125	10					263572
13-64H	64	100	21	20	20	125	13					263574
10-90H	90	140	21	20	20	125	10					263580
13-90H	90	140	21	20	20	125	13					263582
10-130H	130	230	21	20	20	125	10					263588
13-130H	130	230	21	20	20	125	13					263590
2525R/L 15-52H	52	72	26	25	25	150	15					263568
22-52H	52	72	26	25	25	150	22					263570
15-64H	64	100	26	25	25	150	15	263576				
22-64H	64	100	26	25	25	150	22	263578				
15-90H	90	140	26	25	25	150	15	263584				
22-90H	90	140	26	25	25	150	22	263586				
15-130H	130	230	26	25	25	150	15	263592				
22-130H	130	230	26	25	25	150	22	263594				
QFHD 2525R/L 13-58H	58	96	26	25	25	150	13	ZTHD0504..	M6×20	L5	● ●	263500
22-58H	58	96	26	25	25	150	22					263502
13-86H	86	140	26	25	25	150	13					263504
22-86H	86	140	26	25	25	150	22					263506
13-130H	130	200	26	25	25	150	13					263508
22-130H	130	200	26	25	25	150	22					263510
13-185H	185	400	26	25	25	150	13					263512
22-185H	185	400	26	25	25	150	22	263514				
QFHS 2525R/L 30-185H	185	400	26	25	25	150	30	ZTHS0504..	M6×20	L5	● ●	263516
QFKD 2525R/L 13-60H	60	100	26	25	25	150	13	ZTKD0608..	M6×20	L5	● ●	263518
22-60H	60	100	26	25	25	150	22					263520
13-88H	88	180	26	25	25	150	13					263522
22-88H	88	180	26	25	25	150	22					263524
13-160H	160	400	26	25	25	150	13					263526
22-160H	160	400	26	25	25	150	22					263528
QFKS 2525R/L 30-160H	160	400	26	25	25	150	30	ZTKS0608..	M6×20	L5	● ●	263530

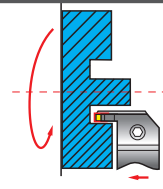


(Cutting Speed): m/min⁻¹

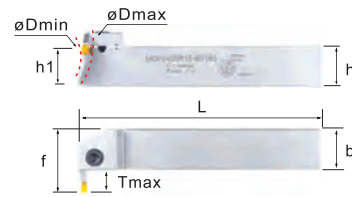
Material	PCD	CBN-K	CBN-S	ZN60	ZN90	ZK01	ZC250	ZC251	ZC325	ZP152	ZP153	ZP163	ZK50	ZK50S
P	Steel	●	●	●	●	●	●	●	●	●	●	●	●	●
M	Stainless Steel	●	●	●	●	●	●	●	●	●	●	●	●	●
K	Iron	●	●	●	●	●	●	●	●	●	●	●	●	●
N	Aluminum/Copper/Magnesium/Zinc/Plastic/Wood	●	●	●	●	●	●	●	●	●	●	●	●	●
S	Carbide/Powder Metallurgy	●	●	●	●	●	●	●	●	●	●	●	●	●
H	Titanium/Superalloy/Carbon Fiber	●	●	●	●	●	●	●	●	●	●	●	●	●

Application	Dimensioning	Product Image	Specification	Dimension						PCD	CBN-K	CBN-S	ZN60	ZN90	ZK01	ZC250	ZC251	ZC325	ZP152	ZP153	ZP163	ZK50	ZK50S	
				W	f _e	L	B	H	θ															
Cut-off Grooving			MGMN 150-G	1.5	0.15	16.0	1.2	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			MGMN 200-T	2.0	0.2	16.0	1.6	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			MGMN 200-M	2.0	0.2	16.0	1.2	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cut-off Grooving			MGMR 300-6D-PS	3.0	0.2	21.0	2.35	4.8	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			MGMN 200R-6	2.0	0.2	16.0	1.6	3.6	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			MGMN 150R-8	1.5	0.15	16.0	1.2	3.5	8°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			MGMN 150	1.5	0.15	16.0	1.2	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
End Face Grooving			MRMN 200-M	2.0	1.0	16.0	1.5	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum Alloy Wheel Processing			MRGN 400-A	4.0	2.0	21.0	3.3	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MGFV..R..



(MGFV..R)



R-Type

Machining of End Face Grooving

Workpiece Rotation Direction

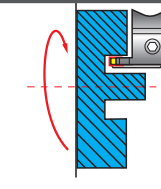
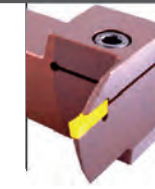


(Inserts): A35-A36

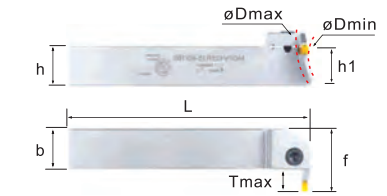
(Toolholder Parts): P01-P04

Ordering code	Dimensions								Insert	Screw	Wrench	Stock		Order Number
	ϕD_{min}	ϕD_{max}	f	b=h1	h	L	Tmax	R				L		
MGFV220R	10-20/36	20	36	30.5	20	20	125	10	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	●	●	265000
	10-30/50	30	50	30.5	20	20	125	10				●	●	265002
	10-50/80	50	80	30.5	20	20	125	10				●	●	265004
	10-80/160	80	160	30.5	20	20	125	10				●	●	265006
	10-160/400	160	400	30.5	20	20	125	10				●	●	265008
15-200/800	200	800	35.5	20	20	125	15	●	●	265010				
MGFV225R	10-20/36	20	36	35.5	25	25	150	10	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	●	●	265012
	10-30/50	30	50	35.5	25	25	150	10				●	●	265014
	10-50/80	50	80	35.5	25	25	150	10				●	●	265016
	10-80/160	80	160	35.5	25	25	150	10				●	●	265018
	10-160/400	160	400	35.5	25	25	150	10				●	●	265020
15-200/800	200	800	40.5	25	25	150	15	●	●	265022				
MGFV2.5-20R	10-20/36	20	36	30.5	20	20	125	10	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	●	●	265024
	10-30/50	30	50	30.5	20	20	125	10				●	●	265026
	15-50/80	50	80	35.5	20	20	125	15				●	●	265028
	15-80/160	80	160	35.5	20	20	125	15				●	●	265030
	15-160/400	160	400	35.5	20	20	125	15				●	●	265032
15-200/800	200	800	35.5	20	20	125	15	●	●	265034				
MGFV2.5-25R	10-20/36	20	36	35.5	25	25	150	10	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	●	●	265036
	10-30/50	30	50	35.5	25	25	150	10				●	●	265038
	15-50/80	50	80	40.5	25	25	150	15				●	●	265040
	15-80/160	80	160	40.5	25	25	150	15				●	●	265042
	15-160/400	160	400	40.5	25	25	150	15				●	●	265044
15-200/800	200	800	40.5	25	25	150	15	●	●	265046				
MGFV320R	15-20/36	20	36	35.5	20	20	125	15	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	●	●	265048
	15-30/50	30	50	35.5	20	20	125	15				●	●	265050
	15-50/80	50	80	35.5	20	20	125	15				●	●	265052
	15-80/160	80	160	35.5	20	20	125	15				●	●	265054
	15-160/400	160	400	35.5	20	20	125	15				●	●	265056
15-200/800	200	800	35.5	20	20	125	15	●	●	265058				
MGFV325R	15-20/36	20	36	40.5	25	25	150	15	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	●	●	265060
	15-30/50	30	50	40.5	25	25	150	15				●	●	265062
	15-50/80	50	80	40.5	25	25	150	15				●	●	265064
	15-80/160	80	160	40.5	25	25	150	15				●	●	265066
	15-160/400	160	400	40.5	25	25	150	15				●	●	265068
15-200/800	200	800	40.5	25	25	150	15	●	●	265070				
MGFV420R	15-20/36	20	36	35.5	20	20	125	15	MGMN400.. MGGN200.. MRMN200..	M5x20	L4	●	●	265072
	15-30/50	30	50	35.5	20	20	125	15				●	●	265074
	15-50/80	50	80	35.5	20	20	125	15				●	●	265076
	15-80/160	80	160	35.5	20	20	125	15				●	●	265078
	15-160/400	160	400	35.5	20	20	125	15				●	●	265080
15-200/800	200	800	35.5	20	20	125	15	●	●	265082				
MGFV425R	15-20/36	20	36	40.5	25	25	150	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	●	●	265084
	15-30/50	30	50	40.5	25	25	150	15				●	●	265086
	15-50/80	50	80	40.5	25	25	150	15				●	●	265088
	15-80/160	80	160	40.5	25	25	150	15				●	●	265090
	15-160/400	160	400	40.5	25	25	150	15				●	●	265092
15-200/800	200	800	40.5	25	25	150	15	●	●	265094				
MGFV520R	15-30/50	30	50	35.5	20	20	125	15	MGMN500.. MGGN500.. MRMN500..	M5x20	L4	●	●	265096
	15-50/80	50	80	35.5	20	20	125	15				●	●	265098
	15-80/160	80	160	35.5	20	20	125	15				●	●	265100
	15-160/400	160	400	35.5	20	20	125	15				●	●	265102
	15-200/800	200	800	35.5	20	20	125	15				●	●	265104
MGFV525R	15-30/50	30	50	40.5	25	25	150	15	MGMN500.. MGGN500.. MRMN500..	M5x20	L4	●	●	265106
	15-50/80	50	80	40.5	25	25	150	15				●	●	265108
	15-80/160	80	160	40.5	25	25	150	15				●	●	265110
	15-160/400	160	400	40.5	25	25	150	15				●	●	265112
	15-200/800	200	800	40.5	25	25	150	15				●	●	265114

MGFV..L..



(MGFV..L)



R-Type

Machining of End Face Grooving

Workpiece Rotation Direction



(Inserts): A35-A36

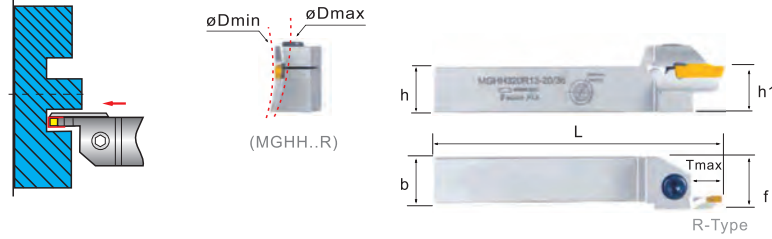
(Toolholder Parts): P01-P04

Ordering code	Dimensions								Insert	Screw	Wrench	Stock		Order Number
	ϕD_{min}	ϕD_{max}	f	b=h1	h	L	Tmax	R				L		
MGFV220L	10-20/36	20	36	30.5	20	20	125	10	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	●	●	265116
	10-30/50	30	50	30.5	20	20	125	10				●	●	265118
	10-50/80	50	80	30.5	20	20	125	10				●	●	265120
	10-80/160	80	160	30.5	20	20	125	10				●	●	265122
	10-160/400	160	400	30.5	20	20	125	10				●	●	265124
	15-200/800	200	800	35.5	20	20	125	15				●	●	265126
MGFV225L	10-20/36	20	36	35.5	25	25	150	10	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	●	●	265128
	10-30/50	30	50	35.5	25	25	150	10				●	●	265130
	10-50/80	50	80	35.5	25	25	150	10				●	●	265132
	10-80/160	80	160	35.5	25	25	150	10				●	●	265134
	10-160/400	160	400	35.5	25	25	150	10				●	●	265136
	15-200/800	200	800	40.5	25	25	150	15				●	●	265138
MGFV2.5-20L	10-20/36	20	36	30.5	20	20	125	10	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	●	●	265140
	10-30/50	30	50	30.5	20	20	125	10				●	●	265142
	15-50/80	50	80	35.5	20	20	125	15				●	●	265144
	15-80/160	80	160	35.5	20	20	125	15				●	●	265146
	15-160/400	160	400	35.5	20	20	125	15				●	●	265148
	15-200/800	200	800	35.5	20	20	125	15				●	●	265150
MGFV2.5-25L	10-20/36	20	36	35.5	25	25	150	10	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	●	●	265152
	10-30/50	30	50	35.5	25	25	150	10				●	●	265154
	15-50/80	50	80	40.5	25	25	150	15				●	●	265156
	15-80/160	80	160	40.5	25	25	150	15				●	●	265158
	15-160/400	160	400	40.5	25	25	150	15				●	●	265160
	15-200/800	200	800	40.5	25	25	150	15				●	●	265162
MGFV320L	15-20/36	20	36	35.5	20	20	125	15	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	●	●	265164
	15-30/50	30	50	35.5	20	20	125	15				●	●	265166
	15-50/80	50	80	35.5	20	20	125	15				●	●	265168
	15-80/160	80	160	35.5	20	20	125	15				●	●	265170
	15-160/400	160	400	35.5	20	20	125	15				●	●	265172
	15-200/800	200	800	35.5	20	20	125	15				●	●	265174
MGFV325L	15-20/36	20	36	40.5	25	25	150	15	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	●	●	265176
	15-30/50	30	50	40.5	25	25	150	15				●	●	265178
	15-50/80	50	80	40.5	25	25	150	15				●	●	265180
	15-80/160	80	160	40.5	25	25	150	15				●	●	265182
	15-160/400	160	400	40.5	25	25	150	15				●	●	265184
	15-200/800	200	800	40.5	25	25	150	15				●	●	265186
MGFV420L	15-20/36	20	36	35.5	20	20	125	15	MGMN400.. MGGN200.. MRMN200..	M5x20				

MGHH..R..

Machining of End Face Grooving

Workpiece Rotation Direction



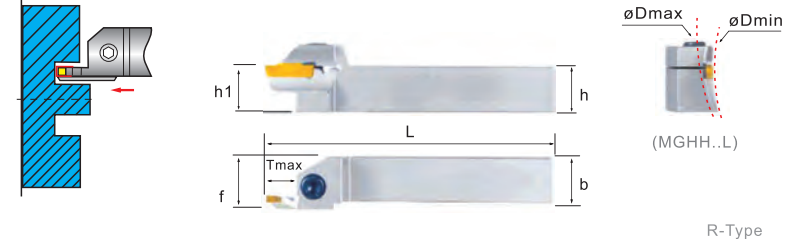
(Inserts): A35-A36 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number
	øDmin	øDmax	f	b=h1	h	L	Tmax					
MGHH216R	08-20/36	20	36	17	16	16	100	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265232
	10-30/50	30	50	17	16	16	100	10				● ● 265234
	12-50/80	50	80	17	16	16	100	12				● ● 265236
	13-80/160	80	160	17	16	16	100	13				● ● 265238
	14-160/400	160	400	17	16	16	100	14				● ● 265240
15-200/800	200	800	17	16	16	100	15	● ● 265242				
MGHH220R	08-20/36	20	36	21	20	20	125	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265244
	10-30/50	30	50	21	20	20	125	10				● ● 265246
	12-50/80	50	80	21	20	20	125	12				● ● 265248
	13-80/160	80	160	21	20	20	125	13				● ● 265250
	14-160/400	160	400	21	20	20	125	14				● ● 265252
15-200/800	200	800	21	20	20	125	15	● ● 265254				
MGHH225R	08-20/36	20	36	26	25	25	150	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265256
	10-30/50	30	50	26	25	25	150	10				● ● 265258
	12-50/80	50	80	26	25	25	150	12				● ● 265260
	13-80/160	80	160	26	25	25	150	13				● ● 265262
	14-160/400	160	400	26	25	25	150	14				● ● 265264
15-200/800	200	800	26	25	25	150	15	● ● 265266				
MGHH2.5-20R	13-20/36	20	36	21	20	20	125	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265268
	15-30/50	30	50	21	20	20	125	15				● ● 265270
	16-50/80	50	80	21	20	20	125	16				● ● 265272
	17-80/160	80	160	21	20	20	125	17				● ● 265274
	18-160/400	160	400	21	20	20	125	18				● ● 265276
20-200/800	200	800	21	20	20	125	20	● ● 265278				
MGHH2.5-25R	13-20/36	20	36	26	25	25	150	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265280
	15-30/50	30	50	26	25	25	150	15				● ● 265282
	16-50/80	50	80	26	25	25	150	16				● ● 265284
	17-80/160	80	160	26	25	25	150	17				● ● 265286
	18-160/400	160	400	26	25	25	150	18				● ● 265288
20-200/800	200	800	26	25	25	150	20	● ● 265290				
MGHH320R	13-20/36	20	36	21	20	20	125	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265292
	15-30/50	30	50	21	20	20	125	15				● ● 265294
	16-50/80	50	80	21	20	20	125	16				● ● 265296
	17-80/160	80	160	21	20	20	125	17				● ● 265298
	18-160/400	160	400	21	20	20	125	18				● ● 265300
20-200/800	200	800	21	20	20	125	20	● ● 265302				
MGHH325R	13-20/36	20	36	26	25	25	150	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265304
	15-30/50	30	50	26	25	25	150	15				● ● 265306
	16-50/80	50	80	26	25	25	150	16				● ● 265308
	17-80/160	80	160	26	25	25	150	17				● ● 265310
	18-160/400	160	400	26	25	25	150	18				● ● 265312
20-200/800	200	800	26	25	25	150	20	● ● 265314				
MGHH420R	15-20/36	20	36	21	20	20	125	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265316
	16-30/50	30	50	21	20	20	125	16				● ● 265318
	18-50/80	50	80	21	20	20	125	18				● ● 265320
	20-80/160	80	160	21	20	20	125	20				● ● 265322
	22-160/400	160	400	21	20	20	125	22				● ● 265324
23-200/800	200	800	21	20	20	125	23	● ● 265326				
MGHH425R	15-20/36	20	36	26	25	25	150	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265328
	16-30/50	30	50	26	25	25	150	16				● ● 265330
	18-50/80	50	80	26	25	25	150	18				● ● 265332
	20-80/160	80	160	26	25	25	150	20				● ● 265334
	22-160/400	160	400	26	25	25	150	22				● ● 265336
23-200/800	200	800	26	25	25	150	23	● ● 265338				
MGHH520R	17-30/50	30	50	21	20	20	125	17	MGMN500.. MGGN500.. MRMN500..	M5x20	L4	● ● 265340
	22-50/80	50	80	21	20	20	125	22				● ● 265342
	26-80/160	80	160	21	20	20	125	26				● ● 265344
	28-160/400	160	400	21	20	20	125	28				● ● 265346
	30-200/800	200	800	21	20	20	125	30				● ● 265348
MGHH525R	17-30/50	30	50	26	25	25	150	17	MGMN500.. MGGN500.. MRMN500..	M5x20	L4	● ● 265350
	22-50/80	50	80	26	25	25	150	22				● ● 265352
	26-80/160	80	160	26	25	25	150	26				● ● 265354
	28-160/400	160	400	26	25	25	150	28				● ● 265356
	30-200/800	200	800	26	25	25	150	30				● ● 265358

MGHH..L..

Machining of End Face Grooving

Workpiece Rotation Direction



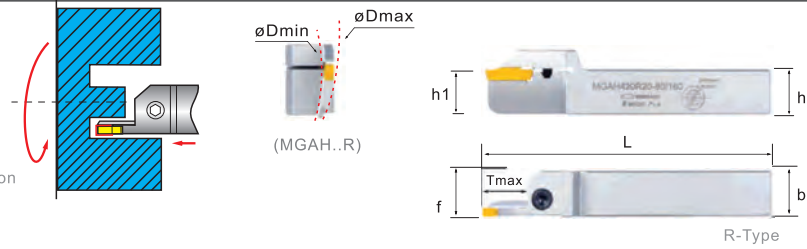
(Inserts): A35-A36 (Toolholder Parts): P01-P04

Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number
	øDmin	øDmax	f	b=h1	h	L	Tmax					
MGHH216L	08-20/36	20	36	17	16	16	100	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265360
	10-30/50	30	50	17	16	16	100	10				● ● 265362
	12-50/80	50	80	17	16	16	100	12				● ● 265364
	13-80/160	80	160	17	16	16	100	13				● ● 265366
	14-160/400	160	400	17	16	16	100	14				● ● 265368
15-200/800	200	800	17	16	16	100	15	● ● 265370				
MGHH220L	08-20/36	20	36	21	20	20	125	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265372
	10-30/50	30	50	21	20	20	125	10				● ● 265374
	12-50/80	50	80	21	20	20	125	12				● ● 265376
	13-80/160	80	160	21	20	20	125	13				● ● 265378
	14-160/400	160	400	21	20	20	125	14				● ● 265380
15-200/800	200	800	21	20	20	125	15	● ● 265382				
MGHH225L	08-20/36	20	36	26	25	25	150	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265384
	10-30/50	30	50	26	25	25	150	10				● ● 265386
	12-50/80	50	80	26	25	25	150	12				● ● 265388
	13-80/160	80	160	26	25	25	150	13				● ● 265390
	14-160/400	160	400	26	25	25	150	14				● ● 265392
15-200/800	200	800	26	25	25	150	15	● ● 265394				
MGHH2.5-20L	13-20/36	20	36	21	20	20	125	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265396
	15-30/50	30	50	21	20	20	125	15				● ● 265398
	16-50/80	50	80	21	20	20	125	16				● ● 265400
	17-80/160	80	160	21	20	20	125	17				● ● 265402
	18-160/400	160	400	21	20	20	125	18				● ● 265404
20-200/800	200	800	21	20	20	125	20	● ● 265406				
MGHH2.5-25L	13-20/36	20	36	26	25	25	150	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265408
	15-30/50	30	50	26	25	25	150	15				● ● 265410
	16-50/80	50	80	26	25	25	150	16				● ● 265412
	17-80/160	80	160	26	25	25	150	17				● ● 265414
	18-160/400	160	400	26	25	25	150	18				● ● 265416
20-200/800	200	800	26	25	25	150	20	● ● 265418				
MGHH320L	13-20/36	20	36	21	20	20	125	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265420
	15-30/50	30	50	21	20	20	125	15				● ● 265422
	16-50/80	50	80	21	20	20	125	16				● ● 265424
	17-80/160	80	160	21	20	20	125	17				● ● 265426
	18-160/400	160	400	21	20	20	125	18				● ● 265428
20-200/800	200	800	21	20	20	125	20	● ● 265430				
MGHH325L	13-20/36	20	36	26	25	25	150	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265432
	15-30/50	30	50	26	25	25	150	15				● ● 265434
	16-50/80	50	80	26	25	25	150	16				● ● 265436
	17-80/160	80	160	26	25	25	150	17				● ● 265438
	18-160/400	160	400	26	25	25	150	18				● ● 265440
20-200/800	200	800	26	25	25	150	20	● ● 265442				
MGHH420L	15-20/36	20	36	21	20	20	125	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265444
	16-30/50	30	50	21	20	20	125	16				● ● 265446
	18-50/80	50	80	21	20	20	125	18				● ● 265448
	20-80/160	80	160	21	20	20	125	20				● ● 265450
	22-160/400	160	400	21	20	20	125	22				● ● 265452
23-200/800	200	800	21	20	20	125	23	● ● 265454				
MGHH425L	15-20/36	20	36	26	25	25	150	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265456

MGAH..R..

Machining of End Face Grooving

Workpiece Rotation Direction



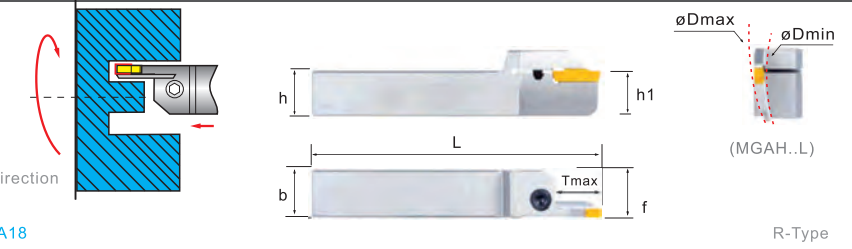
(Inserts): A15-A16 (Toolholder Parts): A17-A18

Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number
	øDmin	øDmax	f	b=h1	h	L	Tmax					
MGAH216R	08-20/36	20	36	17	16	16	100	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265488
	10-30/50	30	50	17	16	16	100	10				● ● 265490
	12-50/80	50	80	17	16	16	100	12				● ● 265492
	13-80/160	80	160	17	16	16	100	13				● ● 265494
	14-160/400	160	400	17	16	16	100	14				● ● 265496
15-200/800	200	800	17	16	16	100	15	● ● 265498				
MGAH220R	08-20/36	20	36	21	20	20	125	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265500
	10-30/50	30	50	21	20	20	125	10				● ● 265502
	12-50/80	50	80	21	20	20	125	12				● ● 265504
	13-80/160	80	160	21	20	20	125	13				● ● 265506
	14-160/400	160	400	21	20	20	125	14				● ● 265508
15-200/800	200	800	21	20	20	125	15	● ● 265510				
MGAH225R	08-20/36	20	36	26	25	25	150	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265512
	10-30/50	30	50	26	25	25	150	10				● ● 265514
	12-50/80	50	80	26	25	25	150	12				● ● 265516
	13-80/160	80	160	26	25	25	150	13				● ● 265518
	14-160/400	160	400	26	25	25	150	14				● ● 265520
15-200/800	200	800	26	25	25	150	15	● ● 265522				
MGAH2.5-20R	13-20/36	20	36	21	20	20	125	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265524
	15-30/50	30	50	21	20	20	125	15				● ● 265526
	16-50/80	50	80	21	20	20	125	16				● ● 265528
	17-80/160	80	160	21	20	20	125	17				● ● 265530
	18-160/400	160	400	21	20	20	125	18				● ● 265532
20-200/800	200	800	21	20	20	125	20	● ● 265534				
MGAH2.5-25R	13-20/36	20	36	26	25	25	150	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265536
	15-30/50	30	50	26	25	25	150	15				● ● 265538
	16-50/80	50	80	26	25	25	150	16				● ● 265540
	17-80/160	80	160	26	25	25	150	17				● ● 265542
	18-160/400	160	400	26	25	25	150	18				● ● 265544
20-200/800	200	800	26	25	25	150	20	● ● 265546				
MGAH320R	13-20/36	20	36	21	20	20	125	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265548
	15-30/50	30	50	21	20	20	125	15				● ● 265550
	16-50/80	50	80	21	20	20	125	16				● ● 265552
	17-80/160	80	160	21	20	20	125	17				● ● 265554
	18-160/400	160	400	21	20	20	125	18				● ● 265556
20-200/800	200	800	21	20	20	125	20	● ● 265558				
MGAH325R	13-20/36	20	36	26	25	25	150	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265560
	15-30/50	30	50	26	25	25	150	15				● ● 265562
	16-50/80	50	80	26	25	25	150	16				● ● 265564
	17-80/160	80	160	26	25	25	150	17				● ● 265566
	18-160/400	160	400	26	25	25	150	18				● ● 265568
20-200/800	200	800	26	25	25	150	20	● ● 265570				
MGAH420R	15-20/36	20	36	21	20	20	125	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265572
	16-30/50	30	50	21	20	20	125	16				● ● 265574
	18-50/80	50	80	21	20	20	125	18				● ● 265576
	20-80/160	80	160	21	20	20	125	20				● ● 265578
	22-160/400	160	400	21	20	20	125	22				● ● 265580
23-200/800	200	800	21	20	20	125	23	● ● 265582				
MGAH425R	15-20/36	20	36	26	25	25	150	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265584
	16-30/50	30	50	26	25	25	150	16				● ● 265586
	18-50/80	50	80	26	25	25	150	18				● ● 265588
	20-80/160	80	160	26	25	25	150	20				● ● 265590
	22-160/400	160	400	26	25	25	150	22				● ● 265592
23-200/800	200	800	26	25	25	150	23	● ● 265594				
MGAH520R	17-30/50	30	50	21	20	20	125	17	MGMN500.. MGGN500.. MRMN500..	M5x20	L4	● ● 265596
	22-50/80	50	80	21	20	20	125	22				● ● 265598
	26-80/160	80	160	21	20	20	125	26				● ● 265600
	28-160/400	160	400	21	20	20	125	28				● ● 265602
	30-200/800	200	800	21	20	20	125	30				● ● 265604
MGAH525R	17-30/50	30	50	26	25	25	150	17	MGMN500.. MGGN500.. MRMN500..	M5x20	L4	● ● 265606
	22-50/80	50	80	26	25	25	150	22				● ● 265608
	26-80/160	80	160	26	25	25	150	26				● ● 265610
	28-160/400	160	400	26	25	25	150	28				● ● 265612
	30-200/800	200	800	26	25	25	150	30				● ● 265614

MGAH..L..

Machining of End Face Grooving

Workpiece Rotation Direction



(Inserts): A15-A16 (Toolholder Parts): A17-A18

Ordering code	Dimensions							Insert	Screw	Wrench	Stock	Order Number
	øDmin	øDmax	f	b=h1	h	L	Tmax					
MGAH216L	08-20/36	20	36	17	16	16	100	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265616
	10-30/50	30	50	17	16	16	100	10				● ● 265618
	12-50/80	50	80	17	16	16	100	12				● ● 265620
	13-80/160	80	160	17	16	16	100	13				● ● 265622
	14-160/400	160	400	17	16	16	100	14				● ● 265624
15-200/800	200	800	17	16	16	100	15	● ● 265626				
MGAH220L	08-20/36	20	36	21	20	20	125	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265628
	10-30/50	30	50	21	20	20	125	10				● ● 265630
	12-50/80	50	80	21	20	20	125	12				● ● 265632
	13-80/160	80	160	21	20	20	125	13				● ● 265634
	14-160/400	160	400	21	20	20	125	14				● ● 265636
15-200/800	200	800	21	20	20	125	15	● ● 265638				
MGAH225L	08-20/36	20	36	26	25	25	150	8	MGMN200.. MGGN200.. MRMN200..	M5x20	L4	● ● 265640
	10-30/50	30	50	26	25	25	150	10				● ● 265642
	12-50/80	50	80	26	25	25	150	12				● ● 265644
	13-80/160	80	160	26	25	25	150	13				● ● 265646
	14-160/400	160	400	26	25	25	150	14				● ● 265648
15-200/800	200	800	26	25	25	150	15	● ● 265650				
MGAH2.5-20L	13-20/36	20	36	21	20	20	125	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265652
	15-30/50	30	50	21	20	20	125	15				● ● 265654
	16-50/80	50	80	21	20	20	125	16				● ● 265656
	17-80/160	80	160	21	20	20	125	17				● ● 265658
	18-160/400	160	400	21	20	20	125	18				● ● 265660
20-200/800	200	800	21	20	20	125	20	● ● 265662				
MGAH2.5-25L	13-20/36	20	36	26	25	25	150	13	MGMN250.. MGGN250.. MRMN250..	M5x20	L4	● ● 265664
	15-30/50	30	50	26	25	25	150	15				● ● 265666
	16-50/80	50	80	26	25	25	150	16				● ● 265668
	17-80/160	80	160	26	25	25	150	17				● ● 265670
	18-160/400	160	400	26	25	25	150	18				● ● 265672
20-200/800	200	800	26	25	25	150	20	● ● 265674				
MGAH320L	13-20/36	20	36	21	20	20	125	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265676
	15-30/50	30	50	21	20	20	125	15				● ● 265678
	16-50/80	50	80	21	20	20	125	16				● ● 265680
	17-80/160	80	160	21	20	20	125	17				● ● 265682
	18-160/400	160	400	21	20	20	125	18				● ● 265684
20-200/800	200	800	21	20	20	125	20	● ● 265686				
MGAH325L	13-20/36	20	36	26	25	25	150	13	MGMN300.. MGGN300.. MRMN300..	M5x20	L4	● ● 265688
	15-30/50	30	50	26	25	25	150	15				● ● 265690
	16-50/80	50	80	26	25	25	150	16				● ● 265692
	17-80/160	80	160	26	25	25	150	17				● ● 265694
	18-160/400	160	400	26	25	25	150	18				● ● 265696
20-200/800	200	800	26	25	25	150	20	● ● 265698				
MGAH420L	15-20/36	20	36	21	20	20	125	15	MGMN400.. MGGN400.. MRMN400..	M5x20	L4	● ● 265700
	16-30/50	30	50	21	20	20	125	16				● ● 265702
	18-50/80	50	80	21	20	20	125	18				● ● 265704
	20-80/160	80	160	21	20	20	125	20				● ● 265706
	22-160/400	160	400	21	20	20	125	22				● ● 265708
23-200/800	200	800	21	20	20	125	23	● ● 265710				
MGAH425L	15-20/36	20	36	26	25	25	150	15	MGMN400.. MGGN400.. MRMN400..			

Официальный импортер VKE Group - Базовая техника

+7(800) 511-57-54



sales@baztehshop.ru

