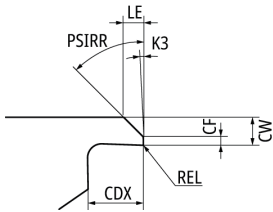
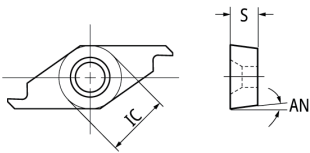


CSVB.. series/Inserts Carbide

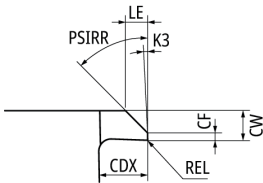
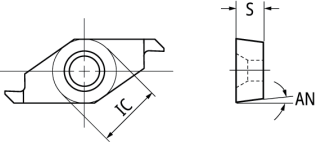
CSVB-V



● Diagram shows right-hand tool
All angles shown are obtained when insert is set in the holder.

Item Number	Hand	Chip-breaker	AN	CDX	CF	CW	EPSR	IC	K3	LE	PSIRR	REL	S	Carbide PVD		
			°	mm	mm	mm	°	mm	°	mm	°	mm	mm	DT4	VM1	ZM3
CSVB11FRV		R	No	7	2	0.3	1	35	6.35	5	0.7	45	0	2.38	●	
CSVB11FRV12		R	No	7	2	0.3	1.2	35	6.35	5	0.8	45	0	2.38	●	
CSVB11FRV14		R	No	7	2	0.3	1.4	35	6.35	5	1	45	0	2.38	●	
CSVB11FRV-A		R	No	7	2	0.3	1	35	6.35	2	0.7	45	0	2.38	●	
CSVB11FRV-C		R	No	7	2	0.15	1	35	6.35	5	0.7	45	0	2.38	●	
CSVB11FRV-M		R	No	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●	●
CSVB11FLV		L	No	7	2	0.3	1	35	6.35	5	0.7	45	0	2.38	●	
CSVB11FLV-M		L	No	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●	

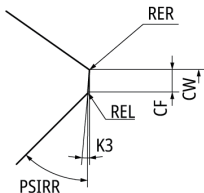
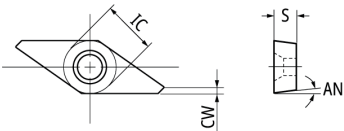
CSVB-VB



● Diagram shows right-hand tool
All angles shown are obtained when insert is set in the holder.

Item Number	Hand	Chip-breaker	AN	CDX	CF	CW	EPSR	IC	K3	LE	PSIRR	REL	S	Carbide PVD		
			°	mm	mm	mm	°	mm	°	mm	°	mm	mm	DT4	VM1	ZM3
CSVB11FRVB		R	Yes	7	2	0.3	1	35	6.35	5	0.7	45	0	2.38	●	
CSVB11FRVB12		R	Yes	7	2	0.3	1.2	35	6.35	5	0.8	45	0	2.38	●	
CSVB11FRVB14		R	Yes	7	2	0.3	1.4	35	6.35	5	1	45	0	2.38	●	
CSVB11FRVB-A		R	Yes	7	2	0.3	1	35	6.35	2	0.7	45	0	2.38	●	
CSVB11FRVB-C		R	Yes	7	2	0.15	1	35	6.35	5	0.7	45	0	2.38	●	
CSVB11FRVB-M		R	Yes	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●	●
CSVB11FLVB-M		L	Yes	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●	

CSVB-VX For Profiling

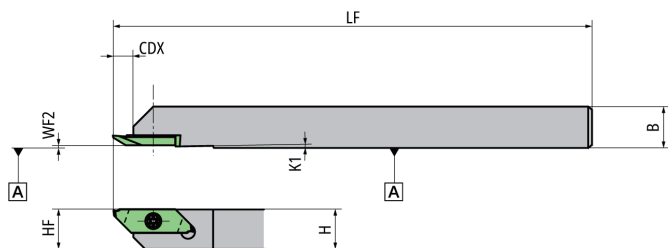


● Diagram shows left-hand tool
All angles shown are obtained when insert is set in the holder.

Item Number	Hand	Chip-breaker	AN	CF	CW	EPSR	IC	K3	PSIRL	REL	RER	S	Carbide PVD		
			°	mm	mm	°	mm	°	°	mm	mm	mm	DT4	VM1	ZM3
CSVB11FLVX		L	No	7	0.035	0.7	35	6.35	5	45	0	0	2.38	●	

CTPS.. series/Toolholder

CTPS



● Diagram shows right-hand tool



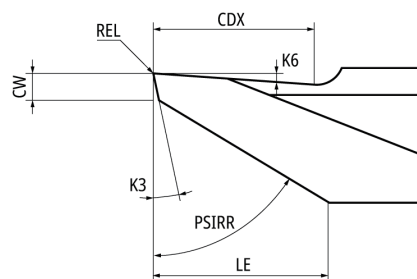
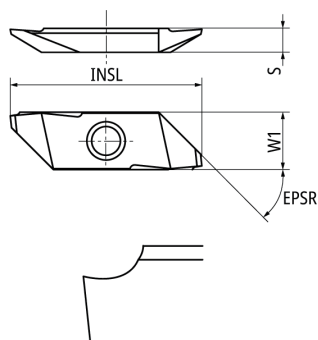
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HF mm	K1 °	LF mm	WF2 mm	Insert Gage	
5346572	CTPSR10	●	R	10	5	10	10	1	120	0	TBPS../CTPS..	GTPS../TTPS..
5397187	CTPSR12	●	R	12	5	12	12	1	120	0	TBPS../CTPS..	GTPS../TTPS..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CTPSR10	LRIS-2.5*7	CLR-15S
CTPSR12	LRIS-2.5*7	CLR-15S

TBPS.. series/Inserts Carbide

TBPS

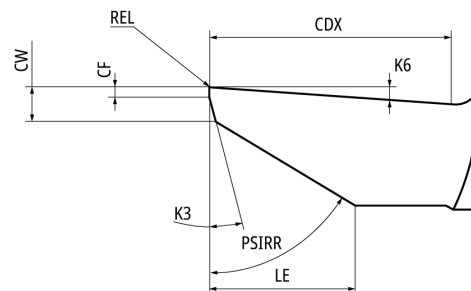
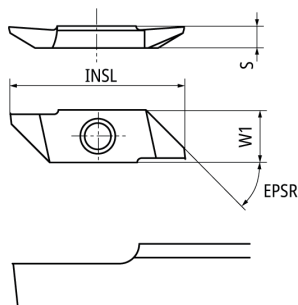


● Diagram shows right-hand tool

All angles shown are obtained when insert is set in the holder.

Item Number	Hand	Chip-breaker	LE	CDX	CW	EPSR	INSL	K3	K6	PSIRR	REL	S	W1	Carbide PVD	
			mm	mm	mm	°	mm	°	°	°	mm	mm	mm	VM1	ZM3
TBPS60FR00	R	Yes	3.1	3.5	0.5	45	20	12	3	60	0	2.5	6	●	●
TBPS60FR10	R	Yes	3.1	3.5	0.5	45	20	12	3	60	0.1	2.5	6	●	●

TBPS-V



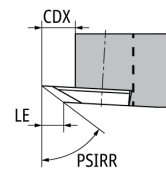
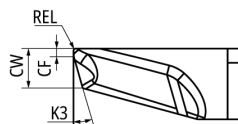
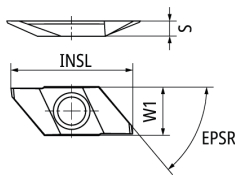
● Diagram shows right-hand tool

All angles shown are obtained when insert is set in the holder.

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	K6	PSIRR	REL	S	W1	Carbide PVD	
			mm	mm	mm	mm	°	mm	°	°	°	mm	mm	mm	VM1	ZM3
TBPS60FRV	M	No	3.1	4.8	0.2	0.7	45	20	15	3	60	0	2.5	6	●	●

TBP.. series/Inserts Carbide

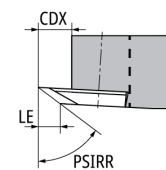
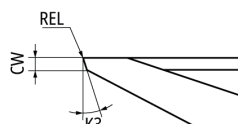
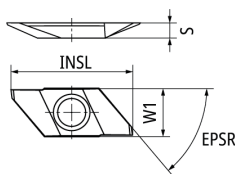
TBP-BM with BM-Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD						PCD
			mm	mm	mm	mm	°	mm	°	mm	°	mm	mm	DM4	ST4	TM4	VM1	ZM3	KM1	PD1
TBP72FR05-BM	R	Yes	3.5	5.3	0.3	1.4	50	20	16	72	0.05	2.5	8	●	●	●				
TBP72FR10M-BM	R	Yes	3.5	5.3	0.3	1.4	50	20	16	72	0.08	2.5	8	●	●	●				
TBP72FR20M-BM	R	Yes	3.5	5.3	0.3	1.4	50	20	16	72	0.18	2.5	8	●	●	●				

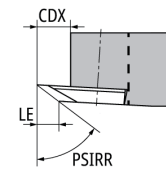
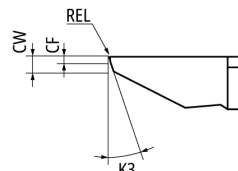
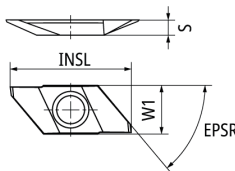
TBP with Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD						PCD
			mm	mm	mm	mm	°	mm	°	mm	°	mm	mm	DM4	ST4	TM4	VM1	ZM3	KM1	PD1
TBP55FR00	R	Yes	3	5.3	-	0.5	50	20	15	55	0	2.5	8				●	●		
TBP55FR10	R	Yes	3	5.3	-	0.5	50	20	15	55	0.1	2.5	8				●	●		
TBP60FR00	R	Yes	3.7	5.3	-	0.5	50	20	15	60	0	2.5	8			●	●	●		
TBP60FR10	R	Yes	3.7	5.3	-	0.5	50	20	15	60	0.1	2.5	8			●	●	●		
TBP60FR10M	R	Yes	3.7	5.3	-	0.5	50	20	15	60	0.08	2.5	8				●			
TBP60FR20	R	Yes	3.7	5.3	-	0.5	50	20	15	60	0.2	2.5	8			●				
TBP55FL00	L	Yes	3	5.3	-	0.5	50	20	15	55	0	2.5	8					●		
TBP55FL10	L	Yes	3	5.3	-	0.5	50	20	15	55	0.1	2.5	8					●		
TBP60FL00	L	Yes	3.7	5.3	-	0.5	50	20	15	60	0	2.5	8					●		
TBP60FL10	L	Yes	3.7	5.3	-	0.5	50	20	15	60	0.1	2.5	8					●		

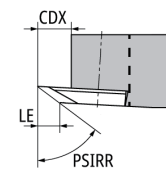
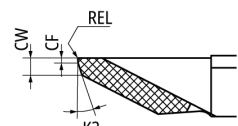
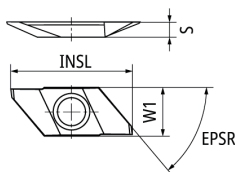
TBP-V without Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD						PCD
			mm	mm	mm	°	mm	°	mm	°	mm	mm	mm	DM4	ST4	TM4	VM1	ZM3	KM1	PD1
TBP60FRV	R	No	4.8	5.3	0.2	0.7	50	20	15	60	0	2.5	8				●	●	●	
TBP60FRV05	R	No	4.8	5.3	0.2	0.7	50	20	15	60	0.05	2.5	8				●	●	●	
TBP60FRV10	R	No	4.8	5.3	0.2	0.7	50	20	15	60	0.1	2.5	8				●	●	●	
TBP60FLV	L	No	4.8	5.3	0.2	0.7	50	20	15	60	0	2.5	8				●			

TBP-P PCD tipped

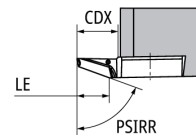
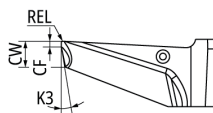
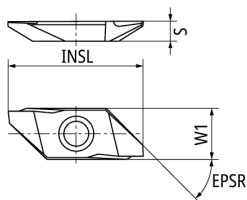


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD						PCD
			mm	mm	mm	°	mm	°	mm	°	mm	mm	mm	DM4	ST4	TM4	VM1	ZM3	KM1	PD1
TBP60FRV00-P	R	No	4	5.3	0.2	0.7	50	20	15	60	0	2.5	8							●
TBP60FRV10-P	R	No	4	5.3	0.2	0.7	50	20	15	60	0.1	2.5	8							●

TBPA.. series/Inserts Carbide

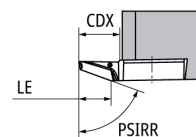
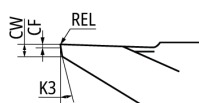
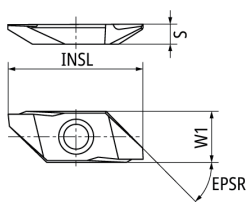
TBPA-BM with BM-Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD		
			mm	mm	mm	mm	°	mm	°	°	mm	mm	mm	DM4	ST4	TM4
TBPA70FR05-BM	R	Yes	5.5	6.5	0.3	1.35	45	25	12	70	0.05	3.5	9.4	●	●	●
TBPA70FR10M-BM	R	Yes	5.5	6.5	0.3	1.35	45	25	12	70	0.08	3.5	9.4	●	●	●
TBPA70FR20M-BM	R	Yes	5.5	6.5	0.3	1.35	45	25	12	70	0.18	3.5	9.4	●	●	●

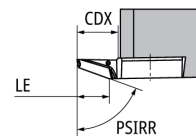
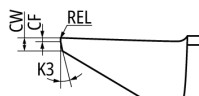
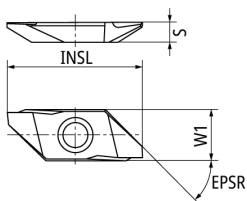
TBPA with Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD			
			mm	mm	mm	mm	°	mm	°	°	mm	mm	mm	DT4	QM3	VM1	ZM3
TBPA60FR10M	R	Yes	4.5	5.3	0.3	0.7	45	25	15	60	0.08	3.5	9.4		●		
TBPA60FRPB10	R	Yes	4.5	5.3	0.3	0.7	45	25	15	60	0.1	3.5	9.4			●	●
TBPA60FRPB10M	R	Yes	4.5	5.3	0.3	0.7	45	25	15	60	0.08	3.5	9.4	●		●	
TBPA60FRPB20M	R	Yes	4.5	5.3	0.3	0.7	45	25	15	60	0.18	3.5	9.4	●			
TBPA60FRVB	R	Yes	4.5	5.3	0.2	0.7	45	25	15	60	0	3.5	9.4	●		●	●
TBPA60FLPB10	L	Yes	4.5	5.3	0.3	0.7	45	25	15	60	0.1	3.5	9.4				●
TBPA60FLVB	L	Yes	4.5	5.3	0.2	0.7	45	25	15	60	0	3.5	9.4				●

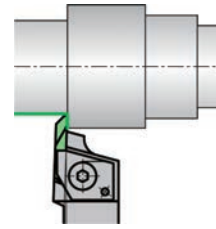
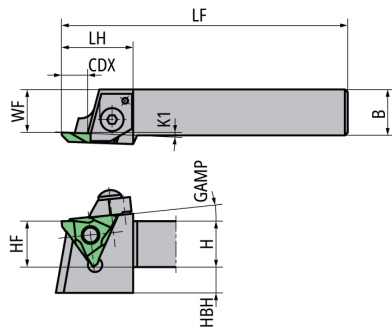
TBPA-V without Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD	
			mm	mm	mm	mm	°	mm	°	°	mm	mm	mm	VM1	ZM3
TBPA60FRV	R	No	6.3	6.8	0.2	0.7	45	25	15	60	0	3.5	9.4	●	●
TBPA60FLV	L	No	6.3	6.8	0.2	0.7	45	25	15	60	0	3.5	9.4		●

TB-F



● Diagram shows right-hand tool

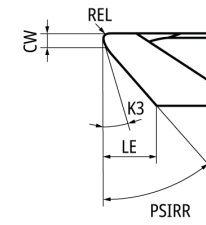
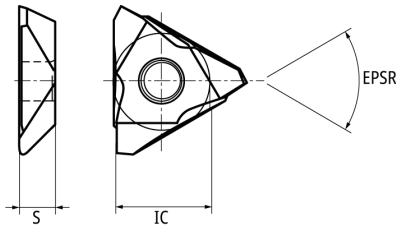
EDP	Item Number	Stock	Hand	B mm	CDX mm	GMAP °	H mm	HBH mm	HF mm	K1 °	LF mm	LH mm	WF mm	Insert Gage
5505037	TBR16F	●	R	16	9	6	16	9	16	2	100	25	15	TB43..
5505029	TBR16FS	●	R	16	5	6	16	9	16	2	100	25	15	TB43..
5505052	TBR20F	●	R	20	9	6	20	5	20	2	100	25	20	TB43..
5526298	TBR20FS	●	R	20	5	6	20	5	20	2	100	25	20	TB43..
5519723	TBR25F	●	R	25	9	6	25	-	25	2	150	25	25	TB43..

Spare Parts

Item Number	Clamp	Clamp screw	Spring	Wrench (for Clamp screw)
TBR16F	CPR5	AOS-5*25	ASG-5	LW-2.5
TBR16FS	CPR5	AOS-5*25	ASG-5	LW-2.5
TBR20F	CPR5	AOS-5*25	ASG-5	LW-2.5
TBR20FS	CPR5	AOS-5*25	ASG-5	LW-2.5
TBR25F	CPR5	AOS-5*25	ASG-5	LW-2.5

TB.. series/Inserts Carbide

TB

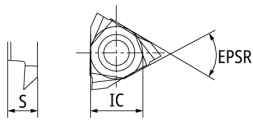


● Diagram shows right-hand tool

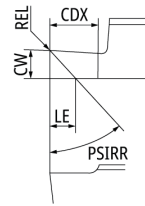
Item Number	Hand	Chip-breaker	LE mm	CW mm	EPSR °	IC mm	K3 °	PSIRR °	REL mm	S mm	Carbide PVD ZM3
TB3200R	R	Yes	2.7	0.5	60	9.525	13	45	0	3.18	●
TB3205R	R	Yes	2.7	0.5	60	9.525	13	45	0.05	3.18	●
TB3215R	R	Yes	2.7	0.5	60	9.525	13	45	0.15	3.18	●
TB3220R	R	Yes	2.7	0.5	60	9.525	13	45	0.2	3.18	●
TB3205L	L	Yes	2.7	0.5	60	9.525	13	45	0.05	3.18	●
TB3215L	L	Yes	2.7	0.5	60	9.525	13	45	0.15	3.18	●
TB4215R	R	Yes	2.3	1	60	12.7	13	45	0.15	3.18	●
TB4305R	R	Yes	4	1	60	12.7	13	45	0.05	4.76	●
TB4315R	R	Yes	4	1	60	12.7	13	45	0.15	4.76	●
TB4340R	R	Yes	3.9	1	60	12.7	13	45	0.4	4.76	●

TBMH.. series/Inserts Carbide

TBMH



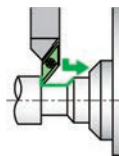
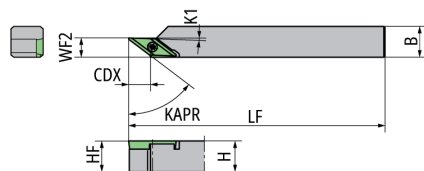
● Diagram shows right-hand tool



Item Number	Hand	Chip-breaker	LE	CDX	CW	EPSR	IC	PSIRR	REL	S	Carbide PVD ZM3
			mm	mm	°	mm	mm	°	mm	mm	
TBMH32100R05-22	R	Yes	0.3	1.8	1	60	9.525	22	0.05	3.18	●
TBMH32100R05-45	R	Yes	0.9	1.8	1	60	9.525	45	0.05	3.18	●
TBMH32150R05-22	R	Yes	0.5	2.7	1.5	60	9.525	22	0.05	3.18	●
TBMH32150R05-45	R	Yes	1.3	2.6	1.5	60	9.525	45	0.05	3.18	●

TBVC.. series/Toolholder

TBVC For non-metallic



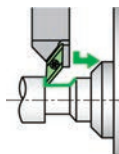
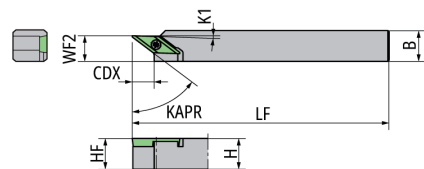
● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HF mm	KAPR °	K1 °	LF mm	WF2 mm	Insert Gage	
5204953	TBVC10	●	R	10	8.5	10	10	53	2	120	7.5	TBVC11FR..	VC..1103..
5204946	TBVC12	●	R	12	8.5	12	12	53	2	120	7.5	TBVC11FR..	VC..1103..
5204920	TBVC16	●	R	16	8.5	16	16	53	2	120	7.5	TBVC11FR..	VC..1103..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
TBVC10	LRIS-2.5*7	CLR-15S
TBVC12	LRIS-2.5*7	CLR-15S
TBVC16	LRIS-2.5*7	CLR-15S

TBVC-F For Steel



● Diagram shows right-hand tool

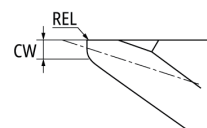
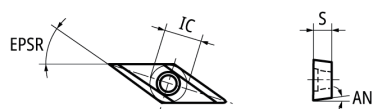
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HF mm	KAPR °	K1 °	LF mm	WF2 mm	Insert Gage	
5344254	TBVC10-F10	●	R	10	8.5	10	10	53	2	120	10	TBVC11FR..	VC..1103..
5344262	TBVC12-F10	●	R	12	8.5	12	12	53	2	120	10	TBVC11FR..	VC..1103..
5459797	TBVC12GX-F10	●	R	12	8.5	12	12	53	2	85	10	TBVC11FR..	VC..1103..
5344270	TBVC16-F10	●	R	16	8.5	16	16	53	2	120	10	TBVC11FR..	VC..1103..
5459805	TBVC16H-F10	●	R	16	8.5	16	16	53	2	100	10	TBVC11FR..	VC..1103..
5459565	TBVC20F-F10	●	R	20	8.5	20	20	53	2	80	10	TBVC11FR..	VC..1103..

Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
TBVC10-F10	LRIS-2.5*7	CLR-15S
TBVC12-F10	LRIS-2.5*7	CLR-15S
TBVC12GX-F10	LRIS-2.5*7	CLR-15S
TBVC16-F10	LRIS-2.5*7	CLR-15S
TBVC16H-F10	LRIS-2.5*7	CLR-15S
TBVC20F-F10	LRIS-2.5*7	CLR-15S

TBVC.. series/Inserts Carbide

TBVC..

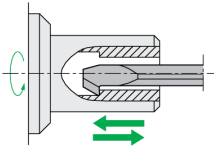
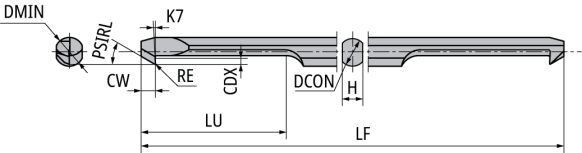


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	AN	CW	EPSR	IC	REL	S	Carbide PVD	
			°	mm	°	mm	mm	mm	VM1	ZM3
TBVC11FR05U	R	Yes	7	0.5	35	6.35	0.05	3.18		●
TBVC11FR10S	R	Yes	7	0.5	35	6.35	0.1	3.18		●
TBVC11FR10U	R	Yes	7	0.5	35	6.35	0.1	3.18	●	●

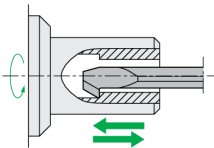
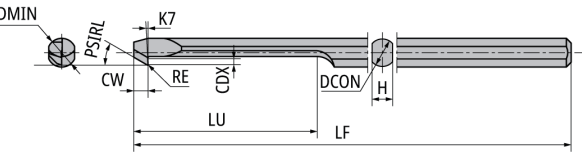
SBB.. series/Insert bar Carbide for ID Back Turning

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
			mm	mm	mm	mm	mm	°	mm	mm	°	mm	mm	
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

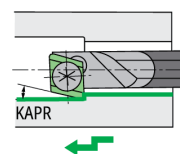
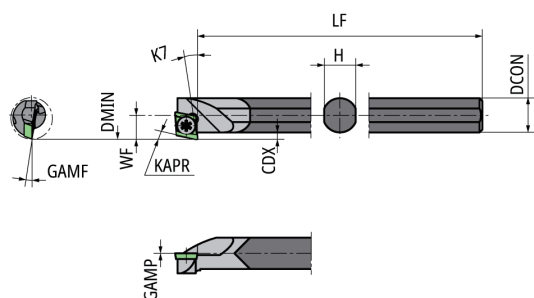


Item Number	Hand	Chip-breaker	DMIN	CDX	CW	DCON	H	K7	LF	LU	PSIRL	RE	WF	Carbide PVD ZM3
			mm	mm	mm	mm	mm	°	mm	mm	°	mm	mm	
SBB030RB005	R	Yes	3	0.5	1.5	3	2.7	3	50	19	30	0.05	1.3	●
SBB030RB010	R	Yes	3	0.5	1.5	3	2.7	3	50	19	30	0.1	1.3	●
SBB040RB005	R	Yes	4	0.8	1.5	4	3.6	3	60	24	30	0.05	1.8	●
SBB040RB015	R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

ID Back Turning

MBL.. series/Toolholder

C-MSBR Carbide shank



- Diagram shows right-hand tool
- 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..

Back Turning

R

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

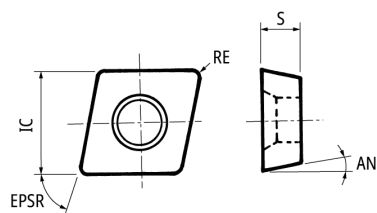
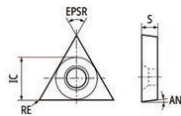


Figure	Item Number	Hand	Chip-breaker	AN °	EPSR °	IC mm	RE mm	S mm	Carbide PVD	QM3	ST4	TM4	ZM3
1	MBL005FL	L	Yes	9	75	3.6	0.05	1	●	●	●	●	●
1	MBL015FL	L	Yes	9	75	3.6	0.15	1	●	●	●	●	●
2	MBL005FRF1	R	Yes	9	75	3.6	0.05	1	●	●	●	●	●
2	MBL015FRF1	R	Yes	9	75	3.6	0.15	1	●	●	●	●	●

TP.. series/Inserts Carbide

TPGH



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

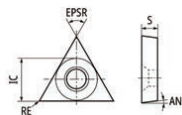
Shape	Item Number	CECC	Carbide																	Uncoated
			EPSR	IC	S	AN	RE	BS	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD		
	(ISO)	°	mm	mm	°	mm	mm	ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1			
	TPGH090202RFG	Up-sharp edge	60	5.56	2.38	11	0.2	-	●			●	●							
	TPGH090204RFG	Up-sharp edge	60	5.56	2.38	11	0.4	-	●			●	●							
	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	-				●		●						

Back Turning

R

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	CVD	CVD		
	(ISO)	°	mm	mm	°	mm	mm	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	-					●		●				

Back Turning
R