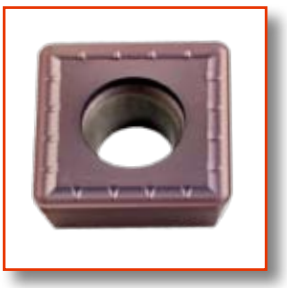
Wendeplattenbohrer Indexable Drills
VHM-Bohrer *Solid Carbide Drills* 7



... Qualität schafft Vertrauen

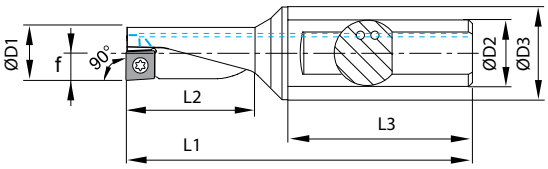
Inhaltsverzeichnis *Contents*

Inhaltsverzeichnis *Contents*

VHM-Bohrer
Solid Carbide Drills

MFD 2.25 x D

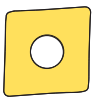
Multi - Function - Drill



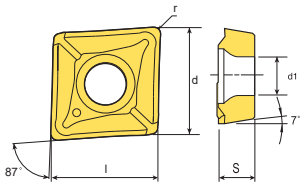
Bezeichnung *Part Number*	Lager *Stock*	Maße [mm] *Dimensions*							Wendeplatte *Insert*	Ersatzteile *Spare Parts*	
		D_1	D_2	D_3	L_1	L_2	L_3	f	Seite / Page: 7.06		
MFD 08 R2. 25 D04	●	8	12	16	70	18,5	42	4	XC•• 04	83.30.153	75.20.621 (T06)
MFD 08 L2. 25 D04	○										
MFD 10 R2. 25 D05	●	10	12	16	74.5	22.5	42	5	XC•• 05	83.30.146	75.20.621 (T06)
MFD 10 L2. 25 D05	○										
MFD 12 R2. 25 D06	●	12	16	20	85	27	45	6	XC•• 06	83.30.145	56.33.611 (T07)
MFD 12 L2. 25 D06	○										
MFD 14 R2. 25 D07	●	14	16	20	90	31.5	45	7	XC•• 07	56.44.144	56.33.612 (T08)
MFD 14 L2. 25 D07	○										
MFD 16 R2. 25 D08	●	16	20	25	100	36	50	8	XC•• 08	83.30.149	56.33.612 (T08)
MFD 16 L2. 25 D08	○										
MFD 18 R2. 25 D09	○	18	25	31	112	40.5	56	9	XC•• 09	83.30.149	56.33.612 (T08)
MFD 18 L2. 25 D09	○										
MFD 20 R2. 25 D10	●	20	25	31	116	45	56	10	XC•• 10	83.30.150	56.33.613 (T15)
MFD 20 L2. 25 D10	○										
MFD 25 R2. 25 D13	●	25	32	39	135	56.5	60	12.5	XC...13	56.44.145	56.33.614 (T20)
MFD 25 L2. 25 D13	○										
MFD 32 R2. 25 D17	○	32	40	50	158	72	70	16	XC•• 17	83.30.152	56.33.614 (T20)
MFD 32 L2. 25 D17	○										

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

XC□□



87°



Wendeplatten *Inserts*	Bezeichnung *Part Number*	Beschichtet *Coated*		Unbeschichtet *Uncoated*	Maße [mm] *Dimensions*					Passende Trägerwerkzeuge *Suitable Tools*
		DP 2320+ (P20/K15C)	DP 5530 (P30C)	DK 1210 (K10)	l	s	d	d1	r	Bezeichnung *Part Number*
	Anwendung *Application*	Stahl *Steel*	Niro *Stainless Steel*	Aluminium						
XCGT	**05 02 04 EN**			○	5.00	2.10	5.40	2.30	0.40	MFD 10 R/L 2.25 D05
	**06 02 04 EN**			○	6.00	2.38	6.40	2.50	0.40	MFD 12 R/L 2.25 D06
	07 03 04 EN			○	7.00	3.18	7.40	2.80	0.40	MFD 14 R/L 2.25 D07
	08 03 04 EN			○	8.00	3.18	8.40	3.40	0.40	MFD 16 R/L 2.25 D08
	09 T3 04EN			○	9.00	3.97	9.60	3.40	0.40	MFD 18 R/L 2.25 D09
	10 T3 04 EN			○	10.00	3.97	10.40	4.00	0.40	MFD 20 R/L 2.25 D10
	13 04 04EN			○	12.50	4.76	13.50	5.30	0.40	MFD 25 R/L 2.25 D13
	13 04 08 EN			○	12.50	4.76	13.50	5.30	0.80	MFD 25 R/L 2.25 D13
	17 05 08 EN			○	16.00	5.56	17.50	5.30	0.80	MFD 32 R/L 2.25 D17
XCMT	**04 01 04 EL**	○			4.00	1.80	4.00	2.10	0.40	MFD 08 L 2.25 D04
	**04 01 04 ER**	●			4.00	1.80	4.00	2.10	0.40	MFD 08 R 2.25 D04
	05 02 04 EN	●			5.00	2.10	5.40	2.30	0.40	MFD 10 R/L 2.25 D05
	06 02 04 EN	●			6.00	2.38	6.40	2.50	0.40	MFD 12 R/L 2.25 D06
	07 03 04 EN	●			7.00	3.18	7.40	2.80	0.40	MFD 14 R/L 2.25 D07
	08 03 04 EN	●			8.00	3.18	8.40	3.40	0.40	MFD 16 R/L 2.25 D08
	09 T3 04EN	○			9.00	3.97	9.60	3.40	0.40	MFD 18 R/L 2.25 D09
	10 T3 04 EN	●			10.00	3.97	10.40	4.00	0.40	MFD 20 R/L 2.25 D10
	13 04 04EN	○			12.50	4.76	13.50	5.30	0.40	MFD 25 R/L 2.25 D13
	13 04 08 EN	●			12.50	4.76	13.50	5.30	0.80	MFD 25 R/L 2.25 D13
	17 05 08 EN	○			16.00	5.56	17.50	5.30	0.80	MFD 32 R/L 2.25 D17
XCMT	**04 01 04 EL**		○		4.00	1.80	4.00	2.10	0.40	MFD 08 L 2.25 D04
	**04 01 04 ER**		○		4.00	1.80	4.00	2.10	0.40	MFD 08 R 2.25 D04
	05 02 04 EN		●		5.00	2.10	5.40	2.30	0.40	MFD 10 R/L 2.25 D05
	06 02 04 EN		●		6.00	2.38	6.40	2.50	0.40	MFD 12 R/L 2.25 D06
	07 03 04 EN		●		7.00	3.18	7.40	2.80	0.40	MFD 14 R/L 2.25 D07
	08 03 04 EN		●		8.00	3.18	8.40	3.40	0.40	MFD 16 R/L 2.25 D08
	09 T3 04EN		○		9.00	3.97	9.60	3.40	0.40	MFD 18 R/L 2.25 D09
	10 T3 04 EN		●		10.00	3.97	10.40	4.00	0.40	MFD 20 R/L 2.25 D10
	13 04 04EN		○		12.50	4.76	13.50	5.30	0.40	MFD 25 R/L 2.25 D13
	13 04 08 EN		○		12.50	4.76	13.50	5.30	0.80	MFD 25 R/L 2.25 D13
	17 05 08 EN		○		16.00	5.56	17.50	5.30	0.80	MFD 32 R/L 2.25 D17

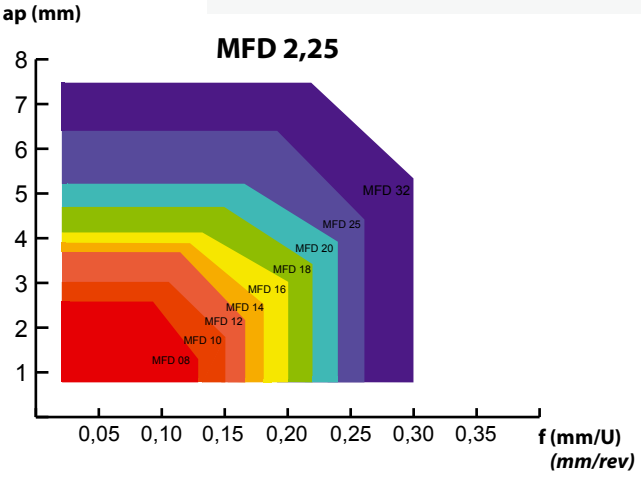
● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

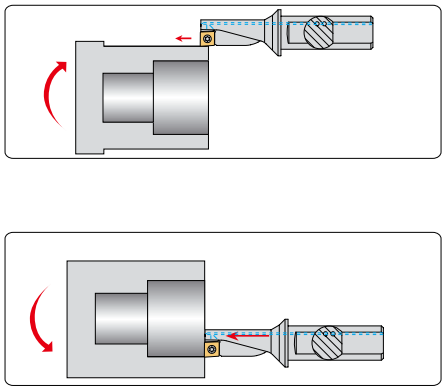
Schnittdaten-Empfehlungen zum Bohren mit MFD
Cutting Data Recommendations for Drilling with MFD

	Werkstückwerkstoff *Material*	Legierung *Alloy*	Brinell-Härte *Hardness* HB	VDI 3323 Gruppe	Schnittgeschwindigkeiten / *Cutting Speeds* v_c [m/min] DK 1210 (K10)	DP 2320+ (P20/K15C)	DP 5530 (P30C)
P	unlegierter Stahl *mild steel*	geglüht *annealed* ≤0,15% C	125	1		150 - 300	120 - 250
		geglüht *annealed* 0,15% - 0,45% C	150-250	2		120 - 220	80 - 180
		vergütet *heat treated* ≥0,45% C	300	3		100 - 200	60 - 160
	niedriglegierter Stahl *lower alloyed steel*	geglüht *annealed*	180	6		120 - 220	80 - 180
		vergütet *heat treated*	300	7/8		100 - 180	60 - 150
		vergütet *heat treated*	350	9		80 - 150	60 - 130
	hochlegierter Stahl *highly alloyed steel*	geglüht *annealed*	200	10		110 - 190	80 - 170
		vergütet *heat treated*	350	11		70 - 150	50 - 130
	nichtrostender Stahl *corrosion-resistant steel*	geglüht *annealed*	200	12		110 - 220	50 - 200
		vergütet *heat treated*	350	13		100 - 180	50 - 150
M	rostfreier Stahl *stainless steel*	ferritisch / martensitisch / geglüht *ferritic / martensitic / annealed*	200	14		50 - 90	50 - 160
		austenitisch *austenitic*	180	14		50 - 110	50 - 180
		Duplex	230-260	14		50 - 80	50 - 130
		austenitisch / *ferritisch* austenitic / *ferritic*	330	14		50 - 100	50 - 120
K	Grauguss *grey cast iron*	perlitisch / *ferritisch* pearlitic / *ferritic*	180	15		130 - 280	90 - 150
		perlitisch / *martensitisch* pearlitic / *martensitic*	260	16		130 - 280	90 - 150
	Grauguss mit Kugelgraphit *nodular cast iron*	ferritisch *ferritic*	160	17		120 - 280	70 - 90
		perlitisch *pearlitic*	250	18		120 - 280	70 - 90
	Temperguss *malleable cast iron*	ferritisch *ferritic*	130	19		110 - 280	80 - 150
		perlitisch *pearlitic*	230	20		110 - 280	80 - 150
N	Aluminium - Knetlegierungen *forging alloy*	nicht aushärtbar *not hardenable*	60	21	100 - 2500		
		aushärtbar *hardenable*	100	22	100 - 2000		
	Aluminium - Gusslegierungen *casting alloy*	nicht aushärtbar *not hardenable* < 12% Si	80	23	100 - 1500		
		aushärtbar *hardenable* < 12% Si	90	24	100 - 1500		
		nicht aushärtbar *not hardenable* > 12% Si	130	25	100 - 800		
	Kupfer und Kupferlegierungen *copper and copper alloys* (Bronze, Messing) *(bronze, brass)*	Automatenlegierungen *free cutting alloys (1% Pb)*	-	26	100 - 600		
		Messing, Rotguss *brass, red bronze*	-	27	100 - 600		
		Bronze *bronze*	90	28	100 - 400		
		bleifreies Kupfer und Elektrolytkupfer *unleaded copper*	100	29	100 - 300		
	nichtmetallische Werkstoffe *non metallic materials*	Duroplaste *thermoset*	100	29	80 - 180		
		faserverstärkte Kunststoffe *fiber reinforced plastic*	-	29	60 - 150		
		Hartgummi *ebonite*	-	30	100 - 250		
S	warmfeste Legierungen *heat resistant alloys*	Fe-Basis/*base* / geglüht *annealed*	200	31			
		Fe-Basis/*base (Incoloy)* / ausgehärtet *hardened*	280	32			
		Ni-Basis/*base (Inconel)* / geglüht *annealed*	250	33			
		Ni- oder Co-Basis / ausgehärtet *hardened*	30-58 HRC	34			
		Ni- oder Co-Basis / gegossen *cast*	1500-2200 Nmm^2	35			
	Titanlegierungen *titanium alloys*	Reintitan Pure titanium	R_m 400	36			
		Alpha- + Beta-Legierungen *alloys*	R_m 1050	37			
H	gehärteter Stahl *hardened steel*	gehärtet und angelassen *hardened and tempered*	55 HRC	38			
			60 HRC	39			
	Hartguss *chilled cast iron*	gegossen *cast*	400	40			
	Gehärtetes Gusseisen *hardened cast iron*	gehärtet und angelassen *hardened and tempered*	55 HRC	40			

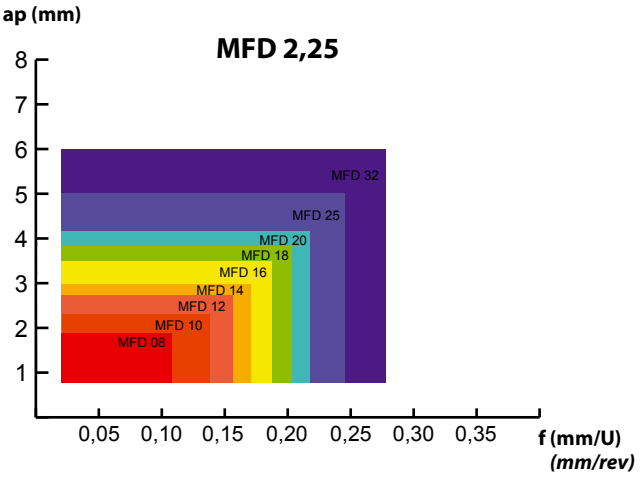
Multi - Function - Drill

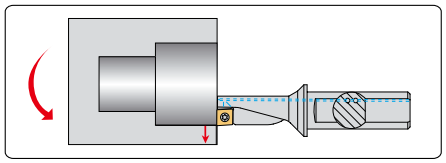
Außen -/ Innenkonturdrehen *Turn outer and innner contour*



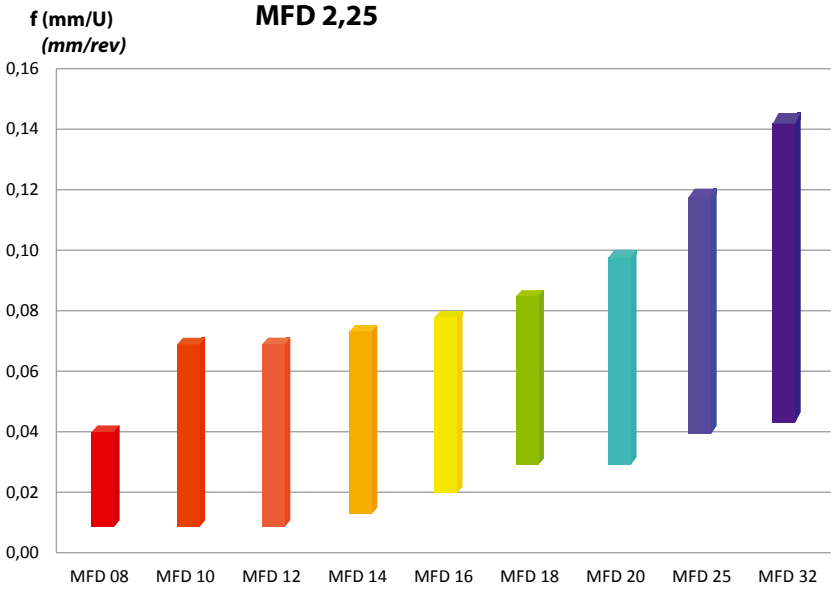


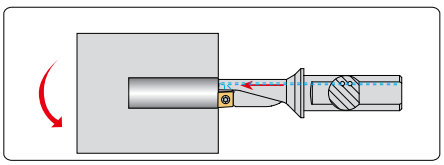
Plandrehen *Turning*





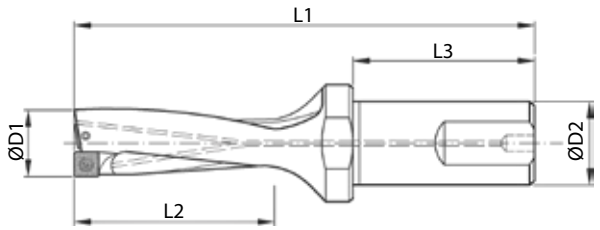
Bohren *Drilling*





JDSP 2xD

Wendeplattenbohrer
Indexable Drills

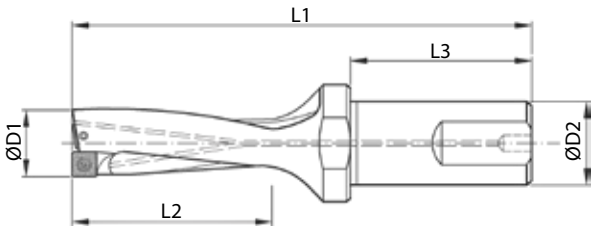


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.14			
JDSP10.0 -2D -C20	10005509036	●	10.0	20	83.0	22.0	50	SP.. 04T102	2	M1.8X3.8 10005514020	75.20.621 (T6) 10001850020
JDSP10.5 -2D -C20	10005510036	●	10.5	20	84.0	23.0	50				
JDSP11.0 -2D -C20	10005511036	●	11.0	20	85.0	24.0	50				
JDSP11.5 -2D -C20	10005512036	●	11.5	20	86.0	25.0	50				
JDSP12.0 -2D -C20	10005513036	●	12.0	20	87.0	26.0	50				
JDSP13.0 -2D -C20	10006373036	●	13.0	20	97.0	28.0	50	SP.. 050204		M2.2X5 10005505020	75.20.621 (T6) 10001850020
JDSP14.0 -2D -C25	10006374036	●	14.0	25	107.0	30.0	56				
JDSP15.0 -2D -C25	10006375036	●	15.0	25	109.0	32.0	56				
JDSP16.0 -2D -C25	10006376036	●	16.0	25	111.0	34.0	56				
JDSP17.0 -2D -C25	10006377036	●	17.0	25	111.0	36.0	56	SP.. 060204		M2,2X6 10005506020	56.33.611 (T7) 10001716020
JDSP18.0 -2D -C25	10006378036	●	18.0	25	112.0	38.0	56				
JDSP19.0 -2D -C25	10006379036	●	19.0	25	113.0	40.0	56				
JDSP20.0 -2D -C25	10006380036	●	20.0	25	117.0	42.0	56				
JDSP21.0 -2D -C25	10006381036	●	21.0	25	119.0	44.0	56				
JDSP22.0 -2D -C25	10006382036	●	22.0	25	121.0	46.0	56	SP.. 07T308		M2,5X8 10005507020	56.33.612 (T8) 10001718020
JDSP23.0 -2D -C25	10006383036	●	23.0	25	123.0	48.0	56				
JDSP24.0 -2D -C25	10006384036	●	24.0	25	125.0	50.0	56				
JDSP25.0 -2D -C25	10006385036	●	25.0	25	128.0	52.0	56				
JDSP25.0 -2D -C32	10006386036	●	25.0	32	137.0	52.0	60				
JDSP26.0 -2D -C32	10006387036	●	26.0	32	139.0	54.0	60				
JDSP27.0 -2D -C32	10006388036	●	27.0	32	141.0	56.0	60				
JDSP28.0 -2D -C32	10006389036	●	28.0	32	143.0	58.0	60	SP.. 090408		M3.5X10 10005508020	56.33.613 (T15) 10001720020
JDSP29.0 -2D -C32	10006390036	●	29.0	32	145.0	60.0	60				
JDSP30.0 -2D -C32	10006391036	●	30.0	32	144.0	62.0	60				
JDSP31.0 -2D -C32	10006392036	●	31.0	32	146.0	64.0	60				
JDSP32.0 -2D -C32	10006393036	●	32.0	32	148.0	66.0	60				
JDSP33.0 -2D -C32	10006394036	●	33.0	32	150.0	68.0	60				
JDSP34.0 -2D -C32	10006395036	●	34.0	32	156.0	70.0	60	SP.. 110408		M4.0X10 10005696020	
JDSP35.0 -2D -C32	10006396036	●	35.0	32	158.0	72.0	60				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

JDSP 3xD

Wendeplattenbohrer
Indexable Drills

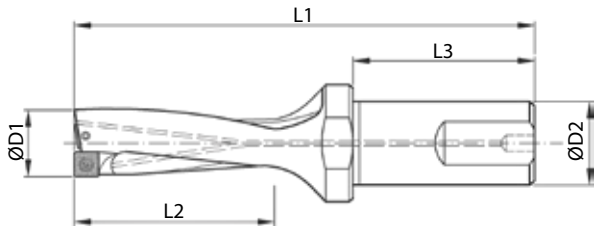


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.14			
JDSP10.0 -3D -C20	10005527036	●	10.0	20	93.0	32.0	50	SP.. 04T102	2	M1.8X3.8 10005514020	75.20.621 (T6) 10001850020
JDSP10.5 -3D -C20	10005528036	●	10.5	20	94.5	33.5	50				
JDSP11.0 -3D -C20	10005529036	●	11.0	20	96.0	35.0	50				
JDSP11.5 -3D -C20	10005530036	●	11.5	20	97.5	36.5	50				
JDSP12.0 -3D -C20	10005531036	●	12.0	20	99.0	38.0	50				
JDSP12.5 -3D -C20	10005532036	●	12.5	20	108.5	39.5	50	SP.. 050204		M2.2X5 10005505020	75.20.621 (T6) 10001850020
JDSP13.0 -3D -C20	10005533036	●	13.0	20	110.0	41.0	50				
JDSP 13.5 -3D -C20	10005534036	●	13.5	20	111.5	42.5	50				
JDSP 14.0 -3D -C25	10005483036	●	14.0	25	121.0	44.0	56				
JDSP 14.5 -3D -C25	10005535036	●	14.5	25	122.5	45.5	56				
JDSP 15.0 -3D -C25	10005502036	●	15.0	25	124.0	47.0	56				
JDSP 15.5 -3D -C25	10005536036	●	15.5	25	125.5	48.5	56				
JDSP16.0 -3D -C25	10005484036	●	16.0	25	127.0	50.0	56				
JDSP16.5 -3D -C25	10005537036	●	16.5	25	128.5	51.5	56				
JDSP 17.0 -3D -C25	10005485036	●	17.0	25	128.0	53.0	56	SP.. 060204		M2.2X6 10005506020	56.33.611 (T7) 10001716020
JDSP 17.5 -3D -C25	10005486036	●	17.5	25	129.5	54.5	56				
JDSP 18.0 -3D -C25	10005487036	●	18.0	25	130.0	56.0	56				
JDSP 18.5 -3D -C25	10005538036	●	18.5	25	131.5	57.5	56				
JDSP 19.0 -3D -C25	10005488036	●	19.0	25	132.0	59.0	56				
JDSP 19.5 -3D -C25	10005539036	●	19.5	25	133.5	60.5	56				
JDSP 20.0 -3D -C25	10005489036	●	20.0	25	137.0	62.0	56				
JDSP 20.5 -3D -C25	10005540036	●	20.5	25	138.5	63.5	56				
JDSP 21.0 -3D -C25	10005490036	●	21.0	25	140.0	65.0	56				
JDSP 21.5 -3D -C25	10005541036	●	21.5	25	141.5	66.5	56				
JDSP 22.0 -3D -C25	10005491036	●	22.0	25	143.0	68.0	56	SP.. 07T308		M2.5X8 10005507020	56.33.612 (T8) 10001718020
JDSP 22.5 -3D -C25	10005542036	●	22.5	25	144.5	69.5	56				
JDSP 23.0 -3D -C25	10005492036	●	23.0	25	146.0	71.0	56				
JDSP 23.5 -3D -C25	10005543036	●	23.5	25	147.5	72.5	56				
JDSP 24.0 -3D -C25	10005493036	●	24.0	25	149.0	74.0	56				
JDSP 24.5 -3D -C25	10005544036	●	24.5	25	150.5	75.5	56				
JDSP 25.0 -3D -C25	10005545036	●	25.0	25	153.0	77.0	56				
JDSP 25.0 -3D -C32	10005494036	○	25.0	32	162.0	77.0	60				
JDSP 25.5 -3D -C32	10005546036	●	25.5	32	163.5	77.0	60				
JDSP 26.0 -3D -C32	10005495036	●	26.0	32	165.0	78.5	60				
JDSP 26.5 -3D -C32	10005547036	●	26.5	32	166.5	80.0	60				
JDSP 27.0 -3D -C32	10005496036	●	27.0	32	168.0	81.5	60				
JDSP 27.5 -3D -C32	10005548036	●	27.5	32	169.5	83.0	60				
JDSP 28.0 -3D -C32	10005497036	●	28.0	32	171.0	86.0	60	SP.. 090408		M3.5X10 10005508020	56.33.613 (T15) 10001720020
JDSP 28.5 -3D -C32	10005549036	●	28.5	32	172.5	87.5	60				
JDSP 29.0 -3D -C32	10005498036	●	29.0	32	174.0	89.0	60				
JDSP 29.5 -3D -C32	10005550036	●	29.5	32	175.5	90.5	60				
JDSP 30.0 -3D -C32	10005499036	●	30.0	32	174.0	92.0	60				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

JDSP 3xD

Wendeplattenbohrer
Indexable Drills

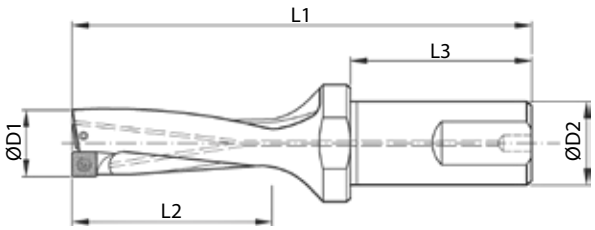


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.14			
JDSP 30.5 -3D-C32	10005551036	○	30.5	32	175.5	93.5	60	SP.. 090408	2	M3.5X10 10005508020	56.33.613 (T15) 10001720020
JDSP 31.0 -3D-C32	10005552036	●	31.0	32	177.0	95.0	60				
JDSP 31.5 -3D-C32	10005553036	○	31.5	32	178.5	96.5	60				
JDSP 32.0 -3D-C32	10005554036	●	32.0	32	180.0	98.0	60				
JDSP 32.5 -3D-C32	10005555036	○	32.5	32	181.5	99.5	60				
JDSP 33.0 -3D-C32	10005556036	●	33.0	32	183.0	101.0	60				
JDSP 33.5 -3D-C32	10005557036	○	33.5	32	184.5	102.5	60				
JDSP 34.0 -3D-C32	10005558036	●	34.0	32	191.5	104.0	60	SP.. 110408		M4.0X10 10005696020	56.33.613 (T15) 10001720020
JDSP 34.5 -3D-C32	10005559036	○	34.5	32	191.5	105.5	60				
JDSP 35.0 -3D-C32	10005560036	●	35.0	32	193.0	107.0	60				
JDSP 35.0 -3D-C32	10005561036	○	35.5	32	194.5	108.5	60				
JDSP 36.0 -3D-C32	10005562036	●	36.0	32	196.0	110.0	60				
JDSP 36.5 -3D-C32	10005563036	○	36.5	32	197.5	111.5	60				
JDSP 37.0 -3D-C32	10005564036	●	37.0	32	198.0	113.0	60				
JDSP 37.5 -3D-C32	10005565036	○	37.5	32	199.5	114.5	60				
JDSP 38.0 -3D-C32	10005566036	●	38.0	32	201.0	116.0	60				
JDSP 38.5 -3D-C32	10005567036	○	38.5	32	202.5	117.5	60				
JDSP 39.0 -3D-C32	10005568036	●	39.0	32	204.0	119.0	60				
JDSP 39.5 -3D-C32	10005569036	○	39.5	32	205.5	120.5	60				
JDSP 40.0 -3D-C32	10005570036	●	40.0	32	207.0	122.0	60				
JDSP 40.5 -3D-C32	10005571036	○	40.5	32	208.5	123.5	60				
JDSP 41.0 -3D-C32	10005572036	●	41.0	32	210.0	125.0	60				
JDSP 42.0 -3D-C40	10005573036	●	42.0	40	221.0	128.0	70	SP.. 140512		M5.0X12 10005697020	56.33.614 (T20) 10001722020
JDSP 43.0 -3D-C40	10005574036	●	43.0	40	224.0	131.0	70				
JDSP 44.0 -3D-C40	10005575036	●	44.0	40	230.0	134.0	70				
JDSP 45.0 -3D-C40	10005576036	●	45.0	40	233.0	137.0	70				
JDSP 46.0 -3D-C40	10005577036	●	46.0	40	237.0	140.0	70				
JDSP 47.0 -3D-C40	10005578036	●	47.0	40	240.0	143.0	70				
JDSP 48.0 -3D-C40	10005579036	●	48.0	40	243.0	146.0	70				
JDSP 49.0 -3D-C40	10005580036	●	49.0	40	246.0	149.0	70				
JDSP 50.0 -3D-C40	10005581036	●	50.0	40	249.0	152.0	70				
JDSP 51.0 -3D-C40	10005582036	○	51.0	40	252.0	155.0	70	SP.. 07T308	4	M2.5X8 10005507020	56.33.612 (T8) 10001718020
JDSP 52.0 -3D-C40	10005583036	○	52.0	40	255.0	158.0	70				
JDSP 53.0 -3D-C40	10005584036	○	53.0	40	258.0	161.0	70				
JDSP 54.0 -3D-C40	10005585036	○	54.0	40	261.0	164.0	70				
JDSP 55.0 -3D-C40	10005586036	○	55.0	40	264.0	167.0	70				
JDSP 56.0 -3D-C40	10005587036	○	56.0	40	267.0	170.0	70	SP.. 090408		M3.5X10 10005508020	56.33.613 (T15) 10001720020
JDSP 57.0 -3D-C40	10005588036	○	57.0	40	270.0	173.0	70				
JDSP 58.0 -3D-C40	10005589036	○	58.0	40	273.0	176.0	70				
JDSP 59.0 -3D-C40	10005590036	○	59.0	40	277.0	179.0	70				
JDSP 60.0 -3D-C40	10005591036	○	60.0	40	280.0	182.0	70				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

JDSP 4xD

Wendeplattenbohrer
Indexable Drills

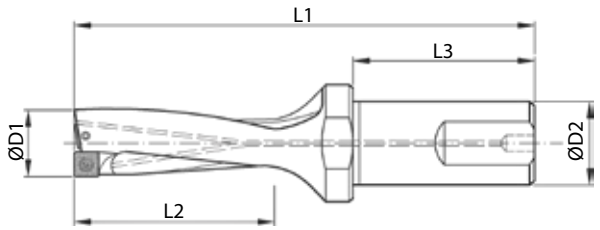


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.14			
JDSP 14.0 -4D -C25	10006253036	●	14.0	25	135	58	56	SP.. 050204		M2.2X5 10005505020	75.20.621 (T6) 10001850020
JDSP 15.0 -4D -C25	10006254036	●	15.0	25	139	62	56				
JDSP 16.0 -4D -C25	10006255036	●	16.0	25	143	66	56				
JDSP 17.0 -4D -C25	10006256036	●	17.0	25	145	70	56	SP.. 060204		M2.2X6 10005506020	56.33.611 (T7) 10001716020
JDSP 18.0 -4D -C25	10006257036	●	18.0	25	148	74	56				
JDSP 19.0 -4D -C25	10006258036	●	19.0	25	151	78	56				
JDSP 20.0 -4D -C25	10006259036	●	20.0	25	157	82	56				
JDSP 21.0 -4D -C25	10006260036	●	21.0	25	161	86	56				
JDSP 22.0 -4D -C25	10006261036	●	22.0	25	165	90	56	SP.. 07T308		M2.5X8 10005507020	56.33.612 (T8) 10001718020
JDSP 23.0 -4D -C25	10006262036	●	23.0	25	169	94	56				
JDSP 24.0 -4D -C25	10006263036	●	24.0	25	173	98	56				
JDSP 25.0 -4D -C25	10006264036	●	25.0	25	177	102	56				
JDSP 26.0 -4D -C32	10006265036	●	26.0	32	191	106	60				
JDSP 27.0 -4D -C32	10006266036	●	27.0	32	195	110	60		2		
JDSP 28.0 -4D -C32	10006267036	●	28.0	32	199	114	60	SP.. 090408		M3.5X10 10005508020	56.33.613 (T15) 10001720020
JDSP 29.0 -4D -C32	10006268036	●	29.0	32	203	118	60				
JDSP 30.0 -4D -C32	10006269036	●	30.0	32	204	122	60				
JDSP 31.0 -4D -C32	10006270036	●	31.0	32	208	126	60				
JDSP 32.0 -4D -C32	10006271036	●	32.0	32	212	130	60				
JDSP 33.0 -4D -C32	10006272036	●	33.0	32	216	134	60				
JDSP 34.0 -4D -C32	10006273036	●	34.0	32	224	138	60	SP.. 110408		M4.0X10 10005696020	56.33.613 (T15) 10001720020
JDSP 35.0 -4D -C32	10006274036	●	35.0	32	228	142	60				
JDSP 36.0 -4D -C32	10006275036	●	36.0	32	232	146	60				
JDSP 37.0 -4D -C32	10006276036	●	37.0	32	235	150	60				
JDSP 38.0 -4D -C32	10006277036	●	38.0	32	239	154	60				
JDSP 39.0 -4D -C32	10006278036	●	39.0	32	243	158	60				
JDSP 40.0 -4D -C32	10006279036	●	40.0	32	247	162	60				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

JDSP 5xD

Wendeplattenbohrer
Indexable Drills

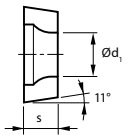


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.14			
JDSP 14.0 -5D -C25	10006280036	●	14.0	25	149	72	56	SP.. 050204		M2.2X5 10005505020	75.20.621 (T6) 10001850020
JDSP 15.0 -5D -C25	10006281036	●	15.0	25	154	77	56				
JDSP 16.0 -5D -C25	10006282036	●	16.0	25	159	82	56				
JDSP 17.0 -5D -C25	10006283036	●	17.0	25	162	87	56	SP.. 060204		M2.2X6 10005506020	56.33.611 (T7) 10001716020
JDSP 18.0 -5D -C25	10006284036	●	18.0	25	166	92	56				
JDSP 19.0 -5D -C25	10006285036	●	19.0	25	170	97	56				
JDSP 20.0 -5D -C25	10006286036	●	20.0	25	177	102	56				
JDSP 21.0 -5D -C25	10006287036	●	21.0	25	182	107	56				
JDSP 22.0 -5D -C25	10006288036	●	22.0	25	187	112	56	SP.. 07T308		M2.5X8 10005507020	56.33.612 (T8) 10001718020
JDSP 23.0 -5D -C25	10006289036	●	23.0	25	192	117	56				
JDSP 24.0 -5D -C25	10006290036	●	24.0	25	197	122	56				
JDSP 25.0 -5D -C25	10006291036	●	25.0	25	203	127	56				
JDSP 26.0 -5D -C32	10006292036	●	26.0	32	217	132	60				
JDSP 27.0 -5D -C32	10006293036	●	27.0	32	222	137	60		2		
JDSP 28.0 -5D -C32	10006294036	●	28.0	32	227	142	60	SP.. 090408		M3.5X10 10005508020	56.33.613 (T15) 10001720020
JDSP 29.0 -5D -C32	10006295036	●	29.0	32	232	147	60				
JDSP 30.0 -5D -C32	10006296036	●	30.0	32	234	152	60				
JDSP 31.0 -5D -C32	10006297036	●	31.0	32	239	157	60				
JDSP 32.0 -5D -C32	10006298036	●	32.0	32	244	162	60				
JDSP 33.0 -5D -C32	10006299036	●	33.0	32	249	167	60				
JDSP 34.0 -5D -C32	10006300036	●	34.0	32	258	172	60	SP.. 110408		M4.0X10 10005696020	56.33.613 (T15) 10001720020
JDSP 35.0 -5D -C32	10006301036	●	35.0	32	263	177	60				
JDSP 36.0 -5D -C32	10006302036	●	36.0	32	268	182	60				
JDSP 37.0 -5D -C32	10006303036	●	37.0	32	272	187	60				
JDSP 38.0 -5D -C32	10006304036	●	38.0	32	277	192	60				
JDSP 39.0 -5D -C32	10006305036	●	39.0	32	282	197	60				
JDSP 40.0 -5D -C32	10006306036	●	40.0	32	287	202	60				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

SP□□

90°



Wendeplatten *Inserts*	Bezeichnung *Part Number*	DM 5125 M25/P25C Niro *Stainless Steel*		DP 5220 P25C Stahl *Steel*		DU 5630 P30/M/K20C Universal		DK 1210 K10 Aluminium		Maße *Dimensions* [mm]			Passende Trägerwerkzeuge *Suitable Toolholders*
		Lager *Stock*	Bestellnummer *Order number*	Lager *Stock*	Bestellnummer *Order number*	Lager *Stock*	Bestellnummer *Order number*	Lager *Stock*	Bestellnummer *Order number*	Ø d	s	Ø d_1	Bezeichnung *Part Number*
SPGT - AL	**05 02 04- AL**							●	10005667034	5,00	2,38	2,25	JDSP 12.5-16.5
	**06 02 04- AL**							●	10005668034	6,00	2,38	2,60	JDSP 17.0-21.5
	07 T3 08- AL							●	10005669034	7,94	3,97	2,85	JDSP 22.0-27.5 / JDSP 51.0-55.0
	09 04 08- AL							●	10004868065	9,80	4,30	4,05	JDSP 28.0-33.5 / JDSP 56.0-60.0
	11 04 08- AL							●	10005670034	11,50	4,80	4,45	JDSP 34.0-41.0
	14 05 12- AL							●	10005671034	14,30	5,20	5,75	JDSP 42.0-50.0
SPGT	**04 T1 02**	●	10005666065							4,00	1,98	2,00	JDSP 10.0-12.0
	**05 02 04**	●	10005666065							5,00	2,38	2,20	JDSP 12.5-16.5
	06 02 04	●	10004623065							6,00	2,38	2,55	JDSP 17.0-21.5
	07 T3 08	●	10004625065							7,94	3,97	2,85	JDSP 22.0-27.5 / JDSP 51.0-55.0
	09 04 08	●	10004626065							9,80	4,30	4,10	JDSP 28.0-33.5 / JDSP 56.0-60.0
	11 04 08	●	10004627065							11,50	4,80	4,40	JDSP 34.0-41.0
	14 05 12	●	10004629065							14,30	5,20	5,75	JDSP 42.0-50.0
SPMT - M50	**05 02 04- M50**					●	10004636065			5,00	2,37	2,15	JDSP 12.5-16.5
	**06 02 04- M50**					●	10004638065			6,00	2,38	2,60	JDSP 17.0-21.5
	07 T3 08- M50					●	10004640065			7,94	3,97	2,80	JDSP 22.0-27.5 / JDSP 51.0-55.0
	09 04 08- M50					●	10004642065			9,78	4,30	4,12	JDSP 28.0-33.5 / JDSP 56.0-60.0
	11 04 08- M50					●	10004644065			11,50	4,76	4,44	JDSP 34.0-41.0
	14 05 12- M50					●	10004646065			14,30	5,20	5,78	JDSP 42.0-50.0
SPMX - M21	**05 02 04- M21**			●	10004612065					5,00	2,38	2,50	JDSP 12.5-16.5
	**06 02 04- M21**			●	10004613065					6,00	2,38	2,80	JDSP 17.0-21.5
	07 T3 08- M21			●	10004614065					7,94	3,97	2,80	JDSP 22.0-27.5 / JDSP 51.0-55.0
	09 04 08- M21			●	10004615065					9,80	4,30	4,10	JDSP 28.0-33.5 / JDSP 56.0-60.0
	11 04 08- M21			●	10004616065					11,50	4,76	4,40	JDSP 34.0-41.0

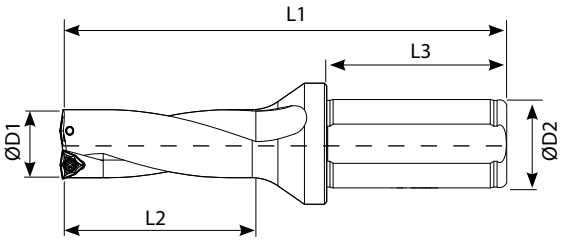
● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

Schnittdaten-Empfehlungen zum Bohren mit JPSP
Cutting Data Recommendations for Drilling with JPSP

Werkstückwerkstoff *Material*		Härte *hardness* HB	Wahl *Choice*	Spanstufe CB	HM-Sorte *Grade*	Schnittdaten *Conditions* (L=3xD + 2xD)						
						V_c	Vorschub f [mm/U] *Feed f [mm/rev]*					
						m/min	Ø12,5-15	Ø15,5-21,5	Ø22-27,5	Ø28-33	Ø34-41	Ø42-50
A	C-Stahl *Low carbon steel*	80 - 180	1.	M21	DP 5220	180-260	0,05-0,08	0,06-0,10	0,06-0,11	0,07-0,13	0,08-0,14	0,08-0,15
			2.		DM5125	170-250						
			3.	M50	DU 5630	180-260						
		180 - 260	1.	M21	DP 5220	140-230	0,06-0,11	0,08-0,14	0,09-0,18	0,12-0,22	0,13-0,24	0,13-0,25
			2.		DM5125	130-220						
			3.	M50	DU 5630	140-230						
	Niedrig legierter Stahl *Low alloy steel*	140 - 250	1.	M21	DP 5220	160-220	0,06-0,12	0,08-0,14	0,10-0,17	0,12-0,22	0,12-0,23	0,13-0,24
			2.		DM5125	150-210						
			3.	M50	DU 5630	160-220						
	Hoch legierter Stahl *High alloy steel*	220 - 450	1.	M21	DP 5220	80-180	0,06-0,10	0,08-0,15	0,10-0,19	0,11-0,22	0,13-0,23	0,14-0,25
			2.		DM5125	70-170						
			3.	M50	DU 5630	80-180						
R	Niro austenitisch Ni > 8% *Austenite*	135 - 275	1.		DM5125	150-190	0,06-0,09	0,06-0,11	0,07-0,13	0,09-0,14	0,09-0,16	0,10-0,17
			2.	M50	DU 5630	100-150						
	Niro ferritisch/ martensitisch *Ferrite / Martensite*	135 - 275	1.		DM5125	180-230	0,06-0,10	0,06-0,12	0,08-0,15	0,09-0,16	0,10-0,17	0,11-0,19
			2.	M50	DU 5630	120-180						
S	Titanlegierung *Ti-alloy*	130 - 400	1.		DM5125	40-50	0,05-0,10	0,05-0,12	0,08-0,16	0,10-0,20	0,11-0,21	0,14-0,24
			2.	M50	DU 5630	20-40						
F	Grauguss *Grey cast iron*	150 - 220	1.	M50	DU 5630	150-280	0,06-0,12	0,08-0,16	0,12-0,19	0,15-0,23	0,16-0,25	0,18-0,28
			2.		DM5125	140-270						
	Kugel-Graphit-Guss *Graphite*	200 - 300	1.	M50	DU 5630	100-220	0,06-0,09	0,08-0,14	0,10-0,18	0,12-0,20	0,14-0,22	0,16-0,25
			2.		DM5125	90-210						
N	Aluminium	330 - 380	1.	AL	DK 1210	310-360	0,06-0,14	0,08-0,15	0,10-0,20	0,12-0,21	0,14-0,22	0,15-0,24
			2.		DM5125	310-360						
	Kupfer *Copper*	150 - 180	1.	AL	DK 1210	230-290	0,06-0,12	0,08-0,13	0,10-0,18	0,12-0,20	0,14-0,21	0,14-0,22
			2.		DM5125	230-290						

JWSD 3xD

Wendeplattenbohrer
Indexable Drills

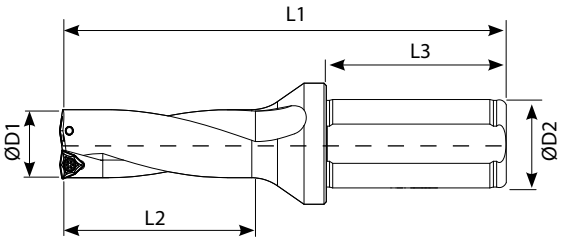


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.18			
JWSD 14.0 -3D -C25	10005463036	●	14.0	25	121.0	44.0	56	WC.. 030208	2	M2.5X5 10005505020	56.33.612 (T8) 10001718020
JWSD 14.5 -3D -C25	10006250036	○	14.5	25	122.5	45.5	56			M2.2X6 10005506020	
JWSD 15.0 -3D -C25	10005480036	●	15.0	25	122.0	47.0	56				
JWSD 15.5 -3D -C25	10006251036	○	15.5	25	123.5	48.5	56				
JWSD16.0 -3D -C25	10005464036	●	16.0	25	125.0	50.0	56				
JWSD16.5 -3D -C25	10006351036	○	16.5	25	126.5	51.5	56				
JWSD 17.0 -3D -C25	10005465036	●	17.0	25	128.0	53.0	56				
JWSD 17.5 -3D -C25	10005466036	○	17.5	25	129.5	54.5	56				
JWSD 18.0 -3D -C25	10005467036	●	18.0	25	131.0	56.0	56				
JWSD 18.5 -3D -C25	10006352036	○	18.5	25	132.5	57.5	56				
JWSD 19.0 -3D -C25	10005468036	●	19.0	25	132.0	59.0	56				
JWSD 19.5 -3D -C25	10006311036	○	19.5	25	133.5	60.5	56				
JWSD 20.0 -3D -C25	10005469036	●	20.0	25	135.5	62.0	56	WC.. 04 02 08		M2.5X6 10005504020	56.33.612 (T8) 10001718020
JWSD 20.5 -3D -C25	10006353036	○	20.5	25	137.5	63.5	56				
JWSD 21.0 -3D -C25	10005470036	●	21.0	25	139.0	65.0	56				
JWSD 21.5 -3D -C25	10006354036	○	21.5	25	140.5	66.5	56				
JWSD 22.0 -3D -C25	10005471036	●	22.0	25	142.0	68.0	56				
JWSD 22.5 -3D -C25	10006355036	○	22.5	25	143.5	69.5	56				
JWSD 23.0 -3D -C25	10005472036	●	23.0	25	145.0	71.0	56				
JWSD 23.5 -3D -C25	10006356036	○	23.5	25	146.5	72.5	56				
JWSD 24.0 -3D -C25	10005473036	●	24.0	25	148.0	74.0	56	WC.. 05 03 08		M3.0X8 10005717020	56.33.612 (T8) 10001718020
JWSD 24.5 -3D -C25	10006312036	○	24.5	25	149.5	75.5	56				
JWSD 25.0 -3D -C25	10006357036	○	25.0	25	152.0	77.0	56				
JWSD 25.0 -3D -C32	10005474036	●	25.0	32	161.0	77.0	60				
JWSD 25.5 -3D -C32	10006358036	○	25.5	32	162.5	78.5	60				
JWSD 26.0 -3D -C32	10005475036	●	26.0	32	164.0	80.0	60				
JWSD 26.5 -3D -C32	10006359036	○	26.5	32	165.5	81.5	60				
JWSD 27.0 -3D -C32	10005476036	●	27.0	32	167.0	83.0	60				
JWSD 27.5 -3D -C32	10006360036	○	27.5	32	168.5	84.5	60				
JWSD 28.0 -3D -C32	10005477036	●	28.0	32	170.0	86.0	60				
JWSD 28.5 -3D -C32	10006361036	○	28.5	32	171.0	87.5	60				
JWSD 29.0 -3D -C32	10005478036	●	29.0	32	173.0	89.0	60				
JWSD 29.5 -3D -C32	10006252036	○	29.5	32	174.5	90.5	60				
JWSD 30.0 -3D -C32	10005479036	●	30.0	32	176.0	92.0	60				
JWSD 30.5 -3D -C32	10005592036	○	30.5	32	176.5	93.5	60				
JWSD 31.0 -3D -C32	10005593036	○	31.0	32	177.0	95.0	60	WC.. 06 T3 08		M3.5X10 10005508020	56.33.613 (T15) 10001720020
JWSD 31.5 -3D -C32	10005594036	○	31.5	32	178.5	96.5	60				
JWSD 32.0 -3D -C32	10005595036	○	32.0	32	180.0	98.0	60				
JWSD 32.5 -3D -C32	10005596036	○	32.5	32	181.5	99.5	60				
JWSD 33.0 -3D -C32	10005597036	○	33.0	32	183.0	101.0	60				
JWSD 33.5 -3D -C32	10005598036	○	33.5	32	184.5	102.5	60				
JWSD 34.0 -3D -C32	10005599036	○	34.0	32	186.0	104.0	60				
JWSD 34.5 -3D -C32	10005600036	○	34.5	32	186.5	105.5	60				
JWSD 35.0 -3D -C32	10005601036	○	35.0	32	190.0	107.0	60				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

JWSD 3xD

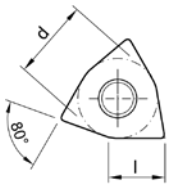
Wendeplattenbohrer
Indexable Drills

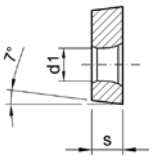


Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*					Wendeplatte *Insert*	Z	Ersatzteile *Spare Parts*	
			D_1	D_2	L_1	L_2	L_3	Seite / *Page*: 7.18			
JWSD 35.5 -3D -C32	10005602036	○	35.5	32	190.5	108.5	60	WC.. 06 T3 08	2	M3.5X10 10005508020	56.33.613 (T15) 10001720020
JWSD 36.0 -3D -C32	10005603036	○	36.0	32	193.0	110.0	60				
JWSD 36.5 -3D -C32	10005604036	○	36.5	32	194.5	111.5	60				
JWSD 37.0 -3D -C32	10005605036	○	37.0	32	196.0	113.0	60				
JWSD 37.5 -3D -C32	10005606036	○	37.5	32	198.5	114.5	60				
JWSD 38.0 -3D -C32	10005607036	○	38.0	32	196.5	116.0	60				
JWSD 38.5 -3D -C32	10005608036	○	38.5	32	198.0	117.5	60				
JWSD 39.0 -3D -C32	10005609036	○	39.0	32	197.0	119.0	60				
JWSD 39.5 -3D -C32	10005610036	○	39.5	32	199.5	120.5	60				
JWSD 40.0 -3D -C32	10005611036	○	40.0	32	200.0	122.0	60				
JWSD 40.5 -3D -C32	10005612036	○	40.5	32	200.5	123.5	60				
JWSD 41.0 -3D -C32	10005613036	○	41.0	32	205.0	125.0	60				
JWSD 41.5 -3D -C32	10005614036	○	41.5	32	203.5	126.5	60				
JWSD 42.0 -3D -C40	10005615036	○	42.0	40	223.0	128.0	70	WC.. 08 04 ..		M4.0X10 10005696020	56.33.613 (T15) 10001720020
JWSD 42.5 -3D -C40	10005616036	○	42.5	40	224.5	129.5	70				
JWSD 43.0 -3D -C40	10005617036	○	43.0	40	226.0	131.0	70				
JWSD 43.5 -3D -C40	10005618036	○	43.5	40	227.5	132.5	70				
JWSD 44.0 -3D -C40	10005619036	○	44.0	40	229.0	134.0	70				
JWSD 44.5 -3D -C40	10005620036	○	44.5	40	230.5	135.5	70				
JWSD 45.0 -3D -C40	10005621036	○	45.0	40	233.0	137.0	70				
JWSD 45.5 -3D -C40	10005622036	○	45.5	40	233.5	138.5	70				
JWSD 46.0 -3D -C40	10005623036	○	46.0	40	235.0	140.0	70				
JWSD 46.5 -3D -C40	10005624036	○	46.5	40	236.5	141.6	70				
JWSD 47.0 -3D -C40	10005625036	○	47.0	40	238.0	143.0	70				
JWSD 47.5 -3D -C40	10005626036	○	47.5	40	239.5	144.5	70				
JWSD 48.0 -3D -C40	10005627036	○	48.0	40	241.0	146.0	70				
JWSD 48.5 -3D -C40	10005628036	○	48.5	40	242.5	147.5	70				
JWSD 49.0 -3D -C40	10005629036	○	49.0	40	244.0	149.0	70				
JWSD 49.5 -3D -C40	10005630036	○	49.5	40	245.5	150.5	70				
JWSD 50.0 -3D -C40	10005631036	○	50.0	40	247.0	152.0	70				
JWSD 50.5 -3D -C40	10005632036	○	50.5	40	249.0	154.0	70				
JWSD 51.0 -3D -C40	10005633036	○	51.0	40	250.0	155.0	70				
JWSD 52.0 -3D -C40	10005634036	○	52.0	40	253.0	158.0	70				
JWSD 53.0 -3D -C40	10005635036	○	53.0	40	256.0	161.0	70				
JWSD 54.0 -3D -C40	10005636036	○	54.0	40	259.0	164.0	70				
JWSD 55.0 -3D -C40	10005637036	○	55.0	40	262.0	167.0	70				
JWSD 56.0 -3D -C40	10005638036	○	56.0	40	265.0	170.0	70				
JWSD 57.0 -3D -C40	10005639036	○	57.0	40	268.0	173.0	70				
JWSD 58.0 -3D -C40	10005640036	○	58.0	40	271.0	176.0	70				
JWSD 59.0 -3D -C40	10005641036	○	59.0	40	274.0	179.0	70				
JWSD 60.0 -3D -C40	10006313036	○	60.0	40	277.0	182.0	70				
JWSD 65.0 -3D -C40	10005643036	○	65.0	40	298.5	197.0	70	WC.. 06 T3 08	4	M3.5X10 10005508020	56.33.613 (T15) 10001720020
JWSD 68.0 -3D -C40	10005644036	○	68.0	40	308.0	206.0	70				
JWSD 70.0 -3D -C40	10005645036	○	70.0	40	302.0	212.0	70				

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

WC□□





Wendeplatten *Inserts*	Bezeichnung *Part Number*	DM 5125 M25/P25C Niro *Stainless Steel*		DU 5630 P30/M/K20C Universal		DK 1210 K10 Aluminium		Maße *Dimensions* [mm]			Passende Trägerwerkzeuge *Suitable Toolholders*
		Lager *Stock*	Bestellnummer *Order number*	Lager *Stock*	Bestellnummer *Order number*	Lager *Stock*	Bestellnummer *Order number*	Ø d	s	Ø d_1	Bezeichnung *Part Number*
WCGT - AL	**03 02 08- AL**					●	10005676034	5,56	2,38	2,55	JWSD 14.0-19.5
	**04 02 08- AL**					●	10005677034	6,35	2,38	2,80	JWSD 20.0-23.5
	05 03 08- AL					●	10005678034	7,94	3,52	3,20	JWSD 24.0-30.5
	06 T3 08- AL					●	10005679034	9,52	3,97	3,70	JWSD 31.0-41.5 / JWSD 65.0-70.0
	08 04 08- AL					●	10005680034	12,70	4,76	4,30	JWSD 42.0-60.0
WCMX - M50	**03 02 08- M50**			●	10004654065			5,56	2,38	2,55	JWSD 14.0-19.5
	**04 02 08- M50**			●	10004655065			6,35	2,38	2,80	JWSD 20.0-23.5
	05 03 08- M50			●	10004656065			7,94	3,52	3,20	JWSD 24.0-30.5
	06 T3 08- M50			●	10004657065			9,52	3,97	3,70	JWSD 31.0-41.5 / JWSD 65.0-70.0
	08 04 12- M50			●	10004658065			12,70	4,76	4,30	JWSD 42.0-60.0
WCMX - S30	**03 02 08- S30**	●	10005681065					5,56	2,38	2,55	JWSD 14.0-19.5
	**04 02 08- S30**	●	10005682065					6,35	2,38	2,80	JWSD 20.0-23.5
	05 03 08- S30	●	10005683065					7,94	3,52	3,20	JWSD 24.0-30.5
	06 T3 08- S30	●	10005684065					9,52	3,97	3,70	JWSD 31.0-41.5 / JWSD 65.0-70.0
	08 04 12- S30	●	10005685065					12,70	4,76	4,30	JWSD 42.0-60.0

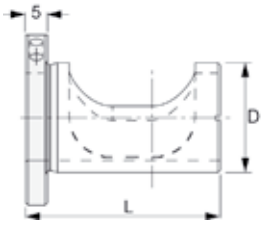
● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

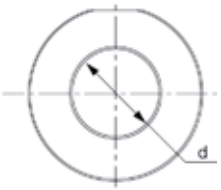
Schnittdaten-Empfehlungen zum Bohren mit JWSD
Cutting Data Recommendations for Drilling with JWSD

Werkstückwerkstoff *Material*		Härte *hardness* HB	Wahl *Choice*	Spanstufe CB	HM-Sorte *Grade*	Schnittdaten *Conditions* (L=3xD + 2xD)					
						V_c	Vorschub f [mm/U] *Feed f [mm/rev]*				
						m/min	Ø14,0-20	Ø20,5-23,5	Ø24-30,5	Ø31-41,5	Ø42-70
A	C-Stahl *Low carbon steel*	80 - 180	1.	M50	DU 5630	130-230	0,04-0,08	0,04-0,08	0,05-0,08	0,04-0,08	0,08-0,12
			2.	S30	DM5125	110-210	0,04-0,08	0,04-0,10	0,05-0,10	0,05-0,10	0,08-0,12
		180 - 280	1.	M50	DU 5630	80-180	0,04-0,08	0,04-0,10	0,05-0,12	0,08-0,15	0,10-0,20
	Niedrig legierter Stahl *Low alloy steel*	140 - 260	1.	M50	DU 5630	70-170	0,04-0,10	0,06-0,12	0,10-0,15	0,11-0,20	0,13-0,25
			2.	S30	DM5125	50-150	0,04-0,10	0,06-0,13	0,10-0,18	0,11-0,20	0,13-0,25
	Hoch legierter Stahl *High alloy steel*	220 - 450	1.	M50	DU 5630	30-120	0,04-0,08	0,04-0,10	0,06-0,12	0,08-0,14	0,10-0,18
			2.	S30	DM5125	30-100	0,04-0,08	0,04-0,10	0,06-0,12	0,08-0,14	0,10-0,18
R	Niro austenitisch Ni > 8% *Austenite*	135 - 275	1.	S30	DM5125	50-130	0,04-0,08	0,04-0,10	0,06-0,12	0,08-0,14	0,10-0,18
			2.	M50	DU 5630	50-130	0,04-0,08	0,04-0,10	0,06-0,12	0,08-0,14	0,10-0,18
	Niro ferritisch/ martensitisch *Ferrite / Martensite*	135 - 275	1.	S30	DM5125	60-150	0,04-0,08	0,04-0,12	0,06-0,14	0,08-0,18	0,12-0,20
			2.	M50	DU 5630	60-140	0,04-0,08	0,04-0,12	0,06-0,14	0,08-0,18	0,12-0,20
S	Titanlegierung *Ti-alloy*	130 - 400	1.	S30	DM5125	30-70	0,04-0,06	0,04-0,08	0,06-0,10	0,08-0,12	0,08-0,15
H	Stahl hochfest *High hardness*	> 400	1.	M50	DU 5630	20-60	0,04-0,06	0,04-0,08	0,06-0,10	0,08-0,12	0,08-0,15
F	Grauguss *Grey cast iron*	150 - 220	1.	M50	DU 5630	140-230	0,04-0,12	0,06-0,14	0,08-0,18	0,10-0,20	0,12-0,25
	Kugel-Graphit-Guss *Graphite*	200 - 300	1.	M50	DU 5630	70-150	0,04-0,10	0,05-0,12	0,06-0,14	0,08-0,18	0,10-0,22
			2.	S30	DM5125	50-130	0,04-0,10	0,05-0,12	0,06-0,14	0,08-0,18	0,10-0,20
N	Aluminium	30 - 150	1.	AL	DK 1210	150-300	0,04-0,12	0,06-0,14	0,08-0,16	0,10-0,20	0,12-0,25
	Kupfer *Copper*	150 - 160	1.	AL	DK 1210	150-250	0,04-0,10	0,05-0,12	0,08-0,14	0,10-0,18	0,12-0,20
			2.	S30	DM5125	100-200	0,04-0,10	0,04-0,10	0,08-0,12	0,10-0,15	0,12-0,18

JDSD - H

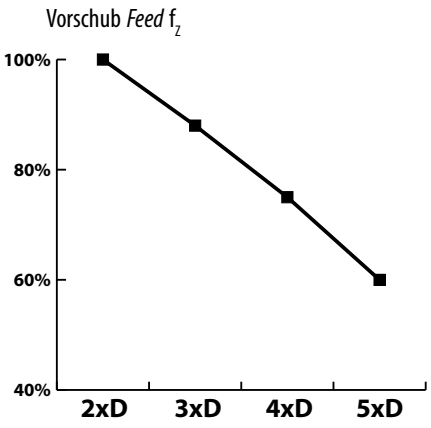
Excenter- Reduzierhülse Eccentric Sleeve

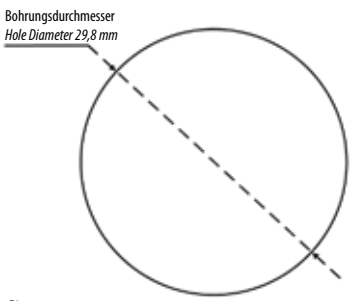




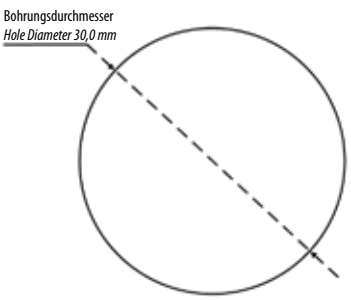
Bezeichnung *Part Number*	Bestellnummer *Order number*	Lager *Stock*	Maße [mm] *Dimensions*		
			d	D	L
JDSD-H-2025	10002368036	●	20	25	46,5
JDSD-H-2532	10002369036	●	25	32	47,0
JDSD-H-3240	10002370036	●	32	40	57,0

Empfohlene Schnittwertänderungen bei Nutzung einer Reduzierhülse
Recommended feed when using eccentric sleeve

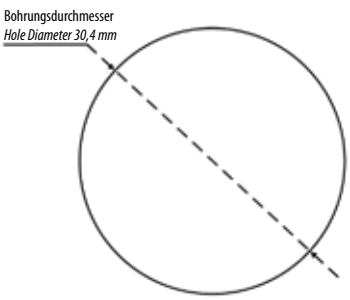




Ø Bohrer *Drill* = 30 mm



Ø Bohrer *Drill* = 30 mm



Ø Bohrer *Drill* = 30 mm

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

Bohrungs- Toleranz und max. Durchmesser der Bohrung bei radialer Neuausrichtung
Hole tolerance and max. hole size with radial adjustment

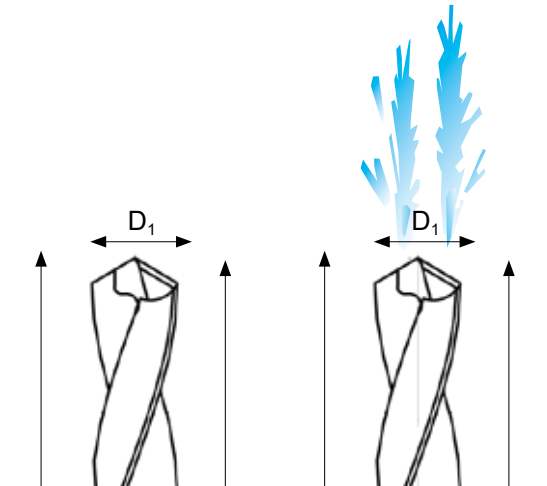
2 x D & 3 x D				4 x D			
Bohrer *Drill Ø mm*	Bohrungs-durchmesser *Hole normal*	Neuausrichtung Radial *Adjustment mm*	max. Bohrungs-Ø *max. Hole-Ø*	Bohrer *Drill Ø mm*	Bohrungs-durchmesser *Hole normal*	Neuausrichtung Radial *Adjustment mm*	max. Bohrungs-Ø *max. Hole-Ø*
13	13,16	0,50	14,0	13	13,22	0,50	14,0
14	14,10	0,50	15,0	14	14,15	0,50	15,0
15	15,10	0,50	16,0	15	15,17	0,50	16,0
16	16,07	0,50	17,0	16	16,09	0,50	17,0
17	17,08	0,50	18,0	17	17,13	0,50	18,0
18	18,05	0,50	19,0	18	18,20	0,50	19,0
19	19,08	0,50	20,0	19	19,18	0,50	20,0
20	20,06	0,50	21,0	20	20,05	0,50	21,0
21	20,97	0,25	21,5	21	21,00	0,25	21,5
22	21,94	0,50	23,0	22	22,01	0,50	23,0
23	23,10	0,50	24,0	23	23,10	0,50	24,0
24	24,10	0,50	25,0	24	24,15	0,50	25,0
25	25,06	0,50	26,0	25	25,13	0,50	26,0
26	26,03	0,25	26,5	26	26,09	0,25	26,5
27	27,05	0,25	27,5	27	26,96	0,25	27,5
28	28,11	0,50	29,0	28	27,97	0,50	29,0
29	28,54	0,50	30,0	29	29,07	0,50	30,0
30	30,23	0,50	31,0	30	30,13	0,50	31,0
31	31,07	0,25	31,5	31	31,12	0,25	31,5
32	32,06	0,25	32,5	32	32,11	0,25	32,5
33	33,12	0,25	33,5	33	33,17	0,25	33,5
34	34,10	0,50	35,0	34	34,15	0,50	35,0
35	35,07	0,50	36,0	35	35,12	0,50	36,0
36	36,03	0,50	37,0	36	36,08	0,50	37,0
37	37,14	0,50	38,0	37	37,19	0,50	38,0
38	38,05	0,50	39,0	38	38,08	0,50	39,0
39	39,03	0,50	40,0	39	39,08	0,50	40,0
40	40,00	0,25	40,5	40	40,05	0,25	40,5
41	40,99	0,25	41,5	41	41,04	0,25	41,5
42	42,03	0,50	43,0	42	42,08	0,50	43,0
43	42,99	0,50	44,0	43	43,04	0,50	44,0
44	44,17	0,50	45,0	44	44,22	0,50	45,0
45	45,21	0,50	46,0	45	45,26	0,50	46,0
46	46,17	0,50	47,0	46	46,23	0,50	47,0
47	47,15	0,50	48,0	47	47,20	0,50	48,0
48	48,12	0,25	48,5	48	48,17	0,25	48,5
49	49,00	0,25	49,5	49	49,05	0,25	49,5
50	50,02	0,25	50,5	50	50,07	0,25	50,5

Bohrungstoleranz mm *hole tolerance mm*		
Bohrer *Drill*	*Ø mm*	3xD
13,0-21,5		-0,10/ +0,15
22,0-50,0		-0,12/ +0,20

P-Line

VHM-Hochleistungsbohrer, Feinstkorn, 3xD, rechtsschneidend,
Solid Carbide High Performance Drills, Super Micrograin, 3xD, RH

3 x D | 30° | 140° | DIN 6535 HA HE | DIN 6537 | IK IC | DP 6030 (AlCrN)

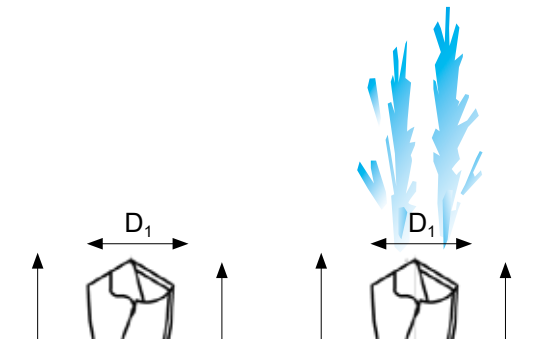


Bezeichnung *Part Number*	Lager *Stock* HA		Lager *Stock* HE		Maße [mm] *Dimensions*			
	IK *IC*	ohne *without* IK *IC*	IK IC	ohne *without* IK *IC*	D_1m_7	D_2h_6	L_1	L_2
P03 0300	●	○	○	○	3.00	6	62	20
P03 0310	○	○	○	○	3.10	6	62	20
P03 0320	○	○	○	○	3.20	6	62	20
P03 0330	●	○	○	○	3.30	6	62	20
P03 0340	○	○	○	○	3.40	6	62	20
P03 0350	○	○	○	○	3.50	6	62	20
P03 0360	○	○	○	○	3.60	6	62	20
P03 0370	○	○	○	○	3.70	6	62	20
P03 0380	○	○	○	○	3.80	6	66	24
P03 0390	○	○	○	○	3.90	6	66	24
P03 0400	●	○	○	○	4.00	6	66	24
P03 0410	○	○	○	○	4.10	6	66	24
P03 0420	●	○	○	○	4.20	6	66	24
P03 0430	○	○	○	○	4.30	6	66	24
P03 0440	○	○	○	○	4.40	6	66	24
P03 0450	○	○	○	○	4.50	6	66	24
P03 0460	○	○	○	○	4.60	6	66	24
P03 0465	○	○	○	○	4.65	6	66	24
P03 0470	○	○	○	○	4.70	6	66	24
P03 0480	○	○	○	○	4.80	6	66	28
P03 0490	○	○	○	○	4.90	6	66	28
P03 0500	●	○	○	○	5.00	6	66	28
P03 0510	○	○	○	○	5.10	6	66	28
P03 0520	○	○	○	○	5.20	6	66	28
P03 0530	○	○	○	○	5.30	6	66	28
P03 0540	○	○	○	○	5.40	6	66	28
P03 0550	○	○	○	○	5.50	6	66	28
P03 0555	○	○	○	○	5.55	6	66	28
P03 0560	○	○	○	○	5.60	6	66	28
P03 0570	○	○	○	○	5.70	6	66	28
P03 0580	○	○	○	○	5.80	6	66	28
P03 0590	○	○	○	○	5.90	6	66	28
P03 0600	●	○	○	○	6.00	6	66	28
P03 0610	○	○	○	○	6.10	8	79	34
P03 0620	○	○	○	○	6.20	8	79	34
P03 0630	○	○	○	○	6.30	8	79	34
P03 0640	○	○	○	○	6.40	8	79	34
P03 0650	○	○	○	○	6.50	8	79	34
P03 0660	○	○	○	○	6.60	8	79	34
P03 0670	○	○	○	○	6.70	8	79	34
P03 0680	●	○	○	○	6.80	8	79	34
P03 0690	○	○	○	○	6.90	8	79	34
P03 0700	●	○	○	○	7.00	8	79	34
P03 0710	○	○	○	○	7.10	8	79	41
P03 0720	○	○	○	○	7.20	8	79	41
P03 0730	○	○	○	○	7.30	8	79	41
P03 0740	○	○	○	○	7.40	8	79	41
P03 0750	○	○	○	○	7.50	8	79	41
P03 0760	○	○	○	○	7.60	8	79	41

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

VHM-Hochleistungsbohrer, Feinstkorn, 3xD, rechtsschneidend,
Solid Carbide High Performance Drills, Super Micrograin, 3xD, RH

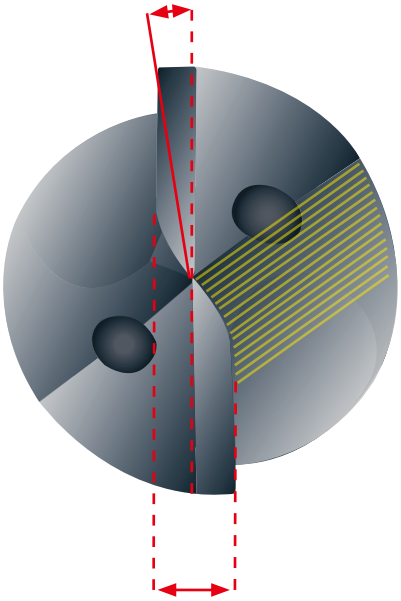
3 x D | 30° | 140 | DIN 6535 HA HE | DIN 6537 | IK IC | DP 6030 (AlCrN)



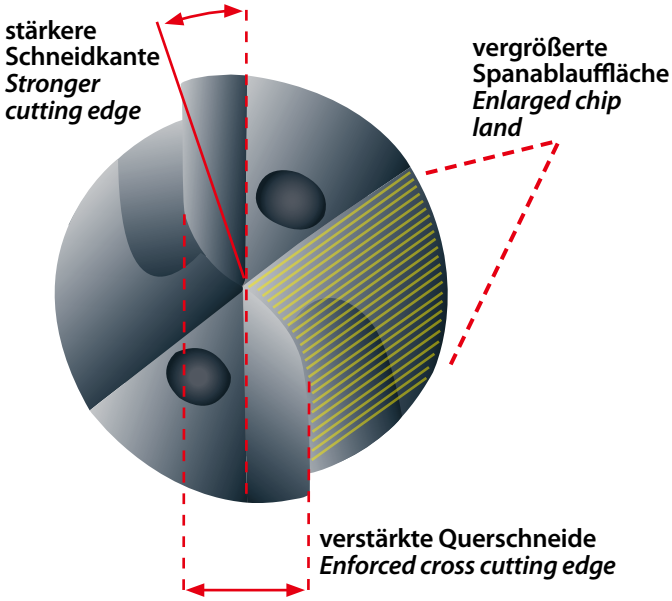
Bezeichnung *Part Number*	Lager *Stock* HA		Lager *Stock* HE		Maße [mm] *Dimensions*			
	IK *IC*	ohne *without* IK *IC*	IK IC	ohne *without* IK *IC*	D_1m_7	D_2h_6	L_1	L_2
P03 0770	○	○	○	○	7.70	8	79	41
P03 0780	○	○	○	○	7.80	8	79	41
P03 0790	○	○	○	○	7.90	8	79	41
P03 0800	●	○	○	○	8.00	8	79	41
P03 0810	○	○	○	○	8.10	10	89	47
P03 0820	○	○	○	○	8.20	10	89	47
P03 0830	○	○	○	○	8.30	10	89	47
P03 0840	○	○	○	○	8.40	10	89	47
P03 0850	●	○	○	○	8.50	10	89	47
P03 0860	○	○	○		8.60	10	89	47
P03 0870	○	○	○	○	8.70	10	89	47
P03 0880	○	○	○	○	8.80	10	89	47
P03 0890	○	○	○	○	8.90	10	89	47
P03 0900	●	○	○	○	9.00	10	89	47
P03 0910	○	○	○	○	9.10	10	89	47
P03 0920	○	○	○	○	9.20	10	89	47
P03 0930	○	○	○	○	9.30	10	89	47
P03 0940	○	○	○	○	9.40	10	89	47
P03 0950	○	○	○	○	9.50	10	89	47
P03 0960	○	○	○	○	9.60	10	89	47
P03 0970	○	○	○	○	9.70	10	89	47
P03 0980	○	○	○	○	9.80	10	89	47
P03 0990	○	○	○	○	9.90	10	89	47
P03 1000	●	○	○	○	10.00	10	89	47
P03 1010	○	○	○	○	10.10	12	102	55
P03 1020	●	○	○	○	10.20	12	102	55
P03 1030	○	○	○	○	10.30	12	102	55
P03 1040	○	○	○	○	10.40	12	102	55
P03 1050	○	○	○	○	10.50	12	102	55
P03 1060	○	○	○	○	10.60	12	102	55
P03 1070	○	○	○	○	10.70	12	102	55
P03 1080	○	○	○	○	10.80	12	102	55
P03 1090	○	○	○	○	10.90	12	102	55
P03 1100	●	○	○	○	11.00	12	102	55
P03 1110	○	○	○	○	11.10	12	102	55
P03 1120	○	○	○	○	11.20	12	102	55
P03 1130	○	○	○	○	11.30	12	102	55
P03 1140	○	○	○	○	11.40	12	102	55
P03 1150	○	○	○	○	11.50	12	102	55
P03 1160	○	○	○	○	11.60	12	102	55
P03 1170	○	○	○	○	11.70	12	102	55
P03 1180	○	○	○	○	11.80	12	102	55
P03 1190	○	○	○	○	11.90	12	102	55
P03 1200	●	○	○	○	12.00	12	102	55
P03 1250	○	○	○	○	12.50	14	107	60
P03 1280	○	○	○	○	12.80	14	107	60
P03 1300	○	○	○	○	13.00	14	107	60
P03 1350	○	○	○	○	13.50	14	107	60
P03 1380	○	○	○	○	13.80	14	107	60
P03 1400	○	○	○	○	14.00	14	107	60
P03 1450	○	○	○	○	14.50	16	115	65
P03 1480	○	○	○	○	14.80	16	115	65
P03 1500	○	○	○	○	15.00	16	115	65

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

Konventioneller Bohrer *Konventional Drill*



P-Line Bohrer *Drill*

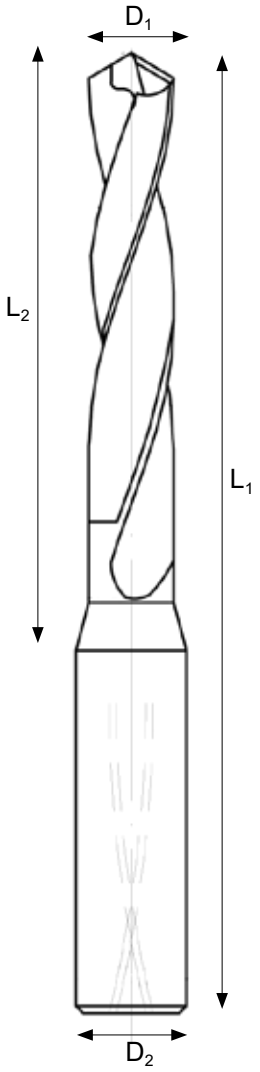


Schnittdaten-Empfehlungen *Cutting Data Recommendations*

Werkstück *Material*	Brinell-Härte *Brinell-hardness* HB	Zugfestigkeit *Tensile strength* N/mm²	Schnittgeschwindigkeit *Cutting speed* Vc [m/min]		Vorschub fz [mm/U] *Feed [mm/rev]*				
			P-Line P03	P-Line P03 IK *IC*	Durchmesser *Diameter* [mm] 4 - 6	6 - 8	8 - 10	10 - 12	13 - 15
Baustahl, Einsatzstahl, Automatenstahl, Vergütungsstahl *Mild steel, heat treated steel*	< 135	< 500	115	140	0,18	0,22	0,25	0,30	0,32
	135 - 200	500 - 700	105	115	0,16	0,20	0,23	0,27	0,30
	200 - 300	700 - 1000	90	95	0,14	0,18	0,20	0,23	0,26
	300 - 390	1000 - 1300	70	75	0,11	0,14	0,16	0,20	0,22
Werkzeugstahl (legiert/unlegiert) *Tool steel (alloyed, unalloyed)*	< 390	< 1300	55	60	0,11	0,14	0,16	0,20	0,23
rostfreier Stahl *Stainless steel*	< 235	< 850	45	50	0,10	0,13	0,15	0,16	0,18
	235 - 330	850 - 1100	45	50	0,09	0,12	0,14	0,15	0,17
Grauguss mit Lamellengraphit *Cast iron*	<175	< 600	170	180	0,23	0,28	0,33	0,37	0,39
Temperguss *Malleable cast iron*	175 - 235	600 - 850	150	160	0,20	0,25	0,28	0,32	0,35
Grauguss mit Kugelgraphit *Nodular cast iron*	< 235	< 850	120	130	0,15	0,22	0,25	0,28	0,30
AL / AL-Legierungen (<12% SI) *AL / AL-alloys (<12% Si)*	< 60	< 300	180	200	0,25	0,30	0,40	0,50	0,55
Kupfer, Bronze, Messing *Copper, bronze, brass*	< 100	< 350	70	80	0,05	0,06	0,07	0,09	0,11
nichtmetallische Werkstoffe *Non-metallic materials*	< 100	< 350	-	-	-	-	-	-	-

VHM-Hochleistungsbohrer, Feinstkorn, 5xD, rechtsschneidend,
Solid Carbide High Performance Drills, Super Micrograin, 5xD, RH

5 x D | 30° | 140 | DIN 6535 HA HE | DIN 6537 | IK IC | DP 6030 (AlCrN)

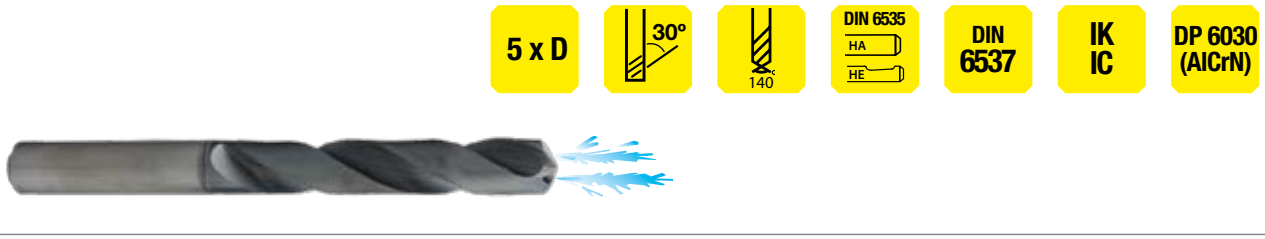


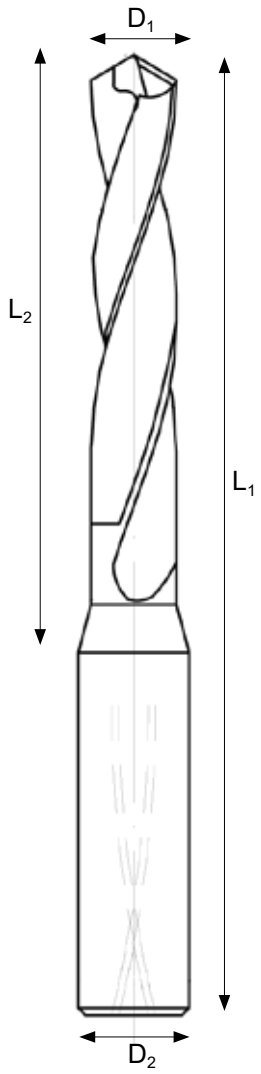
Bezeichnung *Part Number*	Lager *Stock* HA	Lager *Stock* HE	Maße [mm] *Dimensions*			
	IK *IC*	ohne without IK *IC*	D_1m_7	D_2h_6	L_1	L_2
P05 0300	●	○	3.00	6	66	28
P05 0310	●	○	3.10	6	66	28
P05 0320	●	○	3.20	6	66	28
P05 0330	●	○	3.30	6	66	28
P05 0340	●	○	3.40	6	66	28
P05 0350	●	○	3.50	6	66	28
P05 0360	●	○	3.60	6	66	28
P05 0370	●	○	3.70	6	66	28
P05 0380	●	○	3.80	6	74	36
P05 0390	●	○	3.90	6	74	36
P05 0400	●	○	4.00	6	74	36
P05 0410	●	○	4.10	6	74	36
P05 0420	●	○	4.20	6	74	36
P05 0430	●	○	4.30	6	74	36
P05 0440	●	○	4.40	6	74	36
P05 0450	●	○	4.50	6	74	36
P05 0460	●	○	4.60	6	74	36
P05 0465	●	○	4.55	6	74	36
P05 0470	●	○	4.70	6	74	36
P05 0480	●	○	4.80	6	74	44
P05 0490	●	○	4.90	6	74	44
P05 0500	●	○	5.00	6	82	44
P05 0510	●	○	5.10	6	82	44
P05 0520	●	○	5.20	6	82	44
P05 0530	●	○	5.30	6	82	44
P05 0540	●	○	5.40	6	82	44
P05 0550	●	○	5.50	6	82	44
P05 0555	●	○	5.55	6	82	44
P05 0560	●	○	5.60	6	82	44
P05 0570	●	○	5.70	6	82	44
P05 0580	●	○	5.80	6	82	44
P05 0590	●	○	5.90	6	82	44
P05 0600	●	○	6.00	6	82	44
P05 0610	●	○	6.10	8	91	53
P05 0620	●	○	6.20	8	91	53
P05 0630	●	○	6.30	8	91	53
P05 0640	●	○	6.40	8	91	53
P05 0650	●	○	6.50	8	91	53
P05 0660	●	○	6.60	8	91	53
P05 0670	●	○	6.70	8	91	53
P05 0680	●	○	6.80	8	91	53
P05 0690	●	○	6.90	8	91	53
P05 0700	●	○	7.00	8	91	53
P05 0710	●	○	7.10	8	91	53
P05 0720	●	○	7.20	8	91	53
P05 0730	●	○	7.30	8	91	53
P05 0740	●	○	7.40	8	91	53
P05 0750	●	○	7.50	8	91	53
P05 0760	●	○	7.60	8	91	53
P05 0770	●	○	7.70		91	53

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

P-Line

VHM-Hochleistungsbohrer, Feinstkorn, 5xD, rechtsschneidend,
Solid Carbide High Performance Drills, Super Micrograin, 5xD, RH





Bezeichnung *Part Number*	Lager *Stock* HA	Lager *Stock* HE	Maße [mm] *Dimensions*			
	IK *IC*	ohne without IK *IC*	D_1m_7	D_2h_6	L_1	L_2
P05 0780	●	○	7.80	8	91	53
P05 0790	●	○	7.90	8	91	53
P05 0800	●	○	8.00	8	91	53
P05 0810	●	○	8.10	10	103	61
P05 0820	●	○	8.20	10	103	61
P05 0830	●	○	8.30	10	103	61
P05 0840	●	○	8.40	10	103	61
P05 0850	●	○	8.50	10	103	61
P05 0860	●	○	8.60	10	103	61
P05 0870	●	○	8.70	10	103	61
P05 0880	●	○	8.80	10	103	61
P05 0890	●	○	8.90	10	103	61
P05 0900	●	○	9.00	10	103	61
P05 0910	●	○	9.10	10	103	61
P05 0920	●	○	9.20	10	103	61
P05 0930	●	○	9.30	10	103	61
P05 0940	●	○	9.40	10	103	61
P05 0950	●	○	9.50	10	103	61
P05 0960	●	○	9.60	10	103	61
P05 0970	●	○	9.70	10	103	61
P05 0980	●	○	9.80	10	103	61
P05 0990	●	○	9.90	10	103	61
P05 1000	●	○	10.00	10	103	61
P05 1010	●	○	10.10	12	118	71
P05 1020	●	○	10.20	12	118	71
P05 1030	●	○	10.30	12	118	71
P05 1040	●	○	10.40	12	118	71
P05 1050	●	○	10.50	12	118	71
P05 1060	●	○	10.60	12	118	71
P05 1070	●	○	10.70	12	118	71
P05 1080	●	○	10.80	12	118	71
P05 1090	●	○	10.90	12	118	71
P05 1100	●	○	11.00	12	118	71
P05 1110	●	○	11.10	12	118	71
P05 1120	●	○	11.20	12	118	71
P05 1130	●	○	11.30	12	118	71
P05 1140	●	○	11.40	12	118	71
P05 1150	●	○	11.50	12	118	71
P05 1160	●	○	11.60	12	118	71
P05 1170	●	○	11.70	12	118	71
P05 1180	●	○	11.80	12	118	71
P05 1190	●	○	11.90	12	118	71
P05 1200	●	○	12.00	12	118	71
P05 1250	●	○	12.50	14	124	77
P05 1280	●	○	12.80	14	124	77
P05 1300	●	○	13.00	14	124	77
P05 1350	●	○	13.50	14	124	77
P05 1380	●	○	13.80	14	124	77
P05 1400	●	○	14.00	14	124	77
P05 1450	●	○	14.50	16	133	83
P05 1480	●	○	14.80	16	133	83
P05 1500	●	○	15.00	16	133	83

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*

P-Line

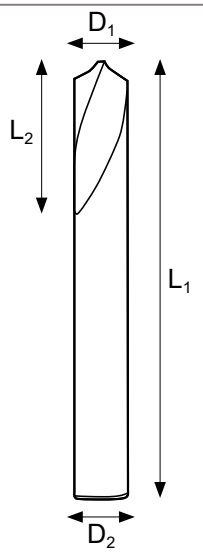
Hochleistungs-VHM-Bohrer
High Performance Carbide Drill

Schnittdaten-Empfehlungen *Cutting Data Recommendations*

Werkstück *Material*	Brinell-Härte *Brinell-hardness* HB	Zugfestigkeit *Tensile strength* N/mm²	Schnittgeschwindigkeit *Cutting speed* Vc [m/min]		Vorschub fz [mm/U] *Feed [mm/rev]*				
					Durchmesser *Diameter* [mm]				
			P-Line P05	P-Line P05 IK *IC*	4 - 6	6 - 8	8 - 10	10 - 12	13 - 15
Baustahl, Einsatzstahl, Automatenstahl, Vergütungsstahl *Mild steel, heat treated steel*	< 135	< 500	115	140	0,18	0,22	0,25	0,30	0,32
	135 - 200	500 - 700	105	115	0,16	0,20	0,23	0,27	0,30
	200 - 300	700 - 1000	90	95	0,14	0,18	0,20	0,23	0,26
	300 - 390	1000 - 1300	70	75	0,11	0,14	0,16	0,20	0,22
Werkzeugstahl (legiert/unlegiert) *Tool steel (alloyed, unalloyed)*	< 390	< 1300	55	60	0,11	0,14	0,16	0,20	0,23
rostfreier Stahl *Stainless steel*	< 235	< 850	45	50	0,10	0,13	0,15	0,16	0,18
	235 - 330	850 - 1100	45	50	0,09	0,12	0,14	0,15	0,17
Grauguss mit Lamellengraphit *Cast iron*	<175	< 600	170	180	0,23	0,28	0,33	0,37	0,39
Temperguss *Malleable cast iron*	175 - 235	600 - 850	150	160	0,20	0,25	0,28	0,32	0,35
Grauguss mit Kugelgraphit *Nodular cast iron*	< 235	< 850	120	130	0,15	0,22	0,25	0,28	0,30
AL / AL-Legierungen (<12% SI) *AL / AL-alloys (<12% Si)*	< 60	< 300	180	200	0,25	0,30	0,40	0,50	0,55
Kupfer, Bronze, Messing *Copper, bronze, brass*	< 100	< 350	70	80	0,05	0,06	0,07	0,09	0,11
nichtmetallische Werkstoffe *Non-metallic materials*	< 100	< 350	-	-	-	-	-	-	-

NC-Anbohrer, VHM, 90°
Spot Drill, Solid Carbide, 90°

2 Zähne *flute* | 30° | DIN 6353 HA | Typ Type N | JD STD. | DP 6030 (AlCrN)



Bezeichnung *Part Number*	Lager / *Stock* DP 6030	Maße [mm] *Dimensions*			
		D_1h_5	D_2h_5	L_1	L_2
JD 2090 030	●	3	3	38	8
JD 2090 040	●	4	4	50	10
JD 2090 050	●	5	5	50	13
JD 2090 060	●	6	6	57	13
JD 2090 080	●	8	8	63	23
JD 2090 100	●	10	10	66	24
JD 2090 120	●	12	12	72	24
JD 2090 160	●	16	16	82	29
JD 2090 200	●	20	20	92	35

L_2: Spannutlänge / *flute length*

● JD-Lager / *JD-Stock* ○ begrenzte Lagerhaltung - auf Anfrage / *limited stock - upon request*