

botek

DEEP HOLE DRILLING SYSTEMS
SOLID CARBIDE TOOLS

Solid drill head
botek Type 70 A, 70 B



Deep hole drilling tools, system BTA
with indexable inserts
and guide pads for **solid drilling**
Drilling range: 25,00 – 64,99 mm



botek advantages

Type 70 A, Type 70 B

1. High performance roughing tool.
2. Very few spare parts.
3. New chip breaker design for high productivity and high feed rates.
4. Simple handling through fixed insert pockets.
5. Hole tolerance up to IT 10.

Type 70 A solid drill head

with indexable inserts and guide pads,
diameter will be manufactured as per order,
4-start connection thread, external
Drilling range: 25,00 – 64,99 mm



Type 70 B solid drill head

with indexable inserts and guide pads,
diameter will be manufactured as per order,
1-start connection thread, internal
Drilling range: 25,00 – 64,99 mm

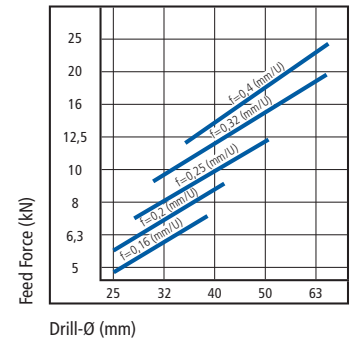
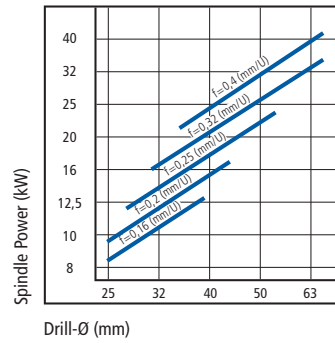


Technical information

Type 70 A, Type 70 B

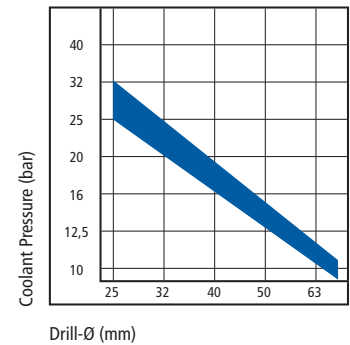
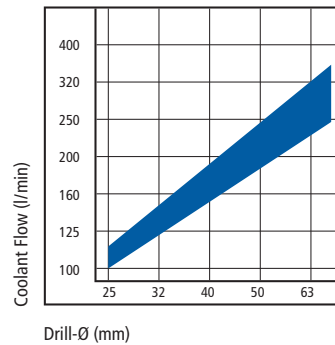
Power requirements

The guide values are for drilling alloyed steel 800 - 1000 N/mm² and can vary for other workpiece materials and tool conditions (wear).



Coolant values

Sufficient coolant must be supplied to the tool for troublefree chip removal.



Cutting data

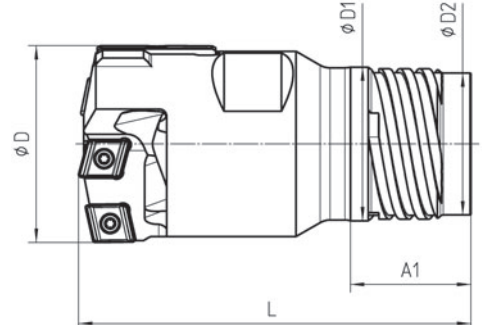
Guide values for cutting speed and feed rate are shown in the table. As there are many factors that can affect the results of deep hole drilling, these values must be corrected if necessary.

Material Hardness	Cutting speed Vc (m/min)	f (mm/rev) for drill diameter (mm)			Carbide grade	
		25,00 - 29,99	30,00 - 44,99	45,00 - 64,99	Indexable insert	Guide pads
Free machine steel ≤ 700 N/mm ²	80 - 120	0,2 - 0,3	0,25 - 0,35	0,25 - 0,4	U225BX-SP5	P20
Case hardening steel ≤ 750 N/mm ²	80 - 100	0,2 - 0,25	0,25 - 0,35	0,25 - 0,4		
Case hardening steel ≤ 1100 N/mm ²	70 - 90	0,2 - 0,25	0,2 - 0,3	0,2 - 0,35		
Heat treatable steel ≤ 700 N/mm ²	70 - 90	0,2 - 0,25	0,25 - 0,35	0,25 - 0,4		
Heat treatable steel ≤ 1100 N/mm ²	55 - 75	0,2 - 0,25	0,25 - 0,3	0,25 - 0,3		
Nitriding steel ≤ 1100 N/mm ²	55 - 75	0,2 - 0,25	0,25 - 0,3	0,25 - 0,3		P20/B
Tool steel	50 - 60	0,15 - 0,25	0,2 - 0,25	0,2 - 0,3		P20
Stainless steel (ferritic) 18-25% Cr, Ni > 8 %	55 - 65	0,15 - 0,25	0,25 - 0,3	0,25 - 0,3		
General steel castings ≤ 700 N/mm ²	60 - 80	0,2 - 0,25	0,25 - 0,35	0,2 - 0,35		
Nodular cast iron (GGG) ≤ 1000 N/mm ²	60 - 90	0,2 - 0,35	0,25 - 0,4	0,3 - 0,4		
Grey cast iron (GG)	90 - 110	0,2 - 0,35	0,3 - 0,4	0,3 - 0,4		
Aluminium AL < 95%	100 - 150	0,1 - 0,25	0,15 - 0,3	0,15 - 0,45		

Ordering data Type 70 A, Type 70 B

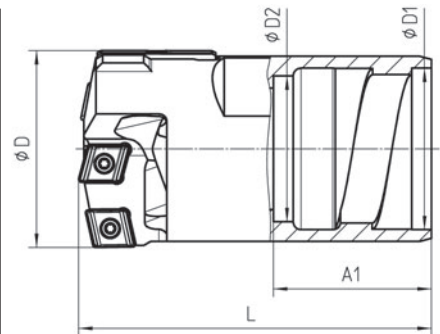
Type 70 A, 4-start connection thread, BTA

Drilling range	Drilltube Ø	Drilltube Size	Ø D1	Ø D2	A1	L
25,00 - 26,40	22	04	19,5	17,5	21,5	74
26,41 - 28,70	24	05	21	19		
28,71 - 31,00	26	06	23,5	21	24,5	82
31,01 - 33,30	28	07	25,5	23		
33,31 - 36,20	30	08	28	25,5	30,5	89
36,21 - 39,60	33	09	30	27		
39,61 - 43,00	36	10	33	30		
43,01 - 47,00	39	11	36	33	30,5	94
47,01 - 51,70	43	12	39	36		
51,71 - 56,20	47	13	43	39,5	34,5	100
56,21 - 60,60	51	14	47	43,5		
61,61 - 64,99	56	15	51	47,5		



Type 70 B, 1-start connection thread, BTA

Drilling range	Drilltube Ø	Drilltube Size	Ø D1	Ø D2	A1	L
25,00 - 26,99	22	04	20	17	25	59
27,00 - 29,99	24	05	22	19		
30,00 - 31,99	26	06	24	21		
32,00 - 33,99	28	07	26	23		
34,00 - 36,99	30	08	27	24	40	76
37,00 - 39,99	33	09	30	27		
40,00 - 43,99	36	10	33	30		
44,00 - 46,99	39	11	37	34		
47,00 - 51,99	43	12	41	37		
52,00 - 56,99	47	13	44	40		
57,00 - 60,99	51	14	49	45		
61,00 - 64,99	56	15	53	49	40	97

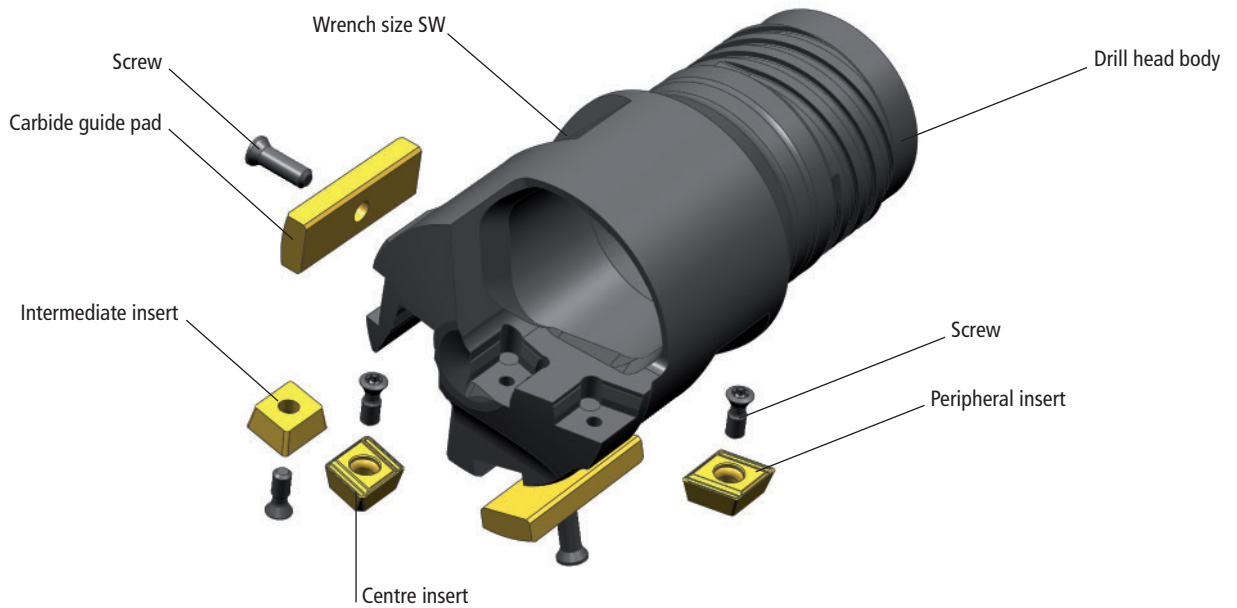


Wrench sizes (mm)

From drill-dia.	25	27	29	31	34	36	38	41,5	44,5	47,5	52,5	57	62,5
Size	20	22	24	26	28	30	32	36	38	41	46	50	55

Ordering data

Type 70 A, Type 70 B



Order No. drill head complete:

70 A 08 - 3577 - 000

70	A	08	3577	000
Type	Version	Drill tube size	Drill-Ø	Drill head
	A: BTA 4-start connection thread		Ø 35,77 mm	000: komplett
	B: BTA 1-start connection thread			110: Drill head body

Drilling range	Peripheral insert		Intermediate insert		Centre insert		Carbide guide pads	
Ø in mm	1x	1x	1x	1x	1x	1x	2x	2x
25,00 - 28,99	70-0550-310	22-0610-840 M 2,5 x 5,9	70-0550-310	22-0610-840 M 2,5 x 5,9	70-0550-210	22-0610-840 M 2,5 x 5,9	70-0600-410/24	22-0610-840 M 2,5 x 5,9
29,00 - 29,99					70-0650-210			
30,00 - 31,99	70-0650-310		70-0650-310		70-0700-410/28			
32,00 - 34,99								
35,00 - 38,99	70-0800-310	22-0600-830 M 3 x 8,4	70-0800-310	22-0600-830 M 3 x 8,4	70-0800-210	22-0600-830 M 3 x 8,4	10-0800-410/38	22-0600-830 M 3 x 8,4
39,00 - 41,99					70-0950-210		10-1000-410/45	
42,00 - 44,99					70-0950-310			
45,00 - 47,99	70-0950-310		70-0950-310		70-1250-210	22-1200-840 M 3,5 x 11,4		
48,00 - 50,99								
51,00 - 56,99	70-1250-310		70-1250-310		70-1250-310	22-1200-840 M 3,5 x 11,4		
57,00 - 62,99								
63,00 - 64,99					10-1200-410/62			
Carbide grade	U225BX-SP5						P20/ P20B	

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SOLID CARBIDE TOOLS

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Präzisionsbohrtechnik GmbH

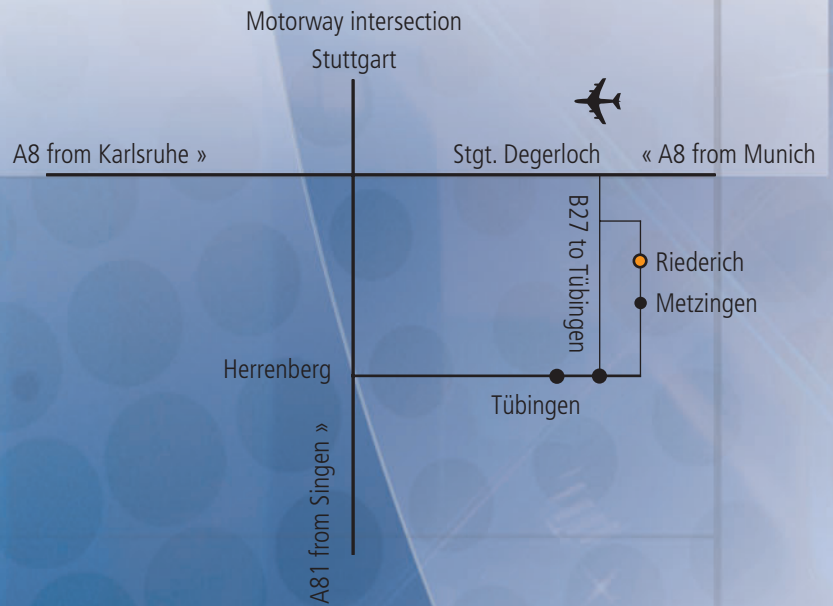
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