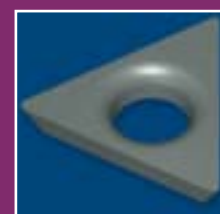




BORING INSERTS

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VarDEX Ordering Code System PowerBore Insert

T	D	0	W	41	14	VTX
1	2	3	4	5	6	7

1 - Insert shape

C - Diamond 80 deg.
T - Triangle
W - Trigon 80 deg.

2 - Clearance Angle

C - 7 deg.
D - 15 deg.

3 - Tolerance Class

0 - Special Tolerance Class

4 - Insert Type

W - Hole + Countersink

5 - Insert Dimension

40-IC 0.156" - Thickness-1.02mm
41-IC 0.160" - Thickness-1.19mm
42-IC 0.156" - Thickness-1.57mm
50-IC 0.187" - Thickness-2.44mm

6 - Corner Radius

11- R 0.05
12- R 0.18
13- R 0.20
14- R 0.38

7 - Carbide Grade

VTX

VarDEX Ordering Code System Micro Boring Insert

6.0	S	I	R	0.2	M		Bore		1	VMX	1-Side
1	2	3	4	5	6		7		8	9	10

1 - Insert Dia.

3.0
4.0
6.0
8.0
10.0

2 - Tool Group

S - Solid Carbide

3 - Type of Insert

I - Internal

4 - Hand of Insert

R - Right Hand Insert
L - Left Hand Insert

5 - Corner Radius

0.2

6 - Tool Length

S - Short
M - Medium
L - Long

7 - Tool Application

Bore
Copy
Chamfer
Back
3527, 3537, 3547-Long Nose
BD_Bore Drill

8 - Front Relief

1 - With Relief
0 - Without Relief

9 - Carbide Grade

VMX

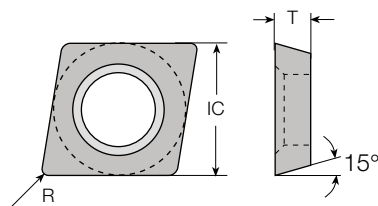
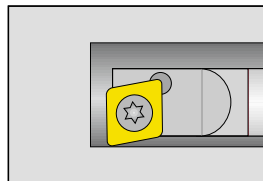
10 - Micro Ended

1-Side - Single Ended
None - Double Ended



Power Bore

Internal



CD0W inserts for Series A Toolholders

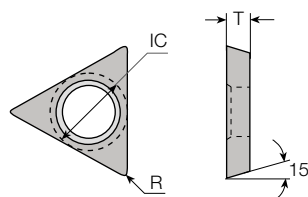
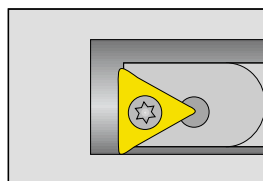
CD0W Inserts for Series A Toolholders



Insert Size	Ordering Code	Dimensions [mm]		Insert Screw 
IC		R	T	
.156"	CD0W4011...	0.05	1.02	VS01
	CD0W4012...	0.18	1.02	
	CD0W4014...	0.38	1.02	

Power Bore

Internal



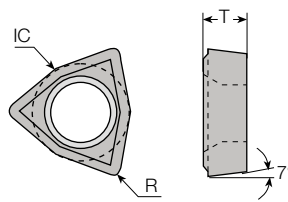
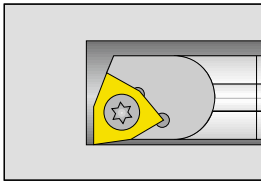
TD0W inserts for Series B Toolholders

TD0W Inserts for Series B Toolholders



Insert Size	Ordering Code	Dimensions [mm]		Insert Screw 
IC		R	T	
.160"	TD0W4111...	0.05	1.19	VS01, VS40
	TD0W4112...	0.18	1.19	
	TD0W4114...	0.38	1.19	

Internal



WC0W inserts for Series E Toolholders

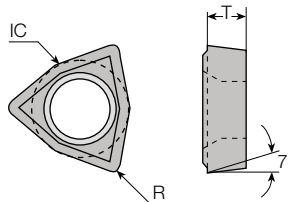
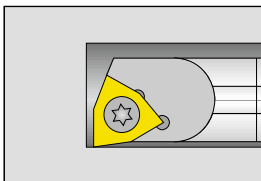
WC0W Inserts for Series E Toolholders



Insert Size	Ordering Code	Dimensions mm		Insert Screw 
IC		R	T	
.156"	WC0W4213...	0.20	1.57	VS40
	WC0W4214...	0.38	1.57	

Power Bore

Internal



WC0W inserts for Series F Toolholders

WC0W Inserts for Series F Toolholders

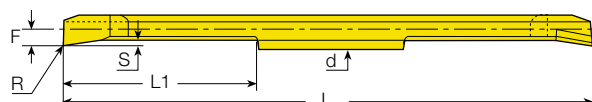
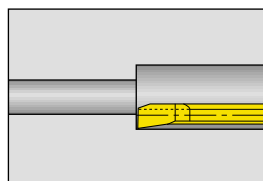
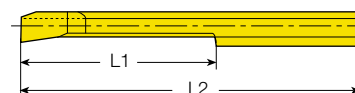


Insert Size	Ordering Code	Dimensions mm		Insert Screw 
IC		R	T	
.187"	WC0W5013...	0.20	2.44	VS41
	WC0W5014...	0.38	2.44	



Micro Tooling

Internal

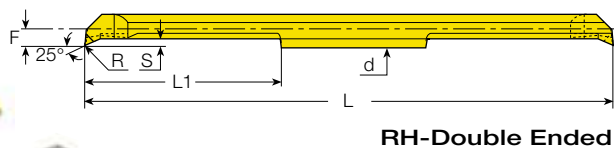
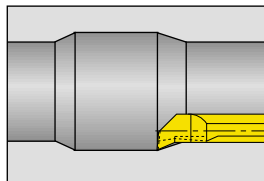

RH-Double Ended

RH-Single Ended

MicroBoring

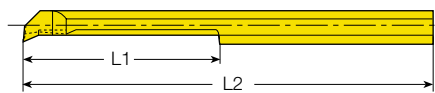
Insert dia.		Dimensions mm							Holder	Min. Bore Ø
d mm	RH-Single Ended	RH-Double Ended	R	L	L1	L2	F	S		
3.0	3.0SIR0.2S-Bore-1...1-SIDE	3.0SIR0.2S-Bore-1...	0.2	36	9	36	1.42	0.66	SMC...-3.0	3.2
	3.0SIR0.2M-Bore-1...1-SIDE	3.0SIR0.2M-Bore-1...	0.2	50	16	43	1.42	0.66		
4.0	4.0SIR0.2S-Bore-1...1-SIDE	4.0SIR0.2S-Bore-1...	0.2	36	9	36	1.92	0.66	SMC...-4.0	4.2
	4.0SIR0.2M-Bore-1...1-SIDE	4.0SIR0.2M-Bore-1...	0.2	50	16	43	1.92	0.66		
	4.0SIR0.2L-Bore-1...1-SIDE	4.0SIR0.2L-Bore-1...	0.2	60	21	50	1.92	0.66		
6.0	6.0SIR0.2S-Bore-1...1-SIDE	6.0SIR0.2S-Bore-1...	0.2	36	9	36	2.92	0.77	SMC...-6.0	6.2
	6.0SIR0.2M-Bore-1...1-SIDE	6.0SIR0.2M-Bore-1...	0.2	50	16	43	2.92	0.77		
	6.0SIR0.2L-Bore-1...1-SIDE	6.0SIR0.2L-Bore-1...	0.2	60	21	50	2.92	0.77		
8.0	8.0SIR0.2S-Bore-1...1-SIDE	8.0SIR0.2S-Bore-1...	0.2	54	12	54	3.92	0.82	SMC...-8.0	8.2
	8.0SIR0.2M-Bore-1...1-SIDE	8.0SIR0.2M-Bore-1...	0.2	70	20	63	3.92	0.82		
	8.0SIR0.2L-Bore-1...1-SIDE	8.0SIR0.2L-Bore-1...	0.2	86	28	70	3.92	0.82		
10.0	10.0SIR0.2S-Bore-1...1-SIDE	10.0SIR0.2S-Bore-1...	0.2	60	15	60	4.92	1.00	SMC...-10.0	10.2
	10.0SIR0.2M-Bore-1...1-SIDE	10.0SIR0.2M-Bore-1...	0.2	80	25	71	4.92	1.00		
	10.0SIR0.2L-Bore-1...1-SIDE	10.0SIR0.2L-Bore-1...	0.2	100	35	80	4.92	1.00		

Micro Tooling

Internal



RH-Double Ended



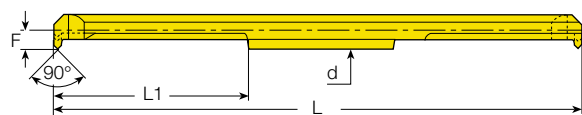
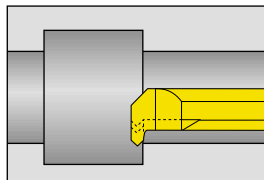
RH-Single Ended

Micro Copy

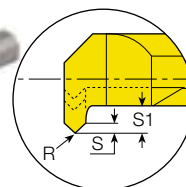
Insert dia.		Dimensions mm								Holder	Min. Bore Ø
d (mm)	RH-Single Ended	RH-Double Ended	R	L	L1	L2	F	S			
4.0	4.0SIR0.2S-Copy-1...1-SIDE	4.0SIR0.2S-Copy-1...	0.2	36	9	36	1.92	1.0		SMC...-4.0	4.2
	4.0SIR0.2M-Copy-1...1-SIDE	4.0SIR0.2M-Copy-1...	0.2	50	16	43	1.92	1.0			
	4.0SIR0.2L-Copy-1...1-SIDE	4.0SIR0.2L-Copy-1...	0.2	60	21	50	1.92	1.0			
6.0	6.0SIR0.2S-Copy-1...1-SIDE	6.0SIR0.2S-Copy-1...	0.2	36	9	36	2.92	1.3		SMC...-6.0	7.0
	6.0SIR0.2M-Copy-1...1-SIDE	6.0SIR0.2M-Copy-1...	0.2	50	16	43	2.92	1.3			
	6.0SIR0.2L-Copy-1...1-SIDE	6.0SIR0.2L-Copy-1...	0.2	60	21	50	2.92	1.3			

Micro Tooling

Internal



RH-Double Ended



RH-Single Ended

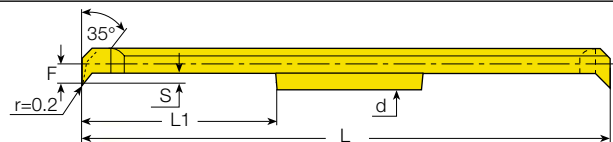
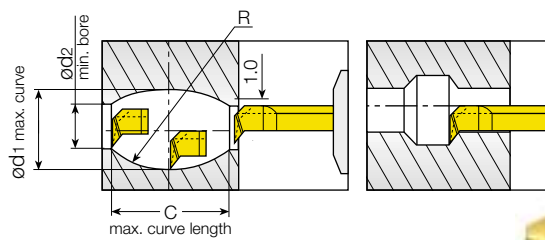
Micro Chamfer

Insert dia.		Dimensions mm								Holder	Min. Bore Ø
d (mm)	RH-Single Ended	RH-Double Ended	R	L	L1	L2	F	S1	S		
4.0	4.0SIR0.2S-Chamfer-0...1-SIDE	4.0SIR0.2S-Chamfer-0...	0.2	36	9	36	1.92	1.0	0.40	SMC...-4.0	4.2
	4.0SIR0.2M-Chamfer-0...1-SIDE	4.0SIR0.2M-Chamfer-0...	0.2	50	16	43	1.92	1.0	0.40		
	4.0SIR0.2L-Chamfer-0...1-SIDE	4.0SIR0.2L-Chamfer-0...	0.2	60	21	50	1.92	1.0	0.40		
6.0	6.0SIR0.2S-Chamfer-0...1-SIDE	6.0SIR0.2S-Chamfer-0...	0.2	36	9	36	2.92	1.2	0.70	SMC...-6.0	7.0
	6.0SIR0.2M-Chamfer-0...1-SIDE	6.0SIR0.2M-Chamfer-0...	0.2	50	16	43	2.92	1.2	0.70		
	6.0SIR0.2L-Chamfer-0...1-SIDE	6.0SIR0.2L-Chamfer-0...	0.2	60	21	50	2.92	1.2	0.70		

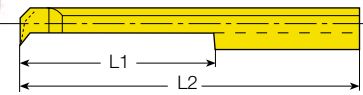


Micro Tooling

Internal



RH-Double Ended



RH-Single Ended

Micro Copy Long Nose

Insert dia.	Ordering Code		Dimensions mm					Holder	Max.Curve	Min.Bore
d (mm)	RH-Single Ended	RH-Double Ended	L	L1	L2	F	S		d1	d2
6.0	6.0SIR0.2S-3527-1...1-SIDE	6.0SIR0.2S-3527-1...	36	9	36	2.92	2.7	SMC...-6.0	12.3	6.9
	6.0SIR0.2M-3527-1...1-SIDE	6.0SIR0.2M-3527-1...	50	16	43	2.92	2.7			
	6.0SIR0.2L-3527-1...1-SIDE	6.0SIR0.2L-3527-1...	60	21	50	2.92	2.7			
8.0	8.0SIR0.2S-3537-1...1-SIDE	8.0SIR0.2S-3537-1...	54	12	54	3.92	3.7	SMC...-8.0	16.1	8.9
	8.0SIR0.2M-3537-1...1-SIDE	8.0SIR0.2M-3537-1...	70	20	63	3.92	3.7			
	8.0SIR0.2L-3537-1...1-SIDE	8.0SIR0.2L-3537-1...	86	28	70	3.92	3.7			
10.0	10.0SIR0.2S-3547-1...1-SIDE	10.0SIR0.2S-3547-1...	60	15	60	4.92	4.7	SMC...-10.0	20.2	10.8
	10.0SIR0.2M-3547-1...1-SIDE	10.0SIR0.2M-3547-1...	80	25	71	4.92	4.7			
	10.0SIR0.2L-3547-1...1-SIDE	10.0SIR0.2L-3547-1...	100	35	80	4.92	4.7			

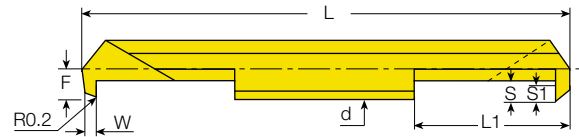
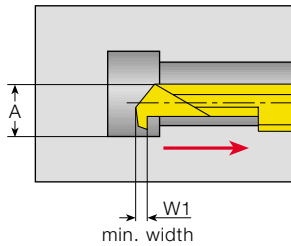
Note:

1. Radius R can be calculated using formula $R = (4S1^2 + C^2) / 8S1$.

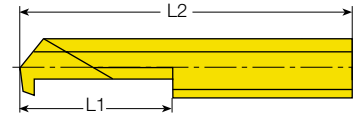
2. Chord length can be calculated using formula $C = 2\sqrt{2S1 \times R - S1^2}$

Micro Tooling

Internal



RH-Double Ended



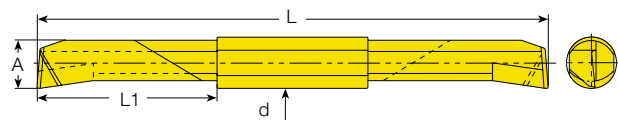
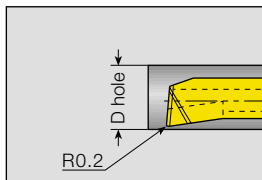
RH-Single Ended

Micro - Back Edge

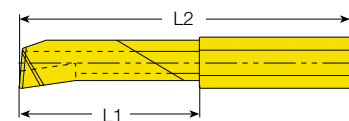
Insert dia.	Ordering Code		Dimensions mm								
d (mm)	RH-Single Ended	RH-Double Ended	L	L1	L2	A	W	W1	F	S	S1
3.0	3.0SIR0.2S-Back-1...1-SIDE	3.0SIR0.2S-Back-1...	36	9.0	36	3.42	1.5	1.81	1.42	0.8	0.6
	3.0SIR0.2M-Back-1...1-SIDE	3.0SIR0.2M-Back-1...	50	16.0	43						
4.0	4.0SIR0.2S-Back-1...1-SIDE	4.0SIR0.2S-Back-1...	36	9.0	36	4.44	2.0	2.34	1.92	1.3	1.0
	4.0SIR0.2M-Back-1...1-SIDE	4.0SIR0.2M-Back-1...	50	16.0	43						
	4.0SIR0.2L-Back-1...1-SIDE	4.0SIR0.2L-Back-1...	60	21.0	50						
6.0	6.0SIR0.2S-Back-1...1-SIDE	6.0SIR0.2S-Back-1...	36	9.0	36	6.44	2.0	2.46	2.92	1.9	1.6
	6.0SIR0.2M-Back-1...1-SIDE	6.0SIR0.2M-Back-1...	50	16.0	43						
	6.0SIR0.2L-Back-1...1-SIDE	6.0SIR0.2L-Back-1...	60	21.0	50						

Micro Tooling

Internal



RH-Double Ended



RH-Single Ended

Micro Bore Drill

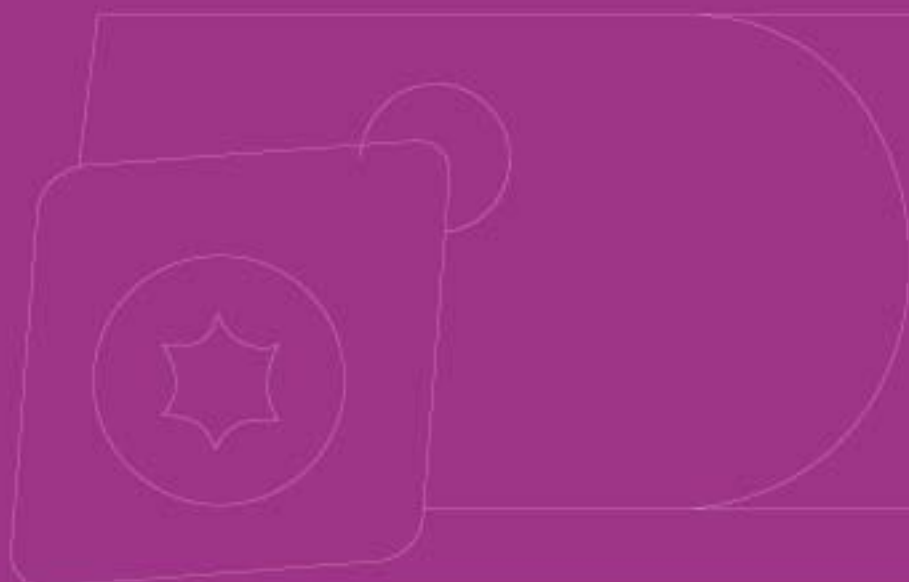
Insert dia.	Ordering Code		Dimensions mm			Min.Bore dia.(mm)	
d (mm)	RH-Single Ended	RH-Double Ended	L	L1	L2	A	D
4.0	4.0SIR0.2M-BD-1...1-SIDE	4.0SIR0.2M-BD-1...	50	16	43	3.53	3.74
6.0	6.0SIR0.2M-BD-1...1-SIDE	6.0SIR0.2M-BD-1...	50	16	43	5.20	5.80
	6.0SIR0.2L-BD-1...1-SIDE	6.0SIR0.2L-BD-1...	60	21	50		
8.0	8.0SIR0.2S-BD-1...1-SIDE	8.0SIR0.2S-BD-1...	54	12	54	6.90	7.80
	8.0SIR0.2M-BD-1...1-SIDE	8.0SIR0.2M-BD-1...	70	20	63		
	8.0SIR0.2L-BD-1...1-SIDE	8.0SIR0.2L-BD-1...	86	28	70		



BORING TOOLHOLDERS

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● Spare Parts for Micro (Location Screw)	Page 170



Vardex Ordering Code System

PowerBore Holders

C	05	D	T	J		5
1	2	3	4	5		6
1 - Shank Style		2 - Shank Dia.		3 - Bar Dia. [D1]		4 - Insert Shape
C - Carbide S - Steel		04 - 4.0 mm 05 - 5.0 mm 06 - 6.0 mm 08 - 8.0 mm 10 - 10.0 mm 12 - 12.0 mm		A - 4.2 B - 4.6 C - 4.8 D - 5.0 E - 5.2 F - 6.0 G - 6.4 H - 7.9 J - 8.0		C - Diamond 80 Deg.  T - Triangle  W - Trigon 80 Deg. 
						5 - Holder Length [L2]
						A - 57 C - 64 D - 70 E - 76 G - 89 J - 102 P - 152
						6 - Front Relief Angle
						0, 5, 7

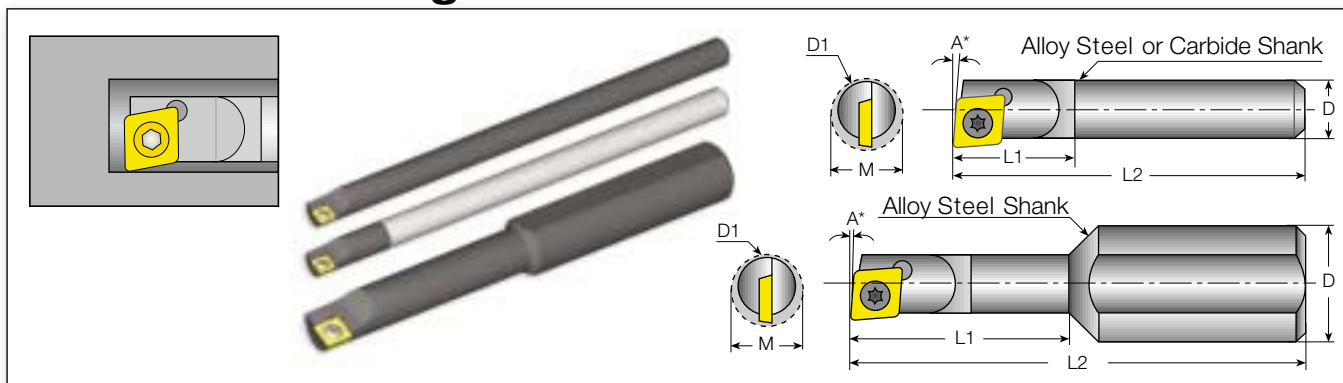
Micro & Adjustable Toolholders (Sleeves)

S	M	C	16	-	3
1	2	3	4		5
1 - Holder Shape		2 - Holder Type		3 - Cooling	
S - Sleeve		V - Adjustable Holders for Mini M - Micro		C - Coolant Channel	
				4 - Holder Dia.	
				10, 12, 16, 20	
				5 - Bore Size	
				Micro Size 3, 4, 6, 8, 10	
				Adjustable Holders (for Mini) 6.2 8	





Series A - Boring Bars



Alloy Steel Shanks - Standard Size

								Spare Parts		
Shank	Ordering Code	A	D	D1	M	L2	L1			
		angle	shank dia	bar dia	min.bore	overall length	bar length	Insert Type	Screw	Torx Key
5.0	S05-ACC--7	7°	5.0	4.2	4.6	64	12	CD0W	VS01	VT51
	S05-BCC--5	5°	5.0	4.6	5.3	64				
	S05-DCC--5	5°	5.0	5.0	6.1	64				
	S05-DCC--0	0°	5.0	5.0	6.4	64				
6.0	S06-FCE--5	5°	6.0	6.0	7.0	76	D1=D			
	S06-FCE--0	0°	6.0	6.0	7.3	76				

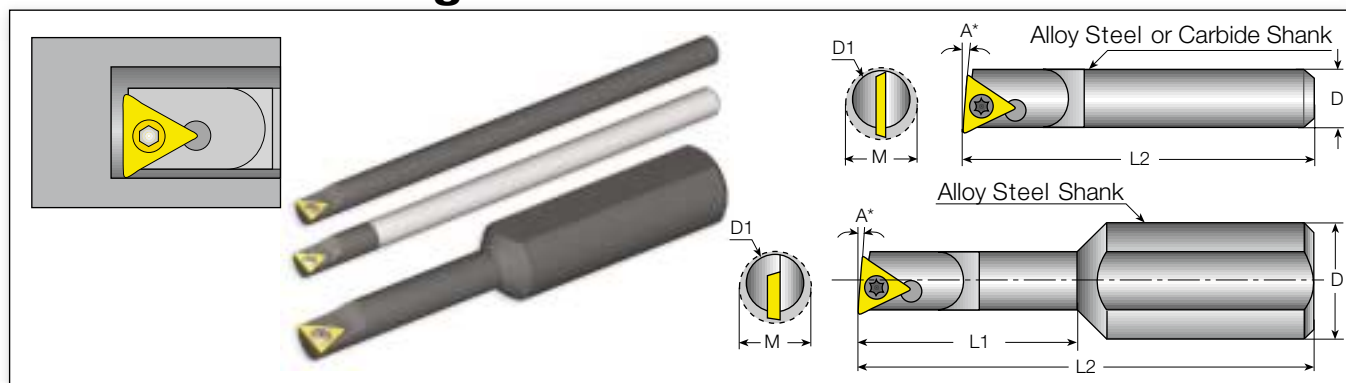
Solid Carbide Shank with Alloy Steel Head - Standard Size

Shank	Ordering Code	A	D	D1	M	L2	L1			
		angle	shank dia	bar dia	min.bore	overall length	bar length	Insert Type	Screw	Torx Key
4.0	C04-ACP--7	7°	4.0	4.2	4.6	152	12	CD0W	VS01	VT51
	C05-CCJ--5	5°	5.0	4.8	5.5	102				
5.0	C05-DCJ--5	5°	5.0	5.0	6.1	102	D1=D			
	C05-DCJ--0	0°	5.0	5.0	6.5	102				
6.0	C06-FCJ--5	5°	6.0	6.0	7.0	102				
	C06-FCJ--0	0°	6.0	6.0	7.3	102				

Alloy Steel Shanks - Oversize

								  		
Shank	Ordering Code	A	D	D1	M	L2	L1			
		angle	shank dia	bar dia	min.bore	overall length	bar length	Insert Type	Screw	Torx Key
8.0	S08-BCA--5	5°	8.0	4.6	5.5	57	25	CD0W	VS01	VT51
	S08-ECA--5	5°	8.0	5.2	5.8	57				
	S08-ECA--0	0°	8.0	5.2	6.2	57				
	S08-GCC--5	5°	8.0	6.4	7.4	64	32			
	S08-GCC--0	0°	8.0	6.4	7.6	64				

Series B - Boring Bars



Alloy Steel Shanks - Standard Size

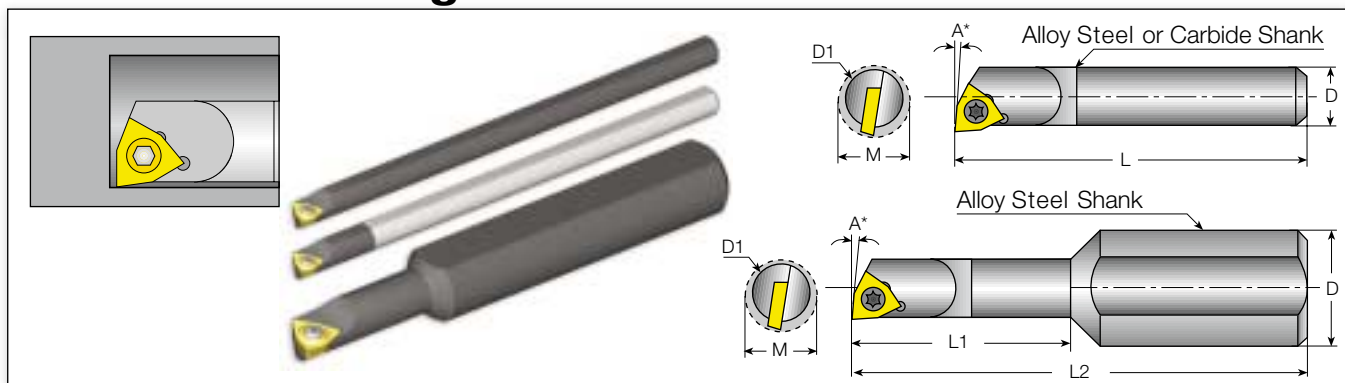
Alloy Steel Shanks - Standard Size						Spare Parts		
Shank	Ordering Code	A	D = D1	M	L2			
		angle	bar dia	min.bore	overall length	Insert Type	Screw	Torx Key
5.0	S05-DTG--5	5°	5.0	7.1	89	TD0W	VS01	VT51
	S05-DTG--0	0°	5.0	7.1	89			
6.0	S06-FTJ--5	5°	6.0	7.3	102		VS40	
	S06-FTJ--0	0°	6.0	7.3	102			
8.0	S08-JTJ--5	5°	8.0	9.2	102		VS40	
	S08-JTJ--0	0°	8.0	9.2	102			

Solid Carbide Shank with Alloy Steel Head - Standard Size

Solid Carbide Shank with Alloy Steel Head - Standard Size						Spare Parts		
Shank	Ordering Code	A	D = D1	M	L2			
		angle	bar dia	min.bore	overall length	Insert Type	Screw	Torx Key
5.0	C05-DTJ--5	5°	5.0	7.1	102	TD0W	VS01	VT51
	C05-DTJ--0	0°	5.0	7.1	102			
6.0	C06-FTJ--5	5°	6.0	7.3	102		VS40	
	C06-FTJ--0	0°	6.0	7.3	102			
8.0	C08-JTJ--5	5°	8.0	9.2	102			
	C08-JTJ--0	0°	8.0	9.2	102			

Alloy Steel Shanks - Oversize

Alloy Steel Shanks - Oversize								Spare Parts		
Shank	Ordering Code	A	D	D1	M	L2	L1			
		angle	shank dia	bar dia	min.bore	overall length	bar length	Insert Type	Screw	Torx Key
12.0	S12-ETC--5	5°	12.0	5.2	6.9	64	25	TD0W	VS01	VT51
	S12-ETC--0	0°	12.0	5.2	6.9	64				
	S12-GTD--5	5°	12.0	6.4	7.6	70	32			
	S12-GTD--0	0°	12.0	6.4	7.6	70				
	S12-HTE--5	5°	12.0	7.9	9.1	76	38			
	S12-HTE--0	0°	12.0	7.9	9.1	76				



Alloy Steel Shanks - Standard Size

Shank	Ordering Code	A	D = D1	M	L	Spare Parts		
		angle	bar dia.	min.bore	bar length	Insert Type	Screw	Torx Key
5.0	S05-DWC--5	5°	5.0	6.1	64	WC0W4213	VS40	VT51
	S05-DWC--0	0°	5.0	6.4	64			
6.0	S06-FWJ--5	5°	6.0	7.0	102			
	S06-FWJ--0	0°	6.0	7.3	102			

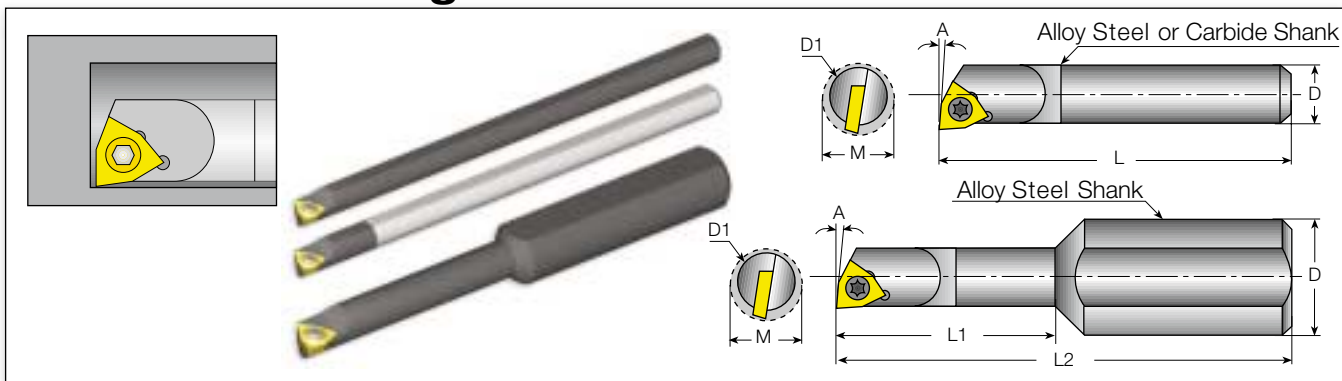
Solid Carbide Shank with Alloy Steel Head - Standard Size

Shank	Ordering Code	A	D = D1	M	L	Spare Parts		
		angle	bar dia.	min.bore	bar length	Insert Type	Screw	Torx Key
5.0	C05-DWJ--5	5°	5.0	6.1	102	WC0W4213	VS40	VT51
	C05-DWJ--0	0°	5.0	6.4	102			
6.0	C06-FWJ--5	5°	6.0	7.0	102			
	C06-FWJ--0	0°	6.0	7.3	102			

Alloy Steel Shanks - Oversize

								Spare Parts		
Shank	Ordering Code	A	D	D1	M	L2	L1			
		angle	shank dia	bar dia	min.bore	overall length	bar length	Insert Type	Screw	Torx Key
10.0	S10-EWA--5	5°	10.0	5.2	5.8	57	13	WC0W4213	VS40	VT51
	S10-EWA--0	0°	10.0	5.2	6.2	57				
	S10-GWC--5	5°	10.0	6.4	7.4	64	19			
	S10-GWC--0	0°	10.0	6.4	7.6	64				

Series F - Boring Bars



Alloy Steel Shanks - Standard Size

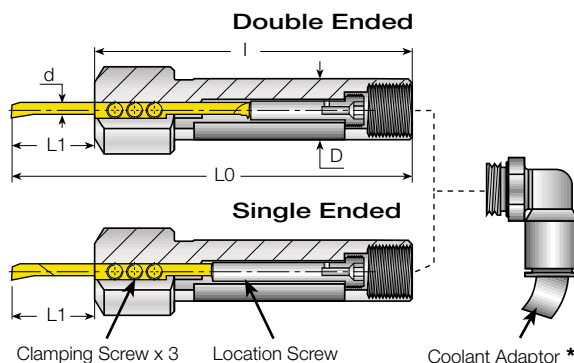
Shank	Ordering Code	A	D=D1	M	L	Spare Parts		
		angle	bar dia	min.bore	bar length	Insert Type	Screw	Torx Key
8.0	S08-JWJ--5	5°	8.0	9.2	102	WCOW5013	VS41	VT51
	S08-JWJ--0	0°	8.0	9.2	102	WCOW5014		

Solid Carbide Shank with Alloy Steel Head - Standard Size

Shank	Ordering Code	A	D=D1	M	L	Spare Parts		
		angle	bar dia	min.bore	bar length	Insert Type	Screw	Torx Key
8.0	C08-JWJ--5	5°	8.0	9.2	102	WCOW5013	VS41	VT51
	C08-JWJ--0	0°	8.0	9.2	102	WCOW5014		

Alloy Steel Shanks - Oversize

Shank	Ordering Code	A	D	D1	M	L2	L1	Spare Parts		
		angle	shank dia	bar dia	min.bore	overall length	bar length	Insert Type	Screw	Torx Key
10.0	S10-HWE--5	5°	10.0	7.9	9.2	76	38	WCOW5013	VS41	VT51
	S10-HWE--0	0°	10.0	7.9	9.2	76	38	WCOW5014		



Micro

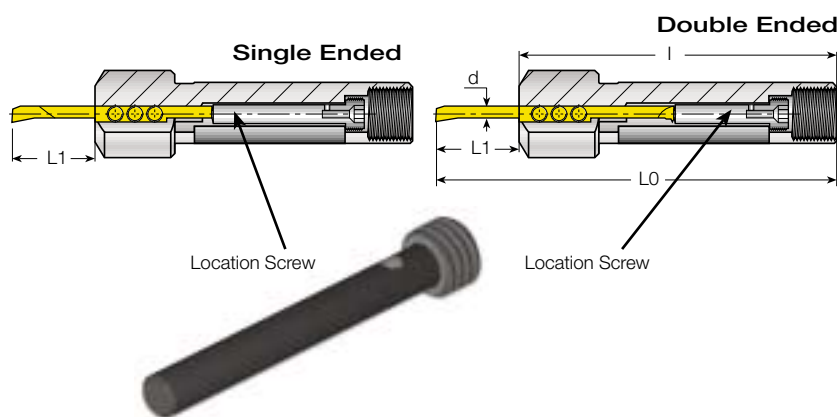
Micro				Spare Parts			
Micro Insert Dia.	Ordering Code	Dimensions		Coolant Adaptor	Location Screw		Clamping Screw x 3
d (mm)		D	I		Screw	Key	Screw Key
3.0	SMC10-3.0	10	80	-	see on next page	K4.0	M4X0.7X4.0 K2.0
	SMC12-3.0	12		-			
	SMC16-3.0	16	95	G1/4A			
	SMC20-3.0	20		G1/4A			
4.0	SMC10-4.0	10	80	-	see on next page	K4.0	M4X0.7X4.0 K2.0
	SMC12-4.0	12		-			
	SMC16-4.0	16	95	G1/4A			
	SMC20-4.0	20		G1/4A			
6.0	SMC12-6.0	12	80	-	see on next page	K4.0	M4X0.7X4.0 K2.0
	SMC16-6.0	16	95	G1/4A			
	SMC20-6.0	20		G1/4A			
8.0	SMC16-8.0	16	95	G1/4A	see on next page	K4.0	M6X1.0X5.0 K3.0
	SMC20-8.0	20		G1/4A			
10.0	SMC16-10.0	16	95	G1/4A	see on next page	K4.0	M6X1.0X5.0 K3.0
	SMC20-10.0	20		G1/4A			

* Coolant Adaptor is optional

continued on next page ▶

NOTE: All Holders can be used for all single ended and double ended.

Internal Toolholders (con't)



Spare Parts - Location Screws for Micro Toolholders*

Micro Insert Dia.	Toolholder	Dimensions mm			Location Screw		
d [mm]		I	L1	L0	Single Ended	M	Double Ended
3	SMC10-3.0	80	9 - Short	89	4GISM8X28	28	4GISM8X28
	SMC12-3.0	80	16 - Medium	96			4GISM8X21
	SMC16-3.0	95	9 - Short	104	4GISM8X49	49	4GISM8X49
	SMC20-3.0	95	16 - Medium	111			4GISM8X42
4	SMC10-4.0	80	9 - Short	89	4GISM8X28	28	4GISM8X28
	SMC12-4.0	80	16 - Medium	96			4GISM8X21
		80	21 - Long	101			4GISM8X16
	SMC16-4.0	95	9 - Short	104	4GISM8X49	49	4GISM8X49
	SMC20-4.0	95	16 - Medium	111			4GISM8X42
		95	21 - Long	116			4GISM8X37
6	SMC12-6.0	80	9 - Short	89	4GISM8X28	28	4GISM8X28
		80	16 - Medium	96			4GISM8X21
		80	21 - Long	101			4GISM8X16
	SMC16-6.0	95	9 - Short	104	4GISM8X49	49	4GISM8X49
	SMC20-6.0	95	16 - Medium	111			4GISM8X42
		95	21 - Long	116			4GISM8X37
8	SMC16-8.0	95	12 - Short	107	4GISM8X33	33	4GISM8X33
	SMC20-8.0	95	20 - Medium	115			4GISM8X25
		95	28 - Long	123			4GISM8X17
10	SMC16-10.0	95	15 - Short	110	4GISM8X30	30	4GISM8X30
	SMC20-10.0	95	25 - Medium	120			4GISM8X20
		95	35 - Long	130			4GISM8X10

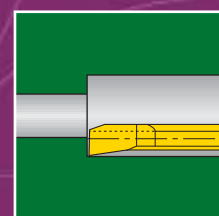
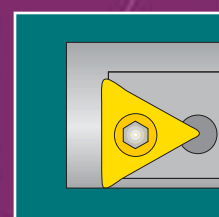
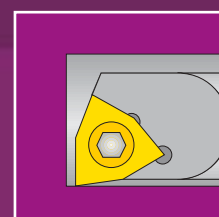
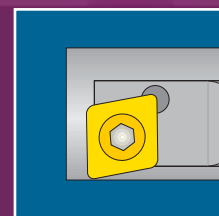
* Every toolholder package contains the full range of location screws needed.



BORING TECHNICAL DATA

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● Recommended Cutting Data - PowerBore and Micro	Page 173
● Grades and Their Applications	Page 173



Spare Parts PowerBore

					
Insert	Boring Bar	Insert	Torx Screw	Screw Description	Torx Key
	A	CD0W	VS01	1-72 Oval X 2.77LG.	VT51
	B	TD0W Min. Bore 7.1 > Bore 7.1	VS01 VS40	1-72 Oval X 2.77LG. M2 X .4 I.S.O. X 3.86LG.	
	E	WC0W4213, WC0W4214	VS40	M2 X .4 I.S.O. X 3.86LG.	
	F	WC0W5013, WC0W5014	VS41	M2 X .4 I.S.O. X 4.90LG.	





Recommended Grades, Cutting Speeds Vc [m/min], Feed f [mm/rev] and Max Depth [mm]

Material			Hardness Brinell HB	Vc[m/min]		Feed f [mm/rev]		Max. depth [mm]			
				Coated				PowerBore			Micro
				PowerBore	Micro	PowerBore					
				VTX	VMX	CD0W	TD0W	WD0W			
P	Unalloyed steel	Low carbon (C=0.1-0.25 %)	125	115-190	50-120	0.25	0.055	0.5	0.45	0.6	0.4
		Medium carbon (C=0.25-0.55 %)	150	100-175	40-100	0.2	0.04	0.5	0.45	0.6	0.4
		High carbon (C=0.55-0.85 %)	170	90-165	30-80	0.15	0.03	0.5	0.45	0.6	0.4
	Low alloy steel (alloying elements ≤ 5%)	Non hardened	180	85-145	50-70	0.2	0.04	0.4	0.35	0.5	0.3
		Hardened	275	75-140	40-60	0.15	0.04	0.4	0.35	0.5	0.3
		Hardened	350	70-135	30-50	0.1	0.03	0.4	0.35	0.5	0.3
	High alloy steel (alloying elements > 5%)	Annealed	200	70-110	30-50	0.1	0.04	0.2	0.18	0.4	0.15
		Hardened	325	50-100	25-40	0.05	0.03	0.2	0.18	0.4	0.15
	Cast steel	Low alloy (alloying elements <5%)	200	75-140	30-50	0.25	0.04	0.2	0.18	0.4	0.15
High alloy (alloying elements >5%)		225	60-120	25-40	0.1	0.04	0.2	0.18	0.4	0.15	
M	Stainless steel Ferritic	Non hardened	200	70-130	60-100	0.2	0.04	0.25	0.22	0.5	0.2
		Hardened	330	60-115	40-60	0.08	0.03	0.2	0.18	0.4	0.15
	Stainless steel Austenitic	Austenitic	180	90-140	50-90	0.2	0.04	0.25	0.22	0.5	0.2
		Super austenitic	200	40-110	40-60	0.08	0.04	0.2	0.18	0.4	0.15
	Stainless steel Cast ferritic	Non hardened	200	90-120	40-60	0.2	0.04	0.25	0.22	0.5	0.2
		Hardened	330	65-110	30-50	0.08	0.03	0.2	0.18	0.4	0.15
	Stainless steel Cast austenitic	Austenitic	200	85-110	40-60	0.2	0.04	0.25	0.22	0.5	0.2
		Hardened	330	60-100	30-50	0.08	0.03	0.2	0.18	0.4	0.15
	High temperature alloys	Annealed (Iron based)	200	45-60	25-45	0.2	0.04	0.25	0.22	0.5	0.2
		Aged (Iron based)	280	30-50	20-30	0.08	0.03	0.2	0.18	0.4	0.15
		Annealed (Nickel or Cobalt based)	250	20-30	15-20	0.08	0.015	0.2	0.18	0.4	0.15
		Aged (Nickel or Cobalt based)	350	15-25	10-15	0.05	0.01	0.2	0.18	0.4	0.15
	Titanium alloys	Pure 99.5 Ti	400Rm	140-170	60-100	0.05	0.02	0.2	0.18	0.4	0.15
		a+b alloys	1050Rm	50-70	40-50	0.05	0.02	0.2	0.18	0.4	0.15
	K	Extra hard steel	Hardened & tempered	55HRc	45-60	20-40	0.02	0.01	0.1	0.05	0.2
Malleable cast iron		Ferritic (short chips)	130	70-160	50-70	0.15	0.02	0.3	0.3	0.4	0.25
		Pearlitic (long chips)	230	60-145	50-70	0.1	0.01	0.3	0.3	0.4	0.25
Grey cast iron		Low tensile strength	180	70-130	50-72	0.15	0.02	0.5	0.45	0.6	0.4
		High tensile strength	260	60-115	40-60	0.1	0.015	0.5	0.45	0.6	0.4
Nodular SG iron		Feritic	160	125-160	50-70	0.15	0.02	0.5	0.45	0.6	0.4
		Pearlitic	260	90-120	60-80	0.1	0.015	0.5	0.45	0.6	0.4
Aluminium alloys Wrought		non aging	60	100-365	100-300	0.3	0.03	0.76	0.63	1.0	0.5
		Aged	100	80-220	100-150	0.2	0.03	0.76	0.63	1.0	0.5
Aluminium alloys		Cast	75	200-400	100-150	0.3	0.03	0.76	0.63	1.0	0.5
		Cast & aged	90	200-280	60-100	0.2	0.03	0.76	0.63	1.0	0.5
Aluminium alloys		Cast Si 13-22%	130	60-180	100-150	0.3	0.02	0.76	0.63	1.0	0.5
Copper and copper alloys		Brass	90	80-225	60-100	0.3	0.03	0.76	0.63	1.0	0.5
	Bronze and non leaded copper	100	80-255	60-100	0.2	0.03	0.76	0.63	1.0	0.5	

Grades and Their Applications

Grade	Application	Sample
VTX	General use carbide grade. A tough sub-micron substrate with TiAlN coating Provides good fracture toughness and excellent wear resistance.	
VMX	General use carbide grade for Micro inserts. TiN coated	