

Bohrsystem KSB/KBH Drilling system KSB/KBH

8 x D

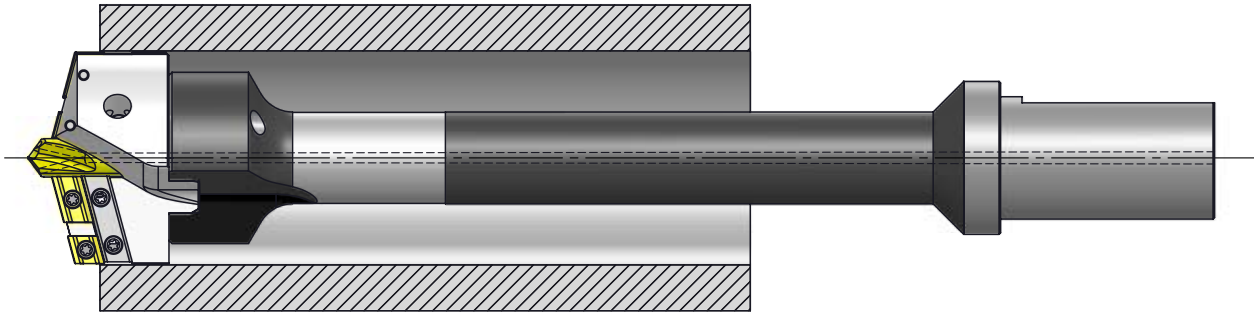


GJL / GJS

ALU

ST(AHL)

NE



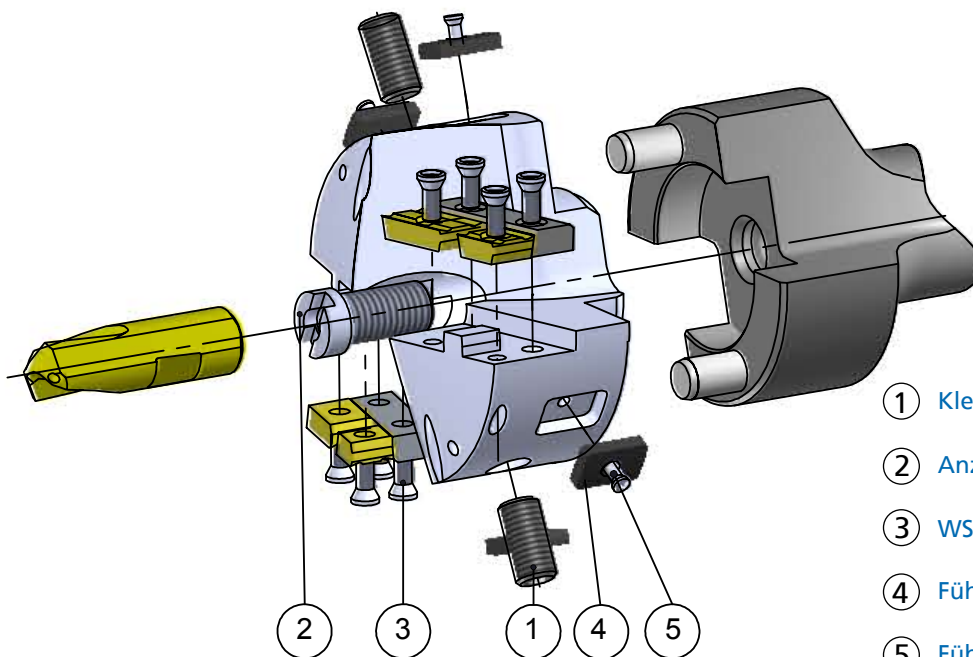
Vorteile:

- Hochpositive Schneidengeometrie für geringe Antriebsleistung
- Hoher Vorschub durch maximale Schneidenüberdeckung
- Hohe Leistungsfähigkeit und übertragbare Schnittmomente durch ungeteilte Halter
- Enge Bohrungstoleranzen (H11)
- Geradliniger Bohrungsverlauf durch Führungsfasen der äußeren WSP
- Führungsplatten für schrägen Austritt und Schnittunterbrechung (KSB03)
- Universell mit HM- und HSSE-WSP einsetzbar
- Auch für labile Einsatzbedingungen geeignet
- Paketbearbeitung möglich

Advantages:

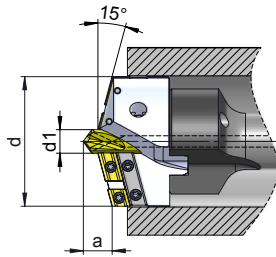
- Very positive rake angle for low machine power requirement
- High feed rate due to maximum overlap of inserts
- High performance by rigid and undivided holder
- Close drilling tolerances (H11)
- Straight bores due to guiding chamfers on the external inserts
- Guide plates for inclined bore outlets and cut interruptions (KSB03)
- Universally usable with carbide and HSS-inserts
- Also usable in unstable conditions
- Machining of staked bores possible

Schneidkopf KSB03 / Cutter head KSB03

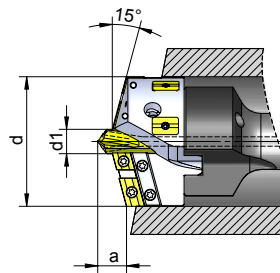


- ① Klemmschraube / Fixing screw
- ② Anzugsschraube / Cutter head screw
- ③ WSP-Schraube / Insert screw
- ④ Führungsplatte / Guide plate
- ⑤ Führungsplatten-Schraube / Guide plate screw

Powerbore-Schneidköpfe / Cutter heads





KSB01 ohne HM-Führungsplatten / without carbide guide plates



KSB03 mit HM-Führungsplatten / with carbide guide plates

d	d ₁	a*	Anzahl WSP / No. of inserts	Größe / Size BZS	Best.-Nr.* / Ord.-No KSB01
39	11	10	3	08	KSB01 039
40	11	10	3	08	KSB01 040
45	11	10	3	08	KSB01 045
48	11	11	4	08	KSB01 048
50	11	11	4	09	KSB01 050
57	11	12	4	09	KSB01 057
60	13	14	4	1	KSB01 060
67	13	15	4	1	KSB01 067
70	13	16	4	1	KSB01 070
77	13	17	4	1	KSB01 077
80	13	17	5	2	KSB01 080
87	13	18	5	2	KSB01 087
90	13	18	5	2	KSB01 090
97	13	19	6	2	KSB01 097
100	13	20	6	3	KSB01 107
107	13	21	6	3	KSB01 107
110	13	21	6	3	KSB01 110
117	13	22	6	3	KSB01 117
120	16	23	6	4	KSB01 120
127	16	24	8	4	KSB01 127
130	16	24	8	4	KSB01 130
137	16	25	8	4	KSB01 137
140	16	26	8	4	KSB01 140
147	16	27	10	4	KSB01 147
150	16	27	10	4	KSB01 150
157	16	28	10	4	KSB01 157
160	16	28	10	4	KSB01 160

Ersatzteile für KSB03 /
Spare parts for KSB03

Best.-Nr.* / Ord.-No	Stk./ Pcs.	 ④ Führungsplatten / guide plates	 ⑤
KSB03			
KSB03 039	4	Z7S 0400	TX 25050S
KSB03 040	4	Z7S 0400	TX 25050S
KSB03 045	4	Z7S 0400	TX 25050S
KSB03 048	4	Z7S 0400	TX 25050S
KSB03 050	4	Z7S 0500	TX 25050S
KSB03 057	4	Z7S 0500	TX 25050S
KSB03 060	4	Z7S 0600	TX 35095S
KSB03 067	4	Z7S 0600	TX 35095S
KSB03 070	4	Z7S 0700	TX 35095S
KSB03 077	4	Z7S 0700	TX 35095S
KSB03 080	6	Z7S 0800	TX 35095S
KSB03 087	6	Z7S 0800	TX 35095S
KSB03 090	6	Z7S 0800	TX 35095S
KSB03 097	6	Z7S 0900	TX 35095S
KSB03 107	6	Z7S 0900	TX 35095S
KSB03 107	6	Z7S 0900	TX 35095S
KSB03 110	6	Z7S 1200	TX 35095S
KSB03 117	6	Z7S 1200	TX 35095S
KSB03 120	6	Z7S 1200	TX 35095S
KSB03 127	6	Z7S 1200	TX 35095S
KSB03 130	6	Z7S 1200	TX 35095S
KSB03 137	6	Z7S 1400	TX 35095S
KSB03 140	6	Z7S 1400	TX 35095S
KSB03 147	6	Z7S 1400	TX 35095S
KSB03 150	6	Z7S 1400	TX 35095S
KSB03 157	6	Z7S 1400	TX 35095S
KSB03 160	6	Z7S 1400	TX 35095S

* Bei Verwendung von ZB02... / When using ZB02...

Zwischenabmessungen kurzfristig lieferbar / Intermediate dimensions available on short term

Andere Abmessungen und Ausführungen auf Anfrage / Other dimensions and designs upon request

Schneiden, Halter, Ersatzteile und Zubehör s. S. 18-19 / Inserts, holder and spare parts s. p. 18-19

Schnittdatenempfehlung / Cutting data recommendation:



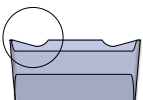

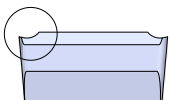
		Niedrigleg. Stahl Low alloy Steel		Hochleg. Stahl High alloy steel		Gusseisen Cast iron	Aluminium
		z.B./e.g. C45E		z.B./e.g. 42CrMo4		z.B./e.g. GJL, GJS	z.B./e.g. AlSi10Mg
Ø d	V _c	HM (P)	HSSE (S6)	HM (P)	HSSE (S6)	HM (P)	HM (P)
39 - 58	f	0,20 - 0,25	0,20 - 0,30	0,20 - 0,25	0,20 - 0,30	0,20 - 0,35	0,20 - 0,35
59 - 99	f	0,20 - 0,30	0,25 - 0,40	0,20 - 0,30	0,25 - 0,40	0,25 - 0,40	0,20 - 0,40
>= 100	f	0,25 - 0,35	0,30 - 0,60	0,25 - 0,35	0,30 - 0,50	0,30 - 0,50	0,25 - 0,50

Schnittgeschwindigkeit /
Cutting speed
V_c (m/min)

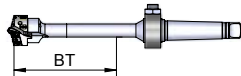
Vorschub / Infeed
f (mm/U) /
(mm/rev)

Ausreichende Kühlschmierstoff-
Zufuhr erforderlich / Sufficient
coolant supply needed

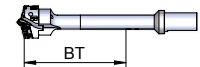
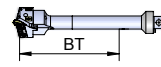
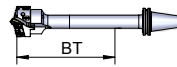
Schneiden, Halter und Ersatzteile Inserts, holders and spare parts

		Wendeschneidplatten / Inserts						
								
Schneidkopf / Cutter Head	Zentrums- bohrer / Centre Drill	Stk. / Pcs	Hochpositive Spanleit- stufen / Very positive rake angle	Sorte (s. S. 22) / Grade (s. p. 22)			Spanleitstufen für kurze Späne auch bei geringem Vorschub / Chip breakers for short chips already at low feed rates	
KSB Ø (s. S.17 / s.p.17)								
38,0 - 42,9	ZB021135N	2 1	XBHX 060304 FR3... XBHX 110304 FR3...	P7 P7	P9 P9	S6 S6	XBHX 060304 FR7 P9 XBHX 110304 FR7 P9	
43,0 - 45,9	ZB021135N	1 1 1	XBHX 060304 FR3... XBHX 080304 FR3... XBHX 110304 FR3...	P7 P7 P7	P9 P9 P9	S6 S6 S6	XBHX 060304 FR7 P9 XBHX 080304 FR7 P9 XBHX 110304 FR7 P9	
46,0 - 47,4	ZB021135N	2 1	XBHX 080304 FR3... XBHX 110304 FR3...	P7 P7	P9 P9	S6 S6	XBHX 080304 FR7 P9 XBHX 110304 FR7 P9	
47,5 - 48,9	ZB021135N	1 2 1	XBHX 060304 FR3... XBHX 080304 FR3... XBHX 110304 FR3...	P7 P7 P7	P9 P9 P9	S6 S6 S6	XBHX 060304 FR7 P9 XBHX 080304 FR7 P9 XBHX 110304 FR7 P9	
49,0 - 52,9	ZB021135N	1 2 1	XBHX 060304 FR3... XBHX 080304 FR3... XBHX 110304 FR3...	P7 P7 P7	P9 P9 P9	S6 S6 S6	XBHX 060304 FR7 P9 XBHX 080304 FR7 P9 XBHX 110304 FR7 P9	
53,0 - 57,9	ZB021135N	2 2	XBHX 080304 FR3... XBHX 110304 FR3...	P7 P7	P9 P9	S6 S6	XBHX 080304 FR7 P9 XBHX 110304 FR7 P9	
58,0 - 59,9*	ZB021346N	1 1 1	XBHX 090404 FR3... XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7 P7	P9 P9 P9	S6 S6 S6	XBHX 090404 FR7 P9 XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	
60,0 - 65,9	ZB021346N	2 2	XBHX 090404 FR3... XBHX 120404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 120404 FR7 P9	
66,0 - 69,5	ZB021346N	2 2	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
69,6 - 79,9	ZB021346N	2 2	XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	
80,0 - 85,5	ZB021356N	3 2	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
85,6 - 90,5	ZB021356N	3 2	XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	
90,6 - 92,5	ZB021356N	2 1 2	XBHX 100404 FR3... XBHX 120404 FR3... XBHX 150404 FR3...	P7 P7 P7	P9 P9 P9	S6 S6 S6	XBHX 100404 FR7 P9 XBHX 120404 FR7 P9 XBHX 150404 FR7 P9	
92,6 - 96,5	ZB021356N	4 2	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
96,6 - 99,9	ZB021356N	4 2	XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	
100,0 - 106,5	ZB021356N	4 2	XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	
106,6 - 119,9	ZB021356N	2 4	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
120,0 - 126,5	ZB021657N	2 4	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
126,6 - 129,5	ZB021657N	6 2	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
129,6 - 145,5	ZB021657N	6 2	XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	
145,6 - 152,9	ZB021657N	8 2	XBHX 090404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 090404 FR7 P9 XBHX 150404 FR7 P9	
153,0 - 160	ZB021657N	8 2	XBHX 100404 FR3... XBHX 150404 FR3...	P7 P7	P9 P9	S6 S6	XBHX 100404 FR7 P9 XBHX 150404 FR7 P9	

Halter / Holder



(incl.)



Größe/ Size BZS	MK DIN 228				SK 50 DIN69871 AD+B		ABS (Lizenz Komet)			Zylinder-Schaft / Cylinder shank D=40	
	BT	Best.-Nr./ Ord.-No	MK		BT	Best.-Nr./ Ord.-No	BT	Best.-Nr./ Ord.-No	ABS	BT	Best.-Nr./ Ord.-No
Size			MT								
08	105	KBH0 0804 A	4	EAL014			105	KBH2 0850 A	50	105	KBH4 0840 A
	205	KBH0 0804 B			205	KBH2 0850 B	205	KBH4 0840 B			
	300	KBH0 0804 C			300	KBH4 0840 C					
09	130	KBH0 0904 A	4	EAL014			130	KBH2 0963 A	63	130	KBH4 0940 A
	250	KBH0 0904 B			250	KBH2 0963 B	250	KBH4 0940 B			
	390	KBH0 0904 C			390	KBH4 0940 C					
1	120	KBH0 104 A	4	EAL014			120	KBH2 163 A	63	120	KBH4 1040 A
	245	KBH0 104 B			245	KBH1 150 B	245	KBH4 1040 B			
	365	KBH0 104 C			365	KBH1 150 C	365	KBH4 1040 C			
	480	KBH0 104 D			480	KBH1 150 D	480	KBH4 1040 D			
2	185	KBH0 205 A	5	EAL015							
	335	KBH0 205 B			335	KBH1 250 B					
	475	KBH0 205 C			475	KBH1 250 C					
	640	KBH0 205 D			640	KBH1 250 D					
3	185	KBH0 305 A	5	EAL015			210	KBH1 350 A			
	335	KBH0 305 B			365	KBH1 350 B					
	485	KBH0 305 C			510	KBH1 350 C					
	700	KBH0 305 D			700	KBH1 350 D					
4	185	KBH0 405 A	5	EAL015							
	335	KBH0 405 B			365	KBH1 450 B					
	485	KBH0 405 C			510	KBH1 450 C					
	700	KBH0 405 D			700	KBH1 450 D					

Bestellbeispiel / Order example:

- 1 Stück/piece Schneidkopf/Drilling head KSB01 050
KSB01 Ø 50 (s. S./s. p. 15)
- 5 Stück/pieces Zentrumsbohrer/Centre Drill ZBO 021135N
- WSP/Indexable Inserts:
20 Stück/pieces XBHX080304FR3P7
20 Stück/pieces XBHX110304FR3P7
20 Stück/pieces XBHX060304FR3P7
- 2 Stück/pieces Halter für/Holder for BT 130 KBH2 0963 A

Ersatzteile, Zubehör / Spare parts

	①	②	③	
Für Schneidkopf/ For cutter head KSB Ø	Klemmschraube für Zentr. Bohrer / Fixing screw	Anzugsschraube für Schneidkopf / Cutter head screw	Mittens- schraube / Centre screw	Schrauben- dreher / Screwdriver
38,0 - 57,9	KLS01 0612	ANS01 0820	TX 25050	TX 208
58,0 - 119,0	KLS01 0816	ANS01 1025	TX 35095	TX 215
120,0 - 160,0	KLS01 0816	ANS01 1225	TX 35095	TX 215