

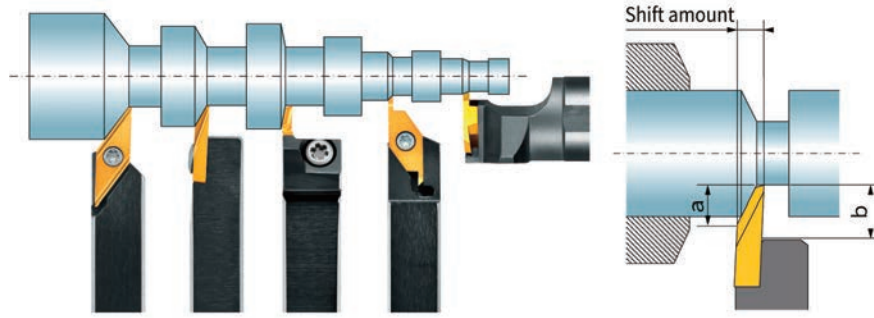
# Back Turning

Back Turning


R







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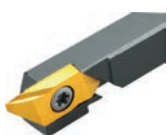


# Product Lines















a: Length of Blade  
b: Max Depth of Cut

Insert	<b>CSVB →R8</b>
Holder	<b>CSV-NC</b>
	
	→R6
a	-1.0mm
b	-2.0mm
Shift amount	1.1 - 1.5mm

Insert	<b>TBPS →R9</b>	<b>TBP →R14</b>				
Holder	<b>CTPS</b>	<b>TBP</b>	<b>TBP-OH3/OH2/OH</b>	<b>Y-TBP</b>	<b>Y-TBP-OH</b>	<b>DS-TBP</b>
						
	→R9	→R11	→R10	→R12	→R12	→R13
			Coolant through	Y-axis	Y-axis Coolant through	DS
a	-4.8mm			-4.8mm		
b	-4.8mm			-5.3mm		
Shift amount	2.4mm			3.5mm		

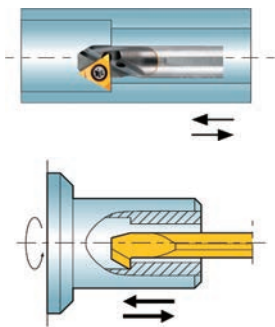
Insert	<b>TBPA →R18</b>			
Holder	<b>CTPA-OH2/OH</b>	<b>CTPA</b>	<b>TBPA-OH</b>	<b>CH-TBPA</b>
				
	→R15,R16	→R16	→R15	→R17
	Coolant through		Coolant through	
a			-6.3mm	
b			-6.8mm	
Shift amount			3.4mm	




Insert	<b>TBDP →R20</b>		<b>TB →R22</b>	<b>VC..1103.. →R32</b>		<b>VC..1303 →R35</b>
Holder	<b>TBDP</b>	<b>Y-TBDP</b>	<b>TB</b>	<b>TBVC →R30</b>	<b>CH-SVXCL</b>	<b>SVAC..(N)W</b>
						
	→R19	→R19	→R21	→R30	→R31	→R34
		Y-axis				
a	3.5mm		-4.0mm	-8.0mm	-	-
b	-5.0mm		-8.8mm	-8.0mm	-	-
Shift amount	2.05mm		4.0mm	7.5/10mm	10mm	-

Insert	<b>TBMH →R28</b>					
Holder	<b>GTT</b>	<b>GTT-OH2/OH</b>	<b>Y-GTT</b>	<b>Y-GTT..-OH</b>	<b>DS-GTT</b>	<b>CH-GTT</b>
						
	→R24	→R23	→R26	→R26	→R27	→R27
		Coolant through	Y-axis	Y-axis Coolant through		
a			-1.3mm			
b			-2.7mm			
Shift amount			1.0/1.5mm			

R Back Turning

## ID Back Turning



Insert	SBB →R38	TC/TP →R41,R45	MBL →R39
Holder	NBH	C-STZP/C (Carbide shank)	C-MSBR (Carbide shank)
			
Min. Bore Dia.	φ3.0	φ10.0	φ5.7 / φ7.7

## Recommended Cutting Conditions

### Back Turning

#### CSVB

Work Material		High Temperature Alloys	Titanium Alloys	Cobalt Chrome Alloys	Stainless Steels		Alloy Steels	Carbon Steels
Common Name		Inconel Hastelloy MP35N	Ti-6Al-4V	ASTM F-75	SUS304 SUS316 17-4PH	SUS303 SUS430F	SCr420 SCM435	S10C S45C
Grade	1st choice	DM4 / DT4					VM1	
	2nd choice	VM1					DM4 / DT4	
Cutting Speed (m/min)		20 40 65	30 55 80			30 60 90		
Feed Rate (mm/rev)	X Direction	0.01 0.02 0.03						
	Z Direction	0.01 0.03 0.04						

#### TBDP / TBMH / TBP / TBPA / TBVC

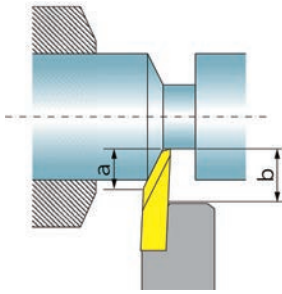
Work Material		High Temperature Alloys	Titanium Alloys	Cobalt Chrome Alloys	Stainless Steels		Alloy Steels	Carbon Steels	
Common Name		Inconel Hastelloy MP35N	Ti-6Al-4V	ASTM F-75	SUS304	SUS316 17-4PH	SUS303 SUS430F	SCr420 SCM435	S10C S45C
Grade	1st choice	DM4 / DT4			ST4 DM4	DM4 DT4 QM3	TM4	QM3	
	2nd choice	TM4 / QM3			VM1		QM3	TM4 / DM4 / DT4	
Cutting Speed (m/min)		20 40 65	30 55 80			45 90 150			
Feed Rate (mm/rev)	X Direction	0.01 0.02 0.03							
	Z Direction	0.02 0.04 0.06							

#### TB32 / TB43

Work Material		High Temperature Alloys	Titanium Alloys	Cobalt Chrome Alloys	Stainless Steels		Alloy Steels	Carbon Steels	
Common Name		Inconel Hastelloy MP35N	Ti-6Al-4V	ASTM F-75	SUS304 SUS316 17-4PH	SUS303 SUS430F	SCr420 SCM435	S10C S45C	
Grade	1st choice	ZM3						ZM3	
	2nd choice	ZM3						ZM3	
Cutting Speed (m/min)		15 30 45				45 90 130			
Feed Rate (mm/rev)	X Direction	0.01 0.03 0.05							
	Z Direction	0.04 0.05 0.08							

# General Information

## Recommended max. depth of cut for each pass



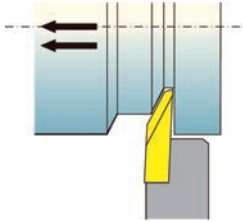
Multiply this ratio by the length of blade (a) to obtain the max. depth of cut for each pass

Work material / Grade	PVD Carbide
	ST4, QM3, DT4, DM4, TM4, VM1, ZM3
Steel	0.7
Stainless Steel	0.6
Non-ferrous material	0.9
Plastic	0.9

a) Length of Blade

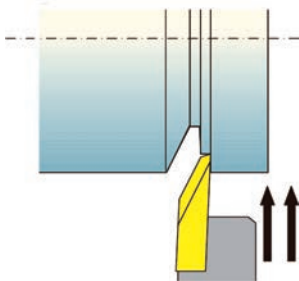
b) Max. Depth of Cut

## When the length of blade (a) is not long enough



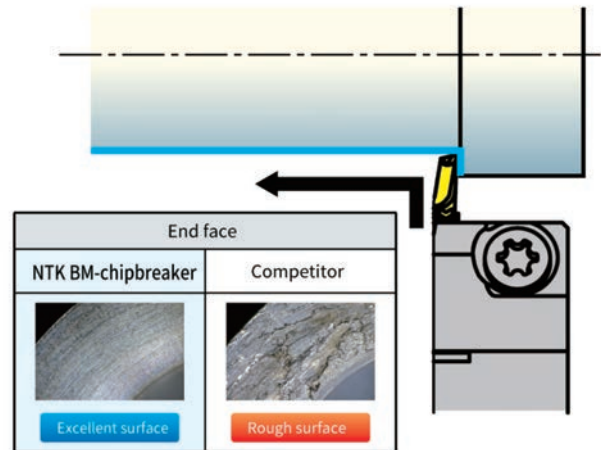
Back turning can be performed multiple times until the total depth of cut reaches (b).

## When experiencing rough finish on shoulder



Turning the shoulder twice can improve the finish.

This problem can be solved by using TBP-BM, TBPA-BM, TBDP inserts without increasing the number of passes

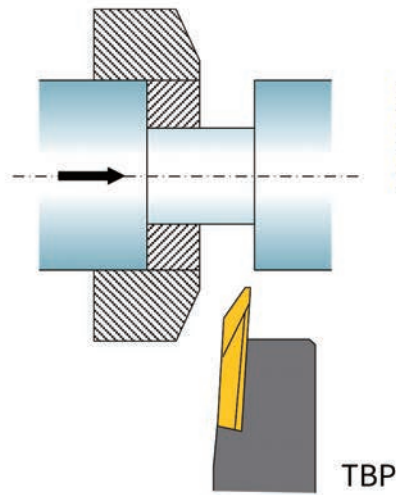


TBP-BM, TBPA-BM, TBDP come with NTK's uniquely designed molded chipbreaker providing single pass machining. These inserts can provide excellent surface finish.

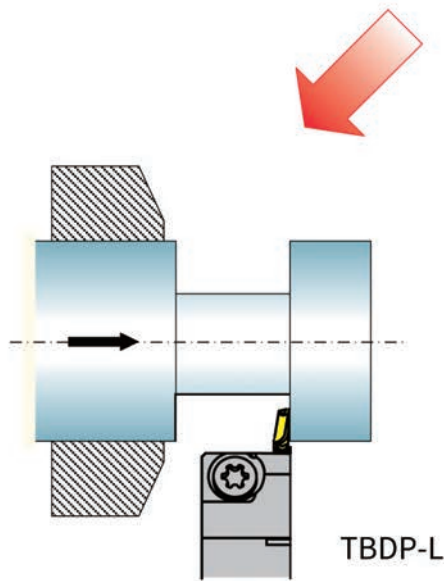
TBDP	→R20
TBP-BM	→R14
TBPA-BM	→R18



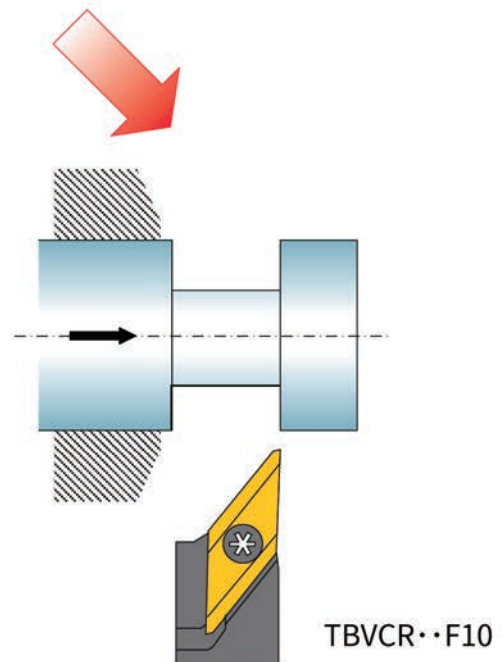
## Finishing cut



Roughed section goes into the guide bushing when performing finish cuts. (Deburring may be required after roughing)

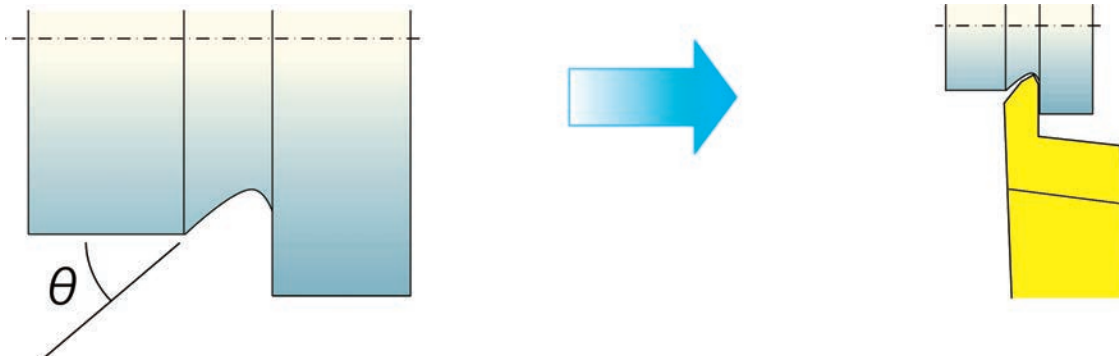


TBDP Left-hand toolholder will eliminate the risky process of pulling back the turned bar stock into the guide-bushing for finishing process, because its cutting point is away from the guide-bushing.



Cutting edge is located away from the guide-bushing. Roughing can be performed without retracting roughed part into the guide-bushing.

## Undercut



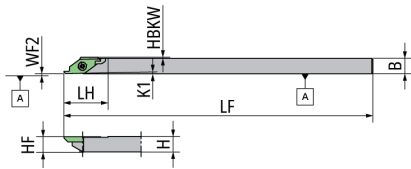
If an undercut exists on the back turning area  
 $\theta=22^\circ$  type  
 $\theta=45^\circ$  type

TBMH style inserts should be used to generate the undercut

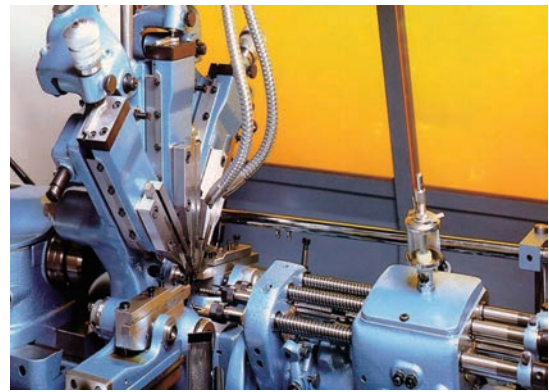
Insert	TBMH32	→R29
Holder	GTRR	→R23
	DS-GTTL	→R28

# CSVB.. series/Toolholder

## CSV [91°] For Cam-style machine



● Diagram shows right-hand tool

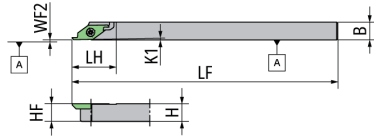


EDP	Item Number	Stock	Hand	B mm	H mm	HBKW mm	HF mm	K1 °	LF mm	LH mm	WF2 mm	Insert Gage
5303169	<b>CSVR07</b>	●	R	7	7	0.5	7	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5492962	<b>CSVR07GX</b>	●	R	7	7	0.5	7	1	85	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5303151	<b>CSVR08</b>	●	R	8	8	0	8	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5492954	<b>CSVR08GX</b>	●	R	8	8	0	8	1	85	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5303136	<b>CSVR095</b>	●	R	9.5	9.5	0	9.5	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5303144	<b>CSVR10</b>	●	R	10	10	0	10	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5327929	<b>CSVR12</b>	●	R	12	12	0	12	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5474770	<b>CSVR12GX</b>	●	R	12	12	0	12	1	85	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5303193	<b>CSVL07</b>	●	L	7	7	0.5	7	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5303201	<b>CSVL08</b>	●	L	8	8	0	8	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..
5303177	<b>CSVL10</b>	●	L	10	10	0	10	1	140	20	0.1	CSVF../CSVB../CSVC... CSVG../CSVT..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
<b>CSVR07</b>	LRIS-2.5*7	CLR-15S
<b>CSVR07GX</b>	LRIS-2.5*7	CLR-15S
<b>CSVR08</b>	LRIS-2.5*7	CLR-15S
<b>CSVR08GX</b>	LRIS-2.5*7	CLR-15S
<b>CSVR095</b>	LRIS-2.5*7	CLR-15S
<b>CSVR10</b>	LRIS-2.5*7	CLR-15S
<b>CSVR12</b>	LRIS-2.5*7	CLR-15S
<b>CSVR12GX</b>	LRIS-2.5*7	CLR-15S
<b>CSVL07</b>	LRIS-2.5*7	CLR-15S
<b>CSVL08</b>	LRIS-2.5*7	CLR-15S
<b>CSVL10</b>	LRIS-2.5*7	CLR-15S

## CSV-NC [91°] For Gang-style machine



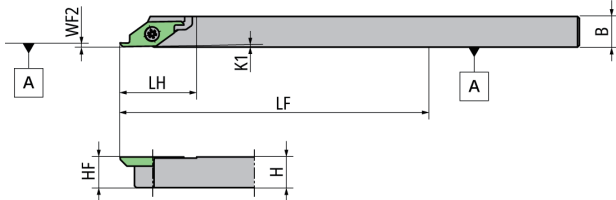
● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	H mm	HF mm	K1 °	LF mm	LH mm	WF2 mm	Insert Gage	
5514062	CSVR08NC	●	R	8	8	8	1	120	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..
5563010	CSVR10GXNC	●	R	10	10	10	1	85	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..
5477492	CSVR10NC	●	R	10	10	10	1	120	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..
5477534	CSVR12NC	●	R	12	12	12	1	120	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..
5514070	CSVL08NC	●	L	8	8	8	1	120	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..
5477542	CSVL10NC	●	L	10	10	10	1	120	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..
5477500	CSVL12NC	●	L	12	12	12	1	120	20	0.1	CSVF../CSVB../CSV..	CSVG../CSV..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CSVR08NC	LRIS-2.5*7	CLR-15S
CSVR10GXNC	LRIS-2.5*7	CLR-15S
CSVR10NC	LRIS-2.5*7	CLR-15S
CSVR12NC	LRIS-2.5*7	CLR-15S
CSVL08NC	LRIS-2.5*7	CLR-15S
CSVL10NC	LRIS-2.5*7	CLR-15S
CSVL12NC	LRIS-2.5*7	CLR-15S

## CSV-NC-F [91°] For Gang-style machine



● Diagram shows right-hand tool

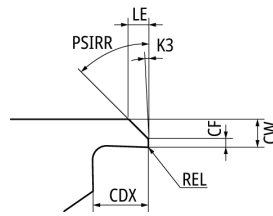
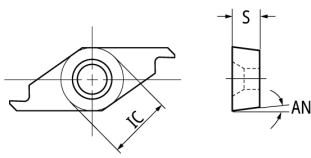
EDP	Item Number	Stock	Hand	B mm	H mm	HBKW mm	HF mm	K1 °	LF mm	LH mm	WF2 mm	Insert Gage	
5789615	CSVR08NC-F	●	R	8	8	0	8	1	120	20	0-0.1	CSVF../CSVB../CSV..	CSVG../CSV..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CSVR08NC-F	LRIS-2.5*7	CLR-15S

# CSVB.. series/Inserts Carbide

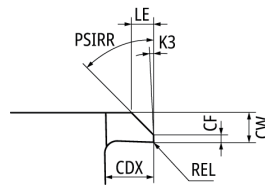
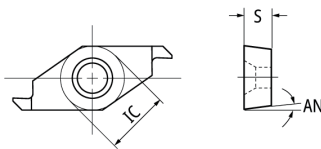
## CSVB-V



● 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
CSVB11FRV	M	R	No	7	2	0.3	1	35	6.35	5	0.7	45	0	2.38	●		
CSVB11FRV12	M	R	No	7	2	0.3	1.2	35	6.35	5	0.8	45	0	2.38	●		
CSVB11FRV14	M	R	No	7	2	0.3	1.4	35	6.35	5	1	45	0	2.38	●		
CSVB11FRV-A	M	R	No	7	2	0.3	1	35	6.35	2	0.7	45	0	2.38	●		
CSVB11FRV-C	M	R	No	7	2	0.15	1	35	6.35	5	0.7	45	0	2.38	●		
CSVB11FRV-M	M	R	No	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●	●	●
CSVB11FLV	M	L	No	7	2	0.3	1	35	6.35	5	0.7	45	0	2.38	●		
CSVB11FLV-M	M	L	No	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●		

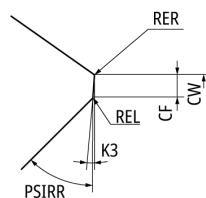
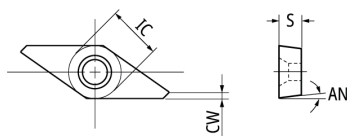
## CSVB-VB



● 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
CSVB11FRVB	M	R	Yes	7	2	0.3	1	35	6.35	5	0.7	45	0	2.38	●		
CSVB11FRVB12	M	R	Yes	7	2	0.3	1.2	35	6.35	5	0.8	45	0	2.38	●		
CSVB11FRVB14	M	R	Yes	7	2	0.3	1.4	35	6.35	5	1	45	0	2.38	●		
CSVB11FRVB-A	M	R	Yes	7	2	0.3	1	35	6.35	2	0.7	45	0	2.38	●		
CSVB11FRVB-C	M	R	Yes	7	2	0.15	1	35	6.35	5	0.7	45	0	2.38	●		
CSVB11FRVB-M	M	R	Yes	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●	●	●
CSVB11FLVB-M	M	L	Yes	7	2	0.15	1	35	6.35	2	0.7	45	0	2.38	●		

## CSVB-VX For Profiling



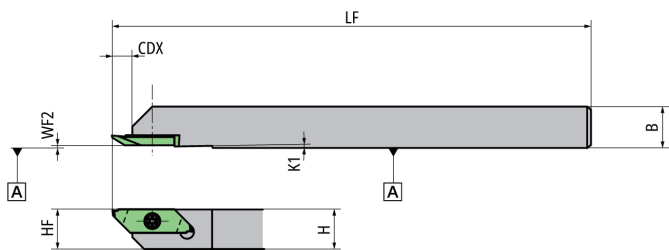
● Diagram shows left-hand tool  
All angles shown are obtained when insert is set in the holder.

Item Number	Hand	Chip-breaker	AN	CF	CW	EPSR	IC	K3	PSIRL	REL	RER	S	Carbide PVD			
													°	mm	mm	°
CSVB11FLVX	M	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..

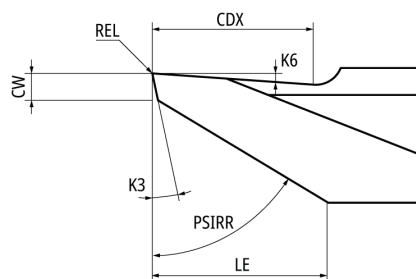
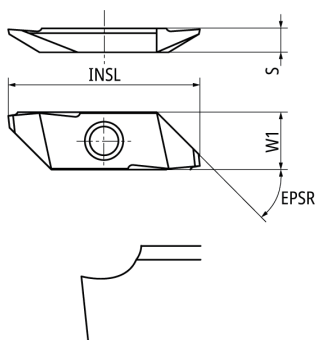
## Spare Parts

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

Back Turning R

# TBPS.. series/Inserts Carbide

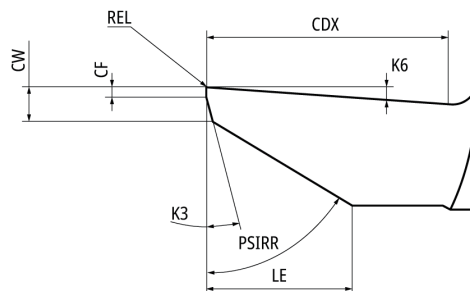
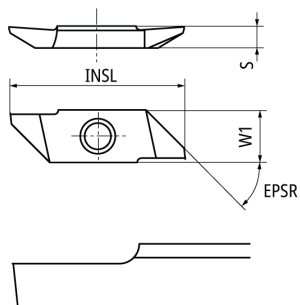
## TBPS



● 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

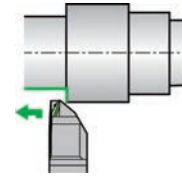
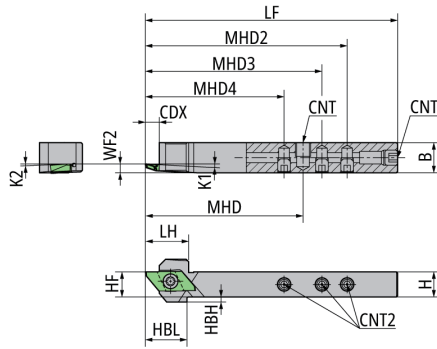


● Diagram shows right-hand tool  
All angles shown are obtained when insert is set in the holder.

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	R	No	3.1	4.8	0.2	0.7	45	20	15	3	60	0	2.5	6	●	●

# TBP.. series/Toolholder

## TBP-OH3 Coolant through (direct connect compatible)



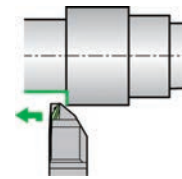
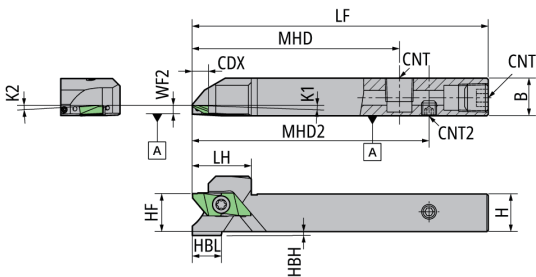
• Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	CNT M6*1	CNT2 M5	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	MHD2 mm	MHD3 mm	MHD4 mm	WF2 mm	Insert Gage
5117759	TBPR1012H-OH3	<span style="color:blue">●</span> <span style="color:red">●</span>	R	12	5.5	M6*1	M5	10	2	16.5	10	3	2	100	17.33	62.5	80.18	70.18	55.18	3.5	TBP..
5121793	TBPR16X-OH3	<span style="color:blue">●</span> <span style="color:red">●</span>	R	16	5.5	Rc1/8	M5	16	-	-	16	3	2	120	20	78.75	100	87.5	70	3.5	TBP..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Screw (for CNT2)	Wrench (for Clamp screw)	Wrench (for CNT2)
TBPR1012H-OH3	LRIS-4*10PW	SS0605SC	SS0505SC	CLR-15S	LW-2.5
TBPR16X-OH3	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5

## TBP-OH2 Coolant through (direct connect compatible)



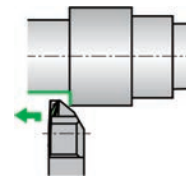
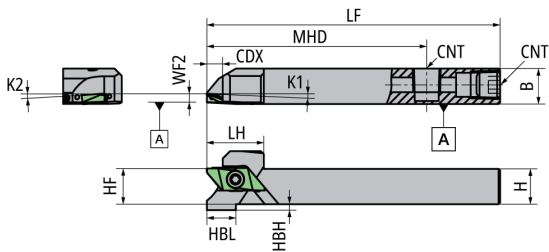
• Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	CNT Rc1/8	CNT2 M5	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	MHD2 mm	WF2 mm	Insert Gage
5037965	TBPR12H-OH2	<span style="color:blue">●</span> <span style="color:black">●</span>	R	12	5.5	Rc1/8	M5	12	2	10	12	3	2	100	19.5	70	80	3.5	TBP..
5043971	TBPR16X-OH2	<span style="color:blue">●</span> <span style="color:black">●</span>	R	16	5.5	Rc1/8	M5	16	-	-	16	3	2	120	19.5	70	100	3.5	TBP..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Screw (for CNT2)	Wrench (for Clamp screw)	Wrench (for CNT2)
TBPR12H-OH2	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5
TBPR16X-OH2	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5

## TBP-OH Coolant through



· Diagram shows right-hand tool

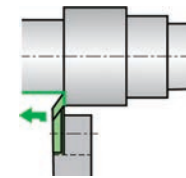
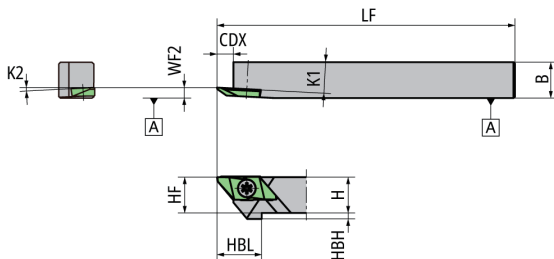
EDP	Item Number	Stock	Hand	B mm	CDX mm	CNT	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	MHD mm	WF2 mm	Insert Gage
5925722	TBPR1012H-OH	●	R	12	5.5	M6*1	10	4	19	10	3	2	100	75	3.5	TBP..
5925730	TBPR12H-OH	●	R	12	5.5	Rc1/8	12	2	10	12	3	2	100	75	3.5	TBP..
5925748	TBPR16H-OH	●	R	16	5.5	Rc1/8	16	-	-	16	3	2	100	75	3.5	TBP..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Wrench (for Clamp screw)
TBPR1012H-OH	LRIS-4*10PW	SS0605SC	CLR-15S
TBPR12H-OH	LRIS-4*12PW	SPR1/8	CLR-15S
TBPR16H-OH	LRIS-4*12PW	SPR1/8	CLR-15S

Back Turning  
R

## TBP



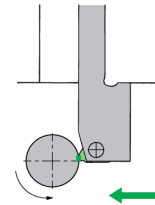
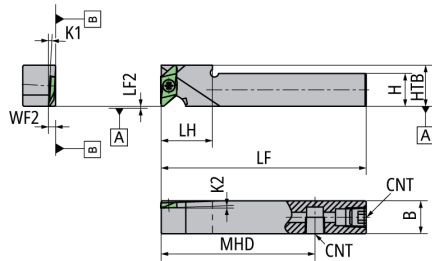
· Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	WF2 mm	Insert Gage
5133285	TBPR08	●	R	10	5.5	8	4	15	8	3	2	120	3.5	TBP..
5090436	TBPR10	●	R	10	5.5	10	2	15	10	3	2	120	3.5	TBP..
5873856	TBPR10H	●	R	10	5.5	10	2	15	10	3	2	100	3.5	TBP..
5090451	TBPR12	●	R	12	5.5	12	-	-	12	3	2	120	3.5	TBP..
5459771	TBPR12GX	●	R	12	5.5	12	-	-	12	3	2	85	3.5	TBP..
5090477	TBPR13	●	R	13	5.5	13	-	-	13	3	2	120	3.5	TBP..
5270822	TBPR16	●	R	16	5.5	16	-	-	16	3	2	120	3.5	TBP..
5459789	TBPR16H	●	R	16	5.5	16	-	-	16	3	2	100	3.5	TBP..
5133293	TBPL08	●	L	10	5.5	8	4	15	8	3	2	120	3.5	TBP..
5090444	TBPL10	●	L	10	5.5	10	2	15	10	3	2	120	3.5	TBP..
5090469	TBPL12	●	L	12	5.5	12	-	-	12	3	2	120	3.5	TBP..
5270830	TBPL16	●	L	16	5.5	16	-	-	16	3	2	120	3.5	TBP..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
TBPR08	LRIS-4*10PW	CLR-15S
TBPR10	LRIS-4*10PW	CLR-15S
TBPR10H	LRIS-4*10PW	CLR-15S
TBPR12	LRIS-4*12PW	CLR-15S
TBPR12GX	LRIS-4*12PW	CLR-15S
TBPR13	LRIS-4*12PW	CLR-15S
TBPR16	LRIS-4*12PW	CLR-15S
TBPR16H	LRIS-4*12PW	CLR-15S
TBPL08	LRIS-4*10PW	CLR-15S
TBPL10	LRIS-4*10PW	CLR-15S
TBPL12	LRIS-4*12PW	CLR-15S
TBPL16	LRIS-4*12PW	CLR-15S

## Y-TBP-OH Y-axis coolant through



• Diagram shows right-hand tool  
 NOTE: Use a right-handed (R) insert.  
 NOTE: There is a risk of interference with the Y-axis holder depending on the combination of the maximum workpiece diameter and machining diameter.  
 →O26

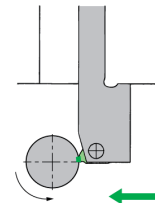
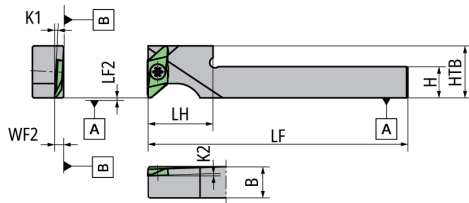
EDP	Item Number	Stock	Hand	B mm	CNT	H mm	HTB mm	K1 °	K2 °	LF mm	LF2 mm	LH mm	MHD mm	WF2 mm	Insert Gage
5911508	Y-TBPR12HS-OH	●	R	12	Rc1/8	12	20	3	2	100	0	20	75	3.5	TBP.
5911516	Y-TBPR16H-OH	●	R	16	Rc1/8	16	20	3	2	100	0	25	75	3.5	TBP.

R Back Turning

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Wrench (for Clamp screw)
Y-TBPR12HS-OH	LRIS-4*12PW	SPR1/8	CLR-15S
Y-TBPR16H-OH	LRIS-4*12PW	SPR1/8	CLR-15S

## Y-TBP Y-axis



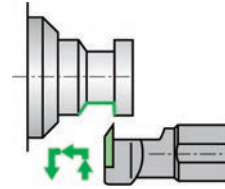
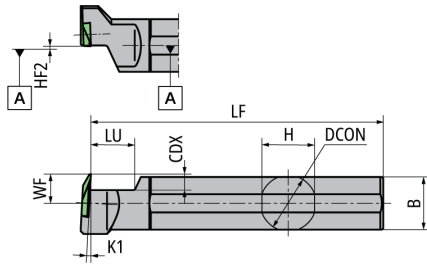
• Diagram shows right-hand tool  
 NOTE: Use a right-handed (R) insert.  
 NOTE: There is a risk of interference with the Y-axis holder depending on the combination of the maximum workpiece diameter and machining diameter.  
 →O26

EDP	Item Number	Stock	Hand	B mm	H mm	HTB mm	K1 °	K2 °	LF mm	LF2 mm	LH mm	WF2 mm	Insert Gage
5950399	Y-TBPR10MS	●	R	10	10	20	3	2	120	0	22	3.5	TBP.
5371554	Y-TBPR10S	●	R	10	10	20	3	2	120	0	20	3.5	TBP.
5950407	Y-TBPR12MS	●	R	12	12	20	3	2	120	0	22	3.5	TBP.
5371588	Y-TBPR12S	●	R	12	12	20	3	2	120	0	20	3.5	TBP.

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
Y-TBPR10MS	LRIS-4*10PW	CLR-15S
Y-TBPR10S	LRIS-4*10PW	CLR-15S
Y-TBPR12MS	LRIS-4*10PW	CLR-15S
Y-TBPR12S	LRIS-4*12PW	CLR-15S

## DS-TBP DS Toolholders



· Diagram shows left-hand tool  
NOTE: Use a right-handed (R) insert.

EDP	Item Number	Stock	Hand	B mm	CDX mm	DCON mm	H mm	HF2 mm	K1 °	K2 °	LF mm	LU mm	WF mm	Insert Gage
5540414	DS-TBPL19	●	L	18	5.5	19.05	18	0	3	2	120	14	10	TBP..
5540422	DS-TBPL20	●	L	19	5.5	20	19	0	3	2	120	14	10	TBP..
5540430	DS-TBPL25	●	L	24	5.5	25.4	24	0	3	2	150	14	10	TBP..

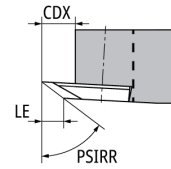
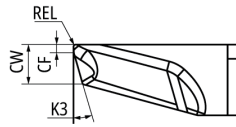
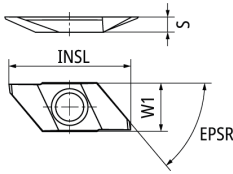
## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
DS-TBPL19	LRIS-4*10	LLR-25S-20*65
DS-TBPL20	LRIS-4*10	LLR-25S-20*65
DS-TBPL25	LRIS-4*10	LLR-25S-20*65



# TBP.. series/Inserts Carbide

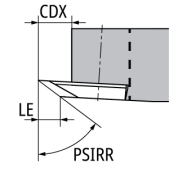
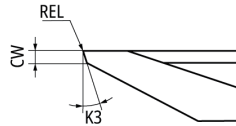
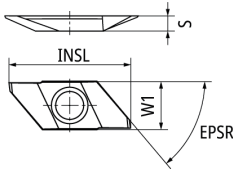
## TBP-BM with BM-Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE mm	CDX mm	CF mm	CW mm	EPSR °	INSL mm	K3 °	PSIRR mm	REL °	S mm	W1 mm	Carbide PVD						PCD	
														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	●	●	●					

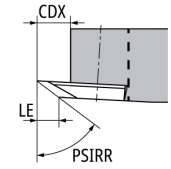
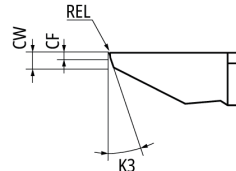
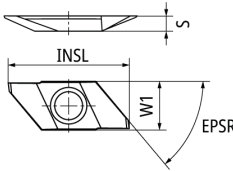
## TBP with Chipbreaker



● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE mm	CDX mm	CF mm	CW mm	EPSR °	INSL mm	K3 °	PSIRR mm	REL °	S mm	W1 mm	Carbide PVD						PCD	
														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						●		

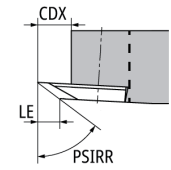
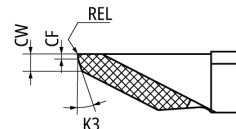
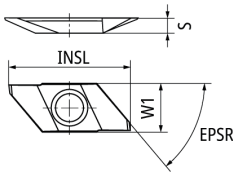
## TBP-V without Chipbreaker



● Diagram shows right-hand tool

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

## TBP-P PCD tipped



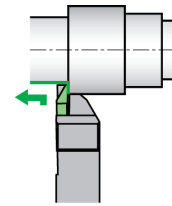
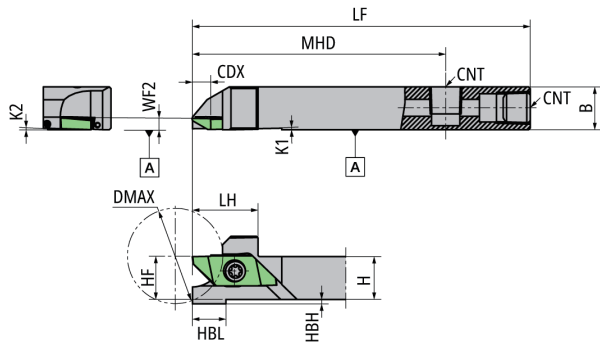
● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE mm	CDX mm	CF mm	CW mm	EPSR °	INSL mm	K3 °	PSIRR mm	REL °	S mm	W1 mm	Carbide PVD						PCD	
														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								●

R  
Back Turning

# TBPA.. series/Toolholder

## TBPA-OH Coolant through



● Diagram shows right-hand tool

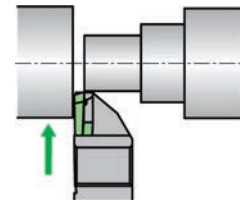
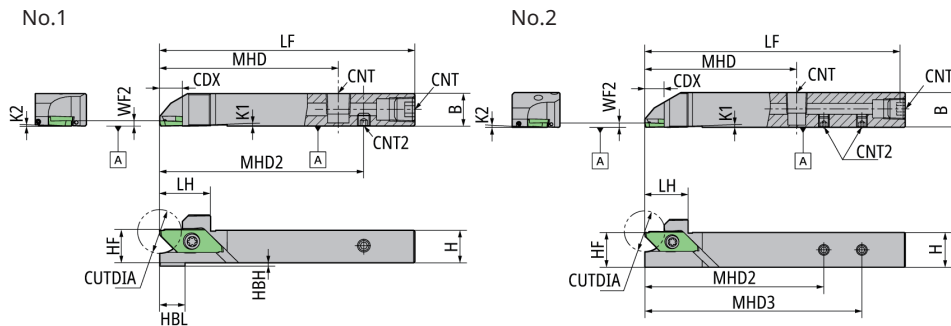
EDP	Item Number	Stock	Hand	DMAX mm	B mm	CDX mm	CNT	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	WF2 mm	Insert Gage
5932983	TBPAR12H-OH	●	R	25	12	6.8	Rc1/8	12	4	10	12	1	2	100	19.5	75	(3.4)	TBPA..
5932991	TBPAR16H-OH	●	R	35	16	6.8	Rc1/8	16	2	10	16	1	2	100	19.5	75	(3.4)	TBPA..
5945811	TBPAR20H-OH	●	R	50	20	6.8	Rc1/8	20	-	-	20	1	2	100	19.5	75	(3.4)	TBPA..

Back Turning  
R

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Wrench (for Clamp screw)
TBPAR12H-OH	LRIS-4*12PW	SPR1/8	CLR-15S
TBPAR16H-OH	LRIS-4*12PW	SPR1/8	CLR-15S
TBPAR20H-OH	LRIS-4*12PW	SPR1/8	CLR-15S

## CTPA-OH2 Coolant through (direct connect compatible)



CTPAR/L16X-OH2

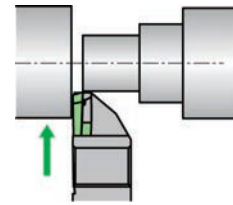
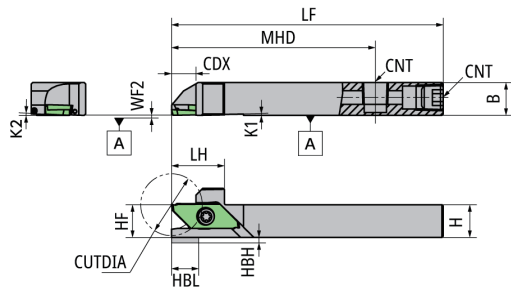
● Diagram shows right-hand tool

Figure	EDP	Item Number	Stock	Hand	CUTDIA mm	B mm	CNT	CNT2	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	MHD2 mm	MHD3 mm	WF2 mm	Insert Gage
1	5037932	CTPAR12H-OH2	●	R	16	12	Rc1/8	M5	12	2	10	12	1	2	100	19.5	70	80	-	2	CTPA.. TBPA..
2	5043872	CTPAR16X-OH2	●	R	16	16	Rc1/8	M5	16	-	-	16	1	2	120	19.5	70	82.5	100	2	CTPA.. TBPA..
1	5037924	CTPAL12H-OH2	●	L	16	12	Rc1/8	M5	12	2	10	12	1	2	100	19.5	70	80	-	2	CTPA.. TBPA..
2	5043864	CTPAL16X-OH2	●	L	16	16	Rc1/8	M5	16	-	-	16	1	2	120	19.5	70	82.5	100	2	CTPA.. TBPA..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Screw (for CNT2)	Wrench (for Clamp screw)	Wrench (for CNT2)
CTPAR12H-OH2	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5
CTPAR16X-OH2	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5
CTPAL12H-OH2	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5
CTPAL16X-OH2	LRIS-4*12PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5

## CTPA-OH Coolant through



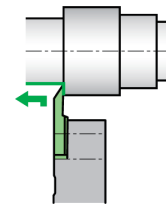
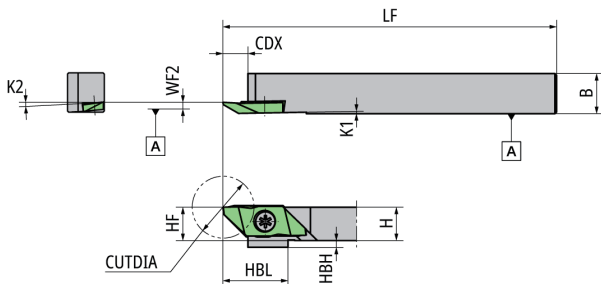
● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	CUTDIA mm	B mm	CNT	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	WF2 mm	Insert Gage	
5931522	CTPAR12H-OH	●	R	16	12	Rc1/8	12	2	10	12	1	2	100	19.5	75	0	CTPA..	TBPA..
5931548	CTPAR16H-OH	●	R	16	16	Rc1/8	16	-	-	16	1	2	100	19.5	75	0	CTPA..	TBPA..
5931530	CTPAL12H-OH	●	L	16	12	Rc1/8	12	2	10	12	1	2	100	19.5	75	0	CTPA..	TBPA..
5931563	CTPAL16H-OH	●	L	16	16	Rc1/8	16	-	-	16	1	2	100	19.5	75	0	CTPA..	TBPA..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CTPAR12H-OH	LRIS-4*12PW	CLR-15S
CTPAR16H-OH	LRIS-4*12PW	CLR-15S
CTPAL12H-OH	LRIS-4*12PW	CLR-15S
CTPAL16H-OH	LRIS-4*12PW	CLR-15S

## CTPA



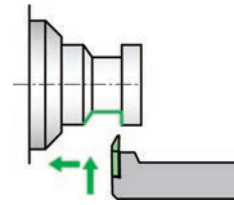
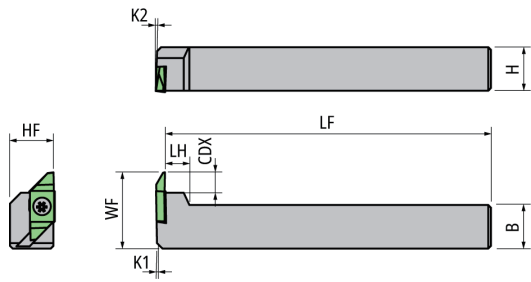
● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	CUTDIA mm	B mm	CDX mm	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	WF2 mm	Insert Gage	
5199187	CTPAR10	●	R	16	10	7.5	10	2	19.5	10	1	2	120	0	CTPA..	TBPA..
5199195	CTPAR12	●	R	16	12	7.5	12	-	-	12	1	2	120	0	CTPA..	TBPA..
5016209	CTPAR12GX	●	R	16	12	7.5	12	-	-	12	1	2	85	0	CTPA..	TBPA..
5199203	CTPAR16	●	R	16	16	7.5	16	-	-	16	1	2	120	0	CTPA..	TBPA..
5459540	CTPAR20F	●	R	16	20	7.5	20	-	-	20	1	2	80	0	CTPA..	TBPA..
5199153	CTPAL10	●	L	16	10	7.5	10	2	19.5	10	1	2	120	0	CTPA..	TBPA..
5199161	CTPAL12	●	L	16	12	7.5	12	-	-	12	1	2	120	0	CTPA..	TBPA..
5016217	CTPAL12GX	●	L	16	12	7.5	12	-	-	12	1	2	85	0	CTPA..	TBPA..
5199179	CTPAL16	●	L	16	16	7.5	16	-	-	16	1	2	120	0	CTPA..	TBPA..
5459557	CTPAL20F	●	L	16	20	7.5	20	-	-	20	1	2	80	0	CTPA..	TBPA..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CTPAR10	LRIS-4*10PW	CLR-15S
CTPAR12	LRIS-4*12PW	CLR-15S
CTPAR12GX	LRIS-4*12PW	CLR-15S
CTPAR16	LRIS-4*12PW	CLR-15S
CTPAR20F	LRIS-4*10	LLR-25S
CTPAL10	LRIS-4*10PW	CLR-15S
CTPAL12	LRIS-4*12PW	CLR-15S
CTPAL12GX	LRIS-4*12PW	CLR-15S
CTPAL16	LRIS-4*12PW	CLR-15S
CTPAL20F	LRIS-4*10	LLR-25S

## CH-TBPA for horizontal gang style tool post



● Diagram shows left-hand tool  
NOTE: Use a right-handed insert.

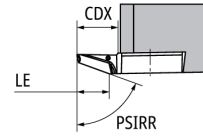
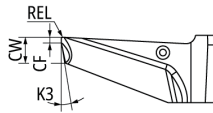
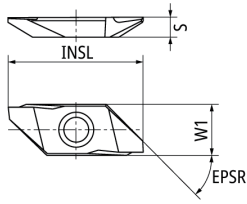
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HF mm	K1 °	K2 °	LF mm	LH mm	WF mm	Insert Gage
5884945	CH-TBPAL16	●	L	16	7.5	16	16	1	2	120	9	28	TBPA..
5884952	CH-TBPAL20	●	L	20	7.5	20	20	1	2	120	9	32	TBPA..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CH-TBPAL16	LRIS-4*10	LLR-25S
CH-TBPAL20	LRIS-4*10	LLR-25S

# TBPA.. series/Inserts Carbide

## TBPA-BM with BM-Chipbreaker

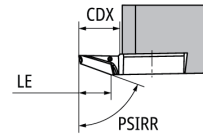
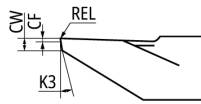
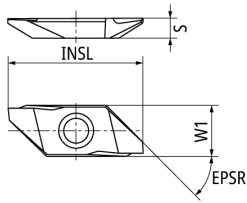


● Diagram shows right-hand tool

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	●	●	●

R Back Turning

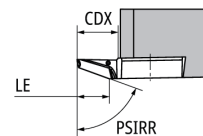
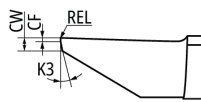
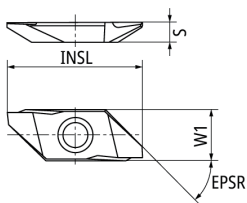
## TBPA with Chipbreaker



● 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

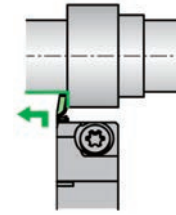
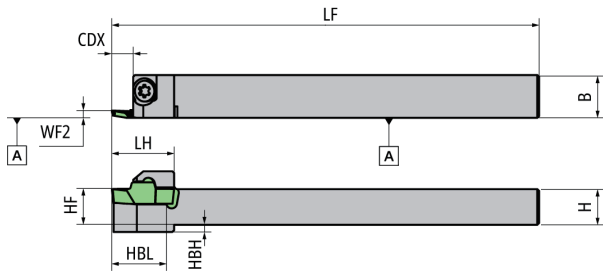
Item Number	Hand	Chip-breaker	LE	CDX	CF	CW	EPSR	INSL	K3	PSIRR	REL	S	W1	Carbide PVD	
			mm	mm	mm	mm	°	mm	°	°	mm	mm	mm	VM1	ZM3
TBPA60FRV	R	No	6.3	6.8	0.2	0.7	45	25	15	60	0	3.5	9.4	●	●
TBPA60FLV	L	No	6.3	6.8	0.2	0.7	45	25	15	60	0	3.5	9.4		●



# BACK DUO

## TBDP.. series/Toolholder

### TBDP



· Diagram shows right-hand tool

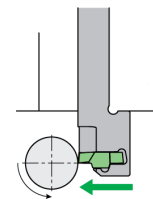
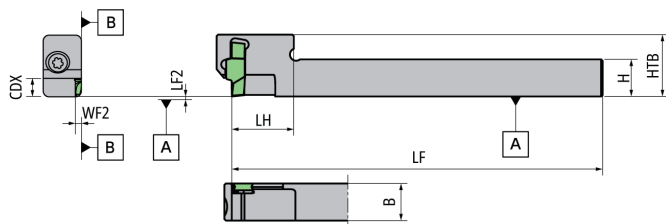
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HBH mm	HBL mm	HF mm	LF mm	LH mm	WF2 mm	Insert Gage
5814678	TBDPR1012	●	R	12	3	10	2	14.5	10	120	15	2.05	TBDP..
5873864	TBDPR1012H	●	R	12	3	10	2	14.5	10	100	15	2.05	TBDP..
5810445	TBDPR12	●	R	12	5	12	-	-	12	120	18	2.05	TBDP..
5810452	TBDPR16	●	R	16	5	16	-	-	16	120	19.5	2.05	TBDP..
5842414	TBDPR20	●	R	20	5	20	-	-	20	120	19.5	2.05	TBDP..
5837265	TBDPL1012	●	L	12	3	10	2	14.5	10	120	15	2.05	TBDP..
5837273	TBDPL12	●	L	12	5	12	-	-	12	120	18	2.05	TBDP..
5837281	TBDPL16	●	L	16	5	16	-	-	16	120	19.5	2.05	TBDP..

Back Turning  
R

### Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
TBDPR1012	LRIS-4*12	LLR-25S
TBDPR1012H	LRIS-4*12	LLR-25S
TBDPR12	LRIS-4*12	LLR-25S
TBDPR16	LRIS-4*12	LLR-25S
TBDPR20	LRIS-4*12	LLR-25S
TBDPL1012	LRIS-4*12	LLR-25S
TBDPL12	LRIS-4*12	LLR-25S
TBDPL16	LRIS-4*12	LLR-25S

### Y-TBDP Y-axis



· Diagram shows right-hand tool

NOTE: Use a right-handed (R) insert.

NOTE: There is a risk of interference with the Y-axis holder depending on the combination of the maximum workpiece diameter and machining diameter.

→O26

EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HTB mm	LF mm	LF2 mm	LH mm	WF2 mm	Insert Gage
5839139	Y-TBDPR12S	●	R	12	5	12	20	120	0	20	2.05	TBDP..

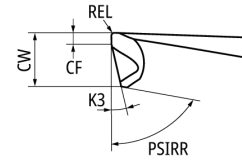
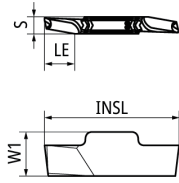
### Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
Y-TBDPR12S	LRIS-4*12	LLR-25S

# BACK DUO

## TBDP.. series/Inserts Carbide

### TBDP

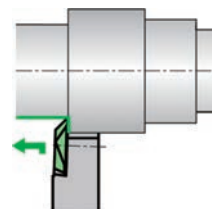
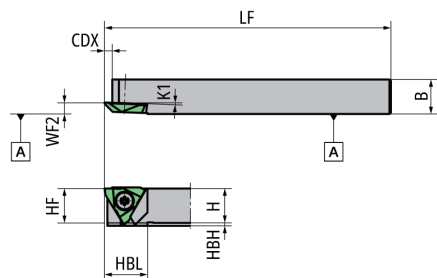


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CF	CW	INSL	K3	PSIRR	REL	S	W1	Carbide PVD		
			mm	mm	mm	mm	°	°	mm	mm	mm	DM4	QM3	TM4
TBDP22005R	R	Yes	3.5	0.3	1.4	17.48	13	80	0.05	2.2	6	●	●	●
TBDP2201MR	R	Yes	3.5	0.3	1.4	17.48	13	80	0.08	2.2	6	●	●	●
TBDP2202MR	R	Yes	3.5	0.3	1.4	17.48	13	80	0.18	2.2	6	●	●	●

# TB.. series/Toolholder

## TBT



● Diagram shows right-hand tool

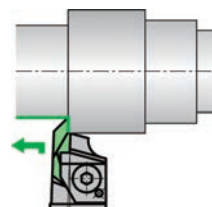
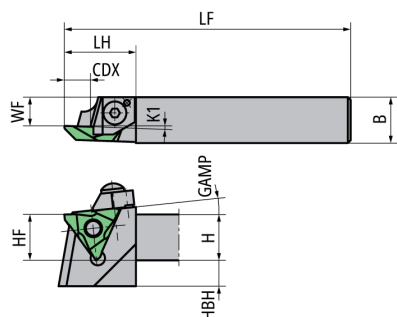
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HBH mm	HBL mm	HF mm	K1 °	LF mm	WF2 mm	Insert Gage
5107511	<b>TBTR08F</b>	●	R	8	5	8	5	15	8	2	80	4	TB32..
5107578	<b>TBTR08K</b>	●	R	8	5	8	5	15	8	2	120	4	TB32..
5107495	<b>TBTR10F</b>	●	R	10	5	10	3	15	10	2	80	4	TB32..
5107552	<b>TBTR10K</b>	●	R	10	5	10	3	15	10	2	120	4	TB32..
5107479	<b>TBTR12F</b>	●	R	12	5	12	1	15	12	2	80	4	TB32..
5107537	<b>TBTR12K</b>	●	R	12	5	12	1	15	12	2	120	4	TB32..
5107503	<b>TBTL08F</b>	●	L	8	5	8	5	15	8	2	80	4	TB32..
5107560	<b>TBTL08K</b>	●	L	8	5	8	5	15	8	2	120	4	TB32..
5107487	<b>TBTL10F</b>	●	L	10	5	10	3	15	10	2	80	4	TB32..
5107545	<b>TBTL10K</b>	●	L	10	5	10	3	15	10	2	120	4	TB32..
5107461	<b>TBTL12F</b>	●	L	12	5	12	1	15	12	2	80	4	TB32..
5107529	<b>TBTL12K</b>	●	L	12	5	12	1	15	12	2	120	4	TB32..

Back Turning R

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
<b>TBTR08F</b>	LR-S-4*10PW	CLR-15S
<b>TBTR08K</b>	LR-S-4*10PW	CLR-15S
<b>TBTR10F</b>	LR-S-4*10PW	CLR-15S
<b>TBTR10K</b>	LR-S-4*10PW	CLR-15S
<b>TBTR12F</b>	LR-S-4*10PW	CLR-15S
<b>TBTR12K</b>	LR-S-4*10PW	CLR-15S
<b>TBTL08F</b>	LR-S-4*10PW	CLR-15S
<b>TBTL08K</b>	LR-S-4*10PW	CLR-15S
<b>TBTL10F</b>	LR-S-4*10PW	CLR-15S
<b>TBTL10K</b>	LR-S-4*10PW	CLR-15S
<b>TBTL12F</b>	LR-S-4*10PW	CLR-15S
<b>TBTL12K</b>	LR-S-4*10PW	CLR-15S

## TB-N



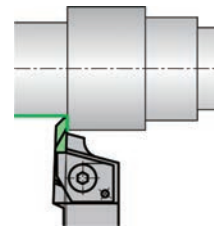
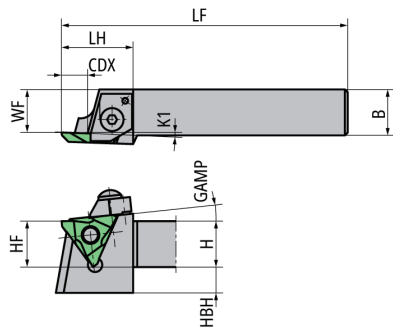
● Diagram shows right-hand tool

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
5504550	<b>TBR16N</b>	●	R	16	9	6	16	9	16	2	78	25	10	TB43..
5837141	<b>TBR16N-42</b>	●	R	16	9	6	16	9	16	2	78	25	11.5	TB42..
5820618	<b>TBR16N-H</b>	●	R	16	9	6	16	9	16	2	100	25	10	TB43..
5848288	<b>TBR16N-K</b>	●	R	16	9	6	16	9	16	2	125	25	10	TB43..
5504543	<b>TBR16NS</b>	●	R	16	5	6	16	9	16	2	78	25	10	TB43..
5553540	<b>TBR20N</b>	●	R	20	9	6	20	5	20	2	100	25	14	TB43..
5524145	<b>TBL16N</b>	●	L	16	9	6	16	9	16	2	78	25	10	TB43..
5524152	<b>TBL20N</b>	●	L	20	9	6	20	5	20	2	100	25	14	TB43..
5524160	<b>TBL25N</b>	●	L	25	9	6	25	-	25	2	150	25	19	TB43..

## Spare Parts

Item Number	Clamp	Clamp screw	Spring	Wrench (for Clamp screw)
<b>TBR16N</b>	CPR5S	AOS-5*25	ASG-5	LW-2.5
<b>TBR16N-42</b>	CPR5S	AOS-5*25	ASG-5	LW-2.5
<b>TBR16N-H</b>	CPR5S	AOS-5*25	ASG-5	LW-2.5
<b>TBR16N-K</b>	CPR5S	AOS-5*25	ASG-5	LW-2.5
<b>TBR16NS</b>	CPR5S	AOS-5*25	ASG-5	LW-2.5
<b>TBR20N</b>	CPR5S	AOS-5*25	ASG-5	LW-2.5
<b>TBL16N</b>	CPL5S	AOS-5*25	ASG-5	LW-2.5
<b>TBL20N</b>	CPL5S	AOS-5*25	ASG-5	LW-2.5
<b>TBL25N</b>	CPL5S	AOS-5*25	ASG-5	LW-2.5

## TB-F



● Diagram shows right-hand tool

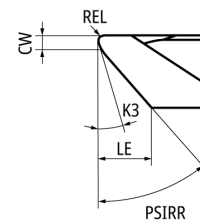
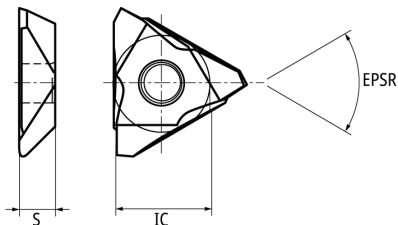
EDP	Item Number	Stock	Hand	B mm	CDX mm	GMAP °	H mm	HBH mm	HF mm	K1 °	LF mm	LH mm	WF mm	Insert Gage
5505037	TBR16F	●	R	16	9	6	16	9	16	2	100	25	15	TB43..
5505029	TBR16FS	●	R	16	5	6	16	9	16	2	100	25	15	TB43..
5505052	TBR20F	●	R	20	9	6	20	5	20	2	100	25	20	TB43..
5526298	TBR20FS	●	R	20	5	6	20	5	20	2	100	25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

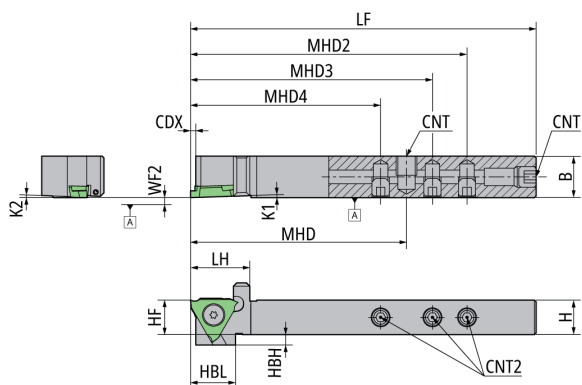


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	LE	CW	EPSR	IC	K3	PSIRR	REL	S	Carbide
			mm	mm	°	mm	°	°	mm	mm	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/Toolholder

## GTT-OH3 Coolant through (direct connect compatible)



● Diagram shows right-hand tool

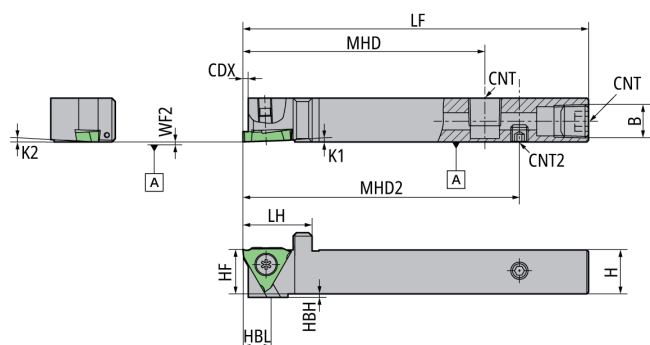
EDP	Item Number	Stock	Hand	B mm	CDX mm	CNT	CNT2	CW mm	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	MHD2 mm	MHD3 mm	MHD4 mm	WF2 mm	Insert	Gage	
5117734	GTTR1012H00-OH3	●	●	R	12	3	Rc1/8	M5	0.3-3	10	3	13	10	2	2	100	17.15	62.5	80	70	55	0	GT..32..	TBMH32..
5121330	GTTR16X00-OH3	●	●	R	16	3.65	Rc1/8	M5	0.3-3	16	-	-	16	2	2	120	20	78.75	100	87.5	70	0	GT..32..	TBMH32..

Back Turning  
**R**

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Screw (for CNT2)	Wrench (for Clamp screw)	Wrench (for CNT2)
GTTR1012H00-OH3	LR-S-4*10PW	SS0605SC	SS0505SC	CLR-15S	LW-2.5
GTTR16X00-OH3	LR-S-4*10PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5

## GTT-OH2 Coolant through (direct connect compatible)



● Diagram shows right-hand tool

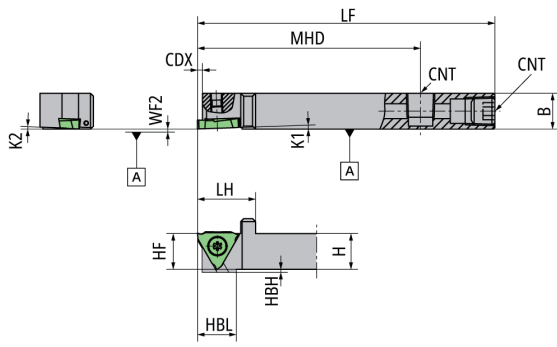
EDP	Item Number	Stock	Hand	B mm	CDX mm	CNT	CNT2	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	MHD2 mm	WF2 mm	Insert	Gage	
5035381	GTTR12H00-OH2	●	●	R	12	1.6	Rc1/8	M5	12	1	13	12	2	2	100	19.5	70	80	0	GT..32..	TBMH32..
5043997	GTTR16X00-OH2	●	●	R	16	1.6	Rc1/8	M5	16	-	-	16	2	2	120	19.5	70	100	0	GT..32..	TBMH32..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Screw (for CNT2)	Wrench (for Clamp screw)	Wrench (for CNT2)
GTTR12H00-OH2	LR-S-4*10PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5
GTTR16X00-OH2	LR-S-4*10PW	SPR1/8	SS0505SC	CLR-15S	LW-2.5



## GTTR-OH Coolant through

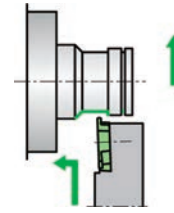
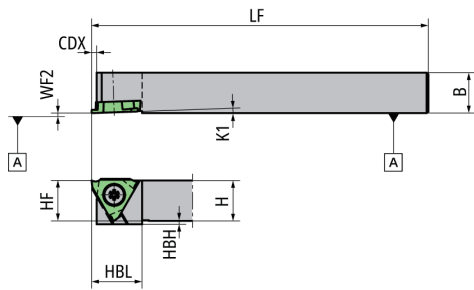


● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	CNT	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	LH mm	MHD mm	WF2 mm	Insert Gage
5921705	GTTR1012H00-OH	●	R	12	1.6	M6*1	10	1	13	10	2	2	100	19.5	70	0	GT..32.. TBMH32..
5890157	GTTR12H00-OH	●	R	12	1.6	Rc1/8	12	1	13	12	2	2	100	19.5	70	0	GT..32.. TBMH32..
5921713	GTTR16H00-OH	●	R	16	1.6	Rc1/8	16	-	-	16	2	2	100	19.5	70	0	GT..32.. TBMH32..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Wrench (for Clamp screw)
GTTR1012H00-OH	LR-S-4*10PW	SS0605SC	CLR-15S
GTTR12H00-OH	LR-S-4*10PW	SPR1/8	CLR-15S
GTTR16H00-OH	LR-S-4*10PW	SPR1/8	CLR-15S



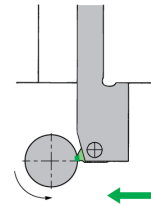
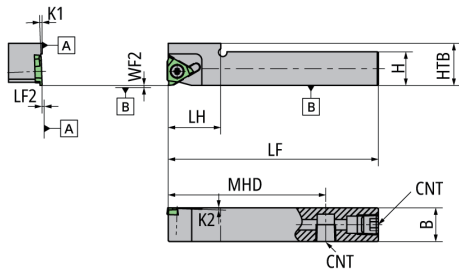
● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HBH mm	HBL mm	HF mm	K1 °	K2 °	LF mm	WF2 mm	Insert Gage
5608682	GTTR0810F00	●	R	10	1.6	8	5	15	8	2	2	80	0	GT..32.. TBMH32..
5608690	GTTR0810K00	●	R	10	1.6	8	5	15	8	2	2	120	0	GT..32.. TBMH32..
5107305	GTTR08F00	●	R	8	1.6	8	5	15	8	2	2	80	0	GT..32.. TBMH32..
5107206	GTTR08K00	●	R	8	1.6	8	5	15	8	2	2	120	0	GT..32.. TBMH32..
5107321	GTTR10F00	●	R	10	1.6	10	3	15	10	2	2	80	0	GT..32.. TBMH32..
5107362	GTTR10F15	●	R	10	2.7	10	3	15	10	2	2	80	0	GT..32.. TBMH32..
5107388	GTTR10F25	●	R	10	2.7	10	3	15	10	2	2	80	0	GT..32.. TBMH32..
5107222	GTTR10K00	●	R	10	1.6	10	3	15	10	2	2	120	0	GT..32.. TBMH32..
5107263	GTTR10K15	●	R	10	2.7	10	3	15	10	2	2	120	0	GT..32.. TBMH32..
5107289	GTTR10K25	●	R	10	2.7	10	3	15	10	2	2	120	0	GT..32.. TBMH32..
5107347	GTTR12F00	●	R	12	1.6	12	1	15	12	2	2	80	0	GT..32.. TBMH32..
5537220	GTTR12F15	●	R	12	2.7	12	1	15	12	2	2	80	0	GT..32.. TBMH32..
5537238	GTTR12F25	●	R	12	2.7	12	1	15	12	2	2	80	0	GT..32.. TBMH32..
5107248	GTTR12K00	●	R	12	1.6	12	1	15	12	2	2	120	0	GT..32.. TBMH32..
5537246	GTTR12K15	●	R	12	2.7	12	1	15	12	2	2	120	0	GT..32.. TBMH32..
5537253	GTTR12K25	●	R	12	2.7	12	1	15	12	2	2	120	0	GT..32.. TBMH32..
5459896	GTTR16H00	●	R	16	1.6	16	-	-	16	2	2	100	0	GT..32.. TBMH32..
5537261	GTTR16H15	●	R	16	2.7	16	-	-	16	2	2	100	0	GT..32.. TBMH32..
5537279	GTTR16H25	●	R	16	2.7	16	-	-	16	2	2	100	0	GT..32.. TBMH32..
5173687	GTTR16K00	●	R	16	1.6	16	-	-	16	2	2	120	0	GT..32.. TBMH32..
5537287	GTTR16K15	●	R	16	2.7	16	-	-	16	2	2	120	0	GT..32.. TBMH32..
5537295	GTTR16K25	●	R	16	2.7	16	-	-	16	2	2	120	0	GT..32.. TBMH32..
5530852	GTTR20K00	●	R	20	2.7	20	-	-	20	2	2	125	0	GT..32.. TBMH32..
5780309	GTTR25M00	●	R	25	2.7	25	-	-	25	2	2	150	0	GT..32.. TBMH32..
5107313	GTTL08F00	●	L	8	1.6	8	5	15	8	2	2	80	0	GT..32.. TBMH32..
5107214	GTTL08K00	●	L	8	1.6	8	5	15	8	2	2	120	0	GT..32.. TBMH32..
5107339	GTTL10F00	●	L	10	1.6	10	3	15	10	2	2	80	0	GT..32.. TBMH32..
5107370	GTTL10F15	●	L	10	2.7	10	3	15	10	2	2	80	0	GT..32.. TBMH32..
5107396	GTTL10F25	●	L	10	2.7	10	3	15	10	2	2	80	0	GT..32.. TBMH32..
5107230	GTTL10K00	●	L	10	1.6	10	3	15	10	2	2	120	0	GT..32.. TBMH32..
5107271	GTTL10K15	●	L	10	2.7	10	3	15	10	2	2	120	0	GT..32.. TBMH32..
5107297	GTTL10K25	●	L	10	2.7	10	3	15	10	2	2	120	0	GT..32.. TBMH32..
5107354	GTTL12F00	●	L	12	1.6	12	1	15	12	2	2	80	0	GT..32.. TBMH32..
5537147	GTTL12F15	●	L	12	2.7	12	1	15	12	2	2	80	0	GT..32.. TBMH32..
5537154	GTTL12F25	●	L	12	2.7	12	1	15	12	2	2	80	0	GT..32.. TBMH32..
5107255	GTTL12K00	●	L	12	1.6	12	1	15	12	2	2	120	0	GT..32.. TBMH32..
5537162	GTTL12K15	●	L	12	2.7	12	1	15	12	2	2	120	0	GT..32.. TBMH32..
5537170	GTTL12K25	●	L	12	2.7	12	1	15	12	2	2	120	0	GT..32.. TBMH32..
5551387	GTTL16H00	●	L	16	1.6	16	-	-	16	2	2	100	0	GT..32.. TBMH32..
5537188	GTTL16H15	●	L	16	2.7	16	-	-	16	2	2	100	0	GT..32.. TBMH32..
5537196	GTTL16H25	●	L	16	2.7	16	-	-	16	2	2	100	0	GT..32.. TBMH32..
5173679	GTTL16K00	●	L	16	1.6	16	-	-	16	2	2	120	0	GT..32.. TBMH32..
5537204	GTTL16K15	●	L	16	2.7	16	-	-	16	2	2	120	0	GT..32.. TBMH32..
5537212	GTTL16K25	●	L	16	2.7	16	-	-	16	2	2	120	0	GT..32.. TBMH32..
5780317	GTTL20K00	●	L	20	1.6	20	-	-	20	2	2	125	0	GT..32.. TBMH32..
5780291	GTTL25M00	●	L	25	1.6	25	-	-	25	2	2	150	0	GT..32.. TBMH32..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
GTTR0810F00	LR-S-4*10PW	CLR-15S
GTTR0810K00	LR-S-4*10PW	CLR-15S
GTTR08F00	LR-S-4*10PW	CLR-15S
GTTR08K00	LR-S-4*10PW	CLR-15S
GTTR10F00	LR-S-4*10PW	CLR-15S
GTTR10F15	LR-S-4*10PW	CLR-15S
GTTR10F25	LR-S-4*10PW	CLR-15S
GTTR10K00	LR-S-4*10PW	CLR-15S
GTTR10K15	LR-S-4*10PW	CLR-15S
GTTR10K25	LR-S-4*10PW	CLR-15S
GTTR12F00	LR-S-4*10PW	CLR-15S
GTTR12F15	LR-S-4*10PW	CLR-15S
GTTR12F25	LR-S-4*10PW	CLR-15S
GTTR12K00	LR-S-4*10PW	CLR-15S
GTTR12K15	LR-S-4*10PW	CLR-15S
GTTR12K25	LR-S-4*10PW	CLR-15S
GTTR16H00	LR-S-4*10PW	CLR-15S
GTTR16H15	LR-S-4*10PW	CLR-15S
GTTR16H25	LR-S-4*10PW	CLR-15S
GTTR16K00	LR-S-4*10PW	CLR-15S
GTTR16K15	LR-S-4*10PW	CLR-15S
GTTR16K25	LR-S-4*10PW	CLR-15S
GTTR20K00	LR-S-4*10PW	CLR-15S
GTTR25M00	LR-S-4*10PW	CLR-15S
GTTL08F00	LR-S-4*5.8	CLR-15S
GTTL08K00	LR-S-4*5.8	CLR-15S
GTTL10F00	LR-S-4*10PW	CLR-15S
GTTL10F15	LR-S-4*10PW	CLR-15S
GTTL10F25	LR-S-4*10PW	CLR-15S
GTTL10K00	LR-S-4*10PW	CLR-15S
GTTL10K15	LR-S-4*10PW	CLR-15S
GTTL10K25	LR-S-4*10PW	CLR-15S
GTTL12F00	LR-S-4*10PW	CLR-15S
GTTL12F15	LR-S-4*10PW	CLR-15S
GTTL12F25	LR-S-4*10PW	CLR-15S
GTTL12K00	LR-S-4*10PW	CLR-15S
GTTL12K15	LR-S-4*10PW	CLR-15S
GTTL12K25	LR-S-4*10PW	CLR-15S
GTTL16H00	LR-S-4*10PW	CLR-15S
GTTL16H15	LR-S-4*10PW	CLR-15S
GTTL16H25	LR-S-4*10PW	CLR-15S
GTTL16K00	LR-S-4*10PW	CLR-15S
GTTL16K15	LR-S-4*10PW	CLR-15S
GTTL16K25	LR-S-4*10PW	CLR-15S
GTTL20K00	LR-S-4*10PW	CLR-15S
GTTL25M00	LR-S-4*10PW	CLR-15S

## Y-GTT-OH Y-axis coolant through holders



· Diagram shows right-hand tool

NOTE: Use a right-handed (R) insert.

NOTE: There is a risk of interference with the Y-axis holder depending on the combination of the maximum workpiece diameter and machining diameter.

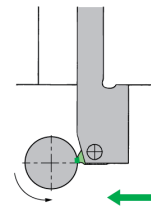
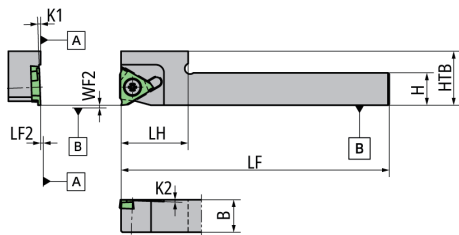
→O26

EDP	Item Number	Stock	Hand	B mm	CNT	H mm	HTB mm	K1 °	K2 °	LF mm	LF2 mm	LH mm	MHD mm	WF2 mm	Insert Gage	
5911466	Y-GTTR12H00S-OH	●	R	12	Rc1/8	12	20	2	2	100	0	20	75	0	GT..32..	TBMH32..
5911474	Y-GTTR16H00-OH	●	R	16	Rc1/8	16	20	2	2	100	0	25	75	0	GT..32..	TBMH32..

## Spare Parts

Item Number	Clamp screw	Screw (for CNT)	Wrench (for Clamp screw)
Y-GTTR12H00S-OH	LR-S-4*10PW	SPR1/8	CLR-15S
Y-GTTR16H00-OH	LR-S-4*10PW	SPR1/8	CLR-15S

## Y-GTT Y-axis



· Diagram shows right-hand tool

NOTE: Use a right-handed (R) insert.

NOTE: There is a risk of interference with the Y-axis holder depending on the combination of the maximum workpiece diameter and machining diameter.

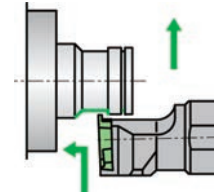
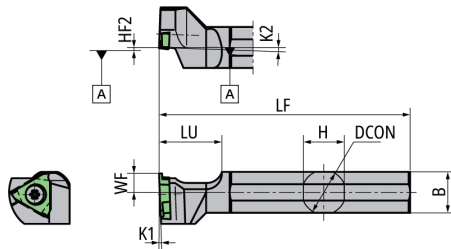
→O26

EDP	Item Number	Stock	Hand	B mm	H mm	HTB mm	K1 °	K2 °	LF mm	LF2 mm	LH mm	WF2 mm	Insert Gage	
5950415	Y-GTTR10MS	●	R	10	10	20	2	2	120	0	22	0	GT..32..	TBMH32..
5371604	Y-GTTR10S	●	R	10	10	20	2	2	120	0	20	0	GT..32..	TBMH32..
5950472	Y-GTTR12MS	●	R	12	12	20	2	2	120	0	22	0	GT..32..	TBMH32..
5371620	Y-GTTR12S	●	R	12	12	20	2	2	120	0	20	0	GT..32..	TBMH32..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
Y-GTTR10MS	LR-S-4*10PW	CLR-15S
Y-GTTR10S	LR-S-4*10PW	CLR-15S
Y-GTTR12MS	LR-S-4*10PW	CLR-15S
Y-GTTR12S	LR-S-4*10PW	CLR-15S

## DS-GTT DS Toolholders



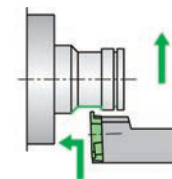
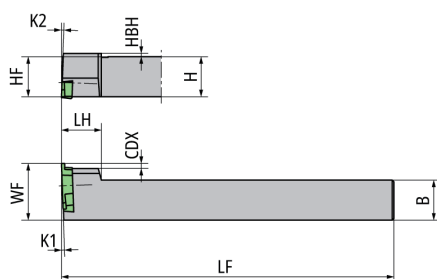
• Diagram shows left-hand tool  
NOTE: Use a right-handed (R) insert.

EDP	Item Number	Stock	Hand	B mm	DCON mm	H mm	HF2 mm	K1 °	K2 °	LF mm	LU mm	WF mm	Insert Gage	
5348560	DS-GTTL14F	●	L	13	14	13	0	2	2	80	19	6	GT..32..	TBMH32..
5348081	DS-GTTL15H	●	L	15	15.875	15	0	2	2	100	19	6	GT..32..	TBMH32..
5341532	DS-GTTL16X	●	L	15	16	15	0	2	2	95	19	6	GT..32..	TBMH32..
5278288	DS-GTTL19	●	L	18	19.05	18	0	2	2	120	19	6	GT..32..	TBMH32..
5278304	DS-GTTL20	●	L	19	20	19	0	2	2	120	19	6	GT..32..	TBMH32..
5324041	DS-GTTL22	●	L	21	22	21	0	2	2	120	19	6	GT..32..	TBMH32..
5317144	DS-GTTL25	●	L	24	25.4	24	0	2	2	120	19	10	GT..32..	TBMH32..
5483433	DS-GTTL25-MET	●	L	24	25	24	0	2	2	150	19	10	GT..32..	TBMH32..
5937693	DS-GTTL32	●	L	30	32	30	0	2	2	150	19	10	GT..32..	TBMH32..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
DS-GTTL14F	LR-S-4*9	RLR-20S
DS-GTTL15H	LR-S-4*9	RLR-20S
DS-GTTL16X	LR-S-4*9	RLR-20S
DS-GTTL19	LR-S-4*9	RLR-20S
DS-GTTL20	LR-S-4*9	RLR-20S
DS-GTTL22	LR-S-4*9	RLR-20S
DS-GTTL25	LR-S-4*9	RLR-20S
DS-GTTL25-MET	LR-S-4*9	RLR-20S
DS-GTTL32	LR-S-4*9	RLR-20S

## CH-GTT for horizontal gang style tool post



• Diagram shows left-hand tool  
NOTE: Use a right-handed (R) insert.

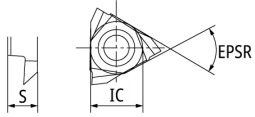
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HBH mm	HF mm	K1 °	K2 °	LF mm	LH mm	WF mm	Insert Gage	
5659248	CH-GTTL10H00	●	L	10	1.5	10	3	10	2	2	100	12	15	GT..32..	TBMH32..
5659255	CH-GTTL12H00	●	L	12	1.5	12	1	12	2	2	100	12	17	GT..32..	TBMH32..
5960836	CH-GTTL16H00	●	L	16	1.5	16	-	16	2	2	100	12	21	GT..32..	TBMH32..

## Spare Parts

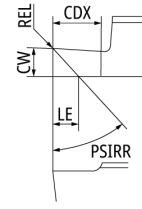
Item Number	Clamp screw	Wrench (for Clamp screw)
CH-GTTL10H00	LR-S-4*9	RLR-20S
CH-GTTL12H00	LR-S-4*9	RLR-20S
CH-GTTL16H00	LR-S-4*9	RLR-20S

# TBMH.. series/Inserts Carbide

## TBMH



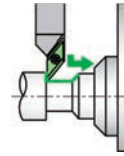
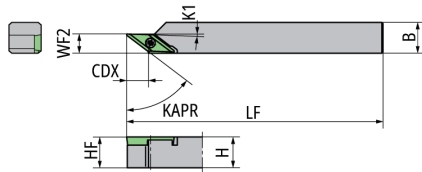
● Diagram shows right-hand tool



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



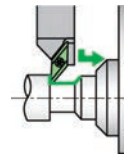
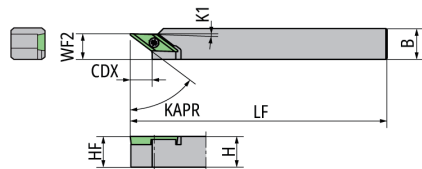
● Diagram shows right-hand tool

EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HF mm	KAPR °	K1 °	LF mm	WF2 mm	Insert Gage
5204953	TBVCR10	●	R	10	8.5	10	10	53	2	120	7.5	TBVC11FR.. VC..1103..
5204946	TBVCR12	●	R	12	8.5	12	12	53	2	120	7.5	TBVC11FR.. VC..1103..
5204920	TBVCR16	●	R	16	8.5	16	16	53	2	120	7.5	TBVC11FR.. VC..1103..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
TBVCR10	LRIS-2.5*7	CLR-15S
TBVCR12	LRIS-2.5*7	CLR-15S
TBVCR16	LRIS-2.5*7	CLR-15S

## TBVC-F For Steel



● Diagram shows right-hand tool

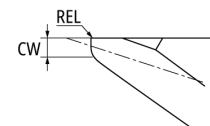
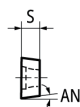
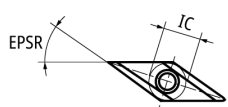
EDP	Item Number	Stock	Hand	B mm	CDX mm	H mm	HF mm	KAPR °	K1 °	LF mm	WF2 mm	Insert Gage
5344254	TBVCR10-F10	●	R	10	8.5	10	10	53	2	120	10	TBVC11FR.. VC..1103..
5344262	TBVCR12-F10	●	R	12	8.5	12	12	53	2	120	10	TBVC11FR.. VC..1103..
5459797	TBVCR12GX-F10	●	R	12	8.5	12	12	53	2	85	10	TBVC11FR.. VC..1103..
5344270	TBVCR16-F10	●	R	16	8.5	16	16	53	2	120	10	TBVC11FR.. VC..1103..
5459805	TBVCR16H-F10	●	R	16	8.5	16	16	53	2	100	10	TBVC11FR.. VC..1103..
5459565	TBVCR20F-F10	●	R	20	8.5	20	20	53	2	80	10	TBVC11FR.. VC..1103..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
TBVCR10-F10	LRIS-2.5*7	CLR-15S
TBVCR12-F10	LRIS-2.5*7	CLR-15S
TBVCR12GX-F10	LRIS-2.5*7	CLR-15S
TBVCR16-F10	LRIS-2.5*7	CLR-15S
TBVCR16H-F10	LRIS-2.5*7	CLR-15S
TBVCR20F-F10	LRIS-2.5*7	CLR-15S

# TBVC.. series/Inserts Carbide

## TBVC..

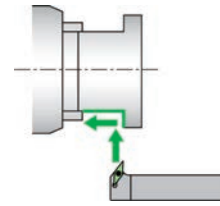
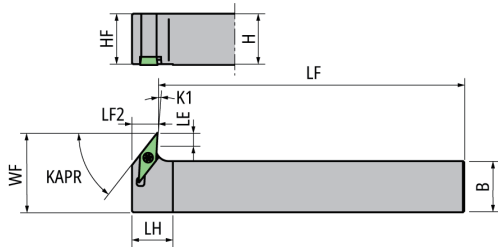


● Diagram shows right-hand tool

Item Number	Hand	Chip-breaker	AN °	CW mm	EPSR °	IC mm	REL mm	S mm	Carbide PVD	
									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	●	●

# VC.. series/Toolholder

## CH-SVXC for horizontal gang style tool post



● Diagram shows left-hand tool

NOTE: Use a right-handed (R) or non-handed insert.

EDP	Item Number	Stock	Hand	B mm	H mm	HF mm	KAPR °	K1 °	LE mm	LF mm	LF2 mm	LH mm	WF mm	Insert Gage
5890637	CH-SVXCL1616X11	●	L	16	16	16	52	3	7	120	10	16	27	VC..1103..
5890645	CH-SVXCL2020X11	●	L	20	20	20	52	3	7	120	10	16	31	VC..1103..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
CH-SVXCL1616X11	LRIS-2.5*7	CLR-15S
CH-SVXCL2020X11	LRIS-2.5*7	CLR-15S



# VC.. series/Inserts Carbide

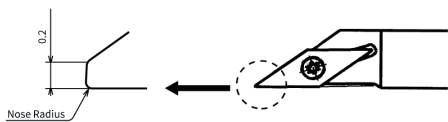
## VC..



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 KM1
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	CVD	CVD			
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7						
	VCGT110301MYL	Up-sharp edge	35	6.35	3.18	7	0.08	-	●	●	●	●	●										
	VCGT110302MYL	Up-sharp edge	35	6.35	3.18	7	0.18	-	●	●	●	●	●										
	VCGT110304MYL	Up-sharp edge	35	6.35	3.18	7	0.38	-	●	●	●	●	●										
	VCGT110202MCL	Up-sharp edge	35	6.35	2.38	7	0.18	-		●	●	●	●	●									
	VCGT110301MCL	Up-sharp edge	35	6.35	3.18	7	0.08	-	●	●	●	●	●										
	VCGT110302MCL	Up-sharp edge	35	6.35	3.18	7	0.18	-	●	●	●	●	●										
	VCGT110300FNAM3	Up-sharp edge	35	6.35	3.18	7	0.03	-			●			●	●								
	VCGT110301MFNAM3	Up-sharp edge	35	6.35	3.18	7	0.08	-	●		●	●	●	●	●								
	VCGT110301FNAM3	Up-sharp edge	35	6.35	3.18	7	0.1	-				●	●	●	●			●	●				
	VCGT110302MFNAM3	Up-sharp edge	35	6.35	3.18	7	0.18	-	●		●	●	●	●	●								
	VCGT110302FNAM3	Up-sharp edge	35	6.35	3.18	7	0.2	-								●	●						
	VCGT110304MFNAM3	Up-sharp edge	35	6.35	3.18	7	0.38	-	●		●	●	●	●	●								
	VCGT110302FNAM3	Up-sharp edge	35	6.35	3.18	7	0.2	-			●												
	VCGT110304FNAM3	Up-sharp edge	35	6.35	3.18	7	0.4	-			●												
	VCGT110300AZ7	Up-sharp edge	35	6.35	3.18	7	0.03	-				●							●				
	VCGT110301MAZ7	Up-sharp edge	35	6.35	3.18	7	0.08	-				●							●				
	VCGT110302MAZ7	Up-sharp edge	35	6.35	3.18	7	0.18	-				●							●				
	VCGT110304MAZ7	Up-sharp edge	35	6.35	3.18	7	0.38	-				●							●				
	VCGT110300RU	Up-sharp edge	35	6.35	3.18	7	0.03	-											●	●			
	VCGT110301MRU	Up-sharp edge	35	6.35	3.18	7	0.08	-				●							●	●			
	VCGT110301RU	Up-sharp edge	35	6.35	3.18	7	0.1	-											●	●			
	VCGT110302MRU	Up-sharp edge	35	6.35	3.18	7	0.18	-				●							●	●			
	VCGT110302RU	Up-sharp edge	35	6.35	3.18	7	0.2	-											●	●			
	VCET1103008RUHG	Up-sharp edge	35	6.35	3.18	7	0.08	-											●				
	VCGT1103005RU-WP	Up-sharp edge	35	6.35	3.18	7	0.05 (0.2)												●	●			
	VCGT110301RU-WP	Up-sharp edge	35	6.35	3.18	7	0.1 (0.2)												●	●			
	VCGT1103005RSX-WP	Ⓜ Up-sharp edge	35	6.35	3.18	7	0.05 (0.2)												●	●			
	VCGT110301RSX-WP	Ⓜ Up-sharp edge	35	6.35	3.18	7	0.1 (0.2)												●	●			
	VCGW110300H	Ⓜ Up-sharp edge	35	6.35	3.18	7	0.03	-														●	
	VCGW110301H	Ⓜ Up-sharp edge	35	6.35	3.18	7	0.1	-														●	
	VCGW110302H	Ⓜ Up-sharp edge	35	6.35	3.18	7	0.2	-														●	

## Features of VCGT-WP insert



NTK WP style inserts have a wiper facet design.

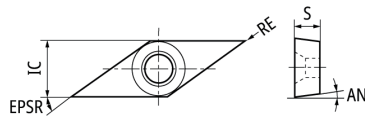
The insert has a 0.2mm flat on the cutting edge when the insert is set into the toolholder.

The flat on the cutting edge ensures a superior surface when feed rates are increased.

WP style inserts can be used in toolholders: SVAC

# VC.. series/Inserts CBN

## VCGW



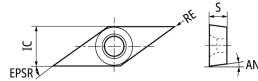
Steel
Stainless Steel
Cast Iron ● ● ● ● ○ ○
Non-Ferrous Material
Heat Resistant Alloy
Hardened Material ● ● ● ● ●
Others (non-metallic)

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	D2 mm	Length of edge	No. of edge	S1 mm	CBN						
												B16 PVD	B22	B23	B30	B36	B6K PVD	B40
	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

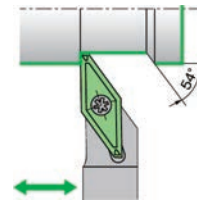
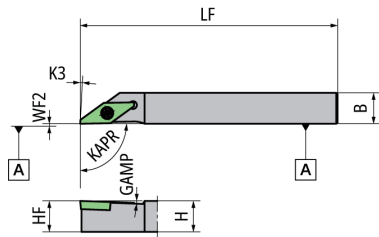


Steel
Stainless Steel
Cast Iron
Non-Ferrous Material ● ● ●
Heat Resistant Alloy
Hardened Material
Others (non-metallic) ●

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	No. of edge	PCD		Diamond Coating
									PD1	PD2	UC1
	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	●		

# VC..2M series/Toolholder

## SVAC-NW for Front and Back Turning



● Diagram shows right-hand tool

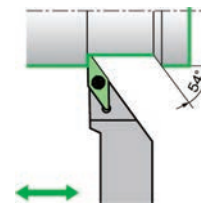
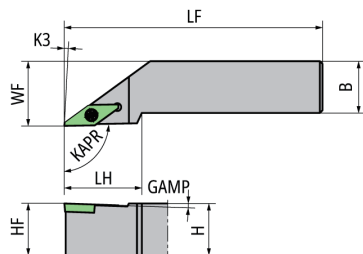
EDP	Item Number	Stock	Hand	B mm	GMAP °	H mm	HF mm	KAPR °	K3 °	LF mm	WF2 mm	Insert Gage
5401724	SVACR1010L13NW	●	R	10	1	10	10	91	3	140	0	VC..1303..2M
5401732	SVACR1212L13NW	●	R	12	1	12	12	91	3	140	0	VC..1303..2M
5401740	SVACR1616M13NW	●	R	16	1	16	16	91	3	140	0	VC..1303..2M
5401708	SVACL1010L13NW	●	L	10	1	10	10	91	3	140	0	VC..1303..2M
5401716	SVACL1212L13NW	●	L	12	1	12	12	91	3	140	0	VC..1303..2M
5431077	SVACL1616M13NW	●	L	16	1	16	16	91	3	140	0	VC..1303..2M

R  
Back Turning

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
SVACR1010L13NW	LRIS-3*8	RLR-20S
SVACR1212L13NW	LRIS-3*8	RLR-20S
SVACR1616M13NW	LRIS-3*8	RLR-20S
SVACL1010L13NW	LRIS-3*8	RLR-20S
SVACL1212L13NW	LRIS-3*8	RLR-20S
SVACL1616M13NW	LRIS-3*8	RLR-20S

## SVAC-W for Front and Back Turning



● Diagram shows right-hand tool

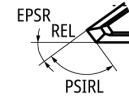
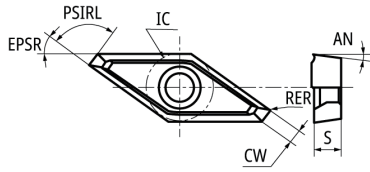
EDP	Item Number	Stock	Hand	B mm	GMAP °	H mm	HF mm	KAPR °	K3 °	LF mm	LH mm	WF mm	Insert Gage
5474549	SVACR2020M13W	●	R	20	1	20	20	91	3	150	30	25	VC..1303..2M

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
SVACR2020M13W	LRIS-3*8	RLR-20S

# VC..2M series/Inserts Carbide

## VC..2M



Left-hand

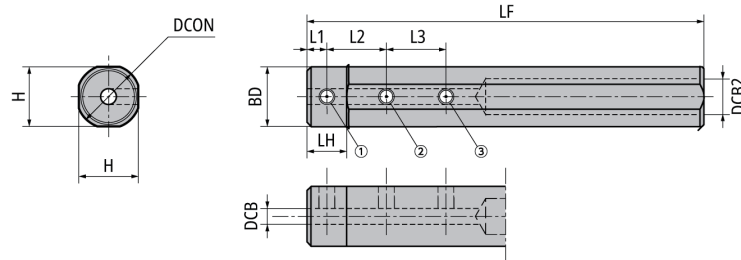
● Diagram shows right-hand tool

Item Number (ISO)	AN °	CW mm	EPSR °	IC mm	PSIRL °	REL mm	RER mm	Carbide PVD DM4
VCGT130300FL2M	7	1.5	35	7.94	94	0	-	●
VCGT130300FR2M	7	1.5	35	7.94	-	-	0	●
VCGT130301FL2M	7	1.5	35	7.94	94	0.1	-	●
VCGT130301FR2M	7	1.5	35	7.94	-	-	0.1	●

# ID Back Turning STICK DUO

## SBB.. series/Sleeve

■ NBH Shank diameter  $\Phi 15.875 - \Phi 19.05$



EDP	Item Number	Stock	Hand	BD mm	DCB mm	DCB2 mm	DCON mm	H mm	LF mm	LH mm	L1 mm	L2 mm	L3 mm	Insert Gage
5631411	NBH03015H	●	N	15	3	9	15.875	15	100	10	5	10	10	SBF../SHF../SBB.. SBG../SBT../SSP..
5586128	NBH04015H	●	N	15	4	9	15.875	15	100	10	5	15	15	SBF../SHF../SBB.. SBG../SBT../SSP..
5631437	NBH03016H	●	N	15	3	9	16	15	100	10	5	10	10	SBF../SHF../SBB.. SBG../SBT../SSP..
5586094	NBH04016H	●	N	15	4	9	16	15	100	10	5	15	15	SBF../SHF../SBB.. SBG../SBT../SSP..
5631452	NBH03019K	●	N	18	3	11	19.05	18	125	10	5	10	10	SBF../SHF../SBB.. SBG../SBT../SSP..
5586037	NBH04019K	●	N	18	4	11	19.05	18	125	10	5	15	15	SBF../SHF../SBB.. SBG../SBT../SSP..

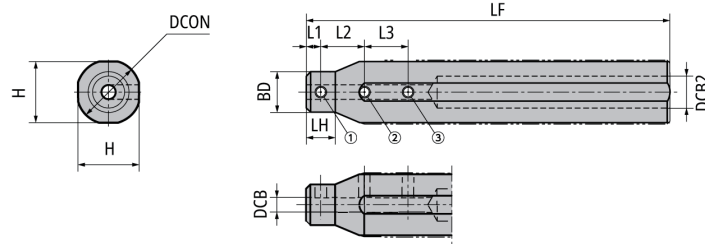
## ■ Spare Parts

Item Number	Clamp screw			Wrench (for Clamp screw)
	①	②	③	①②
NBH03015H	SS0404F	SS0404F	SS0404F	LW-2
NBH04015H	SS0404F	SS0404F	SS0404F	LW-2
NBH03016H	SS0404F	SS0404F	SS0404F	LW-2
NBH04016H	SS0404F	SS0404F	SS0404F	LW-2
NBH03019K	SS0406F	SS0406F	SS0406F	LW-2
NBH04019K	SS0406F	SS0406F	SS0406F	LW-2

# ID Back Turning STICK DUO

## SBB.. series/Sleeve

■ NBH Shank diameter  $\Phi 20 - \Phi 32$



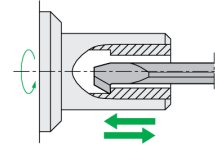
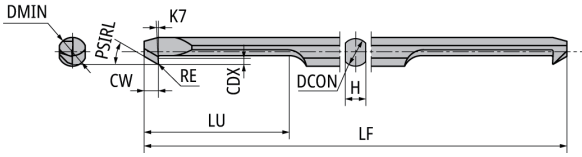
EDP	Item Number	Stock	Hand	BD mm	DCB mm	DCB2 mm	DCON mm	H mm	LF mm	LH mm	L1 mm	L2 mm	L3 mm	Insert Gage	
5631478	NBH03020K	●	N	12	3	11	20	19	125	10	5	10	10	SBF../SHF../SBB..	SBG../SBT../SSP..
5586185	NBH04020K	●	N	13	4	11	20	19	125	10	5	15	15	SBF../SHF../SBB..	SBG../SBT../SSP..
5631494	NBH03022K	●	N	12	3	11	22	21	125	10	5	10	10	SBF../SHF../SBB..	SBG../SBT../SSP..
5586318	NBH04022K	●	N	13	4	11	22	21	125	10	5	15	15	SBF../SHF../SBB..	SBG../SBT../SSP..
5631528	NBH03023K	●	N	12	3	11	23	21	125	10	5	10	10	SBF../SHF../SBB..	SBG../SBT../SSP..
5651336	NBH04023K	●	N	13	4	11	23	21	125	10	5	15	15	SBF../SHF../SBB..	SBG../SBT../SSP..
5631593	NBH03025K-MET	●	N	12	3	11	25	24	125	10	5	10	10	SBF../SHF../SBB..	SBG../SBT../SSP..
5651328	NBH04025K-MET	●	N	13	4	11	25	24	125	10	5	15	15	SBF../SHF../SBB..	SBG../SBT../SSP..
5631684	NBH03025K	●	N	12	3	11	25.4	24	125	10	5	10	10	SBF../SHF../SBB..	SBG../SBT../SSP..
5586383	NBH04025K	●	N	13	4	11	25.4	24	125	10	5	15	15	SBF../SHF../SBB..	SBG../SBT../SSP..

## ■ Spare Parts

Item Number	Clamp screw			Wrench (for Clamp screw)
	①	②	③	①②
NBH03020K	SS0404F	SS0404F	SS0406F	LW-2
NBH04020K	SS0404F	SS0406F	SS0406F	LW-2
NBH03022K	SS0404F	SS0406F	SS0408F	LW-2
NBH04022K	SS0404F	SS0406F	SS0406F	LW-2
NBH03023K	SS0404F	SS0406F	SS0408F	LW-2
NBH04023K	SS0404F	SS0406F	SS0406F	LW-2
NBH03025K-MET	SS0404F	SS0406F	SS0408F	LW-2
NBH04025K-MET	SS0404F	SS0408F	SS0408F	LW-2
NBH03025K	SS0404F	SS0406F	SS0408F	LW-2
NBH04025K	SS0404F	SS0408F	SS0408F	LW-2

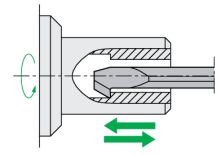
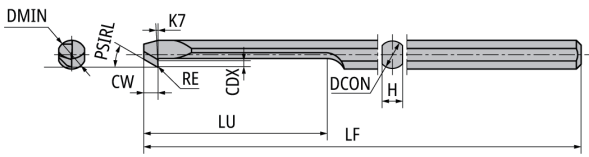
# SBB.. series/Insert bar Carbide for ID Back Turning

## 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

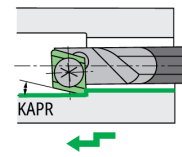
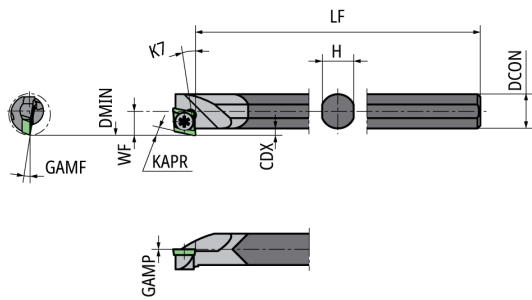


Item Number	Hand	Chip-breaker	DMIN	CDX	CW	DCON	H	K7	LF	LU	PSIRL	RE	WF	Carbide PVD ZM3
			mm	mm	mm	mm	mm	°	mm	mm	°	mm	mm	
SBB030RB005	R	Yes	3	0.5	1.5	3	2.7	3	50	19	30	0.05	1.3	●
SBB030RB010	R	Yes	3	0.5	1.5	3	2.7	3	50	19	30	0.1	1.3	●
SBB040RB005	R	Yes	4	0.8	1.5	4	3.6	3	60	24	30	0.05	1.8	●
SBB040RB015	R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

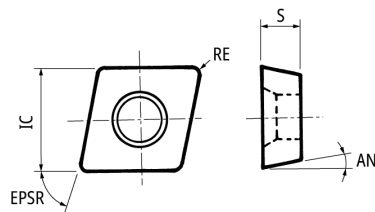


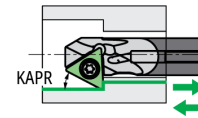
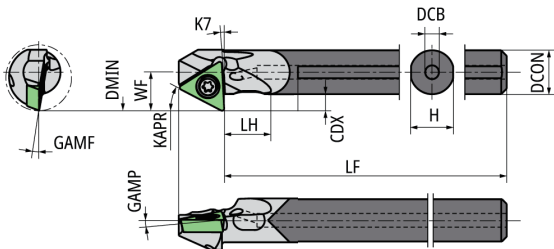
Figure	Item Number	Hand	Chip-breaker	AN °	EPSR °	IC mm	RE mm	S mm	Carbide PVD			
									QM3	ST4	TM4	ZM3
1	MBL005FL	L	Yes	9	75	3.6	0.05	1	●		●	●
1	MBL015FL	L	Yes	9	75	3.6	0.15	1	●		●	●
2	MBL005FRF1	R	Yes	9	75	3.6	0.05	1	●	●	●	
2	MBL015FRF1	R	Yes	9	75	3.6	0.15	1	●	●	●	



# ID Back Turning

## TP.. series/Toolholder

### C-STZP-OH Mogul Bar Coolant through Carbide shank



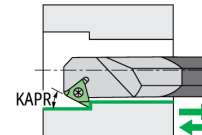
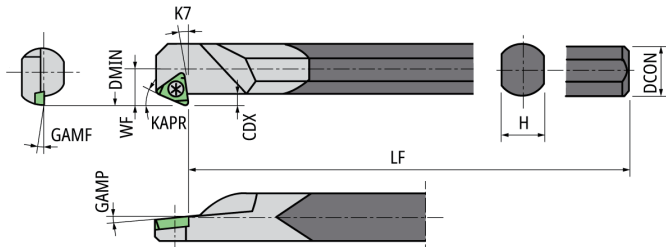
- Diagram shows right-hand tool
- Use right-hand inserts for machining backward
- Use left-hand inserts for machining forward

EDP	Item Number	Stock	Hand	DMIN mm	CDX mm	DCB mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	LH mm	RE mm	WF mm	Insert Gage
5842869	C08K-STZPR09D12-OH	●	R	12	3	2.5	8	10	5	7.7	27	125	8.5	0.4	7	TP..0902..
5842877	C10M-STZPR09D14-OH	●	R	14	3	2.5	10	7	5	9.6	27	150	12	0.4	8	TP..0902..
5842885	C12M-STZPR11D175-OH	●	R	17.5	4.5	3	12	5	5	11.5	27	150	14.5	0.4	10.5	TP..1103..

### Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
C08K-STZPR09D12-OH	LR-S-2.5*4.8	CLR-15S
C10M-STZPR09D14-OH	LR-S-2.5*4.8	CLR-15S
C12M-STZPR11D175-OH	LR-S-3*5.8	RLR-20S

### B-STZP-N Carbide shank



- Diagram shows right-hand tool
- Use right-hand inserts for machining backward
- Use left-hand inserts for machining forward

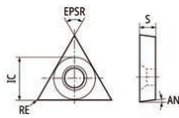
EDP	Item Number	Stock	Hand	DMIN mm	CDX mm	DCB mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	LH mm	RE mm	WF mm	Insert Gage
5852801	B12Q-STZPR-09-N	●	R	16	3	-	12	5	5	11	27	180	-	0.2	9	TP..0902..

### Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
B12Q-STZPR-09-N	LR-S-2.5*6.8	CLR-15S

# TP.. series/Inserts Carbide

## TPGH



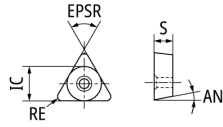
Steel	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Stainless Steel	●	○	○	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●	
Cast Iron																					●	
Non-Ferrous Material																						●
Heat Resistant Alloy																						●
Hardened Material																						●
Others (non-metallic)									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

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	BS mm	Carbide											Uncoated KM1			
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD		CVD	CVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7						
	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**

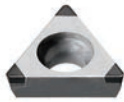
# TP.. series/Inserts CBN

## TPGW



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

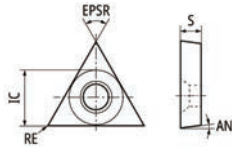
Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	D2 mm	Length of edge	No. of edge	S1 mm	CBN									
												PVD									
												B16	B22	B23	B30	B36	B6K	B40	B52	B5K	
	TPGW090202PTS01015	S01015	60	5.56	2.38	11	0.2	-	2.2	3	-						●		●		
	TPGW090202PTS01325	S01325	60	5.56	2.38	11	0.2	-	2.2	3	-						●		●		
	TPGW090202PTS01535	S01535	60	5.56	2.38	11	0.2	-	2.2	3	-						●		●		
	TPGW090204PTS01015	S01015	60	5.56	2.38	11	0.4	-	2	3	-						●		●		
	TPGW090204PTS01325	S01325	60	5.56	2.38	11	0.4	-	2	3	-						●		●		
	TPGW090204PTS01535	S01535	60	5.56	2.38	11	0.4	-	2	3	-						●		●		
	TPGW090208PTS01015	S01015	60	5.56	2.38	11	0.8	-	1.7	3	-						●		●		
	TPGW090208PTS01325	S01325	60	5.56	2.38	11	0.8	-	1.7	3	-						●		●		
	TPGW090208PTS01535	S01535	60	5.56	2.38	11	0.8	-	1.7	3	-						●		●		
	TPGW110302PTS01015	S01015	60	6.35	3.18	11	0.2	-	2.2	3	-						●		●		
	TPGW110302PTS01325	S01325	60	6.35	3.18	11	0.2	-	2.2	3	-						●		●		
	TPGW110302PTS01535	S01535	60	6.35	3.18	11	0.2	-	2.2	3	-						●		●		
	TPGW110302PTT01020	T01020	60	6.35	3.18	11	0.2	-	2.2	3	-						●				
	TPGW110304PTS01015	S01015	60	6.35	3.18	11	0.4	-	2	3	-						●		●		●
	TPGW110304PTS01325	S01325	60	6.35	3.18	11	0.4	-	2	3	-						●		●		●
	TPGW110304PTS01535	S01535	60	6.35	3.18	11	0.4	-	2	3	-						●		●		●
	TPGW110304PTT01020	T01020	60	6.35	3.18	11	0.4	-	2	3	-						●				
	TPGW110304PTT01515	T01515	60	6.35	3.18	11	0.4	-	2	3	-						●	●			
	TPGW110308PTS01015	S01015	60	6.35	3.18	11	0.8	-	1.7	3	-						●		●		●
	TPGW110308PTS01325	S01325	60	6.35	3.18	11	0.8	-	1.7	3	-						●		●		●
	TPGW110308PTS01535	S01535	60	6.35	3.18	11	0.8	-	1.7	3	-						●		●		●
	TPGW110308PTT01020	T01020	60	6.35	3.18	11	0.8	-	1.7	3	-						●				
	TPGW110308PTT01515	T01515	60	6.35	3.18	11	0.8	-	1.7	3	-						●				
	TPGW110312PTS01015	S01015	60	6.35	3.18	11	1.2	-	2.3	3	-								●		●
	TPGW110312PTS01325	S01325	60	6.35	3.18	11	1.2	-	2.3	3	-								●		●
	TPGW110312PTS01535	S01535	60	6.35	3.18	11	1.2	-	2.3	3	-								●		●
	TPGW110312PTT01020	T01020	60	6.35	3.18	11	1.2	-	2.3	3	-						●				
	TPGW110312PTT01515	T01515	60	6.35	3.18	11	1.2	-	2.3	3	-						●				



R Back Turning

# TP.. series/Inserts PCD / Diamond Coating

## TPM.



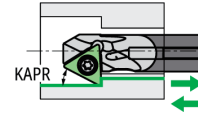
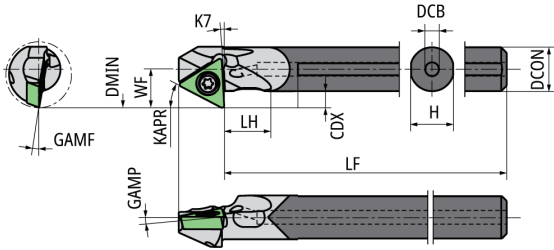
Steel		
Stainless Steel		
Cast Iron		
Non-Ferrous Material	●	●
Heat Resistant Alloy		
Hardened Material		
Others (non-metallic)		●

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	No. of edge	PCD		Diamond Coating
									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

# ID Back Turning TC.. series/Toolholder

## C-STZC-OH Mogul Bar Coolant through Carbide shank



- Diagram shows right-hand tool
- Use right-hand inserts for machining backward
- Use left-hand inserts for machining forward

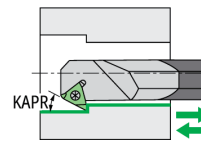
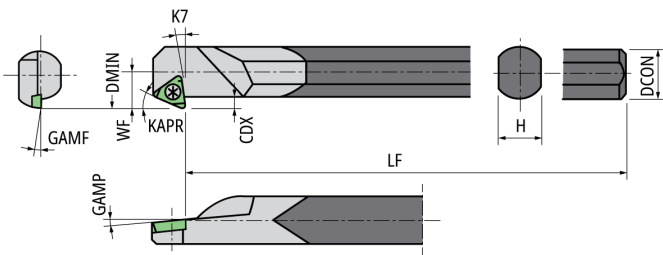
EDP	Item Number	Stock	Hand	DMIN mm	CDX mm	DCB mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	LH mm	RE mm	WF mm	Insert Gage
5842851	C06H-STZCR06D10-OH		R	10	2.5	2	6	10	0	5.8	27	100	6	0.2	5.5	TC..0601..

R  
Back Turning

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
C06H-STZCR06D10-OH	LR-S-2*4.4	CLR-13S

## B-STZC-N Carbide shank



- Diagram shows right-hand tool
- Use right-hand inserts for machining backward
- Use left-hand inserts for machining forward

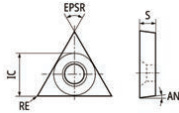
EDP	Item Number	Stock	Hand	DMIN mm	CDX mm	DCON mm	GAMF °	GMAP °	H mm	KAPR °	LF mm	RE mm	WF mm	Insert Gage
5852819	B06J-STZCR-06-N		R	10	2.5	6	10	0	5.2	27	110	0.2	5.5	TC..0601..

## Spare Parts

Item Number	Clamp screw	Wrench (for Clamp screw)
B06J-STZCR-06-N	LR-S-2*4.4	CLR-13S

# 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	CVD	CVD		
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1		
(ISO)	°	mm	mm	°	mm	mm														
	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**