

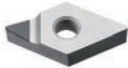
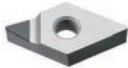
CN.. series/Inserts PCD / Diamond Coating

CNM.

										Steel		
										Stainless Steel		
										Cast Iron		
										Non-Ferrous Material		
										Heat Resistant Alloy		
										Hardened Material		
										Others (non-metallic)		
Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	No. of edge	PCD		Diamond Coating UC1	
	CNMG120404FNZP	Up-sharp edge	80	12.7	4.76	–	0.4	4			●	
	CNMG120408FNZP	Up-sharp edge	80	12.7	4.76	–	0.8	4			●	
	CNMX120404PF	Up-sharp edge	80	12.7	4.76	–	0.4	1		●		
	CNMX120408PF	Up-sharp edge	80	12.7	4.76	–	0.8	1		●		

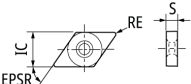
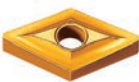
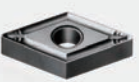
DN.. series/Inserts PCD / Diamond Coating

DNMX

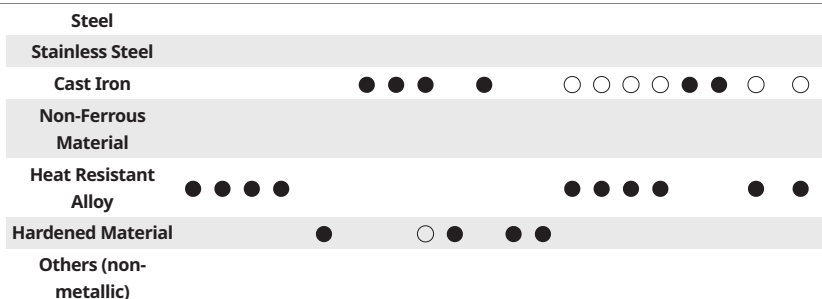
											Steel	
											Stainless Steel	
											Cast Iron	
											Non-Ferrous Material	● ● ●
											Heat Resistant Alloy	
											Hardened Material	
											Others (non-metallic)	●
	Item Number	CECC	EPSR	IC	S	AN	RE	No. of edge	PCD		Diamond Coating	
	(ISO)		°	mm	mm	°	mm		PD1	PD2	UC1	
	DNMX150404PF	Up-sharp edge	55	12.7	4.76	-	0.4	1		●		
	DNMX150408PF	Up-sharp edge	55	12.7	4.76	-	0.8	1		●		

DN.. series/Inserts Carbide

DN..

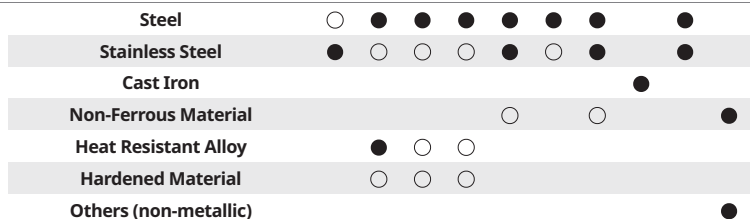
			Steel									○	●	●	●	●	●	●	●	●	
			Stainless Steel									●	○	○	○	●	○	●		●	●
			Cast Iron																●		
			Non-Ferrous Material													○		○		●	●
			Heat Resistant Alloy										●		○	○					
			Hardened Material										○		○	○					
			Others (non-metallic)																		●
Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide												
	PVD								PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	Uncoated			
	(ISO)		°	mm	mm	°	mm	mm	ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1			
	DNMG150404FNZP	Up-sharp edge	55	12.7	4.76	-	0.4	-		●		●			●						
	DNMG150408FNZP	Up-sharp edge	55	12.7	4.76	-	0.8	-		●		●			●						
	DNMG150408T00525Z5	T00525	55	12.7	4.76	-	0.8	-		●		●									
	DNMG150404TNG	T01025	55	12.7	4.76	-	0.4	-				●									
	DNMG150404G	-	55	12.7	4.76	-	0.4	-									●				
	DNMG150408G	-	55	12.7	4.76	-	0.8	-									●				
	DNMG150412G	-	55	12.7	4.76	-	1.2	-									●				

WNGA



WN.. series/Inserts Carbide

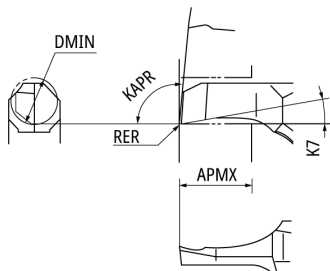
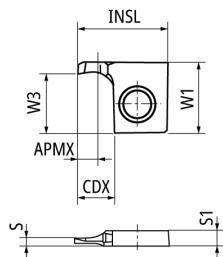
WN..



G20

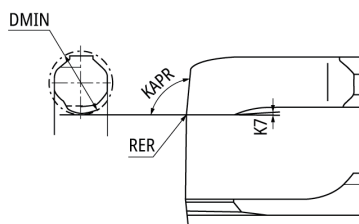
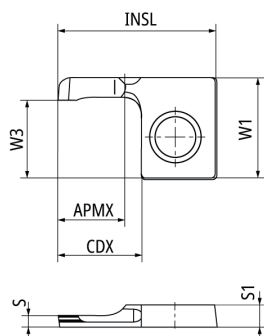
LBM.. series/Inserts Carbide

LBMD-S Short type



Item Number	Hand	Chip-breaker	DMIN	APMX	CDX	INSL	K7	KAPR	RE	S	S1	W1	W3	Carbide PVD	
			mm	mm	mm	mm	°	°	mm	mm	mm	mm	mm	VM1	ZM3
LBMD1020FLPB05S		L	Yes	1	2	6	15	10	95	0.05	1.25	2.5	12	10	●
LBMD1020FLVBS		L	Yes	1	2	6	15	10	95	0	1.25	2.5	12	10	●
LBMD1430FLPB05S		L	Yes	1.4	3	6	15	10	95	0.05	1.25	2.5	12	10	●
LBMD1430FLVBS		L	Yes	1.4	3	6	15	10	95	0	1.25	2.5	12	10	●
LBMD1730FLPB05S		L	Yes	1.7	3	6	15	10	95	0.05	1.25	2.5	12	10	●
LBMD1730FLVBS		L	Yes	1.7	3	6	15	10	95	0	1.25	2.5	12	10	●
LBMD2035FLPB05S		L	Yes	2	3.5	6	15	10	95	0.05	1.25	2.5	12	10	●
LBMD2035FLVBS		L	Yes	2	3.5	6	15	10	95	0	1.25	2.5	12	10	●
LBMD2335FLPB05S		L	Yes	2.3	3.5	6	15	10	95	0.05	1.25	2.5	12	10	●
LBMD2335FLVBS		L	Yes	2.3	3.5	6	15	10	95	0	1.25	2.5	12	10	●

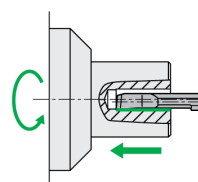
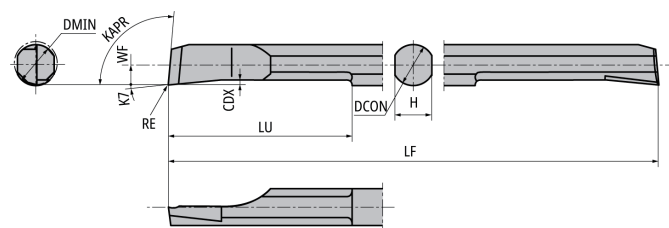
LBM Long type



Item Number	Hand	Chip-breaker	DMIN	APMX	CDX	INSL	K7	KAPR	RE	S	S1	W1	W3	Carbide PVD	
			mm	mm	mm	mm	°	°	mm	mm	mm	mm	mm	VM1	ZM3
LBMD1020FLPB05		L	Yes	1	2	9.9	18.9	10	95	0.05	1.25	2.5	12	10	●
LBMD1020FLVB		L	Yes	1	2	9.9	18.9	10	95	0	1.25	2.5	12	10	●
LBMD2060FLPB05		L	Yes	2	6	9.9	18.9	10	95	0.05	1.25	2.5	12	10	●
LBMD2060FLVB		L	Yes	2	6	9.9	18.9	10	95	0	1.25	2.5	12	10	●
LBME2060FLP05		L	No	2	6	9.9	18.9	2	105	0.05	1.25	2.5	12	10	●
LBME2060FLPB05		L	Yes	2	6	9.9	18.9	2	105	0.05	1.25	2.5	12	10	●
LBME2060FLV		L	No	2	6	9.9	18.9	2	105	0	1.25	2.5	12	10	●
LBME2060FLVB		L	Yes	2	6	9.9	18.9	2	105	0	1.25	2.5	12	10	●
LBM3080FLPB05		L	Yes	3	8	9.9	18.9	2	90	0.05	1.25	2.5	12	9.6	●
LBM3080FLVB		L	Yes	3	8	9.9	18.9	2	90	0	1.25	2.5	12	9.6	●
LBMC3080FLP05		L	No	3	8	9.9	18.9	2	95	0.05	1.25	2.5	12	9.6	● ●
LBMC3080FLPB05		L	Yes	3	8	9.9	18.9	2	95	0.05	1.25	2.5	12	9.6	● ●
LBMC3080FLV		L	No	3	8	9.9	18.9	2	95	0	1.25	2.5	12	9.6	● ●
LBMC3080FLVB		L	Yes	3	8	9.9	18.9	2	95	0	1.25	2.5	12	9.6	● ●

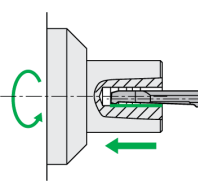
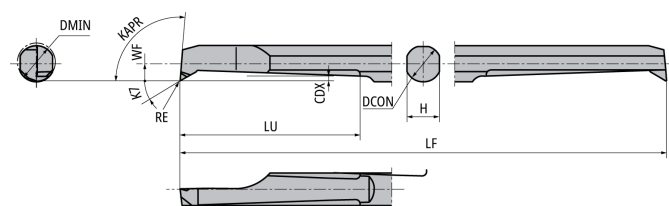
SB.. series/Insert bar Carbide

SBFS-S Sharp cutting edge



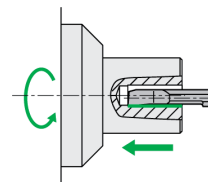
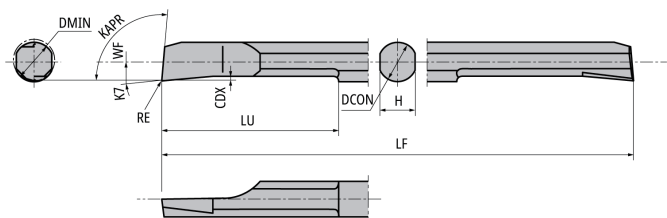
Item Number	Hand	Chip-breaker	DMIN	CDX	DCON	H	K7	KAPR	LF	LU	RE	WF	Carbide PVD	
			mm	mm	mm	mm	°	°	mm	mm	mm	mm	DT4	ZM3
SBFS020R005S	R	Yes	2.2	0.25	2	1.8	5	95	50	10	0.05	0.9	●	●
SBFS025R005S	R	Yes	2.7	0.3	2.5	2.3	5	95	50	12.5	0.05	1.15	●	●
SBFS025R015S	R	Yes	2.7	0.3	2.5	2.3	5	95	50	12.5	0.15	1.15	●	●
SBFS030R005S	R	Yes	3.2	0.4	3	2.7	5	95	50	15	0.05	1.4	●	●
SBFS030R015S	R	Yes	3.2	0.4	3	2.7	5	95	50	15	0.15	1.4	●	●
SBFS035R005S	R	Yes	3.7	0.4	3.5	3.2	5	95	60	17.5	0.05	1.65	●	●
SBFS035R015S	R	Yes	3.7	0.4	3.5	3.2	5	95	60	17.5	0.15	1.65	●	●
SBFS040R005S	R	Yes	4.2	0.45	4	3.6	5	95	60	20	0.05	1.9	●	●
SBFS040R015S	R	Yes	4.2	0.45	4	3.6	5	95	60	20	0.15	1.9	●	●
SBFS050R005S	R	Yes	5.2	0.5	5	4.5	5	95	70	25	0.05	2.4	●	●
SBFS050R015S	R	Yes	5.2	0.5	5	4.5	5	95	70	25	0.15	2.4	●	●
SBFS060R005S	R	Yes	6.2	0.6	6	5.4	5	95	80	30	0.05	2.9	●	●
SBFS060R015S	R	Yes	6.2	0.6	6	5.4	5	95	80	30	0.15	2.9	●	●

SBFB-F Evacuates chips BACKWARD



Item Number	Hand	Chip-breaker	DMIN	CDX	DCON	H	K7	KAPR	LF	LU	RE	WF	Carbide PVD	
			mm	mm	mm	mm	°	°	mm	mm	mm	mm	DT4	ZM3
SBFB020R005F	R	Yes	2.2	0.25	2	1.8	30	95	50	8	0.05	0.95	●	●
SBFB025R005F	R	Yes	2.7	0.3	2.5	2.3	30	95	50	12.5	0.05	1.2	●	●
SBFB025R015F	R	Yes	2.7	0.3	2.5	2.3	30	95	50	12.5	0.15	1.2	●	●
SBFB030R005F	R	Yes	3.2	0.45	3	2.7	30	95	50	15	0.05	1.4	●	●
SBFB030R015F	R	Yes	3.2	0.45	3	2.7	30	95	50	15	0.15	1.4	●	●
SBFB035R005F	R	Yes	3.7	0.5	3.5	3.2	30	95	60	17.5	0.05	1.65	●	●
SBFB035R015F	R	Yes	3.7	0.5	3.5	3.2	30	95	60	17.5	0.15	1.65	●	●
SBFB040R005F	R	Yes	4.2	0.5	4	3.6	30	95	60	20	0.05	1.9	●	●
SBFB040R015F	R	Yes	4.2	0.5	4	3.6	30	95	60	20	0.15	1.9	●	●
SBFB050R005F	R	Yes	5.2	0.7	5	4.5	30	95	70	25	0.05	2.4	●	●
SBFB050R015F	R	Yes	5.2	0.7	5	4.5	30	95	70	25	0.15	2.4	●	●
SBFB060R005F	R	Yes	6.2	0.9	6	5.4	30	95	80	30	0.05	2.9	●	●
SBFB060R015F	R	Yes	6.2	0.9	6	5.4	30	95	80	30	0.15	2.9	●	●

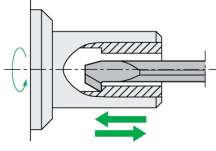
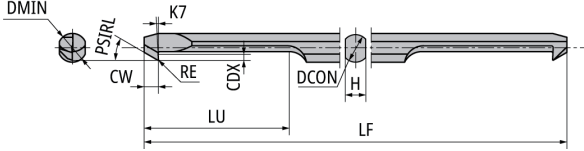
SBFS-H Mirror finish edge



Item Number	Hand	Chip-breaker	DMIN	CDX	DCON	H	K7	KAPR	LF	LU	RE	WF	Carbide PVD	
													DT4	ZM3
SBFS020R005H	M	R	Yes	2.2	0.25	2	1.8	5	95	50	10	0.05	0.9	●
SBFS025R005H	M	R	Yes	2.7	0.3	2.5	2.3	5	95	50	12.5	0.05	1.15	●
SBFS025R015H	M	R	Yes	2.7	0.3	2.5	2.3	5	95	50	12.5	0.15	1.15	●
SBFS030R005H	M	R	Yes	3.2	0.4	3	2.7	5	95	50	15	0.05	1.4	●
SBFS030R015H	M	R	Yes	3.2	0.4	3	2.7	5	95	50	15	0.15	1.4	●
SBFS035R005H	M	R	Yes	3.7	0.4	3.5	3.2	5	95	60	17.5	0.05	1.65	●
SBFS035R015H	M	R	Yes	3.7	0.4	3.5	3.2	5	95	60	17.5	0.15	1.65	●
SBFS040R005H	M	R	Yes	4.2	0.45	4	3.6	5	95	60	20	0.05	1.9	●
SBFS040R015H	M	R	Yes	4.2	0.45	4	3.6	5	95	60	20	0.15	1.9	●
SBFS050R005H	M	R	Yes	5.2	0.5	5	4.5	5	95	70	25	0.05	2.4	●
SBFS050R015H	M	R	Yes	5.2	0.5	5	4.5	5	95	70	25	0.15	2.4	●
SBFS060R005H	M	R	Yes	6.2	0.6	6	5.4	5	95	80	30	0.05	2.9	●
SBFS060R015H	M	R	Yes	6.2	0.6	6	5.4	5	95	80	30	0.15	2.9	●
SBFS080R005H	M	R	Yes	8.2	0.8	8	7.3	5	95	80	30	0.05	3.9	●
SBFS080R015H	M	R	Yes	8.2	0.8	8	7.3	5	95	80	30	0.15	3.9	●

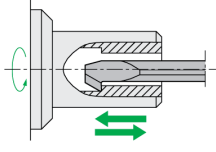
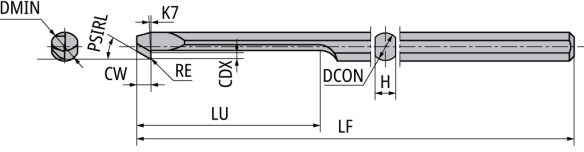
SB.. series/Insert bar Carbide for ID Back Turning

SBB-S Short type / Two-sided



Item Number	Hand	Chip-breaker	DMIN	CDX	CW	DCON	H	K7	LF	LU	PSIRL	RE	WF	Carbide PVD ZM3
SBB030RB005-S	R	Yes	3	0.5	1.5	3	2.7	3	50	15	30	0.05	1.3	●
SBB030RB010-S	R	Yes	3	0.5	1.5	3	2.7	3	50	15	30	0.1	1.3	●
SBB040RB005-S	R	Yes	4	0.8	1.5	4	3.6	3	60	18	30	0.05	1.8	●
SBB040RB015-S	R	Yes	4	0.8	1.5	4	3.6	3	60	18	30	0.15	1.8	●

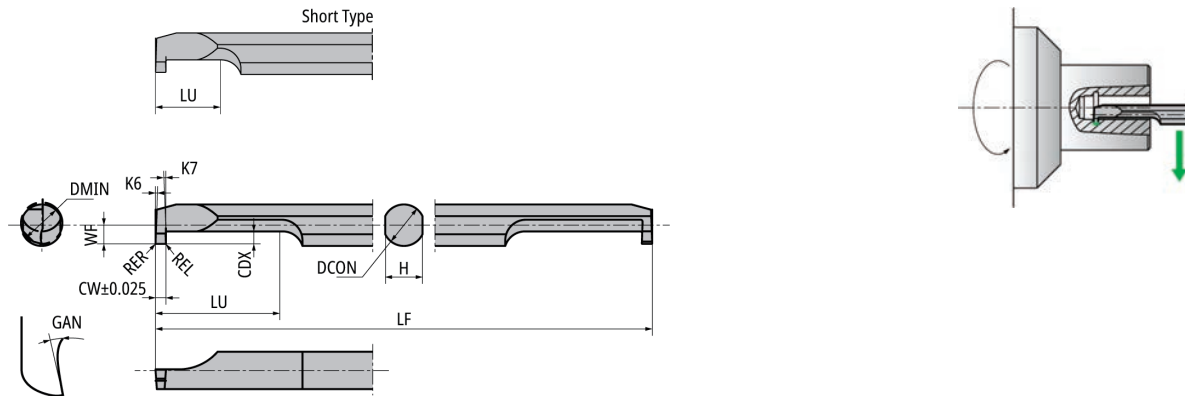
SBB Long type / Single-sided



Item Number	Hand	Chip-breaker	DMIN	CDX	CW	DCON	H	K7	LF	LU	PSIRL	RE	WF	Carbide PVD ZM3
SBB030RB005	R	Yes	3	0.5	1.5	3	2.7	3	50	19	30	0.05	1.3	●
SBB030RB010	R	Yes	3	0.5	1.5	3	2.7	3	50	19	30	0.1	1.3	●
SBB040RB005	R	Yes	4	0.8	1.5	4	3.6	3	60	24	30	0.05	1.8	●
SBB040RB015	R	Yes	4	0.8	1.5	4	3.6	3	60	24	30	0.15	1.8	●

SB.. series/Insert bar Carbide for ID Grooving

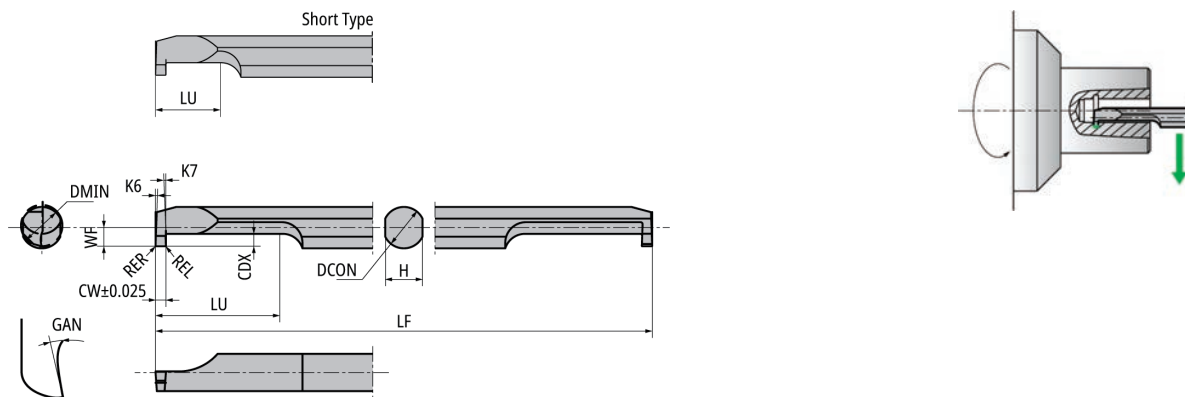
SBG-S Short type / Two-sided



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	DMIN	APMX	CDX	CW	DCON	GAN	K6	K7	LF	LU	REL	RER	WF	Carbide PVD ZM3
SBG030050RB-S	R	Yes	3	0.8	1	0.5	3	8	2	2	50	4.5	0.05	0.05	1.3	●
SBG030075RB-S	R	Yes	3	0.8	1	0.75	3	8	2	2	50	4.5	0.05	0.05	1.3	●
SBG030100RB-S	R	Yes	3	0.8	1	1	3	8	2	2	50	4.5	0.05	0.05	1.3	●
SBG030150RB-S	R	Yes	3	0.8	1	1.5	3	8	2	2	50	4.5	0.05	0.05	1.3	●
SBG040050RB-S	R	Yes	4	1	1.2	0.5	4	8	2	2	60	6	0.05	0.05	1.8	●
SBG040075RB-S	R	Yes	4	1	1.2	0.75	4	8	2	2	60	6	0.05	0.05	1.8	●
SBG040100RB-S	R	Yes	4	1	1.2	1	4	8	2	2	60	6	0.05	0.05	1.8	●
SBG040150RB-S	R	Yes	4	1	1.2	1.5	4	8	2	2	60	6	0.05	0.05	1.8	●
SBG050050RB-S	R	Yes	5	1.2	1.4	0.5	5	8	2	2	70	7.5	0.05	0.05	2.3	●
SBG050100RB-S	R	Yes	5	1.2	1.4	1	5	8	2	2	70	7.5	0.05	0.05	2.3	●
SBG050150RB-S	R	Yes	5	1.2	1.4	1.5	5	8	2	2	70	7.5	0.05	0.05	2.3	●
SBG050200RB-S	R	Yes	5	1.2	1.4	2	5	8	2	2	70	7.5	0.05	0.05	2.3	●
SBG060100RB-S	R	Yes	6	1.8	2	1	6	8	2	2	80	7.5	0.05	0.05	2.8	●
SBG060150RB-S	R	Yes	6	1.8	2	1.5	6	8	2	2	80	7.5	0.05	0.05	2.8	●
SBG060200RB-S	R	Yes	6	1.8	2	2	6	8	2	2	80	7.5	0.05	0.05	2.8	●
SBG080100RB-S	R	Yes	8	2.2	2.4	1	8	8	2	2	80	8.5	0.05	0.05	3.8	●
SBG080150RB-S	R	Yes	8	2.2	2.4	1.5	8	8	2	2	80	8.5	0.05	0.05	3.8	●
SBG080200RB-S	R	Yes	8	2.2	2.4	2	8	8	2	2	80	8.5	0.05	0.05	3.8	●

SBG Long type / Two-sided

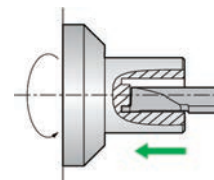
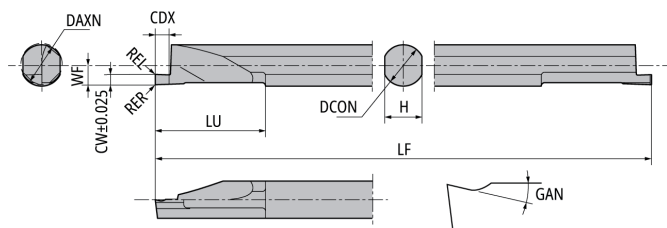


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	DMIN	APMX	CDX	CW	DCON	GAN	K6	K7	LF	LU	REL	RER	WF	Carbide PVD ZM3
SBG030050RB	R	Yes	3	0.8	1	0.5	3	8	2	2	50	9	0.05	0.05	1.3	●
SBG030075RB	R	Yes	3	0.8	1	0.75	3	8	2	2	50	9	0.05	0.05	1.3	●
SBG030100RB	R	Yes	3	0.8	1	1	3	8	2	2	50	9	0.05	0.05	1.3	●
SBG040050RB	R	Yes	4	1	1.2	0.5	4	8	2	2	60	12	0.05	0.05	1.8	●
SBG040075RB	R	Yes	4	1	1.2	0.75	4	8	2	2	60	12	0.05	0.05	1.8	●
SBG040100RB	R	Yes	4	1	1.2	1	4	8	2	2	60	12	0.05	0.05	1.8	●
SBG050050RB	R	Yes	5	1.2	1.4	0.5	5	8	2	2	70	20	0.05	0.05	2.3	●
SBG050100RB	R	Yes	5	1.2	1.4	1	5	8	2	2	70	20	0.05	0.05	2.3	●
SBG050150RB	R	Yes	5	1.2	1.4	1.5	5	8	2	2	70	20	0.05	0.05	2.3	●
SBG060100RB	R	Yes	6	1.8	2	1	6	8	2	2	80	20	0.05	0.05	2.8	●
SBG060150RB	R	Yes	6	1.8	2	1.5	6	8	2	2	80	20	0.05	0.05	2.8	●
SBG060200RB	R	Yes	6	1.8	2	2	6	8	2	2	80	20	0.05	0.05	2.8	●
SBG080100RB	R	Yes	8	2.2	2.4	1	8	8	2	2	80	20	0.05	0.05	3.8	●
SBG080150RB	R	Yes	8	2.2	2.4	1.5	8	8	2	2	80	20	0.05	0.05	3.8	●
SBG080200RB	R	Yes	8	2.2	2.4	2	8	8	2	2	80	20	0.05	0.05	3.8	●

SB.. series/Insert bar Carbide for ID Face Grooving

SFG

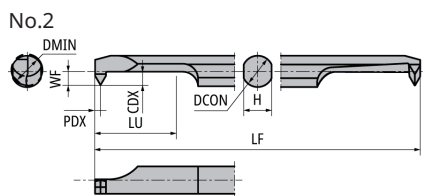
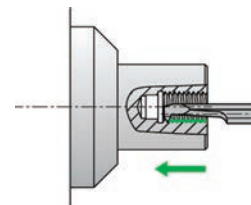
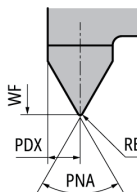
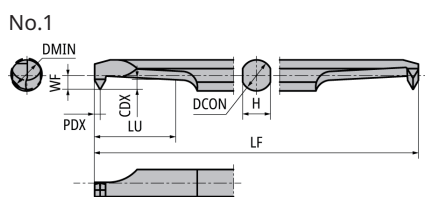


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	DAXN	APMX	CDX	CW	DCON	GAN	H	LF	LU	REL	RER	WF	Carbide PVD
			mm	mm	mm	mm	mm	°	mm	mm	mm	mm	mm	mm	TM4
SFG060R100B	R	Yes	6	1.5	1.7	1	6	14	5.4	80	16	0.05	0.05	2.8	●
SFG060R150B	R	Yes	6	2	2.2	1.5	6	14	5.4	80	16	0.05	0.05	2.8	●
SFG060R200B	R	Yes	6	3	3.2	2	6	14	5.4	80	16	0.05	0.05	2.8	●
SFG080R100B	R	Yes	8	1.5	1.7	1	8	14	7.3	80	16	0.05	0.05	3.8	●
SFG080R150B	R	Yes	8	2	2.2	1.5	8	14	7.3	80	16	0.05	0.05	3.8	●
SFG080R200B	R	Yes	8	3	3.2	2	8	14	7.3	80	16	0.05	0.05	3.8	●
SFG080R300B	R	Yes	8	3	3.2	3	8	14	7.3	80	16	0.05	0.05	3.8	●

SB.. series/Insert bar Carbide for Internal Thread

SBT

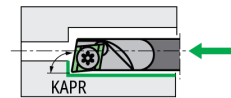
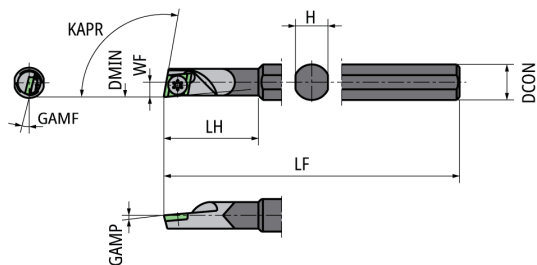


● Diagram shows right-hand tool

● No.1: Eccentric tapered shape

Figure	Item Number	Hand	Chip-breaker	DMIN	Pitch	CDX	DCON	H	LF	LU	PDX	PNA	RE	WF	Carbide PVD
				mm	mm	mm	mm	mm	mm	mm	mm	°	mm	mm	ZM3
1	SBT025M3R	R	No	2.5	0.5	0.6	2.5	2.3	50	5.4	0.4	60	0.05MAX Flat	1.1	●
1	SBT030M4R	R	No	3	0.5-0.8	0.8	3	2.7	50	7.5	0.5	60	0.05MAX Flat	1.3	●
1	SBT030M4RB	R	Yes	3	0.5-0.8	0.8	3	2.7	50	7.5	0.5	60	0.05MAX Flat	1.3	●
1	SBT035M5RB	R	Yes	3.5	0.5-1	1	3.5	3.2	60	8.5	0.55	60	0.05MAX Flat	1.55	●
1	SBT040M6RB	R	Yes	4	0.75-1.25	1.2	4	3.6	60	10.5	0.7	60	0.05	1.8	●
2	SBT050M8RB	R	Yes	5	0.75-1.5	1.5	5	4.5	70	15.8	0.8	60	0.05	2.3	●
2	SBT060M10RB	R	Yes	6	0.75-1.75	1.8	6	5.4	80	18.4	0.95	60	0.05	2.8	●

C06-MBR Carbide shank



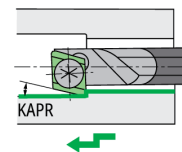
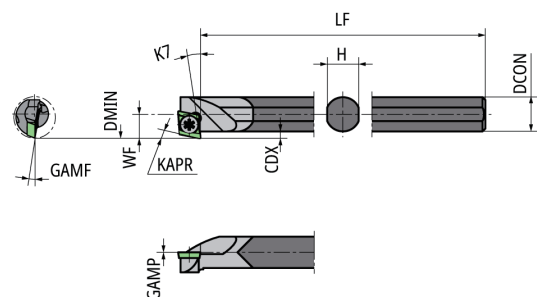
- Diagram shows right-hand tool
- Use a left-handed insert
- For F1 chipbreaker, right-hand inserts fit to right-hand toolholder
- F1 chipbreaker evacuates chips BACKWARD

EDP	Item Number	Stock	Hand	DMIN mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	LH mm	RE mm	WF mm	Insert Gage
5162706	C06F-MBR	●	R	5	6	13	5	5.5	100	80	18	0.15	2.5	MBL..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
C06F-MBR	LR-S-2*3.5	CLR-13S

C-MSBR Carbide shank for ID Back Turning



- Diagram shows right-hand tool
- Use a left-handed insert
- For F1 chipbreaker, right-hand inserts fit to right-hand toolholder
- F1 chipbreaker evacuates chips BACKWARD

EDP	Item Number	Stock	Hand	DMIN mm	CDX mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	RE mm	WF mm	Insert Gage
5161054	C04J-MSBR	●	R	5.7	1	4	10	0	3.5	13	110	0.15	3.2	MBL..
5161047	C06J-MSBR	●	R	7.7	1	6	4	0	5.5	13	110	0.15	4.2	MBL..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
C04J-MSBR	LR-S-2*3.5	CLR-13S
C06J-MSBR	LR-S-2*3.5	CLR-13S

MBL.. series/Inserts Carbide

MBL

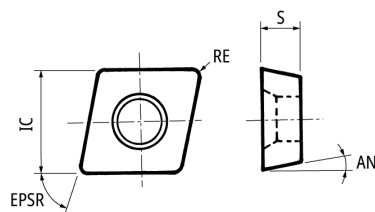
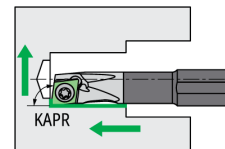
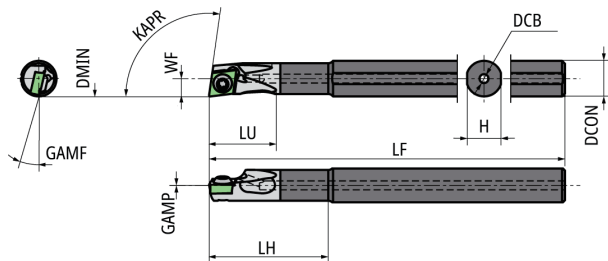


Figure	Item Number	Hand	Chip-breaker	AN	EPSR	IC	RE	S	Carbide PVD			
				°	°	mm	mm	mm	QM3	ST4	TM4	ZM3
1	MBL005FL	L	Yes	9	75	3.6	0.05	1	●		●	●
1	MBL015FL	L	Yes	9	75	3.6	0.15	1	●		●	●
2	MBL005FRF1	R	Yes	9	75	3.6	0.05	1	●	●	●	
2	MBL015FRF1	R	Yes	9	75	3.6	0.15	1	●	●	●	

C06-SEXR-OH Mogul Bar / Coolant through / Carbide shank



- Diagram shows right-hand tool
- Use a left-handed insert
- For F1 chipbreaker, right-hand inserts fit to right-hand toolholder
- F1 chipbreaker evacuates chips BACKWARD

EDP	Item Number	Stock	Hand	DMIN mm	DCB mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	LH mm	LU mm	RE mm	WF mm	Insert Gage
5789938	C06G-SEXRRT3D06-OH	●	R	6	1.5	6	13	0	5.7	98	90	20	11	0.2	3	ERGHT301..
5800487	C06G-SEXRLT3D06-OH	●	L	6	1.5	6	13	0	5.7	98	90	20	11	0.2	3	ERGHT301..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
C06G-SEXRRT3D06-OH	LR-S-2*3.7	CLR-13S
C06G-SEXRLT3D06-OH	LR-S-2*3.7	CLR-13S

ERGH.. series/Inserts Carbide

ERGH

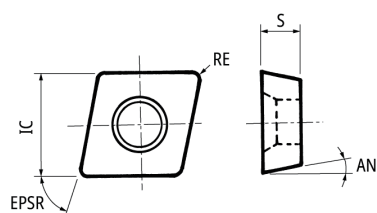
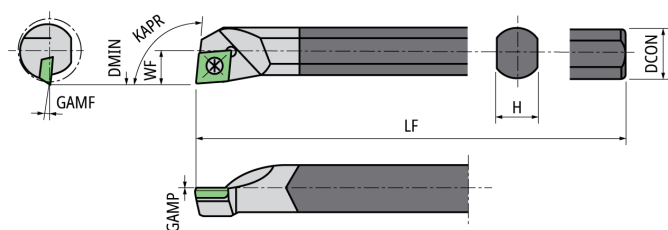


Figure	Item Number	Hand	Chip-breaker	AN °	EPSR °	IC mm	RE mm	S mm	Carbide PVD	QM3	ST4	TM4	ZM3
1	ERGHT30102FRA2	R	Yes	9	75	3.97	0.2	1.59				●	●
1	ERGHT30104FRA2	R	Yes	9	75	3.97	0.4	1.59				●	
1	ERGHT30102FLA2	L	Yes	9	75	3.97	0.2	1.59				●	●
1	ERGHT30104FLA2	L	Yes	9	75	3.97	0.4	1.59				●	●
2	ERGHT30101FRF1	R	Yes	9	75	3.97	0.1	1.59	●	●	●		
2	ERGHT30102FRF1	R	Yes	9	75	3.97	0.2	1.59	●	●	●		
2	ERGHT30104FRF1	R	Yes	9	75	3.97	0.4	1.59	●	●	●		

C-SCLP-N Carbide shank



- Diagram shows right-hand tool
- Use a left-handed insert
- For F1 chipbreaker, right-hand inserts fit to right-hand toolholder
- F1 chipbreaker evacuates chips BACKWARD

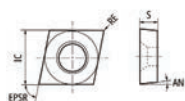
EDP	Item Number	Stock	Hand	DMIN mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	RE mm	WF mm	Insert Gage
5853288	C06J-SCLPR-04-N	●	R	8	6	6	0	5.2	95	110	0.4	4	CP..0401..
5853296	C08K-SCLPR-06-N	●	R	10	8	10	0	7	95	125	0.4	5	CP..0602..
5853304	C10M-SCLPR-08-N	●	R	12	10	6	0	9	95	150	0.4	6	CP..0802..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
C06J-SCLPR-04-N	LR-S-2*4.4	CLR-13S
C08K-SCLPR-06-N	LR-S-2.5*5.5	CLR-15S
C10M-SCLPR-08-N	LR-S-3*6.2	RLR-20S

CP.. series/Inserts Carbide

CP..

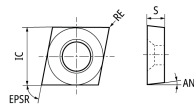


Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron									●
Non-Ferrous Material						○		○	●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

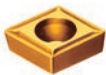
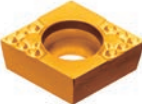
Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	BS mm	Carbide										Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
	CPGH060202FNAM5	Up-sharp edge	80	6.35	2.38	11	0.2	-						●		●			
	CPGH080202FNAM5	Up-sharp edge	80	6.35	2.38	11	0.2	-						●		●			
	CPGH040101FRF1	Up-sharp edge	80	4.76	1.59	11	0.1	-	●				●	●					
	CPGH040102FRF1	Up-sharp edge	80	4.76	1.59	11	0.2	-	●				●	●					
	CPGH040104FRF1	Up-sharp edge	80	4.76	1.59	11	0.4	-	●				●	●					
	CPGH060202FRF1	Up-sharp edge	80	6.35	2.38	11	0.2	-	●				●	●					
	CPGH060204FRF1	Up-sharp edge	80	6.35	2.38	11	0.4	-	●				●	●					
	CPGH040101LS	Up-sharp edge	80	4.76	1.59	11	0.1	-					●	●					
	CPGH040102LS	Up-sharp edge	80	4.76	1.59	11	0.2	-					●	●					
	CPGH040104LS	Up-sharp edge	80	4.76	1.59	11	0.4	-					●	●					
	CPGH060202LS	Up-sharp edge	80	6.35	2.38	11	0.2	-					●	●					
	CPGH060204LS	Up-sharp edge	80	6.35	2.38	11	0.4	-					●	●					
	CPGH060202FLA	Up-sharp edge	80	6.35	2.38	11	0.2	-						●		●			
	CPGH060204FLA	Up-sharp edge	80	6.35	2.38	11	0.4	-						●		●			
	CPGH080202FLA	Up-sharp edge	80	6.35	2.38	11	0.2	-						●		●			
	CPGH080204FLA	Up-sharp edge	80	6.35	2.38	11	0.4	-						●		●			
	CPGH040102FLA1	Up-sharp edge	80	4.76	1.59	11	0.2	-						●		●			
	CPGH040104FLA1	Up-sharp edge	80	4.76	1.59	11	0.4	-						●		●			
														●		●			

CC.. series/Inserts Carbide

CC..

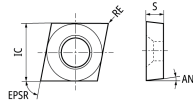


Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material						○	○		●
Heat Resistant Alloy	●	○	○						
Hardened Material	○	○	○						
Others (non-metallic)									●

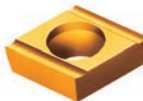
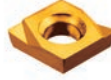
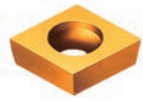
Shape	Item Number	CECC	Carbide																	Uncoated
			EPSR	IC	S	AN	RE	BS	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	CVD	CVD		
			(ISO)	°	mm	mm	°	mm	mm	ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1	
	CCGT09T300YL	Up-sharp edge	80	9.525	3.97	7	0.03	-			●		●							
	CCGT09T301MYL	Up-sharp edge	80	9.525	3.97	7	0.08	-	●	●	●	●	●							
	CCGT09T302MYL	Up-sharp edge	80	9.525	3.97	7	0.18	-	●	●	●	●	●							
	CCGT09T304MYL	Up-sharp edge	80	9.525	3.97	7	0.38	-	●	●	●	●	●							
	CCGT09T308MYL	Up-sharp edge	80	9.525	3.97	7	0.78	-	●	●	●	●	●							
	CCGT060201MCL	Up-sharp edge	80	6.35	2.38	7	0.08	-	●	●	●	●	●							
	CCGT060202MCL	Up-sharp edge	80	6.35	2.38	7	0.18	-	●	●	●	●	●							
	CCGT09T300CL	Up-sharp edge	80	9.525	3.97	7	0.03	-			●		●							
	CCGT09T301MCL	Up-sharp edge	80	9.525	3.97	7	0.08	-	●	●	●	●	●							
	CCGT09T302MCL	Up-sharp edge	80	9.525	3.97	7	0.18	-	●	●	●	●	●							
	CCGT09T304MCL	Up-sharp edge	80	9.525	3.97	7	0.38	-	●	●	●	●	●							
	CCGT060200FNAM3	Up-sharp edge	80	6.35	2.38	7	0.03	-			●		●	●						
	CCGT060201MFNAM3	Up-sharp edge	80	6.35	2.38	7	0.08	-	●		●	●	●							
	CCGT060202FNAM3	Up-sharp edge	80	6.35	2.38	7	0.2	-						●	●					
	CCGT060202MFNAM3	Up-sharp edge	80	6.35	2.38	7	0.18	-	●		●	●	●							
	CCGT060204FNAM3	Up-sharp edge	80	6.35	2.38	7	0.4	-								●				
	CCGT060204MFNAM3	Up-sharp edge	80	6.35	2.38	7	0.38	-	●		●	●	●							
	CCGT09T300FNAM3	Up-sharp edge	80	9.525	3.97	7	0.03	-			●		●	●						
	CCGT09T301MFNAM3	Up-sharp edge	80	9.525	3.97	7	0.08	-	●		●	●	●	●	●					
	CCGT09T302FNAM3	Up-sharp edge	80	9.525	3.97	7	0.2	-				●		●						
	CCGT09T302MFNAM3	Up-sharp edge	80	9.525	3.97	7	0.18	-	●		●	●	●	●	●	●				
	CCGT09T304FNAM3	Up-sharp edge	80	9.525	3.97	7	0.4	-				●		●						
	CCGT09T304MFNAM3	Up-sharp edge	80	9.525	3.97	7	0.38	-	●		●	●	●	●	●	●				
	CCMT060202FNAM3	Up-sharp edge	80	6.35	2.38	7	0.2	-		●										
	CCMT060204FNAM3	Up-sharp edge	80	6.35	2.38	7	0.4	-			●									
	CCMT09T302FNAM3	Up-sharp edge	80	9.525	3.97	7	0.2	-			●									
	CCMT09T304FNAM3	Up-sharp edge	80	9.525	3.97	7	0.4	-			●									
CCMT09T308FNAM3	Up-sharp edge	80	9.525	3.97	7	0.8	-			●										
	CCGT060200AZ7	Up-sharp edge	80	6.35	2.38	7	0.03	-				●								
	CCGT060201MAZ7	Up-sharp edge	80	6.35	2.38	7	0.08	-				●								
	CCGT060202MAZ7	Up-sharp edge	80	6.35	2.38	7	0.18	-				●								
	CCGT09T300AZ7	Up-sharp edge	80	9.525	3.97	7	0.03	-				●	●	●			●			
	CCGT09T301MAZ7	Up-sharp edge	80	9.525	3.97	7	0.08	-				●	●	●			●			
	CCGT09T302MAZ7	Up-sharp edge	80	9.525	3.97	7	0.18	-				●	●	●			●			
	CCGT09T304MAZ7	Up-sharp edge	80	9.525	3.97	7	0.38	-				●	●	●			●			
	CCMT060202E002AZ8	E002	80	6.35	2.38	7	0.2	-										●		
	CCMT060204E004AZ8	E004	80	6.35	2.38	7	0.4	-										●		
	CCMT060208E004AZ8	E004	80	6.35	2.38	7	0.8	-										●		
	CCMT09T302E002AZ8	E002	80	6.35	2.38	7	0.2	-										●		
	CCMT09T304E004AZ8	E004	80	6.35	2.38	7	0.4	-										●		
	CCMT09T308E004AZ8	E004	80	6.35	2.38	7	0.8	-										●		
	CCGT060200RS	Up-sharp edge	80	6.35	2.38	7	0.03	-			●			●	●					
	CCGT060201MRS	Up-sharp edge	80	6.35	2.38	7	0.08	-			●	●								
	CCGT060202MRS	Up-sharp edge	80	6.35	2.38	7	0.18	-			●	●								
	CCGT09T300RS	Up-sharp edge	80	9.525	3.97	7	0.03	-			●		●	●	●					
	CCGT09T301MRS	Up-sharp edge	80	9.525	3.97	7	0.08	-			●	●	●							
	CCGT09T301RS	Up-sharp edge	80	9.525	3.97	7	0.1	-				●		●	●					
	CCGT09T302MRS	Up-sharp edge	80	9.525	3.97	7	0.18	-			●	●	●							
	CCGT09T302RS	Up-sharp edge	80	9.525	3.97	7	0.2	-				●		●	●					
	CCGT09T304MRS	Up-sharp edge	80	9.525	3.97	7	0.38	-			●	●	●							
	CCGT09T304RS	Up-sharp edge	80	9.525	3.97	7	0.4	-				●								

ID Tooling

V

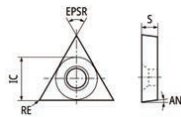


Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material						○	○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide											Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1		
(ISO)	°	mm	mm	°	mm	mm														
	CCGT060200RU	Up-sharp edge	80	6.35	2.38	7	0.03	-			●					●				
	CCGT060201RU	Up-sharp edge	80	6.35	2.38	7	0.1	-			●					●				
	CCGT060202RU	Up-sharp edge	80	6.35	2.38	7	0.2	-			●					●				
	CCGT09T300RU1	Up-sharp edge	80	9.525	3.97	7	0.03	-			●		●			●				
	CCGT09T301RU1	Up-sharp edge	80	9.525	3.97	7	0.1	-			●		●			●				
	CCGT09T302RU1	Up-sharp edge	80	9.525	3.97	7	0.2	-			●		●			●				
	CCGT09T304RU1	Up-sharp edge	80	9.525	3.97	7	0.4	-			●		●			●				
	CCGT060201LU	Up-sharp edge	80	6.35	2.38	7	0.1	-								●				
	CCGT060202LU	Up-sharp edge	80	6.35	2.38	7	0.2	-								●				
	CCGT09T300LU1	Up-sharp edge	80	9.525	3.97	7	0.03	-								●				
	CCGT09T301LU1	Up-sharp edge	80	9.525	3.97	7	0.1	-								●				
	CCGT09T302LU1	Up-sharp edge	80	9.525	3.97	7	0.2	-								●				
CCGT09T304LU1	Up-sharp edge	80	9.525	3.97	7	0.4	-								●					
	CCET09T3005RKHG	Up-sharp edge	80	9.525	3.97	7	0.05	-					●	●						
	CCET09T3008RKHG	Up-sharp edge	80	9.525	3.97	7	0.08	-					●	●						
	CCET09T3018RKHG	Up-sharp edge	80	9.525	3.97	7	0.18	-					●	●						
	CCET09T302RKHG	Up-sharp edge	80	9.525	3.97	7	0.2	-					●	●						
	CCGT060201FRF1	Up-sharp edge	80	6.35	2.38	7	0.1	-	●			●	●							
	CCGT060202FRF1	Up-sharp edge	80	6.35	2.38	7	0.2	-	●			●	●							
	CCGT060204FRF1	Up-sharp edge	80	6.35	2.38	7	0.4	-	●			●	●							
	CCGT09T302FRF1	Up-sharp edge	80	6.35	2.38	7	0.2	-	●			●	●							
	CCGT09T304FRF1	Up-sharp edge	80	6.35	2.38	7	0.4	-	●			●	●							
	CCGW060200FN	Up-sharp edge	80	6.35	2.38	7	0.03	-								●				
	CCGW060200H	Up-sharp edge	80	6.35	2.38	7	0.03	-											●	
	CCGW060201FN	Up-sharp edge	80	6.35	2.38	7	0.1	-								●				
	CCGW060201H	Up-sharp edge	80	6.35	2.38	7	0.1	-											●	
	CCGW060202H	Up-sharp edge	80	6.35	2.38	7	0.2	-											●	
	CCGW09T300FN	Up-sharp edge	80	9.525	3.97	7	0.03	-								●				
	CCGW09T300H	Up-sharp edge	80	9.525	3.97	7	0.03	-											●	
	CCGW09T301FN	Up-sharp edge	80	9.525	3.97	7	0.1	-								●				
	CCGW09T301H	Up-sharp edge	80	9.525	3.97	7	0.1	-											●	
	CCGW09T302H	Up-sharp edge	80	9.525	3.97	7	0.2	-											●	
	CCGW09T302MP	Up-sharp edge	80	9.525	3.97	7	0.18	-			●									

TP.. series/Inserts Carbide

TPGH

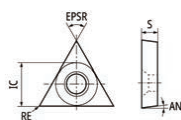


Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material						○	○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide											Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	CP7	KM1	
	TPGH090202RFG	Up-sharp edge	60	5.56	2.38	11	0.2	-	●				●	●						
	TPGH090204RFG	Up-sharp edge	60	5.56	2.38	11	0.4	-	●				●	●						
	TPGH110302RFG	Up-sharp edge	60	6.35	3.18	11	0.2	-	●				●	●						
	TPGH110304RFG	Up-sharp edge	60	6.35	3.18	11	0.4	-	●				●	●						
	TPGH080202FRF1	Up-sharp edge	60	4.76	2.38	11	0.2	-						●	●	●				
	TPGH080204FRF1	Up-sharp edge	60	4.76	2.38	11	0.4	-						●	●	●				
	TPGH090201FRF1	Up-sharp edge	60	5.56	2.38	11	0.1	-	●				●	●						
	TPGH090202FRF1	Up-sharp edge	60	5.56	2.38	11	0.2	-	●				●	●	●	●				
	TPGH090204FRF1	Up-sharp edge	60	5.56	2.38	11	0.4	-	●				●	●	●	●				
	TPGH090208FRF1	Up-sharp edge	60	5.56	2.38	11	0.8	-	●				●	●		●				
	TPGH110302FRF1	Up-sharp edge	60	6.35	3.18	11	0.2	-	●				●	●	●	●				
	TPGH110304FRF1	Up-sharp edge	60	6.35	3.18	11	0.4	-	●				●	●	●	●				
	TPGH110308FRF1	Up-sharp edge	60	6.35	3.18	11	0.8	-	●				●	●		●				
	TPGH090202FLK	Up-sharp edge	60	5.56	2.38	11	0.2	-						●						
	TPGH090204FLK	Up-sharp edge	60	5.56	2.38	11	0.4	-						●						
	TPGH090208FLK	Up-sharp edge	60	5.56	2.38	11	0.8	-						●						
	TPGH090202FLB2	Up-sharp edge	60	5.56	2.38	11	0.2	-						●		●				
	TPGH090204FLB2	Up-sharp edge	60	5.56	2.38	11	0.4	-						●		●				
	TPGH090208FLB2	Up-sharp edge	60	5.56	2.38	11	0.8	-						●		●				
	TPGH080202FLB3	Up-sharp edge	60	4.76	2.38	11	0.2	-						●		●				
	TPGH080204FLB3	Up-sharp edge	60	4.76	2.38	11	0.4	-						●		●				

TC.. series/Inserts Carbide

TCG.

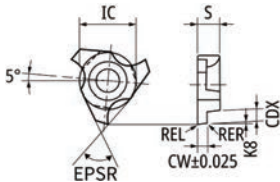


Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material						○	○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide											Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1		
	TCGH060101FRF05	Up-sharp edge	60	3.97	1.59	7	0.1	-	●			●	●							
	TCGH060102FLF05	Up-sharp edge	60	3.97	1.59	7	0.2	-					●			●				
	TCGH060102FRF05	Up-sharp edge	60	3.97	1.59	7	0.2	-	●			●	●			●				
	TCGH060104FRF05	Up-sharp edge	60	3.97	1.59	7	0.4	-	●			●	●			●				
	TCGH060102FLK	Up-sharp edge	60	3.97	1.59	7	0.2	-					●							
	TCGH060104FLK	Up-sharp edge	60	3.97	1.59	7	0.4	-					●							
	TCGH060102FLB1	Up-sharp edge	60	3.97	1.59	7	0.2	-					●			●				
	TCGH060104FLB1	Up-sharp edge	60	3.97	1.59	7	0.4	-					●			●				

GTG.. series/Inserts Carbide

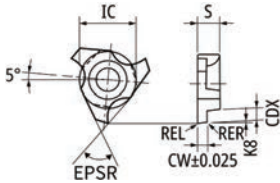
GTG..005



● Diagram shows left-hand tool

Item Number	Hand	Chip-breaker	APMX	CDX	CW	EPSR	IC	K8	REL	RER	S	Carbide PVD		
			mm	mm	mm	°	mm	°	mm	mm	mm	QM3	TM4	ZM3
GTG10050FL005	L	Yes	1	1.2	0.5	60	5.56	2	0.05	0.05	3.18		●	
GTG10075FL005	L	Yes	1	1.2	0.75	60	5.56	2	0.05	0.05	3.18		●	
GTG10100FL005	L	Yes	1	1.2	1	60	5.56	2	0.05	0.05	3.18		●	
GTG10150FL005	L	Yes	1	1.2	1.5	60	5.56	2	0.05	0.05	3.18		●	
GTG10200FL005	L	Yes	1	1.2	2	60	5.56	2	0.05	0.05	3.18		●	

GTG..



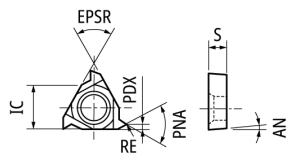
● Diagram shows left-hand tool

Item Number	Hand	Chip-breaker	APMX	CDX	CW	EPSR	IC	K8	REL	RER	S	Carbide PVD		
			mm	mm	mm	°	mm	°	mm	mm	mm	QM3	TM4	ZM3
GTG10050FL00	L	Yes	1	1.2	0.5	60	5.56	2	0.05	0.05	3.18			●
GTG10065FL00	L	Yes	1	1.2	0.65	60	5.56	2	0.05	0.05	3.18			●
GTG10075FL00	L	Yes	1	1.2	0.75	60	5.56	2	0.05	0.05	3.18			●
GTG10100FL00	L	Yes	1	1.2	1	60	5.56	2	0.05	0.05	3.18			●
GTG10150FL00	L	Yes	1	1.2	1.5	60	5.56	2	0.05	0.05	3.18			●
GTG10200FL01	L	Yes	1	1.2	2	60	5.56	2	0.1	0.1	3.18			●
GTG14100FL00	L	Yes	2	2.2	1	60	7.94	2	0.05	0.05	3.18			●
GTG14150FL00	L	Yes	2	2.2	1.5	60	7.94	2	0.05	0.05	3.18			●
GTG14200FL01	L	Yes	2	2.2	2	60	7.94	2	0.1	0.1	3.18			●
GTG20150FL	L	Yes	3	3.2	1.5	60	9.525	2	0.2	0.2	3.18	●		
GTG20200FL	L	Yes	3	3.2	2	60	9.525	2	0.2	0.2	3.18	●		

ID Tooling
V

TMN.. series/Inserts Carbide

TMN



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	AN	EPSR	IC	PNA	RE	S	Pitch	Carbide
			°	°	mm	°	mm	mm	mm	PVD ZM3
TMN06FR03	R	Yes	7	60	3.97	60	0.03	1.59	0.4-0.75	●
TMN08FR03	R	Yes	7	60	4.76	60	0.03	2.38	0.4-0.75	●
TMN09FR03	R	Yes	7	60	5.56	60	0.03	2.38	0.4-0.75	●