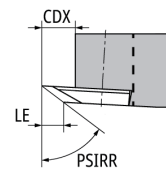
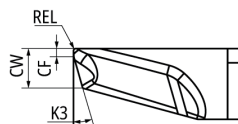
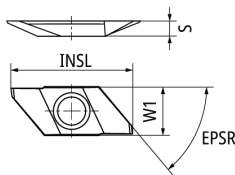


TBP.. series/Inserts Carbide

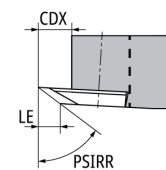
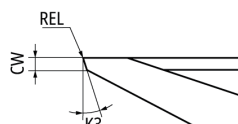
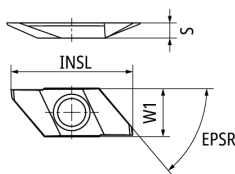
TBP-BM with BM-Chipbreaker



● 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	●	●	●				

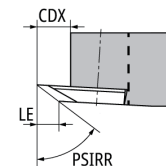
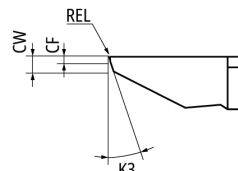
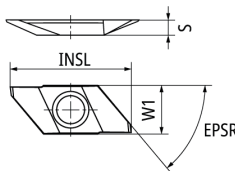
TBP with Chipbreaker



● 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					●		

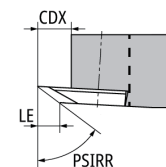
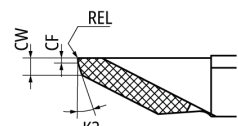
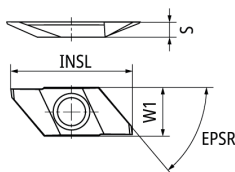
TBP-V without Chipbreaker



● 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

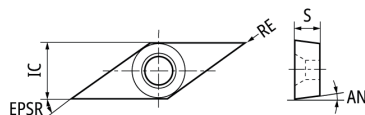


● Diagram shows right-hand tool

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							●

VC.. series/Inserts CBN

VCGW



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

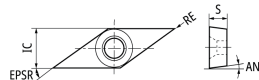
Shape	Item Number (ISO)	CECC	EPSR	IC	S	AN	RE	D2	Length of edge	No. of edge	S1	CBN									
			°	mm	mm	°	mm	mm	mm		mm	B16	PVD	B22	B23	B30	B36	PVD	B40	B52	B5K
	VCGW110302PDS01015	S01015	35	6.35	3.18	7	0.2	-	2.6	2	-										
	VCGW110302PDS01535	S01535	35	6.35	3.18	7	0.2	-	2.6	2	-										
	VCGW110304PDS01015	S01015	35	6.35	3.18	7	0.4	-	2.5	2	-										
	VCGW110304PDS01535	S01535	35	6.35	3.18	7	0.4	-	2.5	2	-										
	VCGW110308PDS01015	S01015	35	6.35	3.18	7	0.8	-	1.6	2	-										
	VCGW110308PDS01535	S01535	35	6.35	3.18	7	0.8	-	1.6	2	-										
	VCGW110312PDS01015	S01015	35	6.35	3.18	7	1.2	-	2.7	2	-										
	VCGW110312PDS01535	S01535	35	6.35	3.18	7	1.2	-	2.7	2	-										

Back Turning

R

VC.. series/Inserts PCD

VCMW

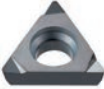


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material
Others (non-metallic)

Shape	Item Number (ISO)	CECC	EPSR	IC	S	AN	RE	No. of edge	PCD		Diamond Coating UC1
			°	mm	mm	°	mm		PD1	PD2	
	VCMW110301	Up-sharp edge	35	6.35	3.18	7	0.1	1	●		
	VCMW110302	Up-sharp edge	35	6.35	3.18	7	0.2	1	●		
	VCMW110304	Up-sharp edge	35	6.35	3.18	7	0.4	1	●		

TP.. series/Inserts PCD / Diamond Coating

TPM.

										Steel		
										Stainless Steel		
										Cast Iron		
										Non-Ferrous Material	●	● ●
										Heat Resistant Alloy		
										Hardened Material		
										Others (non-metallic)	●	
Shape	Item Number (ISO)	CECC	EPSR	IC	S	AN	RE	No. of edge	PCD		Diamond Coating	
			°	mm	mm	°	mm		PD1	PD2	UC1	
	TPMH110302FRF1	Up-sharp edge	60	6.35	3.18	11	0.2	3			●	
	TPMH110304FRF1	Up-sharp edge	60	6.35	3.18	11	0.4	3			●	
	TPMT090201PBF	Up-sharp edge	60	5.56	2.38	11	0.1	1		●		
	TPMT090202PBF	Up-sharp edge	60	5.56	2.38	11	0.2	1		●		
	TPMT090204PBF	Up-sharp edge	60	5.56	2.38	11	0.4	1		●		
	TPMT110301PBF	Up-sharp edge	60	6.35	3.18	11	0.1	1		●		
	TPMT110302PBF	Up-sharp edge	60	6.35	3.18	11	0.2	1		●		
	TPMT110304PBF	Up-sharp edge	60	6.35	3.18	11	0.4	1		●		
	TPMT090202PF	Up-sharp edge	60	5.56	2.38	11	0.2	1		●		
	TPMT090204PF	Up-sharp edge	60	5.56	2.38	11	0.4	1		●		
	TPMT110302PF	Up-sharp edge	60	6.35	3.18	11	0.2	1		●		
	TPMT110304PF	Up-sharp edge	60	6.35	3.18	11	0.4	1		●		

Back Turning

R