

BOHRWERKZEUGE

VHM-BOHRER

HSS-BOHRER

WSP AUSFÜHRUNG

DIAMANTBESCHICHTETER VHM-BOHRER



●Wie ist eine Seite dieses Kapitels aufgebaut

PRODUKTBEZEICHNUNG

ABBILDUNG

[illegible]

STANDARDPRODUKTE beinhaltet Durchmesser, Bohrlängen, Bestellbezeichnungen, Lagerstatus, Abmessungen und Ersatzteile.

LEGENDE FÜR LAGERSYMBOL
wird auf jeder Doppelseite auf der
linken Seite gezeigt.

BOHRWERKZEUGE

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BOHRER STANDARD

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HSS-BOHRER

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DIAMANTBESCHICHTETER VHM-BOHRER

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BOHRER KLASSIFIZIERUNG

BOHRER KLASSIFIZIERUNG

MW

E

0300

S

A

Bohrer Bezeichnung	Kühlmittelzufuhr	Durchmesser	L/D	Schaftdurchmesser
MV : Die neue Generation für allgemeine Anwendung MPS1 : MPS1 Bohrer MW : MWE/MWS Bohrer MSL : MSL Bohrer MP : MPS Bohrer MA : MAE/MAS Bohrer MS : MSE Bohrer MM : MMS Bohrer MN : MNS Bohrer MH : MHS Bohrer MC : MCS Bohrer	E : Externe Kühlung S : Interne Kühlung	z.B 0050 → ϕ 0.5 0300 → ϕ 3.0	S : 2D M : 3D L : 5D (MAE/MAS Bohrer - 6 x D) X : 12D X8DB : 8D X10DB : 10D X15DB : 15D X20DB : 20D X25DB : 25D X30DB : 30D	A : Schaftdurchmesser = Bohrerdurchmesser B : Schaftdurchmesser siehe Katalogdaten

*Abweichungen sind teilweise möglich.

VA

PD

S

SUS

D0300

Bohrer Bezeichnung	Anwendung	Länge der Bohrnut	Werkstoff	Durchmesser
VA : Violet beschichteter Präzisions - Bohrer (Hochwertige Sorte für den Einsatz bei hohen Drehzahlen) V : Violet Bohrer	SD : Zylindrischer Bohrer für allgemeine Zwecke PD : Für Hochpräzisionsbearbeitung	S : Kurz M : Mittel	SUS : Für rostfreien Stahl	z.B D0300 → ϕ 3.0 D0050 → ϕ 0.5

*Abweichungen sind teilweise möglich.

SYMBOL BESCHREIBUNG

Schneidstoff



Ultra feinkörniges Hartmetall



Hoch leg. HSS



**Kobalt
Hochgeschwindigkeitsstähle**



HSS

Kern Anschliff



X Kern Anschliff



XR Kern Anschliff

Beschichtet



MIRACLE Beschichtung

Original MIRACLE Beschichtung (AlTiN),
auch für Trockenbearbeitung einsetzbar.



DP Beschichtung

Neue Beschichtungstechnologie für eine Vielzahl an
Werkstoffen..



UP Beschichtung



VIOLET Beschichtung

Verbesserte Standzeit um den Faktor 2–3 im
Vergleich zu TiN-beschichteten Produkten.



Diamant Beschichtung

Neue CVD-Diamantbeschichtung für das Bohren.
Ideal für den Einsatz in CFK-Werkstoffen.

Winkel und scharfe Schneidkante



Spitzenwinkel

Bezeichnet den Bohrwinkel an der Spitze.

BOHRER AUSWAHL

Schneidstoff	Verfügbare Größen	Bohrtiefe (l/d)	Bezeichnung	Kühlung	Beschichtet	Werkstoff						Form	Seitenverweis	
						P	M	K	N	S	H		Abmessungen	Schnittbedingungen
						C. Stahl, leg. Stahl	Rostfreier Stahl	Guss	Leichtmetalle	Hitzeständiger Stahl	Gehärteter Stahl			
Vollhartmetall	φ0.1 –φ0.99	5–12	MSE	Extern	VP	○	○	○	○	○	○		L008	L009
												MSP = Pilotbohrer für MSE		
	φ1.0 –φ2.9	*2–30	MINI-MVS 	Intern	DP	○	○	○	○		○		L012	L014
	φ0.5 –φ0.99	1–12	MINI-MWS		VP	○	○	○	○	○			L016	L018
	φ3.0 –φ20.0	3–8	MP51 		DP	○	○	○					L027	L033
	φ3.0 –φ20.0	3–40	MPS		VP	○	○	○	○	○			L035	L053
	φ3.0 –φ14.0	20–30	MSL		VP	○	○	○	○	○			L050	L053
	φ3.0 –φ20.0	2, 3	MWE	Extern	VP	○	○	○	○	○	○		L021	L025
	φ0.95 –φ12.0	1–31	MHS	Intern	VP	○	○			○	○		L102	L110
	φ3.0 –φ20.0	3, 5	MMS	Intern	DP		○						L058	L070
	φ0.7 –φ3.0	–80	MGS		–	○	○	○	○	○	○		L055	L056
	φ3.0 –φ16.0	3	MAE	Extern	–			○	○				L096	L101
	φ3.0 –φ16.0	3, 6	MAS	Intern	–			○	○				L096	L101
	φ3.0 –φ20.0	3–30	MNS		–				○				L072	L093
	φ4.366 –φ12.725	3	MCS		DC	Für CFK							L196	L197

*2=Pilotbohrer: Toleranz +0.014 und Bohrtiefe 2 x D.

Schneidstoff	Verfügbare Größen	Bohrtiefe (l/d)	Bezeichnung	Kühlung	Beschichtet	Werkstoff						Form	Seitenverweis	
						P	M	K	N	S	H		Abmessungen	Schnittbedingungen
						C. Stahl, leg. Stahl	Rostfreier Stahl	Guss	Leichtmetalle	Hitzeständiger Stahl	Gehärteter Stahl			
Hochgeschwindigkeits-stahl	φ0.5 – φ13.0	2–3	VAPDS	Extern	Ⓥ	⊙	○	○		○			L169	L173
	φ0.5 – φ32.0	3–6	VAPDM		Ⓥ	⊙	○	○		○			L174	L177
	φ0.5 – φ20.0	2–3	VAPDSSUS		Ⓥ	○	⊙	○	○				L178	L190
	φ0.5 – φ13.0	3–6	VAPDMSUS		Ⓥ	○	⊙	○	○				L184	L190
	φ0.5 – φ13.0	3–6	VSD		Ⓥ	⊙	○	○					L191	L192
	φ2.0 – φ32.0	2–3	VAPDSCB		Ⓥ	⊙	○	○	○				L193	L195
WSP Ausführung	φ10.0 – φ18.4	1.5–8	STAW	Intern	ⓋⓅ	⊙	○	⊙	○				L107	L121
	φ18.5 – φ30.4	3–8	TAW		ⓋⓅ	⊙	○	⊙					L129	L146
	φ17.0 – φ63.0	2–6	MVX		–	⊙	○	⊙					L148	L156
	φ12.0 – φ56.0	2–4	TAF		–	⊙	⊙	⊙					L158	L165

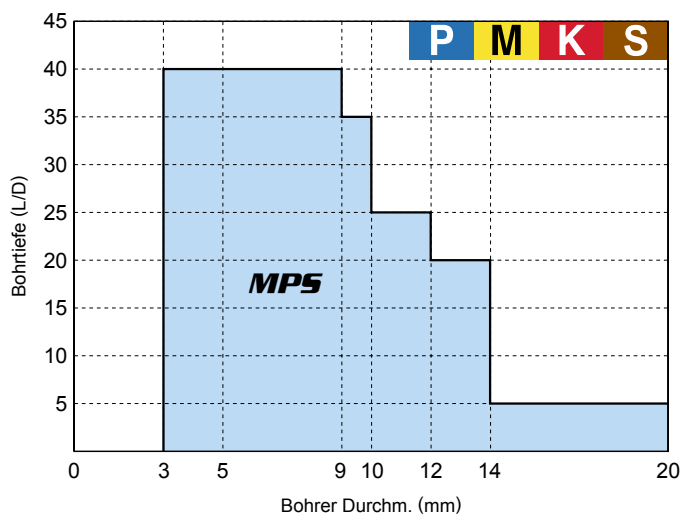
⊙ : 1. Empfehlung / ○ : 2. Empfehlung

BOHRERSERIE

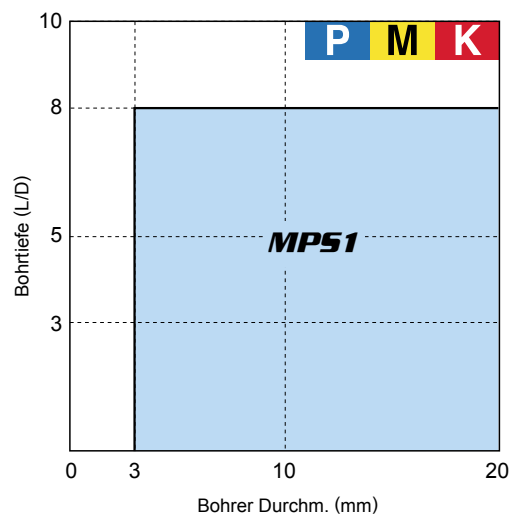
VOLLHARTMETALL



MPS (4-Fasenbohrer)

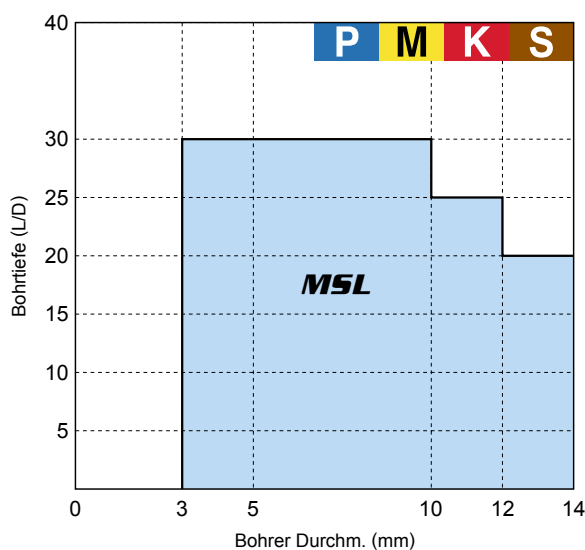


MP51 (4-Fasenbohrer)



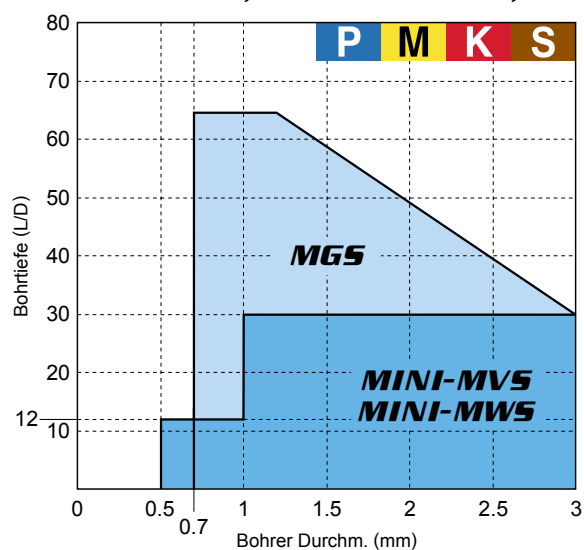
VOLLHARTMETALL

MSL (2-Fasenbohrer)



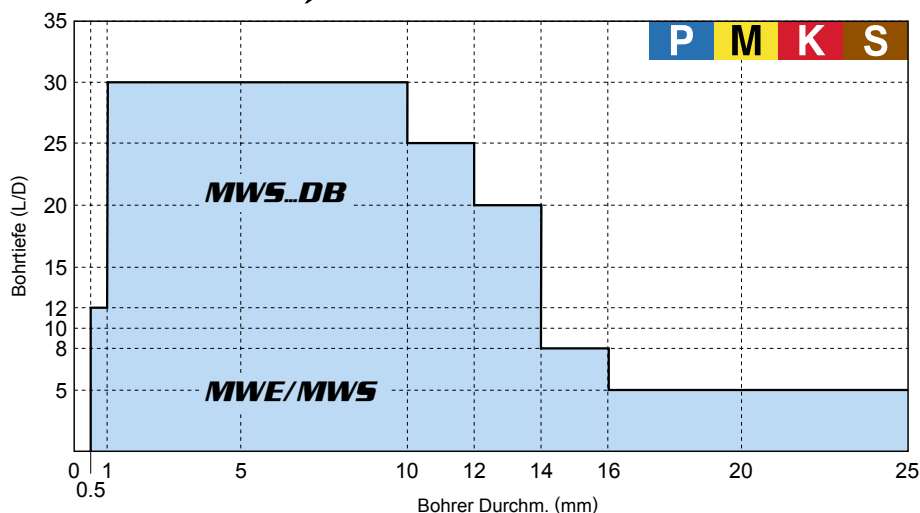
VOLLHARTMETALL

MINI-MVS, MINI-MWS, MGS



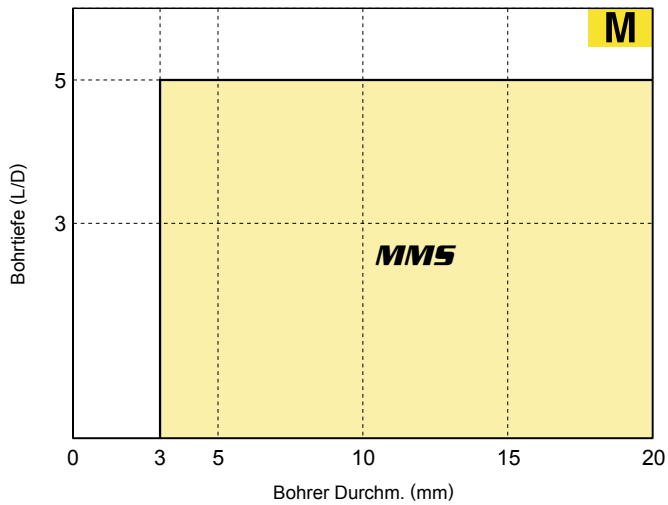
VOLLHARTMETALL

MWE/MWS, MWS...DB (SUPER LONG)



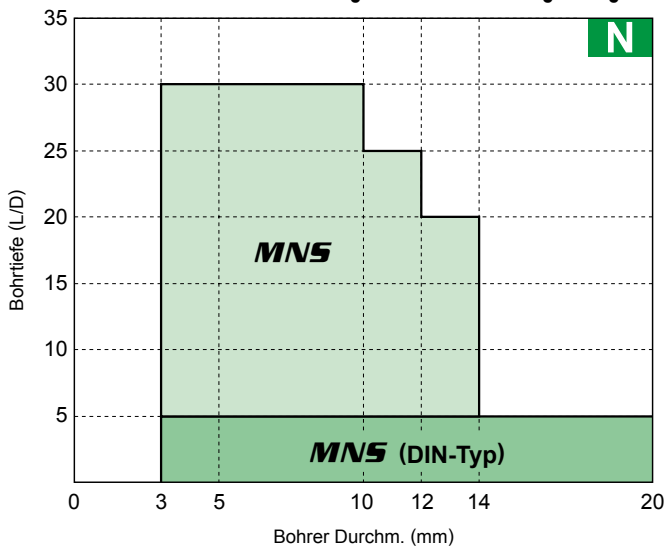
VOLLHARTMETALL

MMS (Für rostfreien Stahl)



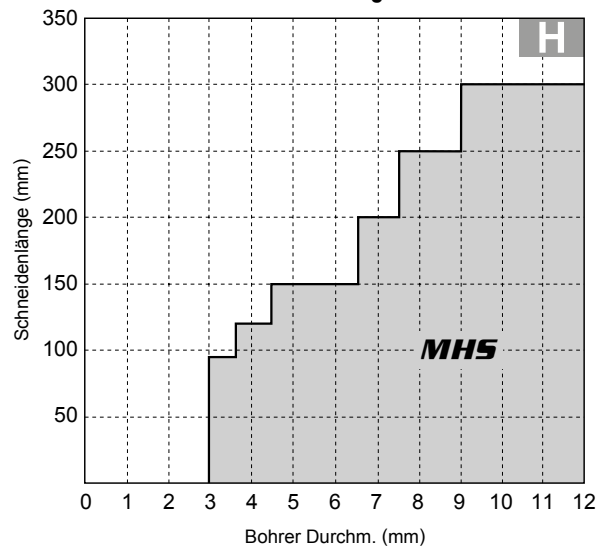
VOLLHARTMETALL

MNS (Für die Bearbeitung von Aluminiumlegierungen)



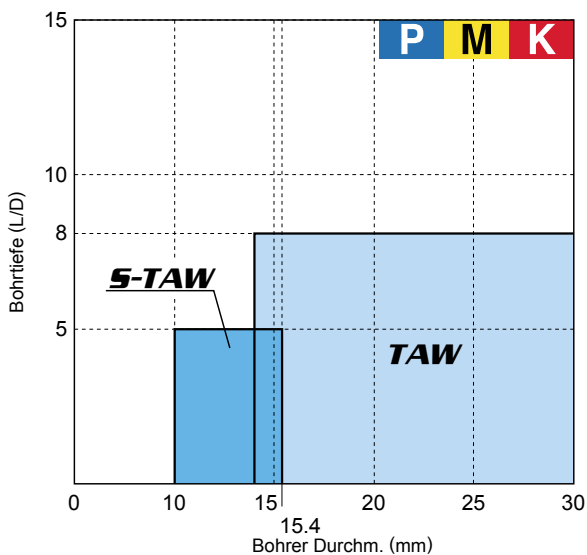
VOLLHARTMETALL

MHS (Für den Werkzeug- und Formenbau)



WSP AUSFÜHRUNG

S-TAW, TAW



BOHREN (VOLLHARTMETALL)

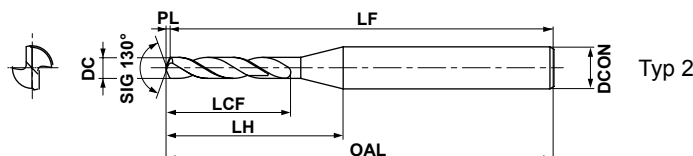
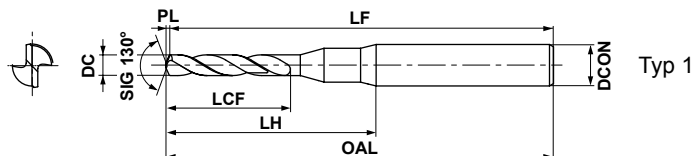
- Große Spannruten für optimale Spanabfuhr.
- Effiziente Bearbeitung kleinster Bohrungen.

MSE

HARTMETALL



0.1 ≤ DC ≤ 0.99



(Bemerkung) MSE Bohrer eignen sich für die Verwendung mit Schrumpfaufnahmen.

Externe Kühlung

DC (mm)	Lager VP20MF VP15TF	Bestellbezeichnung	Abmessungen (mm)						Typ
			LCF	LH	OAL	LF	PL	DCON	
0.10	●	MSE0010SB	1.22	9.72	38.02	38	0.02	3	1
0.11	★	MSE0011SB	1.23	9.73	38.03	38	0.03	3	1
0.12	★	MSE0012SB	1.43	9.73	38.03	38	0.03	3	1
0.13	★	MSE0013SB	1.43	9.73	38.03	38	0.03	3	1
0.14	★	MSE0014SB	2.03	9.73	38.03	38	0.03	3	1
0.15	●	MSE0015SB	2.03	9.73	38.03	38	0.03	3	1
0.16	★	MSE0016SB	2.04	9.74	38.04	38	0.04	3	1
0.17	★	MSE0017SB	2.04	9.74	38.04	38	0.04	3	1
0.18	★	MSE0018SB	2.04	9.74	38.04	38	0.04	3	1
0.19	★	MSE0019SB	2.04	9.74	38.04	38	0.04	3	1
0.20	●	MSE0020SB	2.55	9.75	38.05	38	0.05	3	1
0.21	★	MSE0021SB	2.55	9.75	38.05	38	0.05	3	1
0.22	★	MSE0022SB	2.55	9.75	38.05	38	0.05	3	1
0.23	★	MSE0023SB	2.55	9.75	38.05	38	0.05	3	1
0.24	★	MSE0024SB	3.06	9.76	38.06	38	0.06	3	1
0.25	●	MSE0025SB	3.06	9.76	38.06	38	0.06	3	1
0.26	★	MSE0026SB	3.06	9.76	38.06	38	0.06	3	1
0.27	★	MSE0027SB	3.06	9.76	38.06	38	0.06	3	1
0.28	★	MSE0028SB	3.07	9.77	38.07	38	0.07	3	1
0.29	★	MSE0029SB	3.07	9.77	38.07	38	0.07	3	1
0.30	●	MSE0030SB	5.07	10.27	38.07	38	0.07	3	2
0.31	★	MSE0031SB	5.07	10.27	38.07	38	0.07	3	2
0.32	★	MSE0032SB	5.07	10.27	38.07	38	0.07	3	2
0.33	★	MSE0033SB	5.08	10.28	38.08	38	0.08	3	2
0.34	★	MSE0034SB	6.08	11.28	38.08	38	0.08	3	2
0.35	●	MSE0035SB	6.08	11.18	38.08	38	0.08	3	2
0.36	★	MSE0036SB	6.08	11.18	38.08	38	0.08	3	2
0.37	★	MSE0037SB	6.09	11.19	38.09	38	0.09	3	2
0.38	★	MSE0038SB	6.09	11.19	38.09	38	0.09	3	2
0.39	★	MSE0039SB	6.09	11.19	38.09	38	0.09	3	2
0.40	●	MSE0040SB	7.09	12.19	38.09	38	0.09	3	2
0.41	★	MSE0041SB	7.10	12.10	38.10	38	0.10	3	2
0.42	★	MSE0042SB	7.10	12.10	38.10	38	0.10	3	2
0.43	★	MSE0043SB	7.10	12.10	38.10	38	0.10	3	2

Externe Kühlung

DC (mm)	Lager VP20MF VP15TF	Bestellbezeichnung	Abmessungen (mm)						Typ
			LCF	LH	OAL	LF	PL	DCON	
0.44	★	MSE0044SB	7.10	12.10	38.10	38	0.10	3	2
0.45	●	MSE0045SB	7.10	12.10	38.10	38	0.10	3	2
0.46	★	MSE0046SB	7.11	12.01	38.11	38	0.11	3	2
0.47	★	MSE0047SB	7.11	12.01	38.11	38	0.11	3	2
0.48	★	MSE0048SB	7.11	12.01	38.11	38	0.11	3	2
0.49	★	MSE0049SB	7.11	12.01	38.11	38	0.11	3	2
0.50	●	MSE0050SB	7.12	12.02	38.12	38	0.12	3	2
0.51	★	MSE0051SB	7.12	11.92	38.12	38	0.12	3	2
0.52	★	MSE0052SB	7.12	11.92	38.12	38	0.12	3	2
0.53	★	MSE0053SB	7.12	11.92	38.12	38	0.12	3	2
0.54	★	MSE0054SB	7.13	11.93	38.13	38	0.13	3	2
0.55	●	MSE0055SB	7.13	11.93	38.13	38	0.13	3	2
0.56	★	MSE0056SB	7.13	11.93	38.13	38	0.13	3	2
0.57	★	MSE0057SB	7.13	11.83	38.13	38	0.13	3	2
0.58	★	MSE0058SB	7.14	11.84	38.14	38	0.14	3	2
0.59	★	MSE0059SB	7.14	11.84	38.14	38	0.14	3	2
0.60	●	MSE0060SB	7.14	11.84	38.14	38	0.14	3	2
0.61	★	MSE0061SB	7.14	11.84	38.14	38	0.14	3	2
0.62	★	MSE0062SB	7.14	11.74	38.14	38	0.14	3	2
0.63	★	MSE0063SB	7.15	11.75	38.15	38	0.15	3	2
0.64	★	MSE0064SB	7.15	11.75	38.15	38	0.15	3	2
0.65	●	MSE0065SB	7.15	11.75	38.15	38	0.15	3	2
0.66	★	MSE0066SB	7.15	11.75	38.15	38	0.15	3	2
0.67	★	MSE0067SB	7.16	11.66	38.16	38	0.16	3	2
0.68	★	MSE0068SB	7.16	11.66	38.16	38	0.16	3	2
0.69	★	MSE0069SB	7.16	11.66	38.16	38	0.16	3	2
0.70	●	MSE0070SB	8.16	12.66	38.16	38	0.16	3	2
0.71	★	MSE0071SB	8.17	12.67	38.17	38	0.17	3	2
0.72	★	MSE0072SB	8.17	12.67	38.17	38	0.17	3	2
0.73	★	MSE0073SB	8.17	12.57	38.17	38	0.17	3	2
0.74	★	MSE0074SB	8.17	12.57	38.17	38	0.17	3	2
0.75	●	MSE0075SB	8.17	12.57	38.17	38	0.17	3	2
0.76	★	MSE0076SB	8.18	12.58	38.18	38	0.18	3	2
0.77	★	MSE0077SB	8.18	12.58	38.18	38	0.18	3	2

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

Externe Kühlung

DC (mm)	Lager		Bestellbezeichnung	Abmessungen (mm)						Typ
	VP20MF	VP15TF		LCF	LH	OAL	LF	PL	DCON	
0.78	★	★	MSE0078SB	8.18	12.48	38.18	38	0.18	3	2
0.79	★	★	MSE0079SB	8.18	12.48	38.18	38	0.18	3	2
0.80	●	★	MSE0080SB	10.19	14.49	38.19	38	0.19	3	2
0.81	★	★	MSE0081SB	10.19	14.49	38.19	38	0.19	3	2
0.82	★	★	MSE0082SB	10.19	14.49	38.19	38	0.19	3	2
0.83	★	★	MSE0083SB	10.19	14.49	38.19	38	0.19	3	2
0.84	★	★	MSE0084SB	10.20	14.40	38.20	38	0.20	3	2
0.85	●	★	MSE0085SB	10.20	14.40	38.20	38	0.20	3	2
0.86	★	★	MSE0086SB	10.20	14.40	38.20	38	0.20	3	2
0.87	★	★	MSE0087SB	10.20	14.40	38.20	38	0.20	3	2
0.88	★	★	MSE0088SB	10.21	14.41	38.21	38	0.21	3	2

Externe Kühlung

DC (mm)	Lager		Bestellbezeichnung	Abmessungen (mm)						Typ
	VP20MF	VP15TF		LCF	LH	OAL	LF	PL	DCON	
0.89	★	★	MSE0089SB	10.21	14.31	38.21	38	0.21	3	2
0.90	●	★	MSE0090SB	10.21	14.31	38.21	38	0.21	3	2
0.91	★	★	MSE0091SB	10.21	14.31	38.21	38	0.21	3	2
0.92	★	★	MSE0092SB	10.21	14.31	38.21	38	0.21	3	2
0.93	★	★	MSE0093SB	10.22	14.32	38.22	38	0.22	3	2
0.94	★	★	MSE0094SB	10.22	14.22	38.22	38	0.22	3	2
0.95	●	★	MSE0095SB	10.22	14.22	38.22	38	0.22	3	2
0.96	★	★	MSE0096SB	10.22	14.22	38.22	38	0.22	3	2
0.97	★	★	MSE0097SB	10.23	14.23	38.23	38	0.23	3	2
0.98	★	★	MSE0098SB	10.23	14.23	38.23	38	0.23	3	2
0.99	●	★	MSE0099SB	10.23	14.23	38.23	38	0.23	3	2

SCHNITTDATENEMPFEHLUNGEN

Werkstoff	Allg. Baustahl ($\leq 180\text{HB}$)						C-Stahl, Leg. Stahl ($180-280\text{HB}$)					
	Ck10						Ck45, 41CrMo4					
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)	
0.1	6	20000	0.002 (0.001—0.003)	0.02	40		6	20000	0.002 (0.001—0.003)	0.02	40	
0.12	8	20000	0.002 (0.001—0.003)	0.02	40		8	20000	0.002 (0.001—0.003)	0.02	40	
0.16	10	20000	0.002 (0.001—0.003)	0.02	40		10	20000	0.002 (0.001—0.003)	0.02	40	
0.2	13	20000	0.003 (0.002—0.004)	0.04	60		13	20000	0.003 (0.002—0.004)	0.04	60	
0.25	16	20000	0.003 (0.002—0.004)	0.04	60		16	20000	0.003 (0.002—0.004)	0.04	60	
0.32	20	20000	0.004 (0.003—0.005)	0.05	80		20	20000	0.004 (0.003—0.005)	0.05	80	
0.4	25	20000	0.004 (0.003—0.005)	0.05	80		25	20000	0.004 (0.003—0.005)	0.05	80	
0.5	31	20000	0.006 (0.005—0.007)	0.1	120		31	20000	0.006 (0.005—0.007)	0.1	120	
0.63	40	20000	0.008 (0.006—0.01)	0.1	160		40	20000	0.008 (0.006—0.01)	0.1	160	
0.8	50	20000	0.02 (0.015—0.025)	0.3	400		50	20000	0.015 (0.012—0.018)	0.3	300	
0.99	62	20000	0.04 (0.03—0.05)	0.3	800		62	20000	0.02 (0.015—0.025)	0.3	400	

Werkstoff	C-Stahl, Leg. Stahl ($280-350\text{HB}$)						Vergüteter Stahl ($35-45\text{HRC}$)					
	36CrNiMo4						X36CrMo17					
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)	
0.1	6	20000	0.002 (0.001—0.003)	0.02	40		6	20000	0.002 (0.001—0.003)	0.02	40	
0.12	8	20000	0.002 (0.001—0.003)	0.02	40		8	20000	0.002 (0.001—0.003)	0.02	40	
0.16	10	20000	0.002 (0.001—0.003)	0.02	40		10	20000	0.002 (0.001—0.003)	0.02	40	
0.2	13	20000	0.003 (0.002—0.004)	0.04	60		13	20000	0.003 (0.002—0.004)	0.04	60	
0.25	16	20000	0.003 (0.002—0.004)	0.04	60		16	20000	0.003 (0.002—0.004)	0.04	60	
0.32	20	20000	0.004 (0.003—0.005)	0.05	80		20	20000	0.004 (0.003—0.005)	0.05	80	
0.4	25	20000	0.004 (0.003—0.005)	0.05	80		25	20000	0.004 (0.003—0.005)	0.05	80	
0.5	31	20000	0.006 (0.005—0.007)	0.1	120		31	20000	0.006 (0.005—0.007)	0.1	120	
0.63	40	20000	0.008 (0.006—0.01)	0.1	160		40	20000	0.008 (0.006—0.01)	0.1	160	
0.8	50	20000	0.015 (0.012—0.018)	0.3	300		50	20000	0.015 (0.012—0.018)	0.3	300	
0.99	62	20000	0.02 (0.015—0.025)	0.3	400		62	20000	0.02 (0.015—0.025)	0.3	400	

(Bemerkung)

- Der Einsatz des Zentrierbohrers ist empfohlen.
- Die aufgeführten Schnittdaten können je nach Maschinenleistung, Werkstückbeschaffenheit oder Spannung modifiziert werden, und gelten als allgemeine Empfehlung.
- Bei Bohrtiefen > 5DC werden die o.g. Bohrstufen zur Vorschubunterbrechung empfohlen.
- Es wird Emulsion empfohlen. Bei Einsatz von Öl bitte Schnittwerte reduzieren.
- Bei Werkstoffen der Gruppe "S" (-) ist der Einsatz von Bohrern ohne interne Kühlmittelzufuhr nicht empfohlen. Alternativ setzen Sie bitte den MWS- oder VAPDSSUS-Bohrer ein.

BOHREN (VOLLHARTMETALL)

MSE

- Große Spannuten für optimale Spanabfuhr.
- Effiziente Bearbeitung kleinster Bohrungen.

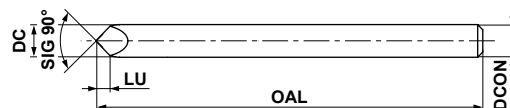
SCHNITTDATENEMPFEHLUNGEN

Werkstoff	Rostfreier Stahl (austenitisch) (≤200HB)						Grauguss (≤350MPa)				
	X5CrNi1810, X5CrNiMo17-12-2						GG30				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)
0.1	6	20000	0.002 (0.001—0.003)	0.02	40		6	20000	0.002 (0.001—0.003)	0.02	40
0.12	8	20000	0.002 (0.001—0.003)	0.02	40		8	20000	0.002 (0.001—0.003)	0.02	40
0.16	10	20000	0.002 (0.001—0.003)	0.02	40		10	20000	0.002 (0.001—0.003)	0.02	40
0.2	11	18000	0.003 (0.002—0.004)	0.04	54		13	20000	0.003 (0.002—0.004)	0.04	60
0.25	14	18000	0.003 (0.002—0.004)	0.04	54		16	20000	0.003 (0.002—0.004)	0.04	60
0.32	15	15000	0.004 (0.003—0.005)	0.05	60		20	20000	0.004 (0.003—0.005)	0.05	80
0.4	19	15000	0.004 (0.003—0.005)	0.05	60		25	20000	0.004 (0.003—0.005)	0.05	80
0.5	16	10000	0.006 (0.005—0.007)	0.1	60		31	20000	0.006 (0.005—0.007)	0.1	120
0.63	20	10000	0.008 (0.006—0.01)	0.1	80		40	20000	0.008 (0.006—0.01)	0.1	160
0.8	15	6000	0.015 (0.012—0.018)	0.2	90		50	20000	0.02 (0.015—0.025)	0.3	400
0.99	19	6000	0.02 (0.015—0.025)	0.2	120		62	20000	0.04 (0.03—0.05)	0.3	800

Werkstoff	Aluminium Leg. (Si<5%)						Hitzebeständiger Stahl				
							Inconel718				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Bohrstufen (mm)	Tischvorschub (mm/min)
0.1	6	20000	0.002 (0.001—0.003)	0.05	40		2	7000	0.001 (0.0005—0.001)	0.02	7
0.12	8	20000	0.003 (0.002—0.004)	0.05	60		3	7000	0.001 (0.0005—0.001)	0.02	7
0.16	10	20000	0.004 (0.003—0.005)	0.05	80		4	7000	0.001 (0.0005—0.001)	0.02	7
0.2	13	20000	0.006 (0.005—0.007)	0.1	120		3	5000	0.002 (0.001—0.002)	0.04	10
0.25	16	20000	0.008 (0.006—0.01)	0.1	160		4	5000	0.002 (0.001—0.002)	0.04	10
0.32	20	20000	0.01 (0.008—0.012)	0.3	200		4	4000	0.002 (0.001—0.002)	0.05	8
0.4	25	20000	0.02 (0.015—0.025)	0.3	400		5	4000	0.002 (0.001—0.002)	0.05	8
0.5	31	20000	0.03 (0.025—0.035)	0.5	600		5	3000	0.003 (0.001—0.003)	0.1	9
0.63	40	20000	0.04 (0.035—0.045)	0.5	800		6	3000	0.004 (0.002—0.004)	0.1	12
0.8	50	20000	0.05 (0.045—0.055)	0.8	1000		5	1800	0.006 (0.004—0.006)	0.2	10.8
0.99	62	20000	0.06 (0.055—0.065)	0.8	1200		6	1800	0.01 (0.008—0.01)	0.2	18

(Bemerkung)

- Der Einsatz des Zentrierbohrers ist empfohlen.
- Die aufgeführten Schnittdaten können je nach Maschinenleistung, Werkstückbeschaffenheit oder Spannung modifiziert werden, und gelten als allgemeine Empfehlung.
- Bei Bohrtiefen > 5DC werden die o.g. Bohrstufen zur Vorschubunterbrechung empfohlen.
- Es wird Emulsion empfohlen. Bei Einsatz von Öl bitte Schnittwerte reduzieren.
- Bei Werkstoffen der Gruppe "S" (-) ist der Einsatz von Bohrern ohne interne Kühlmittelzufuhr nicht empfohlen. Alternativ setzen Sie bitte den MWS- oder VAPDSSUS-Bohrer ein.



Bestellbezeichnung	Sorte	Lager	Abmessungen (mm)				Durchmesserbereich (mm)
			DC	LU	OAL	DCON	
MSP0300SB	VP15TF	●	3	1.5	38	3	0.1—3.0

SCHNITTDATENEMPFEHLUNGEN

Bohrdurchmesser (mm)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
0.1—3.0	10000	0.0005 (0.00025—0.001)	5

BOHREN (VOLLHARTMETALL)

MINI-MVS NEW

- Gerade Schneidkanten für verbesserte Spanabfuhr und erhöhte Schneidkantenstabilität.
- 4 Führungsfasen erzielen eine optimale Bohrlochqualität und Präzision.

P

M

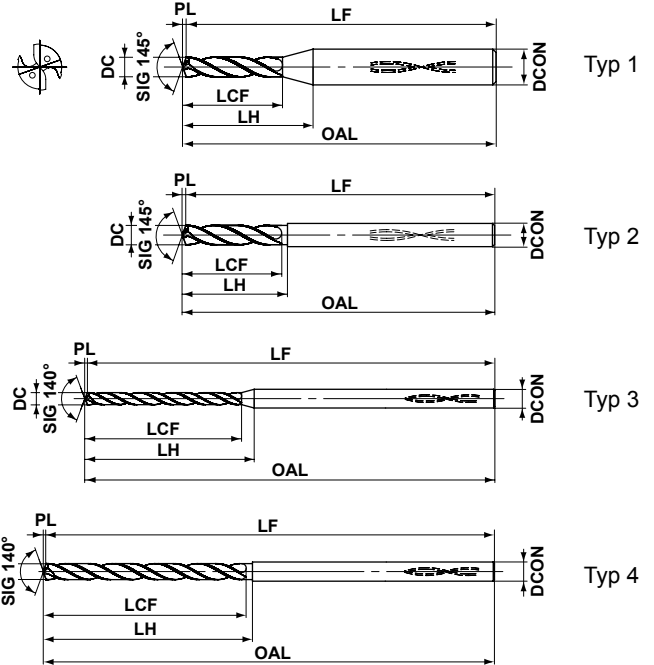
K

N

S

H

Bestellbezeichnung	1 ≤ DC ≤ 2.9
MVS-X02- (Pilotbohrer)	+0.014 0
Andere	0 -0.014
Bestellbezeichnung	DCON
MVS	0 -0.006



Interne Kühlung

DC (mm)	L/D	Lager DP1020	Bestellbezeichnung	Abmessungen (mm)						Typ
				LCF	LH	OAL	LF	PL	DCON	
1.0	*2	●	MVS0100X02S030	5.2	8.9	55.2	55	0.2	3	1
	7	●	MVS0100X07S030	10.2	14.2	55.2	55	0.2	3	3
	12	●	MVS0100X12S030	15.2	19.2	55.2	55	0.2	3	3
	20	●	MVS0100X20S030	24.2	28.2	60.2	60	0.2	3	3
	25	●	MVS0100X25S030	28.2	32.2	66.2	66	0.2	3	3
	30	●	MVS0100X30S030	33.2	37.2	72.2	72	0.2	3	3
1.1	*2	●	MVS0110X02S030	5.6	9.1	55.2	55	0.2	3	1
	7	●	MVS0110X07S030	11.2	15.2	55.2	55	0.2	3	3
	12	●	MVS0110X12S030	17.2	21.2	55.2	55	0.2	3	3
	20	●	MVS0110X20S030	25.2	29.2	60.2	60	0.2	3	3
	25	●	MVS0110X25S030	31.2	34.2	66.2	66	0.2	3	3
	30	●	MVS0110X30S030	36.2	40.2	72.2	72	0.2	3	3
1.2	*2	●	MVS0120X02S030	6.2	9.6	55.2	55	0.2	3	1
	7	●	MVS0120X07S030	12.2	15.2	55.2	55	0.2	3	3
	12	●	MVS0120X12S030	18.2	21.2	55.2	55	0.2	3	3
	20	●	MVS0120X20S030	28.2	31.2	60.2	60	0.2	3	3
	25	●	MVS0120X25S030	34.2	37.2	66.2	66	0.2	3	3
	30	●	MVS0120X30S030	40.2	43.2	72.2	72	0.2	3	3
1.3	*2	●	MVS0130X02S030	6.6	9.8	55.2	55	0.2	3	1
	7	●	MVS0130X07S030	13.2	16.2	55.2	55	0.2	3	3
	12	●	MVS0130X12S030	20.2	23.2	55.2	55	0.2	3	3
	20	●	MVS0130X20S030	30.2	33.2	68.2	68	0.2	3	3
	25	●	MVS0130X25S030	36.2	40.2	74.2	74	0.2	3	3
	30	●	MVS0130X30S030	43.2	46.2	82.2	82	0.2	3	3

Interne Kühlung

DC (mm)	L/D	Lager DP1020	Bestellbezeichnung	Abmessungen (mm)						Typ
				LCF	LH	OAL	LF	PL	DCON	
1.4	*2	●	MVS0140X02S030	7.2	10.2	55.2	55	0.2	3	1
	7	●	MVS0140X07S030	14.3	17.3	55.3	55	0.3	3	3
	12	●	MVS0140X12S030	21.3	24.3	55.3	55	0.3	3	3
	20	●	MVS0140X20S030	32.3	35.3	68.3	68	0.3	3	3
	25	●	MVS0140X25S030	39.3	42.3	74.3	74	0.3	3	3
	30	●	MVS0140X30S030	46.3	49.3	82.3	82	0.3	3	3
1.5	*2	●	MVS0150X02S030	7.6	10.4	55.2	55	0.2	3	1
	7	●	MVS0150X07S030	15.3	18.3	55.3	55	0.3	3	3
	12	●	MVS0150X12S030	23.3	26.3	55.3	55	0.3	3	3
	20	●	MVS0150X20S030	35.3	37.3	68.3	68	0.3	3	3
	25	●	MVS0150X25S030	42.3	45.3	74.3	74	0.3	3	3
	30	●	MVS0150X30S030	50.3	52.3	82.3	82	0.3	3	3
1.6	*2	●	MVS0160X02S030	8.3	10.9	68.3	68	0.3	3	1
	7	●	MVS0160X07S030	16.3	19.3	68.3	68	0.3	3	3
	12	●	MVS0160X12S030	24.3	27.3	68.3	68	0.3	3	3
	20	●	MVS0160X20S030	37.3	39.3	78.3	78	0.3	3	3
	25	●	MVS0160X25S030	45.3	47.3	86.3	86	0.3	3	3
	30	●	MVS0160X30S030	53.3	55.3	95.3	95	0.3	3	3
1.7	*2	●	MVS0170X02S030	8.7	11.1	68.3	68	0.3	3	1
	7	●	MVS0170X07S030	17.3	19.3	68.3	68	0.3	3	3
	12	●	MVS0170X12S030	26.3	28.3	68.3	68	0.3	3	3
	20	●	MVS0170X20S030	39.3	42.3	78.3	78	0.3	3	3
	25	●	MVS0170X25S030	48.3	50.3	86.3	86	0.3	3	3
	30	●	MVS0170X30S030	56.3	59.3	95.3	95	0.3	3	3

*2 = Pilotbohrer: Toleranz +0.014 und Bohrtiefe 2DC.

● : Lagerstandard.

Interne Kühlung

DC	L/D	Lager DP1020	Bestellbezeichnung	Abmessungen (mm)						Typ
				LCF	LH	OAL	LF	PL	DCON	
1.8	*2	●	MVS0180X02S030	9.3	11.5	68.3	68	0.3	3	1
	7	●	MVS0180X07S030	18.3	20.3	68.3	68	0.3	3	3
	12	●	MVS0180X12S030	27.3	29.3	68.3	68	0.3	3	3
	20	●	MVS0180X20S030	41.3	44.3	84.3	84	0.3	3	3
	25	●	MVS0180X25S030	50.3	53.3	94.3	94	0.3	3	3
	30	●	MVS0180X30S030	59.3	62.3	102.3	102	0.3	3	3
1.9	*2	●	MVS0190X02S030	9.7	11.8	68.3	68	0.3	3	1
	7	●	MVS0190X07S030	19.3	21.3	68.3	68	0.3	3	3
	12	●	MVS0190X12S030	29.3	31.3	68.3	68	0.3	3	3
	20	●	MVS0190X20S030	44.3	46.3	84.3	84	0.3	3	3
	25	●	MVS0190X25S030	53.3	55.3	94.3	94	0.3	3	3
	30	●	MVS0190X30S030	63.3	65.3	102.3	102	0.3	3	3
2.0	*2	●	MVS0200X02S030	10.3	12.2	68.3	68	0.3	3	1
	7	●	MVS0200X07S030	20.4	22.4	68.4	68	0.4	3	3
	12	●	MVS0200X12S030	30.4	32.4	68.4	68	0.4	3	3
	20	●	MVS0200X20S030	46.4	48.4	84.4	84	0.4	3	3
	25	●	MVS0200X25S030	56.4	58.4	94.4	94	0.4	3	3
	30	●	MVS0200X30S030	66.4	68.4	102.4	102	0.4	3	3
2.1	*2	●	MVS0210X02S030	10.7	12.4	74.3	74	0.3	3	1
	7	●	MVS0210X07S030	21.4	23.4	74.4	74	0.4	3	3
	12	●	MVS0210X12S030	32.4	34.4	74.4	74	0.4	3	3
	20	●	MVS0210X20S030	48.4	50.4	94.4	94	0.4	3	3
	25	●	MVS0210X25S030	59.4	60.4	107.4	107	0.4	3	3
	30	●	MVS0210X30S030	69.4	71.4	118.4	118	0.4	3	3
2.2	*2	●	MVS0220X02S030	11.3	12.8	74.3	74	0.3	3	1
	7	●	MVS0220X07S030	22.4	23.4	74.4	74	0.4	3	3
	12	●	MVS0220X12S030	33.4	34.4	74.4	74	0.4	3	3
	20	●	MVS0220X20S030	51.4	52.4	94.4	94	0.4	3	3
	25	●	MVS0220X25S030	62.4	63.4	107.4	107	0.4	3	3
	30	●	MVS0220X30S030	73.4	74.4	118.4	118	0.4	3	3
2.3	*2	●	MVS0230X02S030	11.8	13.1	74.4	74	0.4	3	1
	7	●	MVS0230X07S030	23.4	24.4	74.4	74	0.4	3	3
	12	●	MVS0230X12S030	35.4	36.4	74.4	74	0.4	3	3
	20	●	MVS0230X20S030	53.4	54.4	94.4	94	0.4	3	3
	25	●	MVS0230X25S030	64.4	66.4	107.4	107	0.4	3	3
	30	●	MVS0230X30S030	76.4	77.4	118.4	118	0.4	3	3
2.4	*2	●	MVS0240X02S030	12.4	13.5	74.4	74	0.4	3	1
	7	●	MVS0240X07S030	24.4	25.4	74.4	74	0.4	3	3
	12	●	MVS0240X12S030	36.4	37.4	74.4	74	0.4	3	3
	20	●	MVS0240X20S030	55.4	56.4	94.4	94	0.4	3	3
	25	●	MVS0240X25S030	67.4	68.4	107.4	107	0.4	3	3
	30	●	MVS0240X30S030	79.4	80.4	118.4	118	0.4	3	3
2.5	*2	●	MVS0250X02S030	12.8	13.7	74.4	74	0.4	3	1
	7	●	MVS0250X07S030	25.5	26.5	74.5	74	0.5	3	3
	12	●	MVS0250X12S030	38.5	39.5	74.5	74	0.5	3	3
	20	●	MVS0250X20S030	58.5	59.5	94.5	94	0.5	3	3
	25	●	MVS0250X25S030	70.5	71.5	107.5	107	0.5	3	3
	30	●	MVS0250X30S030	83.5	84.5	118.5	118	0.5	3	3

*2 = Pilotbohrer: Toleranz +0.014 und Bohrtiefe 2DC.

Interne Kühlung

DC	L/D	Lager DP1020	Bestellbezeichnung	Abmessungen (mm)						Typ
				LCF	LH	OAL	LF	PL	DCON	
2.6	*2	●	MVS0260X02S030	13.4	13.4	81.4	81	0.4	3	2
	7	●	MVS0260X07S030	26.5	26.5	81.5	81	0.5	3	4
	12	●	MVS0260X12S030	39.5	39.5	81.5	81	0.5	3	4
	20	●	MVS0260X20S030	60.5	60.5	103.5	103	0.5	3	4
	25	●	MVS0260X25S030	73.5	73.5	117.5	117	0.5	3	4
	30	●	MVS0260X30S030	86.5	86.5	132.5	132	0.5	3	4
2.7	*2	●	MVS0270X02S030	13.8	13.8	81.4	81	0.4	3	2
	7	●	MVS0270X07S030	27.5	27.5	81.5	81	0.5	3	4
	12	●	MVS0270X12S030	41.5	41.5	81.5	81	0.5	3	4
	20	●	MVS0270X20S030	62.5	62.5	103.5	103	0.5	3	4
	25	●	MVS0270X25S030	76.5	76.5	117.5	117	0.5	3	4
	30	●	MVS0270X30S030	89.5	89.5	132.5	132	0.5	3	4
2.8	*2	●	MVS0280X02S030	14.4	14.4	81.4	81	0.4	3	2
	7	●	MVS0280X07S030	28.5	28.5	81.5	81	0.5	3	4
	12	●	MVS0280X12S030	42.5	42.5	81.5	81	0.5	3	4
	20	●	MVS0280X20S030	64.5	64.5	103.5	103	0.5	3	4
	25	●	MVS0280X25S030	78.5	78.5	117.5	117	0.5	3	4
	30	●	MVS0280X30S030	92.5	92.5	132.5	132	0.5	3	4
2.9	*2	●	MVS0290X02S030	14.9	14.9	81.5	81	0.5	3	2
	7	●	MVS0290X07S030	29.5	29.5	81.5	81	0.5	3	4
	12	●	MVS0290X12S030	44.5	44.5	81.5	81	0.5	3	4
	20	●	MVS0290X20S030	67.5	67.5	103.5	103	0.5	3	4
	25	●	MVS0290X25S030	81.5	81.5	117.5	117	0.5	3	4
	30	●	MVS0290X30S030	96.5	96.5	132.5	132	0.5	3	4

SCNITTDATENEMPFEHLUNGEN

Werkstoff		Allg. Baustahl ($\leq 180\text{HB}$)		C-Stahl Leg. Stahl ($180-280\text{HB}$)		C-Stahl Leg. Stahl ($280-350\text{HB}$)	
Bohrer Durchm. DC (mm)	L/D	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)
1.0	2*,7DC	15900	0.04 (0.02—0.05)	15900	0.04 (0.02—0.05)	12700	0.04 (0.02—0.05)
	≥ 12DC	15900	0.02 (0.01—0.03)	12700	0.02 (0.01—0.03)	9500	0.02 (0.01—0.03)
1.5	2*,7DC	10600	0.05 (0.03—0.08)	10600	0.05 (0.03—0.08)	8400	0.05 (0.03—0.08)
	≥ 12DC	10600	0.05 (0.02—0.08)	8400	0.05 (0.03—0.08)	6300	0.05 (0.02—0.08)
2.0	2*,7DC	7900	0.07 (0.04—0.10)	7900	0.07 (0.04—0.10)	6300	0.07 (0.04—0.10)
	≥ 12DC	7900	0.07 (0.04—0.10)	7900	0.07 (0.04—0.10)	7900	0.07 (0.04—0.10)
2.5	2*,7DC	7600	0.09 (0.05—0.13)	7600	0.09 (0.05—0.13)	6300	0.09 (0.05—0.13)
	≥ 12DC	7600	0.09 (0.06—0.13)	6300	0.09 (0.06—0.13)	6300	0.08 (0.05—0.13)

Werkstoff		Rostfreier Stahl (austenitisch) ($\leq 200\text{HB}$)		Grauguss ($\leq 350\text{MPa}$)		Duktiler Guss ($\leq 450\text{MPa}$)	
Bohrer Durchm. DC (mm)	L/D	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)
1.0	2*,7DC	9500	0.03 (0.02—0.05)	15900	0.04 (0.02—0.05)	12700	0.04 (0.02—0.05)
	≥ 12DC	9500	0.02 (0.01—0.03)	12700	0.02 (0.01—0.03)	9500	0.02 (0.01—0.03)
1.5	2*,7DC	6300	0.05 (0.03—0.07)	10600	0.05 (0.03—0.08)	8400	0.05 (0.03—0.08)
	≥ 12DC	6300	0.05 (0.02—0.08)	8400	0.05 (0.03—0.08)	6300	0.05 (0.02—0.08)
2.0	2*,7DC	4700	0.06 (0.04—0.08)	7900	0.07 (0.04—0.10)	6300	0.07 (0.04—0.10)
	≥ 12DC	4700	0.07 (0.04—0.10)	7900	0.07 (0.04—0.10)	7900	0.07 (0.04—0.10)
2.5	2*,7DC	5000	0.08 (0.05—0.10)	7600	0.09 (0.05—0.13)	6300	0.09 (0.05—0.13)
	≥ 12DC	3800	0.08 (0.05—0.12)	6300	0.09 (0.06—0.13)	6300	0.08 (0.05—0.12)

Werkstoff		Aluminium Leg. (Si<5%)		Hitzebeständiger Stahl	
Bohrer Durchm. DC (mm)	L/D	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)
1.0	2*,7DC	19000	0.05 (0.03—0.08)	3100	0.02 (0.01—0.03)
	≥ 12DC	15900	0.05 (0.03—0.08)	3100	0.02 (0.01—0.03)
1.5	2*,7DC	16900	0.07 (0.05—0.12)	2100	0.03 (0.02—0.04)
	≥ 12DC	14800	0.08 (0.05—0.12)	2100	0.03 (0.02—0.04)
2.0	2*,7DC	14300	0.1 (0.06—0.15)	2300	0.04 (0.03—0.05)
	≥ 12DC	12700	0.11 (0.06—0.15)	2300	0.04 (0.03—0.05)
2.5	2*,7DC	12700	0.13 (0.08—0.20)	1900	0.05 (0.04—0.06)
	≥ 12DC	11400	0.14 (0.08—0.20)	1900	0.05 (0.04—0.06)

*2 = Pilotbohrer: Die Bohrtiefe beträgt 2DC.

BEDIENHINWEISE FÜR MINI-MVS-LANGBOHRER (L/D ≥ 10)

BOHREN AUF GLATTEN FLÄCHEN

1. Bohren einer Pilotbohrung



- ① Verwenden Sie einen Bohrer mit einem größeren (flacheren) Spitzenwinkel. Verwenden Sie die kürzeste Länge.
- ② Die Pilotbohrung muss mit hoher Präzision gebohrt werden.
- ③ Bohrtiefe: etwa 1DC.
(Passen Sie die Tiefe der Pilotbohrung der Länge Ihres langen Bohrers an)

2. Anfahren mit dem Tieflochbohrer



- ① Eintritt in die Pilotbohrung mit geringer Drehzahl.
(Drehzahl 1000 min⁻¹, Vorschub 0.2–0.3mm/U)
- ② Tieflochbohrer 0.5–1 mm vor Ende der Pilotbohrung stoppen.

3. Tieflochbohren



- ① Beginnen Sie mit der empfohlenen Drehzahl und verwenden Sie kontinuierlichen Vorschub (ohne zu lüften).

4. Herausfahren des Bohrers



- ① Senken Sie nach dem Bohren 0.5–1mm über dem Lochboden die Drehzahl. (Drehzahl 1000 min⁻¹)
- ② Ziehen Sie den Bohrer bei einem Vorschub von 3000mm/min bis zum Startpunkt der Pilotbohrung heraus.
- ③ Ziehen Sie schließlich bei einer Schnittgeschwindigkeit von 20–30m/min und einem Vorschub von 0.2–0.3mm/U den Bohrer ganz heraus.

UNTERBROCHENE BOHRUNG ● Bohrungen und Durchbrüche bei ungleichmäßigen Flächen und Winkeln

1. Anspiegeln



- ① Bearbeiten Sie die flache oder unebene Fläche mit einem Schaft- oder Nutenfräser, der zum Anspiegeln geeignet ist. Wählen Sie den Durchmesser der Planfläche so groß wie den Durchmesser der Pilotbohrung.

2. Bohren einer Pilotbohrung



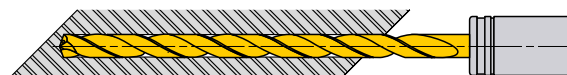
- ① Verwenden Sie einen Bohrer mit einem größeren (flacheren) Spitzenwinkel. Verwenden Sie die kürzeste Länge.
- ② Die Pilotbohrung muss mit hoher Präzision gebohrt werden.
- ③ Bohrtiefe: ca. 1DC
(Passen Sie die Tiefe der Pilotbohrung der Länge Ihres langen Bohrers an)

3. Einfahren in die Pilotbohrung



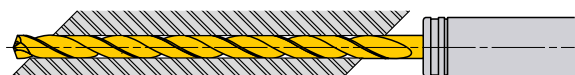
- ① Mit niedriger Drehzahl in die Pilotbohrung einfahren.
(Drehzahl ca. 1000 min⁻¹, Vorschub 0.2–0.3mm/U)
- ② Tieflochbohrer 0.5-1 mm vor Ende der Pilotbohrung stoppen.

4. Tieflochbohren



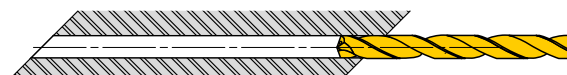
- ① Beginnen Sie mit der empfohlenen Drehzahl und verwenden Sie kontinuierlichen Vorschub (ohne zu lüften).
- ② Vorschub bis vor dem Durchbruch beibehalten.

5. Durchbruch



- ① Beim Durchbruch kann die Schneidkante beschädigt werden.
- ② Beim Durchbohren empfiehlt sich etwa die halbe Vorschubgeschwindigkeit.

6. Herausfahren des Bohrers



- ① Dann Tieflochbohrer mit einer Umdrehungsgeschwindigkeit von 1000 min⁻¹ aus der Bohrung herausfahren.
- ② Ziehen Sie den Bohrer bei einem Vorschub von 3000mm/min bis zum Startpunkt der Pilotbohrung heraus.
- ③ Ziehen Sie schließlich bei einer Schnittgeschwindigkeit von 20–30m/min und einem Vorschub von 0.2–0.3mm/U den Bohrer ganz heraus.

BOHREN (VOLLHARTMETALL)

MINI-MWS

- Mini VHM-Bohrer mit internen Kühlmittelkanälen für stabiles Tieflochbohren.
- Für äußerst präzises und effizientes Bohren, von C-Stahl bis hin zu schwer zu bearbeitenden Werkstoffen.

P

M

K

N

S

H

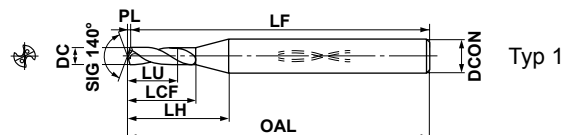
0.5 ≤ DC < 1 1 ≤ DC < 2.95



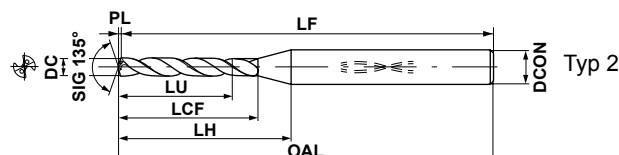
+0.009
0
-0.006

+0.014
0
-0.006

Typ SB
(Für Pilotbohrungen)



Typ LB/XB



(Bemerkung) MWS Bohrers eignen sich für die Verwendung mit Schrumpfaufnahmen.

Interne Kühlung

DC (mm)	Bohr- tiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
0.50	1	●	MWS0050SB	0.50	2.59	7.29	47.09	47	0.09	3	1
	5	★	MWS0050LB	2.50	8.09	13.09	47.10	47	0.10	3	2
	12	★	MWS0050XB	6.00	16.09	21.09	47.10	47	0.10	3	2
0.51	1	★	MWS0051SB	0.50	2.69	7.29	47.09	47	0.09	3	1
	5	★	MWS0051LB	2.50	8.09	13.09	47.11	47	0.11	3	2
	12	★	MWS0051XB	6.00	16.09	21.09	47.11	47	0.11	3	2
0.52	1	★	MWS0052SB	0.50	2.69	7.29	47.09	47	0.09	3	1
	5	★	MWS0052LB	2.50	8.09	13.09	47.11	47	0.11	3	2
	12	★	MWS0052XB	6.00	16.09	21.09	47.11	47	0.11	3	2
0.53	1	★	MWS0053SB	0.50	2.70	7.30	47.10	47	0.10	3	1
	5	★	MWS0053LB	2.50	8.10	13.10	47.11	47	0.11	3	2
	12	★	MWS0053XB	6.00	16.10	21.10	47.11	47	0.11	3	2
0.54	1	★	MWS0054SB	0.50	2.70	7.30	47.10	47	0.10	3	1
	5	★	MWS0054LB	2.50	8.10	13.10	47.11	47	0.11	3	2
	12	★	MWS0054XB	6.00	16.10	21.10	47.11	47	0.11	3	2
0.55	1	●	MWS0055SB	0.50	2.70	7.30	47.10	47	0.10	3	1
	5	★	MWS0055LB	2.50	8.10	13.10	47.11	47	0.11	3	2
	12	★	MWS0055XB	6.00	16.10	21.10	47.11	47	0.11	3	2
0.56	1	★	MWS0056SB	0.50	3.00	7.60	47.10	47	0.10	3	1
	5	★	MWS0056LB	2.50	8.10	13.10	47.12	47	0.12	3	2
	12	★	MWS0056XB	6.00	16.10	21.10	47.12	47	0.12	3	2
0.57	1	★	MWS0057SB	0.50	3.00	7.50	47.10	47	0.10	3	1
	5	★	MWS0057LB	2.50	8.10	13.10	47.12	47	0.12	3	2
	12	★	MWS0057XB	6.00	16.10	21.10	47.12	47	0.12	3	2

Interne Kühlung

DC (mm)	Bohr- tiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
0.58	1	★	MWS0058SB	0.50	3.01	7.51	47.11	47	0.11	3	1
	5	★	MWS0058LB	2.50	8.11	13.11	47.12	47	0.12	3	2
	12	★	MWS0058XB	6.00	16.11	21.11	47.12	47	0.12	3	2
0.59	1	★	MWS0059SB	0.50	3.01	7.51	47.11	47	0.11	3	1
	5	★	MWS0059LB	2.50	8.11	12.11	47.12	47	0.12	3	2
	12	★	MWS0059XB	6.00	16.11	20.11	47.12	47	0.12	3	2
0.60	1	●	MWS0060SB	0.60	3.01	7.51	47.11	47	0.11	3	1
	5	★	MWS0060LB	3.00	8.11	12.11	47.12	47	0.12	3	2
	12	★	MWS0060XB	7.20	16.11	20.11	47.12	47	0.12	3	2
0.61	1	★	MWS0061SB	0.60	3.21	7.71	47.11	47	0.11	3	1
	5	★	MWS0061LB	3.00	8.11	12.11	47.13	47	0.13	3	2
	12	★	MWS0061XB	7.20	16.11	20.11	47.13	47	0.13	3	2
0.62	1	★	MWS0062SB	0.60	3.21	7.61	47.11	47	0.11	3	1
	5	★	MWS0062LB	3.00	8.11	12.11	47.13	47	0.13	3	2
	12	★	MWS0062XB	7.20	16.11	20.11	47.13	47	0.13	3	2
0.63	1	★	MWS0063SB	0.60	3.21	7.61	47.11	47	0.11	3	1
	5	★	MWS0063LB	3.00	8.11	12.11	47.13	47	0.13	3	2
	12	★	MWS0063XB	7.20	16.11	20.11	47.13	47	0.13	3	2
0.64	1	★	MWS0064SB	0.60	3.22	7.62	47.12	47	0.12	3	1
	5	★	MWS0064LB	3.00	8.12	12.12	47.13	47	0.13	3	2
	12	★	MWS0064XB	7.20	16.12	20.12	47.13	47	0.13	3	2
0.65	1	●	MWS0065SB	0.60	3.22	7.62	47.12	47	0.12	3	1
	5	★	MWS0065LB	3.00	8.12	12.12	47.13	47	0.13	3	2
	12	★	MWS0065XB	7.20	16.12	20.12	47.13	47	0.13	3	2

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DON	
0.66	1	★	MWS0066SB	0.60	3.52	7.92	47.12	47	0.12	3	1
	5	★	MWS0066LB	3.00	8.12	12.12	47.14	47	0.14	3	2
	12	★	MWS0066XB	7.20	16.12	20.12	47.14	47	0.14	3	2
0.67	1	★	MWS0067SB	0.60	3.52	7.82	47.12	47	0.12	3	1
	5	★	MWS0067LB	3.00	8.12	12.12	47.14	47	0.14	3	2
	12	★	MWS0067XB	7.20	16.12	20.12	47.14	47	0.14	3	2
0.68	1	★	MWS0068SB	0.60	3.52	7.82	47.12	47	0.12	3	1
	5	★	MWS0068LB	3.00	8.12	12.12	47.14	47	0.14	3	2
	12	★	MWS0068XB	7.20	16.12	20.12	47.14	47	0.14	3	2
0.69	1	★	MWS0069SB	0.60	3.53	7.83	47.13	47	0.13	3	1
	5	★	MWS0069LB	3.00	8.13	12.13	47.14	47	0.14	3	2
	12	★	MWS0069XB	7.20	16.13	20.13	47.14	47	0.14	3	2
0.70	1	●	MWS0070SB	0.70	3.53	7.83	47.13	47	0.13	3	1
	5	★	MWS0070LB	3.50	8.13	12.13	47.14	47	0.14	3	2
	12	★	MWS0070XB	8.40	16.13	20.13	47.14	47	0.14	3	2
0.71	1	★	MWS0071SB	0.70	3.73	8.03	50.13	50	0.13	3	1
	5	★	MWS0071LB	3.50	10.13	14.13	50.15	50	0.15	3	2
	12	★	MWS0071XB	8.40	20.13	24.13	50.15	50	0.15	3	2
0.72	1	★	MWS0072SB	0.70	3.73	8.03	50.13	50	0.13	3	1
	5	★	MWS0072LB	3.50	10.13	14.13	50.15	50	0.15	3	2
	12	★	MWS0072XB	8.40	20.13	24.13	50.15	50	0.15	3	2
0.73	1	★	MWS0073SB	0.70	3.73	7.93	50.13	50	0.13	3	1
	5	★	MWS0073LB	3.50	10.13	14.13	50.15	50	0.15	3	2
	12	★	MWS0073XB	8.40	20.13	24.13	50.15	50	0.15	3	2
0.74	1	★	MWS0074SB	0.70	3.73	7.93	50.13	50	0.13	3	1
	5	★	MWS0074LB	3.50	10.13	14.13	50.15	50	0.15	3	2
	12	★	MWS0074XB	8.40	20.13	24.13	50.15	50	0.15	3	2
0.75	1	●	MWS0075SB	0.70	3.74	7.94	50.14	50	0.14	3	1
	5	★	MWS0075LB	3.50	10.14	14.14	50.16	50	0.16	3	2
	12	★	MWS0075XB	8.40	20.14	24.14	50.16	50	0.16	3	2
0.76	1	★	MWS0076SB	0.70	4.04	8.24	50.14	50	0.14	3	1
	5	★	MWS0076LB	3.50	10.14	14.14	50.16	50	0.16	3	2
	12	★	MWS0076XB	8.40	20.14	24.14	50.16	50	0.16	3	2
0.77	1	★	MWS0077SB	0.70	4.04	8.24	50.14	50	0.14	3	1
	5	★	MWS0077LB	3.50	10.14	14.14	50.16	50	0.16	3	2
	12	★	MWS0077XB	8.40	20.14	24.14	50.16	50	0.16	3	2
0.78	1	★	MWS0078SB	0.70	4.04	8.14	50.14	50	0.14	3	1
	5	★	MWS0078LB	3.50	10.14	14.14	50.16	50	0.16	3	2
	12	★	MWS0078XB	8.40	20.14	24.14	50.16	50	0.16	3	2
0.79	1	★	MWS0079SB	0.70	4.04	8.14	50.14	50	0.14	3	1
	5	★	MWS0079LB	3.50	10.14	14.14	50.16	50	0.16	3	2
	12	★	MWS0079XB	8.40	20.14	24.14	50.16	50	0.16	3	2
0.80	1	●	MWS0080SB	0.80	4.05	8.15	50.15	50	0.15	3	1
	5	★	MWS0080LB	4.00	10.15	14.15	50.17	50	0.17	3	2
	12	★	MWS0080XB	9.60	20.15	24.15	50.17	50	0.17	3	2
0.81	1	★	MWS0081SB	0.80	4.25	8.35	50.15	50	0.15	3	1
	5	★	MWS0081LB	4.00	10.15	14.15	50.17	50	0.17	3	2
	12	★	MWS0081XB	9.60	20.15	24.15	50.17	50	0.17	3	2
0.82	1	★	MWS0082SB	0.80	4.25	8.35	50.15	50	0.15	3	1
	5	★	MWS0082LB	4.00	10.15	14.15	50.17	50	0.17	3	2
	12	★	MWS0082XB	9.60	20.15	24.15	50.17	50	0.17	3	2

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DON	
0.83	1	★	MWS0083SB	0.80	4.25	8.25	50.15	50	0.15	3	1
	5	★	MWS0083LB	4.00	10.15	14.15	50.17	50	0.17	3	2
	12	★	MWS0083XB	9.60	20.15	24.15	50.17	50	0.17	3	2
0.84	1	★	MWS0084SB	0.80	4.25	8.25	50.15	50	0.15	3	1
	5	★	MWS0084LB	4.00	10.15	14.15	50.17	50	0.17	3	2
	12	★	MWS0084XB	9.60	20.15	24.15	50.17	50	0.17	3	2
0.85	1	●	MWS0085SB	0.80	4.25	8.25	50.15	50	0.15	3	1
	5	★	MWS0085LB	4.00	10.15	14.15	50.18	50	0.18	3	2
	12	★	MWS0085XB	9.60	20.15	24.15	50.18	50	0.18	3	2
0.86	1	★	MWS0086SB	0.80	4.56	8.56	50.16	50	0.16	3	1
	5	★	MWS0086LB	4.00	10.16	14.16	50.18	50	0.18	3	2
	12	★	MWS0086XB	9.60	20.16	24.16	50.18	50	0.18	3	2
0.87	1	★	MWS0087SB	0.80	4.56	8.56	50.16	50	0.16	3	1
	5	★	MWS0087LB	4.00	10.16	14.16	50.18	50	0.18	3	2
	12	★	MWS0087XB	9.60	20.16	24.16	50.18	50	0.18	3	2
0.88	1	★	MWS0088SB	0.80	4.56	8.56	50.16	50	0.16	3	1
	5	★	MWS0088LB	4.00	10.16	14.16	50.18	50	0.18	3	2
	12	★	MWS0088XB	9.60	20.16	24.16	50.18	50	0.18	3	2
0.89	1	★	MWS0089SB	0.80	4.56	8.46	50.16	50	0.16	3	1
	5	★	MWS0089LB	4.00	10.16	14.16	50.18	50	0.18	3	2
	12	★	MWS0089XB	9.60	20.16	24.16	50.18	50	0.18	3	2
0.90	1	●	MWS0090SB	0.90	4.56	8.46	50.16	50	0.16	3	1
	5	★	MWS0090LB	4.50	10.16	14.16	50.19	50	0.19	3	2
	12	★	MWS0090XB	10.80	20.16	24.16	50.19	50	0.19	3	2
0.91	1	★	MWS0091SB	0.90	4.77	8.67	50.17	50	0.17	3	1
	5	★	MWS0091LB	4.50	10.17	14.17	50.19	50	0.19	3	2
	12	★	MWS0091XB	10.80	20.17	24.17	50.19	50	0.19	3	2
0.92	1	★	MWS0092SB	0.90	4.77	8.67	50.17	50	0.17	3	1
	5	★	MWS0092LB	4.50	10.17	14.17	50.19	50	0.19	3	2
	12	★	MWS0092XB	10.80	20.17	24.17	50.19	50	0.19	3	2
0.93	1	★	MWS0093SB	0.90	4.77	8.67	50.17	50	0.17	3	1
	5	★	MWS0093LB	4.50	10.17	14.17	50.19	50	0.19	3	2
	12	★	MWS0093XB	10.80	20.17	24.17	50.19	50	0.19	3	2
0.94	1	★	MWS0094SB	0.90	4.77	8.57	50.17	50	0.17	3	1
	5	★	MWS0094LB	4.50	10.17	14.17	50.19	50	0.19	3	2
	12	★	MWS0094XB	10.80	20.17	24.17	50.19	50	0.19	3	2
0.95	1	●	MWS0095SB	0.90	4.77	8.57	50.17	50	0.17	3	1
	5	★	MWS0095LB	4.50	10.17	14.17	50.20	50	0.20	3	2
	12	★	MWS0095XB	10.80	20.17	24.17	50.20	50	0.20	3	2
0.96	1	★	MWS0096SB	0.90	5.07	8.87	50.17	50	0.17	3	1
	5	★	MWS0096LB	4.50	10.17	14.17	50.20	50	0.20	3	2
	12	★	MWS0096XB	10.80	20.17	24.17	50.20	50	0.20	3	2
0.97	1	★	MWS0097SB	0.90	5.08	8.88	50.18	50	0.18	3	1
	5	★	MWS0097LB	4.50	10.18	14.18	50.20	50	0.20	3	2
	12	★	MWS0097XB	10.80	20.18	24.18	50.20	50	0.20	3	2
0.98	1	★	MWS0098SB	0.90	5.08	8.88	50.18	50	0.18	3	1
	5	★	MWS0098LB	4.50	10.18	14.18	50.20	50	0.20	3	2
	12	★	MWS0098XB	10.80	20.18	24.18	50.20	50	0.20	3	2
0.99	1	★	MWS0099SB	0.90	5.08	8.88	50.18	50	0.18	3	1
	5	★	MWS0099LB	4.50	10.18	14.18	50.21	50	0.21	3	2
	12	★	MWS0099XB	10.80	20.18	24.18	50.21	50	0.21	3	2

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung. (Andere Durchmesser und Längen können bestellt werden).

SCHNITTDATENEMPFEHLUNGEN

SB/LB/XB-Bohrer (l/d<10)

Werkstoff	Allg. Baustahl ($\leq 180\text{HB}$)					C-Stahl, Leg. Stahl ($180-280\text{HB}$)				
	Ck10					Ck45, 42CrMo4				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	
0.5	40	25400	0.01 (0.005—0.015)	250		40	25400	0.01 (0.005—0.015)	250	
0.63	40	20200	0.014 (0.008—0.020)	280		40	20200	0.014 (0.008—0.020)	280	
0.8	45	17900	0.028 (0.016—0.040)	500		45	17900	0.028 (0.016—0.040)	500	
1.0	50	15900	0.035 (0.020—0.050)	555		50	15900	0.035 (0.020—0.050)	555	

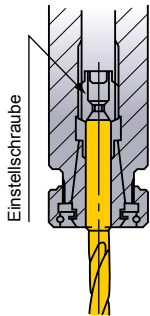
Werkstoff	C-Stahl, Leg. Stahl ($280-350\text{HB}$)					Rostfreier Stahl (austenitisch) ($\leq 200\text{HB}$)				
	36CrNiMo4					X5CrNi1810, X5CrNiMo17-12-2				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	
0.5	30	19000	0.01 (0.005—0.015)	190		20	12700	0.008 (0.005—0.010)	100	
0.63	30	15100	0.014 (0.008—0.020)	210		20	10100	0.01 (0.008—0.013)	100	
0.8	35	13900	0.028 (0.016—0.040)	385		25	9900	0.02 (0.016—0.026)	195	
1.0	40	12700	0.035 (0.020—0.050)	440		30	9500	0.03 (0.020—0.044)	285	

Werkstoff	Grauguss ($\leq 350\text{MPa}$)					Duktiler Guss ($\leq 450\text{MPa}$)				
	GG30					GGG45				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	
0.5	40	25400	0.01 (0.005—0.015)	250		30	19000	0.01 (0.005—0.015)	190	
0.63	40	20200	0.014 (0.008—0.020)	280		30	15100	0.014 (0.008—0.020)	210	
0.8	45	17900	0.028 (0.016—0.040)	500		35	13900	0.028 (0.016—0.040)	385	
1.0	50	15900	0.035 (0.020—0.050)	555		40	12700	0.035 (0.020—0.050)	440	

Werkstoff	Aluminium Leg. (Si<5%)					Hitzebeständiger Stahl				
						Inconel718				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	
0.5	40	25400	0.014 (0.008—0.020)	355		10	6300	0.006 (0.004—0.008)	35	
0.63	40	20200	0.02 (0.012—0.030)	400		10	5000	0.008 (0.007—0.010)	40	
0.8	45	17900	0.036 (0.024—0.050)	640		10	3900	0.016 (0.013—0.021)	60	
1.0	60	19000	0.05 (0.030—0.075)	950		10	3100	0.02 (0.016—0.027)	60	

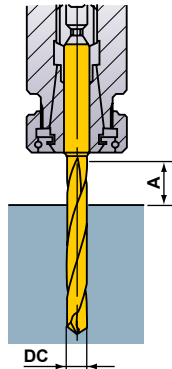
EINSATZ HINWEISE

Bohrer Aufnahme



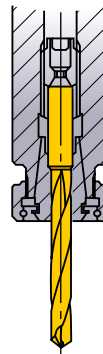
Präzisionsspannzangen können verwendet werden.

Max. Bohrtiefe



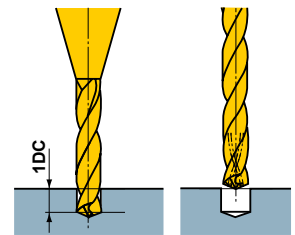
$$A \geq DC \times 2.0$$

Bohrer Einstellung



Nicht auf den Nuten spannen.

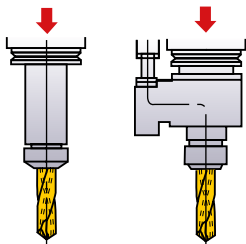
Bohrer Einstellung



- ① Für die Pilotbohrung verwenden Sie bitte Bohrer mit SB-Ausführung.
- ② Verwenden Sie die Pilotbohrung als Führung. Je nach Schnittdaten empfiehlt es sich mit Vorschubunterbrechung zu arbeiten.

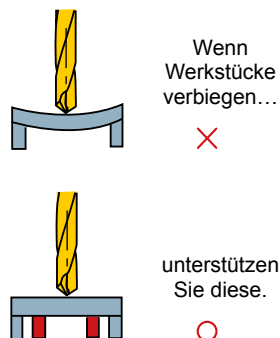
Interne Kühlmittelzufuhr

Kühlmittelzufuhr durch die Spindel Kühlmittelzufuhr durch spezielle Aufnahmen.



Empfohlener Kühlmitteldruck: $\geq 3 \text{ MPa}$
Mindestens 1.5 MPa erforderlich.

Dünne Werkstücke



Wenn Werkstücke verbiegen...

unterstützen Sie diese.

Handling mit Kühlmittel

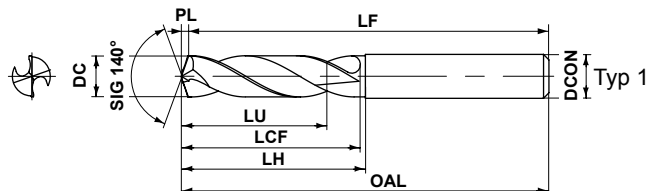
- 1) Kleine Partikel können die Kühlmittelbohrungen verstopfen. Verwenden Sie daher bitte einen Kühlmittelfilter.
- 2) Stark verschmutztes Kühlmittel reduziert den Spänefluss. Wir empfehlen ein regelmäßiges Wechseln des Kühlmittels. Bitte prüfen Sie eine einwandfreie Kühlmittelzufuhr!

GEBRAUCHSANLEITUNG

- Bitte verwenden Sie einen Kühlmittelfilter ($\leq 3 \mu\text{m}$) um Kühlmittelstau zu verhindern.

P	M	K	N	S	H
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	DC=3	3<DC≤6	6<DC≤10	10<DC≤18	18<DC≤25
	0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.033
	0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.033
	0 -0.006	0 -0.008	0 -0.009	0 -0.011	0 -0.013



Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
(mm)	(l/d)	VP15TF		LU	LCF	LH	OAL	LF	PL	DCON	
3.0	2	●	MWE0300SA	6.0	16.5	16.5	55.5	55	0.5	3.0	1
	3	●	MWE0300MA	9.0	21.5	21.5	60.5	60	0.5	3.0	1
3.1	2	●	MWE0310SA	6.2	18.6	18.6	55.6	55	0.6	3.1	1
	3	●	MWE0310MA	9.3	24.6	24.6	60.6	60	0.6	3.1	1
3.2	2	●	MWE0320SA	6.4	18.6	18.6	55.6	55	0.6	3.2	1
	3	●	MWE0320MA	9.6	24.6	24.6	60.6	60	0.6	3.2	1
3.3	2	●	MWE0330SA	6.6	18.6	18.6	55.6	55	0.6	3.3	1
	3	●	MWE0330MA	9.9	24.6	24.6	60.6	60	0.6	3.3	1
3.4	2	●	MWE0340SA	6.8	20.6	20.6	55.6	55	0.6	3.4	1
	3	●	MWE0340MA	10.2	24.6	24.6	60.6	60	0.6	3.4	1
3.5	2	●	MWE0350SA	7.0	20.6	20.6	55.6	55	0.6	3.5	1
	3	●	MWE0350MA	10.5	24.6	24.6	60.6	60	0.6	3.5	1
3.6	2	★	MWE0360SA	7.2	20.7	20.7	55.7	55	0.7	3.6	1
	3	●	MWE0360MA	10.8	27.7	27.7	60.7	60	0.7	3.6	1
3.7	2	★	MWE0370SA	7.4	20.7	20.7	55.7	55	0.7	3.7	1
	3	★	MWE0370MA	11.1	27.7	27.7	60.7	60	0.7	3.7	1
3.8	2	●	MWE0380SA	7.6	22.7	22.7	55.7	55	0.7	3.8	1
	3	●	MWE0380MA	11.4	27.7	27.7	60.7	60	0.7	3.8	1
3.9	2	●	MWE0390SA	7.8	22.7	22.7	55.7	55	0.7	3.9	1
	3	★	MWE0390MA	11.7	27.7	27.7	60.7	60	0.7	3.9	1
4.0	2	●	MWE0400SA	8.0	22.7	22.7	55.7	55	0.7	4.0	1
	3	●	MWE0400MA	12.0	27.7	27.7	60.7	60	0.7	4.0	1
4.1	2	●	MWE0410SA	8.2	22.7	22.7	55.7	55	0.7	4.1	1
	3	★	MWE0410MA	12.3	29.7	29.7	63.7	63	0.7	4.1	1
4.2	2	●	MWE0420SA	8.4	22.8	22.8	55.8	55	0.8	4.2	1
	3	●	MWE0420MA	12.6	29.8	29.8	63.8	63	0.8	4.2	1
4.3	2	●	MWE0430SA	8.6	24.8	24.8	58.8	58	0.8	4.3	1
	3	●	MWE0430MA	12.9	29.8	29.8	63.8	63	0.8	4.3	1
4.4	2	★	MWE0440SA	8.8	24.8	24.8	58.8	58	0.8	4.4	1
	3	●	MWE0440MA	13.2	29.8	29.8	63.8	63	0.8	4.4	1
4.5	2	★	MWE0450SA	9.0	24.8	24.8	58.8	58	0.8	4.5	1
	3	●	MWE0450MA	13.5	29.8	29.8	63.8	63	0.8	4.5	1
4.6	2	★	MWE0460SA	9.2	24.8	24.8	58.8	58	0.8	4.6	1
	3	●	MWE0460MA	13.8	32.8	32.8	68.8	68	0.8	4.6	1
4.7	2	★	MWE0470SA	9.4	24.9	24.9	58.9	58	0.9	4.7	1
	3	★	MWE0470MA	14.1	32.9	32.9	68.9	68	0.9	4.7	1

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
(mm)	(l/d)	VP15TF		LU	LCF	LH	OAL	LF	PL	DCON	
4.8	2	★	MWE0480SA	9.6	26.9	26.9	62.9	62	0.9	4.8	1
	3	●	MWE0480MA	14.4	32.9	32.9	68.9	68	0.9	4.8	1
4.9	2	★	MWE0490SA	9.8	26.9	26.9	62.9	62	0.9	4.9	1
	3	●	MWE0490MA	14.7	32.9	32.9	68.9	68	0.9	4.9	1
5.0	2	●	MWE0500SA	10.0	26.9	26.9	62.9	62	0.9	5.0	1
	3	●	MWE0500MA	15.0	32.9	32.9	68.9	68	0.9	5.0	1
5.1	2	●	MWE0510SA	10.2	26.9	26.9	62.9	62	0.9	5.1	1
	3	●	MWE0510MA	15.3	34.9	34.9	72.9	72	0.9	5.1	1
5.2	2	●	MWE0520SA	10.4	26.9	26.9	62.9	62	0.9	5.2	1
	3	●	MWE0520MA	15.6	34.9	34.9	72.9	72	0.9	5.2	1
5.3	2	★	MWE0530SA	10.6	27.0	27.0	63.0	62	1.0	5.3	1
	3	★	MWE0530MA	15.9	35.0	35.0	73.0	72	1.0	5.3	1
5.4	2	★	MWE0540SA	10.8	29.0	29.0	67.0	66	1.0	5.4	1
	3	●	MWE0540MA	16.2	35.0	35.0	73.0	72	1.0	5.4	1
5.5	2	●	MWE0550SA	11.0	29.0	29.0	67.0	66	1.0	5.5	1
	3	●	MWE0550MA	16.5	35.0	35.0	73.0	72	1.0	5.5	1
5.6	2	★	MWE0560SA	11.2	29.0	29.0	67.0	66	1.0	5.6	1
	3	●	MWE0560MA	16.8	37.0	37.0	75.0	74	1.0	5.6	1
5.7	2	★	MWE0570SA	11.4	29.0	29.0	67.0	66	1.0	5.7	1
	3	★	MWE0570MA	17.1	37.0	37.0	75.0	74	1.0	5.7	1
5.8	2	★	MWE0580SA	11.6	29.1	29.1	67.1	66	1.1	5.8	1
	3	●	MWE0580MA	17.4	37.1	37.1	75.1	74	1.1	5.8	1
5.9	2	★	MWE0590SA	11.8	29.1	29.1	67.1	66	1.1	5.9	1
	3	★	MWE0590MA	17.7	37.1	37.1	75.1	74	1.1	5.9	1
6.0	2	●	MWE0600SA	12.0	29.1	29.1	67.1	66	1.1	6.0	1
	3	●	MWE0600MA	18.0	42.1	42.1	82.1	81	1.1	6.0	1
6.1	2	★	MWE0610SA	12.2	32.1	32.1	71.1	70	1.1	6.1	1
	3	●	MWE0610MA	18.3	42.1	42.1	82.1	81	1.1	6.1	1
6.2	2	★	MWE0620SA	12.4	32.1	32.1	71.1	70	1.1	6.2	1
	3	●	MWE0620MA	18.6	42.1	42.1	82.1	81	1.1	6.2	1
6.3	2	★	MWE0630SA	12.6	32.1	32.1	71.1	70	1.1	6.3	1
	3	●	MWE0630MA	18.9	42.1	42.1	82.1	81	1.1	6.3	1
6.4	2	★	MWE0640SA	12.8	32.2	32.2	71.2	70	1.2	6.4	1
	3	★	MWE0640MA	19.2	42.2	42.2	82.2	81	1.2	6.4	1
6.5	2	●	MWE0650SA	13.0	32.2	32.2	71.2	70	1.2	6.5	1
	3	●	MWE0650MA	19.5	42.2	42.2	82.2	81	1.2	6.5	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

SCHNITTBEDINGUNGEN > L025
ANWENDUNGSHINWEISE > L026
TECHNISCHE DATEN > N001

BOHREN (VOLLHARTMETALL)

MWE

HARTMETALL

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
(mm)	(l/d)	VP15TF									
6.6	2	★	MWE0660SA	13.2	32.2	32.2	71.2	70	1.2	6.6	1
	3	★	MWE0660MA	19.8	44.2	44.2	84.2	83	1.2	6.6	1
6.7	2	★	MWE0670SA	13.4	32.2	32.2	71.2	70	1.2	6.7	1
	3	★	MWE0670MA	20.1	44.2	44.2	84.2	83	1.2	6.7	1
6.8	2	●	MWE0680SA	13.6	35.2	35.2	75.2	74	1.2	6.8	1
	3	●	MWE0680MA	20.4	44.2	44.2	84.2	83	1.2	6.8	1
6.9	2	★	MWE0690SA	13.8	35.3	35.3	75.3	74	1.3	6.9	1
	3	●	MWE0690MA	20.7	44.3	44.3	84.3	83	1.3	6.9	1
7.0	2	●	MWE0700SA	14.0	35.3	35.3	75.3	74	1.3	7.0	1
	3	●	MWE0700MA	21.0	44.3	44.3	84.3	83	1.3	7.0	1
7.1	2	★	MWE0710SA	14.2	35.3	35.3	75.3	74	1.3	7.1	1
	3	●	MWE0710MA	21.3	46.3	46.3	88.3	87	1.3	7.1	1
7.2	2	★	MWE0720SA	14.4	35.3	35.3	75.3	74	1.3	7.2	1
	3	★	MWE0720MA	21.6	46.3	46.3	88.3	87	1.3	7.2	1
7.3	2	★	MWE0730SA	14.6	35.3	35.3	75.3	74	1.3	7.3	1
	3	●	MWE0730MA	21.9	46.3	46.3	88.3	87	1.3	7.3	1
7.4	2	★	MWE0740SA	14.8	35.3	35.3	75.3	74	1.3	7.4	1
	3	●	MWE0740MA	22.2	46.3	46.3	88.3	87	1.3	7.4	1
7.5	2	★	MWE0750SA	15.0	35.4	35.4	75.4	74	1.4	7.5	1
	3	●	MWE0750MA	22.5	46.4	46.4	88.4	87	1.4	7.5	1
7.6	2	★	MWE0760SA	15.2	38.4	38.4	80.4	79	1.4	7.6	1
	3	●	MWE0760MA	22.8	49.4	49.4	91.4	90	1.4	7.6	1
7.7	2	★	MWE0770SA	15.4	38.4	38.4	80.4	79	1.4	7.7	1
	3	●	MWE0770MA	23.1	49.4	49.4	91.4	90	1.4	7.7	1
7.8	2	●	MWE0780SA	15.6	38.4	38.4	80.4	79	1.4	7.8	1
	3	★	MWE0780MA	23.4	49.4	49.4	91.4	90	1.4	7.8	1
7.9	2	★	MWE0790SA	15.8	38.4	38.4	80.4	79	1.4	7.9	1
	3	★	MWE0790MA	23.7	49.4	49.4	91.4	90	1.4	7.9	1
8.0	2	●	MWE0800SA	16.0	38.5	38.5	80.5	79	1.5	8.0	1
	3	●	MWE0800MA	24.0	49.5	49.5	91.5	90	1.5	8.0	1
8.1	2	●	MWE0810SA	16.2	38.5	38.5	80.5	79	1.5	8.1	1
	3	●	MWE0810MA	24.3	54.5	54.5	97.5	96	1.5	8.1	1
8.2	2	★	MWE0820SA	16.4	38.5	38.5	80.5	79	1.5	8.2	1
	3	●	MWE0820MA	24.6	54.5	54.5	97.5	96	1.5	8.2	1
8.3	2	★	MWE0830SA	16.6	38.5	38.5	80.5	79	1.5	8.3	1
	3	●	MWE0830MA	24.9	54.5	54.5	97.5	96	1.5	8.3	1
8.4	2	★	MWE0840SA	16.8	38.5	38.5	80.5	79	1.5	8.4	1
	3	●	MWE0840MA	25.2	54.5	54.5	97.5	96	1.5	8.4	1
8.5	2	●	MWE0850SA	17.0	38.5	38.5	80.5	79	1.5	8.5	1
	3	●	MWE0850MA	25.5	54.5	54.5	97.5	96	1.5	8.5	1
8.6	2	★	MWE0860SA	17.2	41.6	41.6	85.6	84	1.6	8.6	1
	3	●	MWE0860MA	25.8	56.6	56.6	99.6	98	1.6	8.6	1
8.7	2	★	MWE0870SA	17.4	41.6	41.6	85.6	84	1.6	8.7	1
	3	●	MWE0870MA	26.1	56.6	56.6	99.6	98	1.6	8.7	1
8.8	2	★	MWE0880SA	17.6	41.6	41.6	85.6	84	1.6	8.8	1
	3	●	MWE0880MA	26.4	56.6	56.6	99.6	98	1.6	8.8	1
8.9	2	★	MWE0890SA	17.8	41.6	41.6	85.6	84	1.6	8.9	1
	3	★	MWE0890MA	26.7	56.6	56.6	99.6	98	1.6	8.9	1
9.0	2	●	MWE0900SA	18.0	41.6	41.6	85.6	84	1.6	9.0	1
	3	●	MWE0900MA	27.0	56.6	56.6	99.6	98	1.6	9.0	1

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
(mm)	(l/d)	VP15TF									
9.1	2	●	MWE0910SA	18.2	41.7	41.7	85.7	84	1.7	9.1	1
	3	●	MWE0910MA	27.3	59.7	59.7	103.7	102	1.7	9.1	1
9.2	2	●	MWE0920SA	18.4	41.7	41.7	85.7	84	1.7	9.2	1
	3	●	MWE0920MA	27.6	59.7	59.7	103.7	102	1.7	9.2	1
9.3	2	★	MWE0930SA	18.6	41.7	41.7	82.7	84	1.7	9.3	1
	3	★	MWE0930MA	27.9	59.7	59.7	103.7	102	1.7	9.3	1
9.4	2	★	MWE0940SA	18.8	41.7	41.7	85.7	84	1.7	9.4	1
	3	★	MWE0940MA	28.2	59.7	59.7	103.7	102	1.7	9.4	1
9.5	2	★	MWE0950SA	19.0	41.7	41.7	85.7	84	1.7	9.5	1
	3	●	MWE0950MA	28.5	59.7	59.7	103.7	102	1.7	9.5	1
9.6	2	★	MWE0960SA	19.2	44.7	44.7	90.7	89	1.7	9.6	1
	3	●	MWE0960MA	28.8	61.7	61.7	106.7	105	1.7	9.6	1
9.7	2	★	MWE0970SA	19.4	44.8	44.8	90.8	89	1.8	9.7	1
	3	●	MWE0970MA	29.1	61.8	61.8	106.8	105	1.8	9.7	1
9.8	2	★	MWE0980SA	19.6	44.8	44.8	90.8	89	1.8	9.8	1
	3	★	MWE0980MA	29.4	61.8	61.8	106.8	105	1.8	9.8	1
9.9	2	★	MWE0990SA	19.8	44.8	44.8	90.8	89	1.8	9.9	1
	3	★	MWE0990MA	29.7	61.8	61.8	106.8	105	1.8	9.9	1
10.0	2	●	MWE1000SA	20.0	44.8	44.8	90.8	89	1.8	10.0	1
	3	●	MWE1000MA	30.0	61.8	61.8	106.8	105	1.8	10.0	1
10.1	2	★	MWE1010SA	20.2	44.8	44.8	90.8	89	1.8	10.1	1
	3	●	MWE1010MA	30.3	67.8	67.8	113.8	112	1.8	10.1	1
10.2	2	●	MWE1020SA	20.4	44.9	44.9	90.9	89	1.9	10.2	1
	3	●	MWE1020MA	30.6	67.9	67.9	113.9	112	1.9	10.2	1
10.3	2	★	MWE1030SA	20.6	44.9	44.9	90.9	89	1.9	10.3	1
	3	●	MWE1030MA	30.9	67.9	67.9	113.9	112	1.9	10.3	1
10.4	2	★	MWE1040SA	20.8	44.9	44.9	90.9	89	1.9	10.4	1
	3	●	MWE1040MA	31.2	67.9	67.9	113.9	112	1.9	10.4	1
10.5	2	●	MWE1050SA	21.0	44.9	44.9	90.9	89	1.9	10.5	1
	3	●	MWE1050MA	31.5	67.9	67.9	113.9	112	1.9	10.5	1
10.6	2	★	MWE1060SA	21.2	44.9	44.9	90.9	89	1.9	10.6	1
	3	★	MWE1060MA	31.8	69.9	69.9	115.9	114	1.9	10.6	1
10.7	2	★	MWE1070SA	21.4	48.9	48.9	96.9	95	1.9	10.7	1
	3	★	MWE1070MA	32.1	69.9	69.9	115.9	114	1.9	10.7	1
10.8	2	★	MWE1080SA	21.6	49.0	49.0	97.0	95	2.0	10.8	1
	3	●	MWE1080MA	32.4	70.0	70.0	116.0	114	2.0	10.8	1
10.9	2	★	MWE1090SA	21.8	49.0	49.0	97.0	95	2.0	10.9	1
	3	★	MWE1090MA	32.7	70.0	70.0	116.0	114	2.0	10.9	1
11.0	2	●	MWE1100SA	22.0	49.0	49.0	97.0	95	2.0	11.0	1
	3	●	MWE1100MA	33.0	70.0	70.0	116.0	114	2.0	11.0	1
11.1	2	★	MWE1110SA	22.2	49.0	49.0	97.0	95	2.0	11.1	1
	3	●	MWE1110MA	33.3	73.0	73.0	120.0	118	2.0	11.1	1
11.2	2	●	MWE1120SA	22.4	49.0	49.0	97.0	95	2.0	11.2	1
	3	●	MWE1120MA	33.6	73.0	73.0	120.0	118	2.0	11.2	1
11.3	2	★	MWE1130SA	22.6	49.1	49.1	97.1	95	2.1	11.3	1
	3	★	MWE1130MA	33.9	73.1	73.1	120.1	118	2.1	11.3	1
11.4	2	★	MWE1140SA	22.8	49.1	49.1	97.1	95	2.1	11.4	1
	3	★	MWE1140MA	34.2	73.1	73.1	120.1	118	2.1	11.4	1
11.5	2	★	MWE1150SA	23.0	49.1	49.1	97.1	95	2.1	11.5	1
	3	●	MWE1150MA	34.5	73.1	73.1	120.1	118	2.1	11.5	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
(mm)	(l/d)	VP15TF									
11.6	2	★	MWE1160SA	23.2	49.1	49.1	97.1	95	2.1	11.6	1
	3	★	MWE1160MA	34.8	75.1	75.1	123.1	121	2.1	11.6	1
11.7	2	★	MWE1170SA	23.4	49.1	49.1	97.1	95	2.1	11.7	1
	3	●	MWE1170MA	35.1	75.1	75.1	123.1	121	2.1	11.7	1
11.8	2	★	MWE1180SA	23.6	49.1	49.1	97.1	95	2.1	11.8	1
	3	●	MWE1180MA	35.4	75.1	75.1	123.1	121	2.1	11.8	1
11.9	2	★	MWE1190SA	23.8	53.2	53.2	104.2	102	2.2	11.9	1
	3	★	MWE1190MA	35.7	75.2	75.2	123.2	121	2.2	11.9	1
12.0	2	●	MWE1200SA	24.0	53.2	53.2	104.2	102	2.2	12.0	1
	3	●	MWE1200MA	36.0	75.2	75.2	123.2	121	2.2	12.0	1
12.1	2	★	MWE1210SA	24.2	53.2	53.2	104.2	102	2.2	12.1	1
	3	●	MWE1210MA	36.3	78.2	78.2	137.2	135	2.2	12.1	1
12.2	2	★	MWE1220SA	24.4	53.2	53.2	104.2	102	2.2	12.2	1
	3	●	MWE1220MA	36.6	78.2	78.2	137.2	135	2.2	12.2	1
12.3	2	★	MWE1230SA	24.6	53.2	53.2	104.2	102	2.2	12.3	1
	3	●	MWE1230MA	36.9	78.2	78.2	137.2	135	2.2	12.3	1
12.4	2	★	MWE1240SA	24.8	53.3	53.3	104.3	102	2.3	12.4	1
	3	★	MWE1240MA	37.2	78.3	78.3	137.3	135	2.3	12.4	1
12.5	2	★	MWE1250SA	25.0	53.3	53.3	104.3	102	2.3	12.5	1
	3	●	MWE1250MA	37.5	78.3	78.3	137.3	135	2.3	12.5	1
12.6	2	★	MWE1260SA	25.2	53.3	53.3	104.3	102	2.3	12.6	1
	3	★	MWE1260MA	37.8	80.3	80.3	139.3	137	2.3	12.6	1
12.7	2	★	MWE1270SA	25.4	53.3	53.3	104.3	102	2.3	12.7	1
	3	●	MWE1270MA	38.1	80.3	80.3	139.3	137	2.3	12.7	1
12.8	2	★	MWE1280SA	25.6	53.3	53.3	104.3	102	2.3	12.8	1
	3	★	MWE1280MA	38.4	80.3	80.3	139.3	137	2.3	12.8	1
12.9	2	★	MWE1290SA	25.8	53.3	53.3	104.3	102	2.3	12.9	1
	3	★	MWE1290MA	38.7	80.3	80.3	139.3	137	2.3	12.9	1
13.0	2	●	MWE1300SA	26.0	53.4	53.4	104.4	102	2.4	13.0	1
	3	●	MWE1300MA	39.0	80.4	80.4	139.4	137	2.4	13.0	1
13.1	2	★	MWE1310SA	26.2	53.4	53.4	104.4	102	2.4	13.1	1
	3	●	MWE1310MA	39.3	86.4	86.4	146.4	144	2.4	13.1	1
13.2	2	★	MWE1320SA	26.4	53.4	53.4	104.4	102	2.4	13.2	1
	3	★	MWE1320MA	39.6	86.4	86.4	146.4	144	2.4	13.2	1
13.3	2	★	MWE1330SA	26.6	56.4	56.4	109.4	107	2.4	13.3	1
	3	★	MWE1330MA	39.9	86.4	86.4	146.4	144	2.4	13.3	1
13.4	2	★	MWE1340SA	26.8	56.4	56.4	109.4	107	2.4	13.4	1
	3	★	MWE1340MA	40.2	86.4	86.4	146.4	144	2.4	13.4	1
13.5	2	●	MWE1350SA	27.0	56.5	56.5	109.5	107	2.5	13.5	1
	3	●	MWE1350MA	40.5	86.5	86.5	146.5	144	2.5	13.5	1
13.6	2	★	MWE1360SA	27.2	56.5	56.5	109.5	107	2.5	13.6	1
	3	★	MWE1360MA	40.8	88.5	88.5	149.5	147	2.5	13.6	1
13.7	2	★	MWE1370SA	27.4	56.5	56.5	109.5	107	2.5	13.7	1
	3	●	MWE1370MA	41.1	88.5	88.5	149.5	147	2.5	13.7	1
13.8	2	●	MWE1380SA	27.6	56.5	56.5	109.5	107	2.5	13.8	1
	3	★	MWE1380MA	41.4	88.5	88.5	149.5	147	2.5	13.8	1
13.9	2	★	MWE1390SA	27.8	56.5	56.5	109.5	107	2.5	13.9	1
	3	★	MWE1390MA	41.7	88.5	88.5	149.5	147	2.5	13.9	1
14.0	2	●	MWE1400SA	28.0	56.5	56.5	109.5	107	2.5	14.0	1
	3	●	MWE1400MA	42.0	88.5	88.5	149.5	147	2.5	14.0	1

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
(mm)	(l/d)	VP15TF									
14.1	2	★	MWE1410SA	28.2	58.6	58.6	113.6	111	2.6	14.1	1
	3	★	MWE1410MA	42.3	91.6	91.6	153.6	151	2.6	14.1	1
14.2	2	★	MWE1420SA	28.4	58.6	58.6	113.6	111	2.6	14.2	1
	3	●	MWE1420MA	42.6	91.6	91.6	153.6	151	2.6	14.2	1
14.3	2	□	MWE1430SA	28.6	58.6	58.6	113.6	111	2.6	14.3	1
	3	★	MWE1430MA	42.9	91.6	91.6	153.6	151	2.6	14.3	1
14.4	2	□	MWE1440SA	28.8	58.6	58.6	113.6	111	2.6	14.4	1
	3	★	MWE1440MA	43.2	91.6	91.6	153.6	151	2.6	14.4	1
14.5	2	●	MWE1450SA	29.0	58.6	58.6	113.6	111	2.6	14.5	1
	3	●	MWE1450MA	43.5	91.6	91.6	153.6	151	2.6	14.5	1
14.6	2	□	MWE1460SA	29.2	58.7	58.7	113.7	111	2.7	14.6	1
	3	★	MWE1460MA	43.8	93.7	93.7	155.7	153	2.7	14.6	1
14.7	2	□	MWE1470SA	29.4	58.7	58.7	113.7	111	2.7	14.7	1
	3	★	MWE1470MA	44.1	93.7	93.7	155.7	153	2.7	14.7	1
14.8	2	□	MWE1480SA	29.6	58.7	58.7	113.7	111	2.7	14.8	1
	3	★	MWE1480MA	44.4	93.7	93.7	155.7	153	2.7	14.8	1
14.9	2	□	MWE1490SA	29.8	58.7	58.7	113.7	111	2.7	14.9	1
	3	★	MWE1490MA	44.7	93.7	93.7	155.7	153	2.7	14.9	1
15.0	2	●	MWE1500SA	30.0	58.7	58.7	113.7	111	2.7	15.0	1
	3	●	MWE1500MA	45.0	93.7	93.7	155.7	153	2.7	15.0	1
15.1	2	□	MWE1510SA	30.2	60.7	60.7	117.7	115	2.7	15.1	1
	3	★	MWE1510MA	45.3	96.7	96.7	159.7	157	2.7	15.1	1
15.2	2	★	MWE1520SA	30.4	60.8	60.8	117.8	115	2.8	15.2	1
	3	★	MWE1520MA	45.6	96.8	96.8	159.8	157	2.8	15.2	1
15.3	2	□	MWE1530SA	30.6	60.8	60.8	117.8	115	2.8	15.3	1
	3	★	MWE1530MA	45.9	96.8	96.8	159.8	157	2.8	15.3	1
15.4	2	□	MWE1540SA	30.8	60.8	60.8	117.8	115	2.8	15.4	1
	3	★	MWE1540MA	46.2	96.8	96.8	159.8	157	2.8	15.4	1
15.5	2	●	MWE1550SA	31.0	60.8	60.8	117.8	115	2.8	15.5	1
	3	★	MWE1550MA	46.5	96.8	96.8	159.8	157	2.8	15.5	1
15.6	2	□	MWE1560SA	31.2	60.8	60.8	117.8	115	2.8	15.6	1
	3	★	MWE1560MA	46.8	98.8	98.8	162.8	160	2.8	15.6	1
15.7	2	□	MWE1570SA	31.4	60.9	60.9	117.9	115	2.9	15.7	1
	3	★	MWE1570MA	47.1	98.9	98.9	162.9	160	2.9	15.7	1
15.8	2	□	MWE1580SA	31.6	60.9	60.9	117.9	115	2.9	15.8	1
	3	★	MWE1580MA	47.4	98.9	98.9	162.9	160	2.9	15.8	1
15.9	2	□	MWE1590SA	31.8	60.9	60.9	117.9	115	2.9	15.9	1
	3	★	MWE1590MA	47.7	98.9	98.9	162.9	160	2.9	15.9	1
16.0	2	●	MWE1600SA	32.0	60.9	60.9	117.9	115	2.9	16.0	1
	3	●	MWE1600MA	48.0	98.9	98.9	162.9	160	2.9	16.0	1
16.1	2	□	MWE1610SA	32.2	62.9	62.9	121.9	119	2.9	16.1	1
	3	□	MWE1610MA	48.3	104.9	104.9	169.9	167	2.9	16.1	1
16.2	2	★	MWE1620SA	32.4	62.9	62.9	121.9	119	2.9	16.2	1
	3	□	MWE1620MA	48.6	104.9	104.9	169.9	167	2.9	16.2	1
16.3	2	★	MWE1630SA	32.6	63.0	63.0	122.0	119	3.0	16.3	1
	3	□	MWE1630MA	48.9	105.0	105.0	170.0	167	3.0	16.3	1
16.4	2	□	MWE1640SA	32.8	63.0	63.0	122.0	119	3.0	16.4	1
	3	□	MWE1640MA	49.2	105.0	105.0	170.0	167	3.0	16.4	1
16.5	2	★	MWE1650SA	33.0	63.0	63.0	122.0	119	3.0	16.5	1
	3	●	MWE1650MA	49.5	105.0	105.0	170.0	167	3.0	16.5	1

BOHREN (VOLLHARTMETALL)

MWE

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
(mm)	(l/d)	VP15TF									
16.6	2	□	MWE1660SA	33.2	63.0	63.0	122.0	119	3.0	16.6	1
	3	□	MWE1660MA	49.8	105.0	105.0	170.0	167	3.0	16.6	1
16.7	2	□	MWE1670SA	33.4	63.0	63.0	122.0	119	3.0	16.7	1
	3	□	MWE1670MA	50.1	105.0	105.0	170.0	167	3.0	16.7	1
16.8	2	□	MWE1680SA	33.6	63.1	63.1	122.1	119	3.1	16.8	1
	3	□	MWE1680MA	50.4	105.1	105.1	170.1	167	3.1	16.8	1
16.9	2	□	MWE1690SA	33.8	63.1	63.1	122.1	119	3.1	16.9	1
	3	□	MWE1690MA	50.7	105.1	105.1	170.1	167	3.1	16.9	1
17.0	2	●	MWE1700SA	34.0	63.1	63.1	122.1	119	3.1	17.0	1
	3	●	MWE1700MA	51.0	105.1	105.1	170.1	167	3.1	17.0	1
17.1	2	□	MWE1710SA	34.2	65.1	65.1	126.1	123	3.1	17.1	1
	3	□	MWE1710MA	51.3	105.1	105.1	170.1	167	3.1	17.1	1
17.2	2	□	MWE1720SA	34.4	65.1	65.1	126.1	123	3.1	17.2	1
	3	□	MWE1720MA	51.6	105.1	105.1	170.1	167	3.1	17.2	1
17.3	2	□	MWE1730SA	34.6	65.1	65.1	126.1	123	3.1	17.3	1
	3	□	MWE1730MA	51.9	105.1	105.1	170.1	167	3.1	17.3	1
17.4	2	□	MWE1740SA	34.8	65.2	65.2	126.2	123	3.2	17.4	1
	3	□	MWE1740MA	52.2	105.2	105.2	170.2	167	3.2	17.4	1
17.5	2	●	MWE1750SA	35.0	65.2	65.2	126.2	123	3.2	17.5	1
	3	●	MWE1750MA	52.5	105.2	105.2	170.2	167	3.2	17.5	1
17.6	2	□	MWE1760SA	35.2	65.2	65.2	126.2	123	3.2	17.6	1
	3	□	MWE1760MA	52.8	105.2	105.2	170.2	167	3.2	17.6	1
17.7	2	□	MWE1770SA	35.4	65.2	65.2	126.2	123	3.2	17.7	1
	3	□	MWE1770MA	53.1	105.2	105.2	170.2	167	3.2	17.7	1
17.8	2	★	MWE1780SA	35.6	65.2	65.2	126.2	123	3.2	17.8	1
	3	□	MWE1780MA	53.4	105.2	105.2	170.2	167	3.2	17.8	1
17.9	2	□	MWE1790SA	35.8	65.3	65.3	126.3	123	3.3	17.9	1
	3	□	MWE1790MA	53.7	105.3	105.3	170.3	167	3.3	17.9	1
18.0	2	●	MWE1800SA	36.0	65.3	65.3	126.3	123	3.3	18.0	1
	3	●	MWE1800MA	54.0	105.3	105.3	170.3	167	3.3	18.0	1
18.1	2	□	MWE1810SA	36.2	67.3	67.3	130.3	127	3.3	18.1	1
	3	□	MWE1810MA	54.3	117.3	117.3	182.3	179	3.3	18.1	1
18.2	2	□	MWE1820SA	36.4	67.3	67.3	130.3	127	3.3	18.2	1
	3	□	MWE1820MA	54.6	117.3	117.3	182.3	179	3.3	18.2	1
18.3	2	□	MWE1830SA	36.6	67.3	67.3	130.3	127	3.3	18.3	1
	3	□	MWE1830MA	54.9	117.3	117.3	182.3	179	3.3	18.3	1
18.4	2	□	MWE1840SA	36.8	67.3	67.3	130.3	127	3.3	18.4	1
	3	□	MWE1840MA	55.2	117.3	117.3	182.3	179	3.3	18.4	1
18.5	2	●	MWE1850SA	37.0	67.4	67.4	130.4	127	3.4	18.5	1
	3	●	MWE1850MA	55.5	117.4	117.4	182.4	179	3.4	18.5	1
18.6	2	□	MWE1860SA	37.2	67.4	67.4	130.4	127	3.4	18.6	1
	3	□	MWE1860MA	55.8	117.4	117.4	182.4	179	3.4	18.6	1
18.7	2	□	MWE1870SA	37.4	67.4	67.4	130.4	127	3.4	18.7	1
	3	□	MWE1870MA	56.1	117.4	117.4	182.4	179	3.4	18.7	1
18.8	2	□	MWE1880SA	37.6	67.4	67.4	130.4	127	3.4	18.8	1
	3	□	MWE1880MA	56.4	117.4	117.4	182.4	179	3.4	18.8	1
18.9	2	□	MWE1890SA	37.8	67.4	67.4	130.4	127	3.4	18.9	1
	3	□	MWE1890MA	56.7	117.4	117.4	182.4	179	3.4	18.9	1
19.0	2	●	MWE1900SA	38.0	67.5	67.5	130.5	127	3.5	19.0	1
	3	★	MWE1900MA	57.0	117.5	117.5	182.5	179	3.5	19.0	1

Externe Kühlung

DC	Bohr- tiefe	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
(mm)	(l/d)	VP15TF									
19.1	2	□	MWE1910SA	38.2	69.5	69.5	134.5	131	3.5	19.1	1
	3	□	MWE1910MA	57.3	117.5	117.5	182.5	179	3.5	19.1	1
19.2	2	□	MWE1920SA	38.4	69.5	69.5	134.5	131	3.5	19.2	1
	3	□	MWE1920MA	57.6	117.5	117.5	182.5	179	3.5	19.2	1
19.3	2	□	MWE1930SA	38.6	69.5	69.5	134.5	131	3.5	19.3	1
	3	□	MWE1930MA	57.9	117.5	117.5	182.5	179	3.5	19.3	1
19.4	2	□	MWE1940SA	38.8	69.5	69.5	134.5	131	3.5	19.4	1
	3	□	MWE1940MA	58.2	117.5	117.5	182.5	179	3.5	19.4	1
19.5	2	●	MWE1950SA	39.0	69.5	69.5	134.5	131	3.5	19.5	1
	3	★	MWE1950MA	58.5	117.5	117.5	182.5	179	3.5	19.5	1
19.6	2	□	MWE1960SA	39.2	69.6	69.6	134.6	131	3.6	19.6	1
	3	□	MWE1960MA	58.8	117.6	117.6	182.6	179	3.6	19.6	1
19.7	2	□	MWE1970SA	39.4	69.6	69.6	134.6	131	3.6	19.7	1
	3	□	MWE1970MA	59.1	117.6	117.6	182.6	179	3.6	19.7	1
19.8	2	□	MWE1980SA	39.6	69.6	69.6	134.6	131	3.6	19.8	1
	3	□	MWE1980MA	59.4	117.6	117.6	182.6	179	3.6	19.8	1
19.9	2	□	MWE1990SA	39.8	69.6	69.6	134.6	131	3.6	19.9	1
	3	□	MWE1990MA	59.7	117.6	117.6	182.6	179	3.6	19.9	1
20.0	2	●	MWE2000SA	40.0	69.6	69.6	134.6	131	3.6	20.0	1
	3	●	MWE2000MA	60.0	117.6	117.6	182.6	179	3.6	20.0	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

SCHNITTDATENEMPFEHLUNGEN

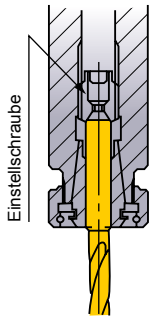
Werkstoff	Allg. Baustahl ($\leq 180\text{HB}$)			C-Stahl, Leg. Stahl ($180-280\text{HB}$)			C-Stahl, Leg. Stahl ($280-350\text{HB}$)		
	Ck10			Ck45, 42CrMo4			36CrNiMo4		
Bohrer Durchm. DC (mm)	Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)		Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)		Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)	
3.0	6400	0.1	(0.06–0.13)	5900	0.1	(0.06–0.13)	5400	0.09	(0.06–0.12)
4.0	5500	0.12	(0.08–0.16)	5100	0.12	(0.08–0.16)	4700	0.11	(0.07–0.14)
5.0	4400	0.15	(0.10–0.20)	4100	0.15	(0.10–0.20)	3800	0.14	(0.09–0.18)
6.3	4000	0.2	(0.13–0.26)	3700	0.2	(0.13–0.26)	3500	0.18	(0.11–0.24)
8.0	3300	0.23	(0.18–0.28)	3100	0.23	(0.18–0.28)	2900	0.21	(0.16–0.25)
10.0	2800	0.27	(0.22–0.32)	2700	0.27	(0.22–0.32)	2500	0.23	(0.19–0.27)
12.0	2500	0.31	(0.28–0.34)	2300	0.31	(0.28–0.34)	2200	0.26	(0.23–0.29)
16.0	1900	0.33	(0.28–0.38)	1700	0.33	(0.28–0.38)	1600	0.29	(0.24–0.33)
20.0	1500	0.35	(0.30–0.40)	1400	0.35	(0.30–0.40)	1300	0.3	(0.26–0.34)

Werkstoff	Rostfreier Stahl (austenitisch) ($\leq 200\text{HB}$)			Grauguss ($\leq 350\text{MPa}$)			Duktiler Guss ($\leq 450\text{MPa}$)		
	X5CrNi1810, X5CrNiMo17-12-2			GG30			GGG45		
Bohrer Durchm. DC (mm)	Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)		Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)		Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)	
3.0	1900	0.07	(0.05–0.08)	6900	0.1	(0.06–0.13)	6400	0.1	(0.06–0.13)
4.0	1500	0.08	(0.06–0.10)	5500	0.12	(0.08–0.16)	5100	0.12	(0.08–0.16)
5.0	1200	0.1	(0.07–0.13)	4400	0.15	(0.10–0.20)	4100	0.15	(0.10–0.20)
6.3	1200	0.13	(0.09–0.17)	3700	0.2	(0.13–0.26)	3500	0.2	(0.13–0.26)
8.0	900	0.14	(0.10–0.18)	2900	0.25	(0.18–0.31)	2700	0.23	(0.18–0.28)
10.0	700	0.16	(0.12–0.19)	2300	0.29	(0.22–0.35)	2200	0.27	(0.22–0.32)
12.0	600	0.18	(0.15–0.20)	2100	0.33	(0.28–0.37)	1900	0.31	(0.28–0.34)
16.0	400	0.19	(0.15–0.23)	1500	0.35	(0.28–0.42)	1400	0.33	(0.28–0.38)
20.0	300	0.2	(0.15–0.24)	1300	0.37	(0.30–0.44)	1200	0.35	(0.30–0.40)

Werkstoff	Aluminium Leg. (Si $\leq 5\%$)			Hitzebeständiger Stahl			Gehärteter Stahl ($40-55\text{HRC}$)		
				Inconel718			X40CrMoV51, 55NiCrMoV7		
Bohrer Durchm. DC (mm)	Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)		Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)		Drehzahl (min^{-1})	Vorschub (min. – max.) (mm/U.)	
3.0	7900	0.1	(0.06–0.13)	1900	0.07	(0.05–0.09)	1900	0.07	(0.05–0.09)
4.0	6300	0.12	(0.08–0.16)	1500	0.09	(0.06–0.11)	1500	0.09	(0.06–0.11)
5.0	5000	0.15	(0.10–0.20)	1200	0.11	(0.08–0.14)	1200	0.11	(0.08–0.14)
6.3	4500	0.2	(0.13–0.26)	1200	0.14	(0.09–0.19)	1200	0.14	(0.09–0.19)
8.0	3500	0.23	(0.18–0.28)	900	0.14	(0.11–0.17)	900	0.14	(0.11–0.17)
10.0	2800	0.27	(0.22–0.32)	700	0.16	(0.12–0.19)	700	0.16	(0.12–0.19)
12.0	2600	0.31	(0.28–0.34)	600	0.16	(0.13–0.18)	600	0.16	(0.13–0.18)
16.0	1900	0.33	(0.28–0.38)	400	0.18	(0.14–0.21)	400	0.18	(0.14–0.21)
20.0	1700	0.35	(0.30–0.40)	400	0.19	(0.15–0.22)	400	0.19	(0.15–0.22)

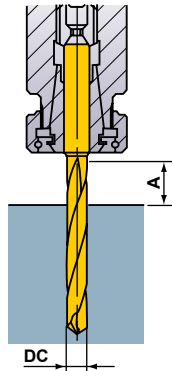
EINSATZ HINWEISE

Bohrer Aufnahme



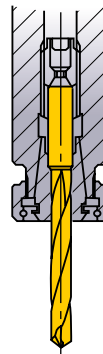
Präzisionsspannzangen können verwendet werden.

Max. Bohrtiefe



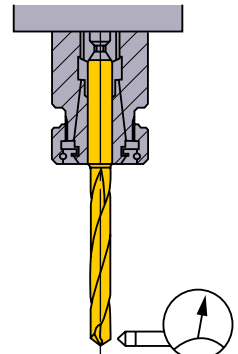
$$A \geq DC \times 1.5$$

Bohrer Einstellung



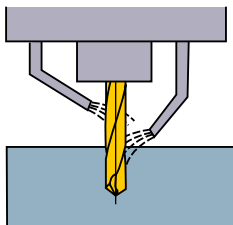
Nicht auf den Nuten spannen.

Rundlauftoleranz



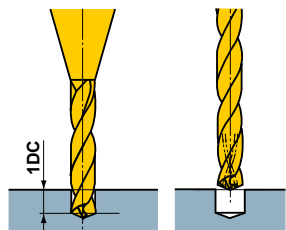
Rundlaufabweichung $\leq 0.03\text{mm}$

Kühlmittelzufuhr



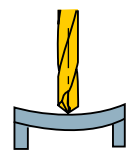
Zwei Kühlmittelleitungen sind ideal. (Bohrerspizze und Bohrermitte)

Bohrer Einstellung

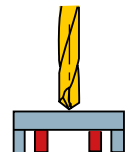


- ① Die Pilotbohrungen setzen Sie bitte die Bohrtiefe von $1 \times DC$ ($DC = \text{Bohrer Durchmesser}$).
- ② Verwenden Sie die Pilotbohrung als Führung. Je nach Schnittdaten empfiehlt es sich mit Vorschubunterbrechung zu arbeiten.

Dünne Werkstücke

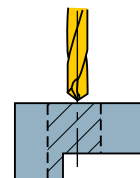


Wenn Werkstücke verbiegen...



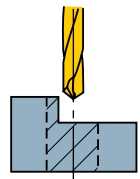
unterstützen Sie diese.

Unterbrochene Bearbeitung



Ohne Vorbearbeitung

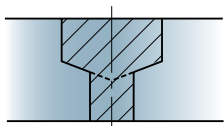
- ① Reduzieren Sie den Vorschub an der unterbrochenen Stelle.



Benötigt Vorbearbeitung

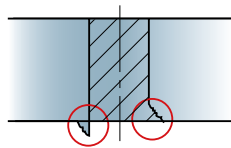
- ① Planen Sie die Fläche mit einem Fräser vorab.

Stufenbohrungen



- ① Geteilt in 2 Prozesse.
 - ② Bohren Sie das größere Loch zuerst.
- ★ Auf Anfrage bieten wir auch Stufenbohrer an, die Stufenbohrungen in einem Prozess herstellen können.

Gratbildung oder Ausbrüche am Werkstück



- ① Reduzieren Sie den Vorschub um ca. 50% beim Austritt.
- ② Schleifen Sie eine 45° Fäse an den Bohrer.
- ③ Tauschen Sie den Bohrer durch einen anderen mit größerem Spitzenwinkel.

MPS1
4-Fasenbohrer

- Neue PVD-Beschichtung auf AlTiCrN-Basis.
- VHM-Bohrer mit 4 Führungsfasen für hohe Bohrlochqualitäten.
- Alle Bohrer mit interner Kühlmittelzufuhr.



HARTMETALL

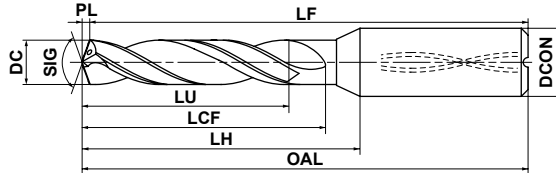


	3 ≤ DC ≤ 6	6 < DC ≤ 10	10 < DC ≤ 18	18 < DC ≤ 20
	+0.010 -0.002	+0.010 -0.005	+0.005 -0.013	+0.005 -0.016
	0 -0.008	0 -0.009	0 -0.011	0 -0.013

*Bohrer unter $\varnothing 6$ mm haben runde interne Kühlkanäle.

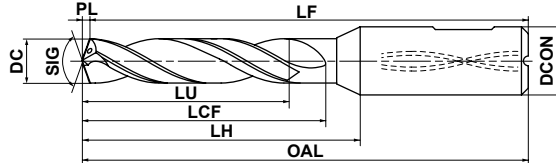
*SIG : 3XD und 5XD=140°, 8XD=135°

● Typ 1 Zylinderschaft mit konischem Hinterschliff



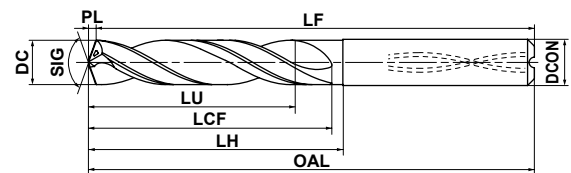
MPS1----S/L-DIN-C

● Typ 3 Whistle Notch Schaft mit konischem Hinterschliff



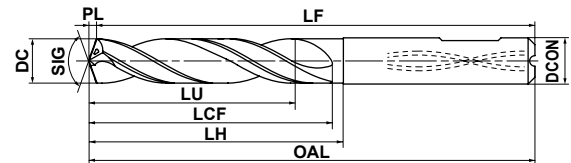
MPS1----S/L-DIN (Whistle notch)

● Typ 2 Zylinderschaft



MPS1----S/L-DIN-C

● Typ 4 Whistle Notch Schaft



MPS1----S/L-DIN (Whistle notch)

DC (mm)	Bohrtiefe (l/d)	Lager DP1021	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
3.0	3	□	MPS1-0300S-DIN	62	15.0	20	26	61.5	0.5	6	3
	3	●	MPS1-0300S-DIN-C	62	15.0	20	26	61.5	0.5	6	1
	5	□	MPS1-0300L-DIN	66	20.0	25	30	65.5	0.5	6	3
	5	●	MPS1-0300L-DIN-C	66	20.0	25	30	65.5	0.5	6	1
3.05	8	●	MPS1-0300-L8C	77	24.6	34	41	76	0.5	6	1
	3	□	MPS1-0305S-DIN	62	15.0	20	26	61.4	0.6	6	3
	3	●	MPS1-0305S-DIN-C	62	15.0	20	26	61.4	0.6	6	1
	5	□	MPS1-0305L-DIN	66	20.0	25	30	65.4	0.6	6	3
3.1	5	●	MPS1-0305L-DIN-C	66	20.0	25	30	65.4	0.6	6	1
	3	□	MPS1-0310S-DIN	62	14.9	20	26	61.4	0.6	6	3
	3	●	MPS1-0310S-DIN-C	62	14.9	20	26	61.4	0.6	6	1
	5	□	MPS1-0310L-DIN	66	19.9	25	30	65.4	0.6	6	3
3.2	5	●	MPS1-0310L-DIN-C	66	19.9	25	30	65.4	0.6	6	1
	8	●	MPS1-0310-L8C	83	25.4	40	47	82	0.6	6	1
	3	□	MPS1-0320S-DIN	62	14.8	20	26	61.4	0.6	6	3
	3	●	MPS1-0320S-DIN-C	62	14.8	20	26	61.4	0.6	6	1
3.3	5	□	MPS1-0320L-DIN	66	19.8	25	30	65.4	0.6	6	3
	5	●	MPS1-0320L-DIN-C	66	19.8	25	30	65.4	0.6	6	1
	8	●	MPS1-0320-L8C	83	26.3	40	47	82	0.6	6	1
	3	□	MPS1-0330S-DIN	62	14.7	20	26	61.4	0.6	6	3
3.4	3	●	MPS1-0330S-DIN-C	62	14.7	20	26	61.4	0.6	6	1
	5	□	MPS1-0330L-DIN	66	20.2	25	30	65.4	0.6	6	3
	5	●	MPS1-0330L-DIN-C	66	20.2	25	30	65.4	0.6	6	1
	8	●	MPS1-0330-L8C	83	27.1	40	47	82	0.6	6	1
3.5	3	□	MPS1-0340S-DIN	62	14.5	20	26	61.4	0.6	6	3
	3	●	MPS1-0340S-DIN-C	62	14.5	20	26	61.4	0.6	6	1
	5	□	MPS1-0340L-DIN	66	20.0	25	30	65.4	0.6	6	3
	5	●	MPS1-0340L-DIN-C	66	20.0	25	30	65.4	0.6	6	1
3.5	8	●	MPS1-0340-L8C	83	27.9	40	47	82	0.6	6	1
	3	□	MPS1-0350S-DIN	62	14.4	20	26	61.4	0.6	6	3
	3	●	MPS1-0350S-DIN-C	62	14.4	20	26	61.4	0.6	6	1
	5	□	MPS1-0350L-DIN	66	19.9	25	30	65.4	0.6	6	3
3.5	5	●	MPS1-0350L-DIN-C	66	19.9	25	30	65.4	0.6	6	1
	8	●	MPS1-0350-L8C	83	28.7	40	47	82	0.6	6	1

DC (mm)	Bohrtiefe (l/d)	Lager DP1021	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
3.6	3	□	MPS1-0360S-DIN	62	14.3	20	26	61.3	0.7	6	3
	3	●	MPS1-0360S-DIN-C	62	14.3	20	26	61.3	0.7	6	1
	5	□	MPS1-0360L-DIN	66	19.8	25	30	65.3	0.7	6	3
	5	●	MPS1-0360L-DIN-C	66	19.8	25	30	65.3	0.7	6	1
3.7	8	●	MPS1-0360-L8C	88	29.5	45	51	87	0.7	6	1
	3	□	MPS1-0370S-DIN	62	14.1	20	26	61.3	0.7	6	3
	3	●	MPS1-0370S-DIN-C	62	14.1	20	26	61.3	0.7	6	1
	5	□	MPS1-0370L-DIN	66	20.1	26	30	65.3	0.7	6	3
3.8	5	●	MPS1-0370L-DIN-C	66	20.1	26	30	65.3	0.7	6	1
	8	●	MPS1-0370-L8C	88	30.4	45	51	87	0.7	6	1
	3	□	MPS1-0380S-DIN	66	18.0	24	30	65.3	0.7	6	3
	3	●	MPS1-0380S-DIN-C	66	18.0	24	30	65.3	0.7	6	1
3.9	5	□	MPS1-0380L-DIN	74	28.0	34	38	73.3	0.7	6	3
	5	●	MPS1-0380L-DIN-C	74	28.0	34	38	73.3	0.7	6	1
	8	●	MPS1-0380-L8C	88	31.2	45	51	87	0.7	6	1
	3	□	MPS1-0390S-DIN	66	17.9	24	30	65.3	0.7	6	3
4.0	3	●	MPS1-0390S-DIN-C	66	17.9	24	30	65.3	0.7	6	1
	5	□	MPS1-0390L-DIN	74	27.9	34	38	73.3	0.7	6	3
	5	●	MPS1-0390L-DIN-C	74	27.9	34	38	73.3	0.7	6	1
	8	●	MPS1-0390-L8C	88	32.0	45	51	87	0.7	6	1
4.05	3	□	MPS1-0400S-DIN	66	17.7	24	30	65.3	0.7	6	3
	3	●	MPS1-0400S-DIN-C	66	17.7	24	30	65.3	0.7	6	1
	5	□	MPS1-0400L-DIN	74	27.7	34	38	73.3	0.7	6	3
	5	●	MPS1-0400L-DIN-C	74	27.7	34	38	73.3	0.7	6	1
4.1	8	●	MPS1-0400-L8C	88	32.8	45	51	87	0.7	6	1
	3	□	MPS1-0405S-DIN	66	17.7	24	30	65.3	0.7	6	3
	3	●	MPS1-0405S-DIN-C	66	17.7	24	30	65.3	0.7	6	1
	5	□	MPS1-0405L-DIN	74	27.7	34	38	73.3	0.7	6	3
4.1	5	●	MPS1-0405L-DIN-C	74	27.7	34	38	73.3	0.7	6	1
	3	□	MPS1-0410S-DIN	66	17.6	24	30	65.3	0.7	6	3
	3	●	MPS1-0410S-DIN-C	66	17.6	24	30	65.3	0.7	6	1
	5	□	MPS1-0410L-DIN	74	27.6	34	38	73.3	0.7	6	3
4.1	5	●	MPS1-0410L-DIN-C	74	27.6	34	38	73.3	0.7	6	1
	8	●	MPS1-0410-L8C	93	33.6	51	56	92	0.7	6	1

BOHREN

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

SCHNITTBEDINGUNGEN > L033
ANWENDUNGSHINWEISE > L034
TECHNISCHE DATEN > N001

BOHREN (VOLLHARTMETALL)

MPS1

4-Fasenbohrer

DC	Bohrtiefe (mm)	Lager DP1021	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
4.2	3	□	MPS1-0420S-DIN	66	17.5	24	30	65.2	0.8	6	3
	3	●	MPS1-0420S-DIN-C	66	17.5	24	30	65.2	0.8	6	1
	5	□	MPS1-0420L-DIN	74	28.0	34	38	73.2	0.8	6	3
	5	●	MPS1-0420L-DIN-C	74	28.0	34	38	73.2	0.8	6	1
4.3	8	●	MPS1-0420-L8C	93	34.5	51	56	92	0.8	6	1
	3	□	MPS1-0430S-DIN	66	17.3	24	30	65.2	0.8	6	3
	3	●	MPS1-0430S-DIN-C	66	17.3	24	30	65.2	0.8	6	1
	5	□	MPS1-0430L-DIN	74	27.8	34	38	73.2	0.8	6	3
4.4	5	●	MPS1-0430L-DIN-C	74	27.8	34	38	73.2	0.8	6	1
	8	●	MPS1-0430-L8C	93	35.3	51	56	92	0.8	6	1
	3	□	MPS1-0440S-DIN	66	17.2	24	30	65.2	0.8	6	3
	3	●	MPS1-0440S-DIN-C	66	17.2	24	30	65.2	0.8	6	1
4.5	5	□	MPS1-0440L-DIN	74	27.7	34	38	73.2	0.8	6	3
	5	●	MPS1-0440L-DIN-C	74	27.7	34	38	73.2	0.8	6	1
	8	●	MPS1-0440-L8C	93	36.1	51	56	92	0.8	6	1
	3	□	MPS1-0450S-DIN	66	17.1	24	30	65.2	0.8	6	3
4.6	3	●	MPS1-0450S-DIN-C	66	17.1	24	30	65.2	0.8	6	1
	5	□	MPS1-0450L-DIN	74	27.6	34	38	73.2	0.8	6	3
	5	●	MPS1-0450L-DIN-C	74	27.6	34	38	73.2	0.8	6	1
	8	●	MPS1-0450-L8C	93	36.9	51	56	92	0.8	6	1
4.65	3	□	MPS1-0460S-DIN	66	16.9	24	30	65.2	0.8	6	4
	3	●	MPS1-0460S-DIN-C	66	16.9	24	30	65.2	0.8	6	2
	5	□	MPS1-0460L-DIN	74	28.9	36	38	73.2	0.8	6	4
	5	●	MPS1-0460L-DIN-C	74	28.9	36	38	73.2	0.8	6	2
4.7	8	●	MPS1-0460-L8C	96	37.8	55	59	95	0.8	6	2
	3	□	MPS1-0465S-DIN	66	16.9	24	30	65.2	0.8	6	4
	3	●	MPS1-0465S-DIN-C	66	16.9	24	30	65.2	0.8	6	2
	5	□	MPS1-0465L-DIN	74	28.9	36	38	73.2	0.8	6	4
4.8	5	●	MPS1-0465L-DIN-C	74	28.9	36	38	73.2	0.8	6	2
	3	□	MPS1-0470S-DIN	66	16.8	24	30	65.1	0.9	6	4
	3	●	MPS1-0470S-DIN-C	66	16.8	24	30	65.1	0.9	6	2
	5	□	MPS1-0470L-DIN	74	28.8	36	38	73.1	0.9	6	4
4.9	5	●	MPS1-0470L-DIN-C	74	28.8	36	38	73.1	0.9	6	2
	8	●	MPS1-0470-L8C	96	38.6	55	59	95	0.9	6	2
	3	□	MPS1-0480S-DIN	66	20.7	28	30	65.1	0.9	6	4
	3	●	MPS1-0480S-DIN-C	66	20.7	28	30	65.1	0.9	6	2
5.0	5	□	MPS1-0480L-DIN	82	36.7	44	46	81.1	0.9	6	4
	5	●	MPS1-0480L-DIN-C	82	36.7	44	46	81.1	0.9	6	2
	8	●	MPS1-0480-L8C	96	39.4	55	59	95	0.9	6	2
	3	□	MPS1-0490S-DIN	66	20.5	28	30	65.1	0.9	6	4
5.05	3	●	MPS1-0490S-DIN-C	66	20.5	28	30	65.1	0.9	6	2
	5	□	MPS1-0490L-DIN	82	36.5	44	46	81.1	0.9	6	4
	5	●	MPS1-0490L-DIN-C	82	36.5	44	46	81.1	0.9	6	2
	8	●	MPS1-0490-L8C	96	40.2	55	59	95	0.9	6	2
5.1	3	□	MPS1-0500S-DIN	66	20.4	28	30	65.1	0.9	6	4
	3	●	MPS1-0500S-DIN-C	66	20.4	28	30	65.1	0.9	6	2
	5	□	MPS1-0500L-DIN	82	36.4	44	46	81.1	0.9	6	4
	5	●	MPS1-0500L-DIN-C	82	36.4	44	46	81.1	0.9	6	2
5.2	8	●	MPS1-0500-L8C	96	41.0	55	59	95	0.9	6	2
	3	□	MPS1-0505S-DIN	66	20.3	28	30	65.1	0.9	6	4
	3	●	MPS1-0505S-DIN-C	66	20.3	28	30	65.1	0.9	6	2
	5	□	MPS1-0505L-DIN	82	36.3	44	46	81.1	0.9	6	4
5.3	5	●	MPS1-0505L-DIN-C	82	36.3	44	46	81.1	0.9	6	2
	8	●	MPS1-0505-L8C	102	41.9	62	65	101	0.9	6	2
	3	□	MPS1-0510S-DIN	66	20.1	28	30	65.1	0.9	6	4
	3	●	MPS1-0510S-DIN-C	66	20.1	28	30	65.1	0.9	6	2
5.4	5	□	MPS1-0510L-DIN	82	36.1	44	46	81.1	0.9	6	4
	5	●	MPS1-0510L-DIN-C	82	36.1	44	46	81.1	0.9	6	2
	8	●	MPS1-0510-L8C	102	42.7	62	65	101	0.9	6	2
	3	□	MPS1-0520S-DIN	66	20.0	28	30	65	1	6	4
5.5	3	●	MPS1-0520S-DIN-C	66	20.0	28	30	65	1	6	2
	5	□	MPS1-0520L-DIN	82	36.0	44	46	81	1	6	4
	5	●	MPS1-0520L-DIN-C	82	36.0	44	46	81	1	6	2
	8	●	MPS1-0520-L8C	102	43.5	62	65	101	1	6	2
5.55	3	□	MPS1-0530S-DIN	66	19.9	28	30	65	1	6	4
	3	●	MPS1-0530S-DIN-C	66	19.9	28	30	65	1	6	2
	5	□	MPS1-0530L-DIN	82	35.9	44	46	81	1	6	4
	5	●	MPS1-0530L-DIN-C	82	35.9	44	46	81	1	6	2
5.6	8	●	MPS1-0530-L8C	102	44.3	62	65	101	1	6	2
	3	□	MPS1-0540S-DIN	66	19.8	28	30	65	1	6	4
	3	●	MPS1-0540S-DIN-C	66	19.8	28	30	65	1	6	2
	5	□	MPS1-0540L-DIN	82	35.8	44	46	81	1	6	4
5.7	5	●	MPS1-0540L-DIN-C	82	35.8	44	46	81	1	6	2
	8	●	MPS1-0540-L8C	102	45.1	62	65	101	1	6	2
	3	□	MPS1-0550S-DIN	66	19.7	28	30	65	1	6	4
	3	●	MPS1-0550S-DIN-C	66	19.7	28	30	65	1	6	2
5.8	5	□	MPS1-0550L-DIN	82	35.7	44	46	81	1	6	4
	5	●	MPS1-0550L-DIN-C	82	35.7	44	46	81	1	6	2
	8	●	MPS1-0550-L8C	102	45.1	62	65	101	1	6	2
	3	□	MPS1-0555S-DIN	66	19.7	28	30	65	1	6	4
5.9	3	●	MPS1-0555S-DIN-C	66	19.7	28	30	65	1	6	2
	5	□	MPS1-0555L-DIN	82	35.7	44	46	81	1	6	4
	5	●	MPS1-0555L-DIN-C	82	35.7	44	46	81	1	6	2
	8	●	MPS1-0555-L8C	102	45.1	62	65	101	1	6	2
6.0	3	□	MPS1-0560S-DIN	66	19.6	28	30	65	1	6	4
	3	●	MPS1-0560S-DIN-C	66	19.6	28	30	65	1	6	2
	5	□	MPS1-0560L-DIN	82	35.6	44	46	81	1	6	4
	5	●	MPS1-0560L-DIN-C	82	35.6	44	46	81	1	6	2
6.05	8	●	MPS1-0560-L8C	107	46.0	67	70	106	1	6	2
	3	□	MPS1-0570S-DIN	66	19.5	28	30	65	1	6	4
	3	●	MPS1-0570S-DIN-C	66	19.5	28	30	65	1	6	2
	5	□	MPS1-0570L-DIN	82	35.5	44	46	81	1	6	4
6.1	5	●	MPS1-0570L-DIN-C	82	35.5	44	46	81	1	6	2
	8	●	MPS1-0570-L8C	107	46.8	67	70	106	1	6	2
	3	□	MPS1-0580S-DIN	66	19.4	28	30	64.9	1.1	6	4
	3	●	MPS1-0580S-DIN-C	66	19.4	28	30	64.9	1.1	6	2
6.2	5	□	MPS1-0580L-DIN	82	35.4	44	46	80.9	1.1	6	4
	5	●	MPS1-0580L-DIN-C	82	35.4	44	46	80.9	1.1	6	2
	8	●	MPS1-0580-L8C	107	47.6	67	70	106	1.1	6	2
	3	□	MPS1-0590S-DIN	66	19.2	28	30	64.9	1.1	6	4
6.3	3	●	MPS1-0590S-DIN-C	66	19.2	28	30	64.9	1.1	6	2
	5	□	MPS1-0590L-DIN	82	35.2	44	46	80.9	1.1	6	4
	5	●	MPS1-0590L-DIN-C	82	35.2	44	46	80.9	1.1	6	2
	8	●	MPS1-0590-L8C	107	48.4	67	70	106	1.1	6	2
6.4	3	□	MPS1-0600S-DIN	66	19.1	28	30	64.9	1.1	6	4
	3	●	MPS1-0600S-DIN-C	66	19.1	28	30	64.9	1.1	6	2
	5	□	MPS1-0600L-DIN	82	35.1	44	46	80.9	1.1	6	4
	5	●	MPS1-0600L-DIN-C	82	35.1	44	46	80.9	1.1	6	2
6.5	8	●	MPS1-0600-L8C	107	49.2	67	70	106	1.1	6	2

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
5.1	3	□	MPS1-0510S-DIN	66	20.3	28	30	65.1	0.9	6	4
	3	●	MPS1-0510S-DIN-C	66	20.3	28	30	65.1	0.9	6	2
	5	□	MPS1-0510L-DIN	82	36.3	44	46	81.1	0.9	6	4
	5	●	MPS1-0510L-DIN-C	82	36.3	44	46	81.1	0.9	6	2
	NEW	8	●	MPS1-0510-L8C	102	41.9	62	65	101	0.9	6
5.2	3	□	MPS1-0520S-DIN	66	20.1	28	30	65.1	0.9	6	4
	3	●	MPS1-0520S-DIN-C	66	20.1	28	30	65.1	0.9	6	2
	5	□	MPS1-0520L-DIN	82	36.1	44	46	81.1	0.9	6	4
	5	●	MPS1-0520L-DIN-C	82	36.1	44	46	81.1	0.9	6	2
	NEW	8	●	MPS1-0520-L8C	102	42.7	62	65	101	0.9	6
5.3	3	□	MPS1-0530S-DIN	66	20.0	28	30	65	1	6	4
	3	●	MPS1-0530S-DIN-C	66	20.0	28	30	65	1	6	2
	5	□	MPS1-0530L-DIN	82	36.0	44	46	81	1	6	4
	5	●	MPS1-0530L-DIN-C	82	36.0	44	46	81	1	6	2
	NEW	8	●	MPS1-0530-L8C	102	43.5	62	65	101	1	6
5.4	3	□	MPS1-0540S-DIN	66	19.9	28	30	65	1	6	2
	3	●	MPS1-0540S-DIN-C	66	19.9	28	30	65	1	6	4
	5	□	MPS1-0540L-DIN	82	35.9	44	46	81	1	6	4
	5	●	MPS1-0540L-DIN-C	82	35.9	44	46	81	1	6	2
	NEW	8	●	MPS1-0540-L8C	102	44.3	62	65	101	1	6
5.5	3	□	MPS1-0550S-DIN	66	19.8	28	30	65	1	6	4
	3	●	MPS1-0550S-DIN-C	66	19.8	28	30	65	1	6	2
	5	□	MPS1-0550L-DIN	82	35.8	44	46	81	1	6	4
	5	●	MPS1-0550L-DIN-C	82	35.8	44	46	81	1	6	2
	NEW	8	●	MPS1-0550-L8C	102	45.1	62	65	101	1	6
5.55	3	□	MPS1-0555S-DIN	66	19.7	28	30	65	1	6	4
	3	●	MPS1-0555S-DIN-C	66	19.7	28	30	65	1	6	2
	5	□	MPS1-0555L-DIN	82	35.7	44	46	81	1	6	4
	5	●	MPS1-0555L-DIN-C	82	35.7	44	46	81	1	6	2
	5.6	3	□	MPS1-0560S-DIN	66	19.6	28	30	65	1	6
3		●	MPS1-0560S-DIN-C	66	19.6	28	30	65	1	6	2
5		□	MPS1-0560L-DIN	82	35.6	44	46	81	1	6	4
5		●	MPS1-0560L-DIN-C	82	35.6	44	46	81	1	6	2
NEW		8	●	MPS1-0560-L8C	107	46.0	67	70	106	1	6
5.7	3	□	MPS1-0570S-DIN	66	19.5	28	30	65	1	6	4
	3	●	MPS1-0570S-DIN-C	66	19.5	28	30	65	1	6	2
	5	□	MPS1-0570L-DIN	82	35.5	44	46	81	1	6	4
	5	●	MPS1-0570L-DIN-C	82	35.5	44	46	81	1	6	2
	NEW	8	●	MPS1-0570-L8C	107	46.8	67	70	106	1	6
5.8	3	□	MPS1-0580S-DIN	66	19.4	28	30	64.9	1.1	6	4
	3	●	MPS1-0580S-DIN-C	66	19.4	28	30	64.9	1.1	6	2
	5	□	MPS1-0580L-DIN	82	35.4	44	46	80.9	1.1	6	4
	5	●	MPS1-0580L-DIN-C	82	35.4	44	46	80.9	1.1	6	2
	NEW	8	●	MPS1-0580-L8C	107	47.6	67	70	106	1.1	6
5.9	3	□	MPS1-0590S-DIN	66	19.2	28	30	64.9	1.1	6	4
	3	●	MPS1-0590S-DIN-C	66	19.2	28	30	64.9	1.1	6	2
	5	□	MPS1-0590L-DIN	82	35.2	44	46	80.9	1.1	6	4
	5	●	MPS1-0590L-DIN-C	82	35.2	44	46	80.9	1.1	6	2
	NEW	8	●	MPS1-0590-L8C	107	48.4	67	70	106	1.1	6
6.0	3	□	MPS1-0600S-DIN	66	19.1	28	30	64.9	1.1	6	4
	3	●	MPS1-0600S-DIN-C	66	19.1	28	30	64.9	1.1	6	2
	5	□	MPS1-0600L-DIN	82	35.1	44	46	80.9	1.1	6	4
	5	●	MPS1-0600L-DIN-C	82	35.1	44	46	80.9	1.1	6	2
	NEW	8	●	MPS1-0600-L8C	107	49.2	67	70	106	1.1	6

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
6.05	3	□	MPS1-0605S-DIN	79	25.0	34	43	77.9	1.1	8	4
	3	●	MPS1-0605S-DIN-C	79	25.0	34	43	77.9	1.1	8	2
	5	□	MPS1-0605L-DIN	91	44.0	53	55	89.9	1.1	8	4
	5	●	MPS1-0605L-DIN-C	91	44.0	53	55	89.9	1.1	8	2
6.1	3	□	MPS1-0610S-DIN	79	25.0	34	43	77.9	1.1	8	4
	3	●	MPS1-0610S-DIN-C	79	25.0	34	43	77.9	1.1	8	2
	5	□	MPS1-0610L-DIN	91	44.0	53	55	89.9	1.1	8	4
	5	●	MPS1-0610L-DIN-C	91	44.0	53	55	89.9	1.1	8	2
NEW 6.2	8	●	MPS1-0610-L8C	113	50.1	73	76	112	1.1	8	2
	3	□	MPS1-0620S-DIN	79	24.8	34	43	77.9	1.1	8	4
	3	●	MPS1-0620S-DIN-C	79	24.8	34	43	77.9	1.1	8	2
	5	□	MPS1-0620L-DIN	91	43.8	53	55	89.9	1.1	8	4
6.3	5	●	MPS1-0620L-DIN-C	91	43.8	53	55	89.9	1.1	8	2
	8	●	MPS1-0620-L8C	113	50.9	73	76	112	1.1	8	2
	3	□	MPS1-0630S-DIN	79	24.7	34	43	77.9	1.1	8	4
	3	●	MPS1-0630S-DIN-C	79	24.7	34	43	77.9	1.1	8	2
6.4	5	□	MPS1-0630L-DIN	91	43.7	53	55	89.9	1.1	8	4
	5	●	MPS1-0630L-DIN-C	91	43.7	53	55	89.9	1.1	8	2
	8	●	MPS1-0630-L8C	113	51.7	73	76	112	1.1	8	2
	3	□	MPS1-0640S-DIN	79	24.6	34	43	77.8	1.2	8	4
6.5	3	●	MPS1-0640S-DIN-C	79	24.6	34	43	77.8	1.2	8	2
	5	□	MPS1-0640L-DIN	91	43.6	53	55	89.8	1.2	8	4
	5	●	MPS1-0640L-DIN-C	91	43.6	53	55	89.8	1.2	8	2
	8	●	MPS1-0640-L8C	113	52.5	73	76	112	1.2	8	2
6.6	3	□	MPS1-0650S-DIN	79	24.4	34	43	77.8	1.2	8	4
	3	●	MPS1-0650S-DIN-C	79	24.4	34	43	77.8	1.2	8	2
	5	□	MPS1-0650L-DIN	91	43.4	53	55	89.8	1.2	8	4
	5	●	MPS1-0650L-DIN-C	91	43.4	53	55	89.8	1.2	8	2
NEW 6.7	8	●	MPS1-0650-L8C	113	53.3	73	76	112	1.2	8	2
	3	□	MPS1-0660S-DIN	79	24.3	34	43	77.8	1.2	8	4
	3	●	MPS1-0660S-DIN-C	79	24.3	34	43	77.8	1.2	8	2
	5	□	MPS1-0660L-DIN	91	43.3	53	55	89.8	1.2	8	4
6.8	5	●	MPS1-0660L-DIN-C	91	43.3	53	55	89.8	1.2	8	2
	8	●	MPS1-0660-L8C	118	54.2	78	81	117	1.2	8	2
	3	□	MPS1-0670S-DIN	79	24.2	34	43	77.8	1.2	8	4
	3	●	MPS1-0670S-DIN-C	79	24.2	34	43	77.8	1.2	8	2
6.9	5	□	MPS1-0670L-DIN	91	43.2	53	55	89.8	1.2	8	4
	5	●	MPS1-0670L-DIN-C	91	43.2	53	55	89.8	1.2	8	2
	8	●	MPS1-0670-L8C	118	55.0	78	81	117	1.2	8	2
	3	□	MPS1-0680S-DIN	79	24.0	34	43	77.8	1.2	8	4
6.10	3	●	MPS1-0680S-DIN-C	79	24.0	34	43	77.8	1.2	8	2
	5	□	MPS1-0680L-DIN	91	43.0	53	55	89.8	1.2	8	4
	5	●	MPS1-0680L-DIN-C	91	43.0	53	55	89.8	1.2	8	2
	8	●	MPS1-0680-L8C	118	55.8	78	81	117	1.2	8	2
7.0	3	□	MPS1-0690S-DIN	79	23.9	34	43	77.7	1.3	8	4
	3	●	MPS1-0690S-DIN-C	79	23.9	34	43	77.7	1.3	8	2
	5	□	MPS1-0690L-DIN	91	42.9	53	55	89.7	1.3	8	4
	5	●	MPS1-0690L-DIN-C	91	42.9	53	55	89.7	1.3	8	2
NEW 7.1	8	●	MPS1-0690-L8C	118	56.6	78	81	117	1.3	8	2
	3	□	MPS1-0700S-DIN	79	23.8	34	43	77.7	1.3	8	4
	3	●	MPS1-0700S-DIN-C	79	23.8	34	43	77.7	1.3	8	2
	5	□	MPS1-0700L-DIN	91	42.8	53	55	89.7	1.3	8	4
7.2	5	●	MPS1-0700L-DIN-C	91	42.8	53	55	89.7	1.3	8	2
	8	●	MPS1-0700-L8C	118	57.4	78	81	117	1.3	8	2
	3	□	MPS1-0710S-DIN	79	30.6	41	43	77.7	1.3	8	4
	3	●	MPS1-0710S-DIN-C	79	30.6	41	43	77.7	1.3	8	2
7.3	5	□	MPS1-0710L-DIN	91	42.6	53	55	89.7	1.3	8	4
	5	●	MPS1-0710L-DIN-C	91	42.6	53	55	89.7	1.3	8	2
	8	●	MPS1-0710-L8C	124	58.3	84	87	123	1.3	8	2
	3	□	MPS1-0720S-DIN	79	30.5	41	43	77.7	1.3	8	4
7.4	3	●	MPS1-0720S-DIN-C	79	30.5	41	43	77.7	1.3	8	2
	5	□	MPS1-0720L-DIN	91	42.5	53	55	89.7	1.3	8	4
	5	●	MPS1-0720L-DIN-C	91	42.5	53	55	89.7	1.3	8	2
	8	●	MPS1-0720-L8C	124	59.1	84	87	123	1.3	8	2
7.5	3	□	MPS1-0730S-DIN	79	30.4	41	43	77.7	1.3	8	4
	3	●	MPS1-0730S-DIN-C	79	30.4	41	43	77.7	1.3	8	2
	5	□	MPS1-0730L-DIN	91	42.4	53	55	89.7	1.3	8	4
	5	●	MPS1-0730L-DIN-C	91	42.4	53	55	89.7	1.3	8	2
7.6	8	●	MPS1-0730-L8C	125	59.9	84	88	123	1.3	8	2
	3	□	MPS1-0740S-DIN	79	30.2	41	43	77.7	1.3	8	4
	3	●	MPS1-0740S-DIN-C	79	30.2	41	43	77.7	1.3	8	2
	5	□	MPS1-0740L-DIN	91	42.2	53	55	89.7	1.3	8	4
7.7	5	●	MPS1-0740L-DIN-C	91	42.2	53	55	89.7	1.3	8	2
	8	●	MPS1-0740-L8C	125	60.7	84	88	123	1.3	8	2
	3	□	MPS1-0750S-DIN	79	30.1	41	43	77.6	1.4	8	4
	3	●	MPS1-0750S-DIN-C	79	30.1	41	43	77.6	1.4	8	2
7.8	5	□	MPS1-0750L-DIN	91	42.1	53	55	89.6	1.4	8	4
	5	●	MPS1-0750L-DIN-C	91	42.1	53	55	89.6	1.4	8	2
	8	●	MPS1-0750-L8C	125	61.6	84	88	123	1.4	8	2
	3	□	MPS1-0760S-DIN	79	30.0	41	43	77.6	1.4	8	4
7.9	3	●	MPS1-0760S-DIN-C	79	30.0	41	43	77.6	1.4	8	2
	5	□	MPS1-0760L-DIN	91	42.0	53	55	89.6	1.4	8	4
	5	●	MPS1-0760L-DIN-C	91	42.0	53	55	89.6	1.4	8	2
	8	●	MPS1-0760-L8C	130	62.4	89	93	128	1.4	8	2
8.0	3	□	MPS1-0770S-DIN	79	29.9	41	43	77.6	1.4	8	4
	3	●	MPS1-0770S-DIN-C	79	29.9	41	43	77.6	1.4	8	2
	5	□	MPS1-0770L-DIN	91	41.9	53	55	89.6	1.4	8	4
	5	●	MPS1-0770L-DIN-C	91	41.9	53	55	89.6	1.4	8	2
8.1	8	●	MPS1-0770-L8C	130	63.2	89	93	128	1.4	8	2
	3	□	MPS1-0780S-DIN	79	29.7	41	43	77.6	1.4	8	4
	3	●	MPS1-0780S-DIN-C	79	29.7	41	43	77.6	1.4	8	2
	5	□	MPS1-0780L-DIN	91	41.7	53	55	89.6	1.4	8	4
8.2	5	●	MPS1-0780L-DIN-C	91	41.7	53	55	89.6	1.4	8	2
	8	●	MPS1-0780-L8C	130	64.0	89	93	128	1.4	8	2
	3	□	MPS1-0790S-DIN	79	29.6	41	43	77.6	1.4	8	4
	3	●	MPS1-0790S-DIN-C	79	29.6	41	43	77.6	1.4	8	2
8.3	5	□	MPS1-0790L-DIN	91	41.6	53	55	89.6	1.4	8	4
	5	●	MPS1-0790L-DIN-C	91	41.6	53	55	89.6	1.4	8	2
	8	●	MPS1-0790-L8C	130	64.8	89	93	128	1.4	8	2
	3	□	MPS1-0800S-DIN	79	29.5	41	43	77.5	1.5	8	4
8.4	3	●	MPS1-0800S-DIN-C	79	29.5	41	43	77.5	1.5	8	2
	5	□	MPS1-0800L-DIN	91	41.5	53	55	89.5	1.5	8	4
	5	●	MPS1-0800L-DIN-C	91	41.5	53	55	89.5	1.5	8	2
	8	●	MPS1-0800-L8C	130	65.7	89	93	128	1.5	8	2
8.5	3	□	MPS1-0805S-DIN	88	34.4	46	48	86.5	1.5	10	4
	3	●	MPS1-0805S-DIN-C	88	34.4	46	48	86.5	1.5	10	2
	5	□	MPS1-0805L-DIN	102	48.4	60	62	100.5	1.5	10	4
	5	●	MPS1-0805L-DIN-C	102	48.4	60	62	100.5	1.5	10	2

DC	Bohrtiefe (mm)	Bohrtiefe (l/d)	Lager DP1021	Bestellbezeichnung	Abmessungen (mm)							Typ
					OAL	LU	LCF	LH	LF	PL	DCON	
7.1	3	□	MPS1-0710S-DIN	79	30.6	41	43	77.7	1.3	8	4	
	3	●	MPS1-0710S-DIN-C	79	30.6	41	43	77.7	1.3	8	2	
	5	□	MPS1-0710L-DIN	91	42.6	53	55	89.7	1.3	8	4	
	5	●	MPS1-0710L-DIN-C	91	42.6	53	55	89.7	1.3	8	2	
	NEW	8	●	MPS1-0710-L8C	124	58.3	84	87	123	1.3	8	2
7.2	3	□	MPS1-0720S-DIN	79	30.5	41	43	77.7	1.3	8	4	
	3	●	MPS1-0720S-DIN-C	79	30.5	41	43	77.7	1.3	8	2	
	5	□	MPS1-0720L-DIN	91	42.5	53	55	89.7	1.3	8	4	
	5	●	MPS1-0720L-DIN-C	91	42.5	53	55	89.7	1.3	8	2	
	NEW	8	●	MPS1-0720-L8C	124	59.1	84	87	123	1.3	8	2
7.3	3	□	MPS1-0730S-DIN	79	30.4	41	43	77.7	1.3	8	4	
	3	●	MPS1-0730S-DIN-C	79	30.4	41	43	77.7	1.3	8	2	
	5	□	MPS1-0730L-DIN	91	42.4	53	55	89.7	1.3	8	4	
	5	●	MPS1-0730L-DIN-C	91	42.4	53	55	89.7	1.3	8	2	
	NEW	8	●	MPS1-0730-L8C	125	59.9	84	88	123	1.3	8	2
7.4	3	□	MPS1-0740S-DIN	79	30.2	41	43	77.7	1.3	8	4	
	3	●	MPS1-0740S-DIN-C	79	30.2	41	43	77.7	1.3	8	2	
	5	□	MPS1-0740L-DIN	91	42.2	53	55	89.7	1.3	8	4	
	5	●	MPS1-0740L-DIN-C	91	42.2	53	55	89.7	1.3	8	2	
	NEW	8	●	MPS1-0740-L8C	125	60.7	84	88	123	1.3	8	2
7.5	3	□	MPS1-0750S-DIN	79	30.1	41	43	77.6	1.4	8	4	
	3	●	MPS1-0750S-DIN-C	79	30.1	41	43	77.6	1.4	8	2	
	5	□	MPS1-0750L-DIN	91	42.1	53	55	89.6	1.4	8	4	
	5	●	MPS1-0750L-DIN-C	91	42.1	53	55	89.6	1.4	8	2	
	NEW	8	●	MPS1-0750-L8C	125	61.6	84	88	123	1.4	8	2
7.6	3	□	MPS1-0760S-DIN	79	30.0	41	43	77.6	1.4	8	4	
	3	●	MPS1-0760S-DIN-C	79	30.0	41	43	77.6	1.4	8	2	
	5	□	MPS1-0760L-DIN	91	42.0	53	55	89.6	1.4	8	4	
	5	●	MPS1-0760L-DIN-C	91	42.0	53	55	89.6	1.4	8	2	
	NEW	8	●	MPS1-0760-L8C	130	62.4	89	93	128	1.4	8	2
7.7	3	□	MPS1-0770S-DIN	79	29.9	41	43	77.6	1.4	8	4	
	3	●	MPS1-0770S-DIN-C	79	29.9	41	43	77.6	1.4	8	2	
	5	□	MPS1-0770L-DIN	91	41.9	53	55	89.6	1.4	8	4	
	5	●	MPS1-0770L-DIN-C	91	41.9	53	55	89.6	1.4	8	2	
	NEW	8	●	MPS1-0770-L8C	130	63.2	89	93	128	1.4	8	2
7.8	3	□	MPS1-0780S-DIN	79	29.7	41	43	77.6	1.4	8	4	
	3	●	MPS1-0780S-DIN-C	79	29.7	41	43	77.6	1.4	8	2	
	5	□	MPS1-0780L-DIN	91	41.7	53	55	89.6	1.4	8	4	
	5	●	MPS1-0780L-DIN-C	91	41.7	53	55	89.6	1.4	8	2	
	NEW	8	●	MPS1-0780-L8C	130	64.0	89	93	128	1.4	8	2
7.9	3	□	MPS1-0790S-DIN	79	29.6	41	43	77.6	1.4	8	4	
	3	●	MPS1-0790S-DIN-C	79	29.6	41	43	77.6	1.4	8	2	
	5	□	MPS1-0790L-DIN	91	41.6	53	55	89.6	1.4	8	4	
	5	●	MPS1-0790L-DIN-C	91	41.6	53	55	89.6	1.4	8	2	
	NEW	8	●	MPS1-0790-L8C	130	64.8	89	93	128	1.4	8	2
8.0	3	□	MPS1-0800S-DIN	79	29.5	41	43	77.5	1.5	8	4	
	3	●	MPS1-0800S-DIN-C	79	29.5	41	43	77.5	1.5	8	2	
	5	□	MPS1-0800L-DIN	91	41.5	53	55	89.5	1.5	8	4	
	5	●	MPS1-0800L-DIN-C	91	41.5	53	55	89.5	1.5	8	2	
	NEW	8	●	MPS1-0800-L8C	130	65.7	89	93	128	1.5	8	2
8.05	3	□	MPS1-0805S-DIN	88	34.4	46	48	86.5	1.5	10	4	
	3	●	MPS1-0805S-DIN-C	88	34.4	46	48	86.5	1.5	10	2	
	5	□	MPS1-0805L-DIN	102	48.4	60	62	100.5	1.5	10	4	
	5	●	MPS1-0805L-DIN-C	102	48.4	60	62	100.5	1.5	10	2	

BOHREN (VOLLHARTMETALL)

MPS1

4-Fasenbohrer

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
8.1	3	□	MPS1-0810S-DIN	88	34.3	46	48	86.5	1.5	10	4
	3	●	MPS1-0810S-DIN-C	88	34.3	46	48	86.5	1.5	10	2
	5	□	MPS1-0810L-DIN	102	48.3	60	62	100.5	1.5	10	4
	5	●	MPS1-0810L-DIN-C	102	48.3	60	62	100.5	1.5	10	2
8.2	8	●	MPS1-0810-L8C	140	66.5	95	99	138	1.5	10	2
	3	□	MPS1-0820S-DIN	88	34.2	46	48	86.5	1.5	10	4
	3	●	MPS1-0820S-DIN-C	88	34.2	46	48	86.5	1.5	10	2
	5	□	MPS1-0820L-DIN	102	48.2	60	62	100.5	1.5	10	4
8.3	5	●	MPS1-0820L-DIN-C	102	48.2	60	62	100.5	1.5	10	2
	8	●	MPS1-0820-L8C	140	67.3	95	99	138	1.5	10	2
	3	□	MPS1-0830S-DIN	88	34.1	46	48	86.5	1.5	10	4
	3	●	MPS1-0830S-DIN-C	88	34.1	46	48	86.5	1.5	10	2
8.4	5	□	MPS1-0830L-DIN	102	48.1	60	62	100.5	1.5	10	4
	5	●	MPS1-0830L-DIN-C	102	48.1	60	62	100.5	1.5	10	2
	8	●	MPS1-0830-L8C	140	68.1	95	99	138	1.5	10	2
	3	□	MPS1-0840S-DIN	88	33.9	46	48	86.5	1.5	10	4
8.5	3	●	MPS1-0840S-DIN-C	88	33.9	46	48	86.5	1.5	10	2
	5	□	MPS1-0840L-DIN	102	47.9	60	62	100.5	1.5	10	4
	5	●	MPS1-0840L-DIN-C	102	47.9	60	62	100.5	1.5	10	2
	8	●	MPS1-0840-L8C	140	68.9	95	99	138	1.5	10	2
8.6	3	□	MPS1-0850S-DIN	88	33.8	46	48	86.5	1.5	10	4
	3	●	MPS1-0850S-DIN-C	88	33.8	46	48	86.5	1.5	10	2
	5	□	MPS1-0850L-DIN	102	47.8	60	62	100.5	1.5	10	4
	5	●	MPS1-0850L-DIN-C	102	47.8	60	62	100.5	1.5	10	2
8.7	8	●	MPS1-0850-L8C	140	69.8	95	99	138	1.5	10	2
	3	□	MPS1-0860S-DIN	88	33.7	46	48	86.4	1.6	10	4
	3	●	MPS1-0860S-DIN-C	88	33.7	46	48	86.4	1.6	10	2
	5	□	MPS1-0860L-DIN	102	47.7	60	62	100.4	1.6	10	4
8.8	5	●	MPS1-0860L-DIN-C	102	47.7	60	62	100.4	1.6	10	2
	8	●	MPS1-0860-L8C	145	70.6	100	104	143	1.6	10	2
	3	□	MPS1-0870S-DIN	88	33.5	46	48	86.4	1.6	10	4
	3	●	MPS1-0870S-DIN-C	88	33.5	46	48	86.4	1.6	10	2
8.9	5	□	MPS1-0870L-DIN	102	47.5	60	62	100.4	1.6	10	4
	5	●	MPS1-0870L-DIN-C	102	47.5	60	62	100.4	1.6	10	2
	8	●	MPS1-0870-L8C	145	71.4	100	104	143	1.6	10	2
	3	□	MPS1-0880S-DIN	88	33.4	46	48	86.4	1.6	10	4
9.0	3	●	MPS1-0880S-DIN-C	88	33.4	46	48	86.4	1.6	10	2
	5	□	MPS1-0880L-DIN	102	47.4	60	62	100.4	1.6	10	4
	5	●	MPS1-0880L-DIN-C	102	47.4	60	62	100.4	1.6	10	2
	8	●	MPS1-0880-L8C	145	72.2	100	104	143	1.6	10	2
9.1	3	□	MPS1-0890S-DIN	88	33.3	46	48	86.4	1.6	10	4
	3	●	MPS1-0890S-DIN-C	88	33.3	46	48	86.4	1.6	10	2
	5	□	MPS1-0890L-DIN	102	47.3	60	62	100.4	1.6	10	4
	5	●	MPS1-0890L-DIN-C	102	47.3	60	62	100.4	1.6	10	2
9.2	8	●	MPS1-0890-L8C	145	73.0	100	104	143	1.6	10	2
	3	□	MPS1-0900S-DIN	88	33.1	46	48	86.4	1.6	10	4
	3	●	MPS1-0900S-DIN-C	88	33.1	46	48	86.4	1.6	10	2
	5	□	MPS1-0900L-DIN	102	47.1	60	62	100.4	1.6	10	4
9.3	5	●	MPS1-0900L-DIN-C	102	47.1	60	62	100.4	1.6	10	2
	8	●	MPS1-0900-L8C	145	73.9	100	104	143	1.6	10	2
	3	□	MPS1-0910S-DIN	89	33.0	47	49	87.3	1.7	10	4
	3	●	MPS1-0910S-DIN-C	89	33.0	47	49	87.3	1.7	10	2
9.4	5	□	MPS1-0910L-DIN	103	47.0	62	63	101.3	1.7	10	4
	5	●	MPS1-0910L-DIN-C	103	47.0	62	63	101.3	1.7	10	2
	8	●	MPS1-0910-L8C	151	74.7	107	110	149	1.7	10	2
	3	□	MPS1-0920S-DIN	89	32.9	47	49	87.3	1.7	10	4
9.5	3	●	MPS1-0920S-DIN-C	89	32.9	47	49	87.3	1.7	10	2
	5	□	MPS1-0920L-DIN	103	46.9	62	63	101.3	1.7	10	4
	5	●	MPS1-0920L-DIN-C	103	46.9	62	63	101.3	1.7	10	2
	8	●	MPS1-0920-L8C	151	75.5	107	110	149	1.7	10	2
9.6	3	□	MPS1-0930S-DIN	89	32.7	47	49	87.3	1.7	10	4
	3	●	MPS1-0930S-DIN-C	89	32.7	47	49	87.3	1.7	10	2
	5	□	MPS1-0930L-DIN	103	46.7	62	63	101.3	1.7	10	4
	5	●	MPS1-0930L-DIN-C	103	46.7	62	63	101.3	1.7	10	2
9.7	8	●	MPS1-0930-L8C	151	76.3	107	110	149	1.7	10	2
	3	□	MPS1-0940S-DIN	89	32.6	47	49	87.3	1.7	10	4
	3	●	MPS1-0940S-DIN-C	89	32.6	47	49	87.3	1.7	10	2
	5	□	MPS1-0940L-DIN	103	46.6	62	63	101.3	1.7	10	4
9.8	5	●	MPS1-0940L-DIN-C	103	46.6	62	63	101.3	1.7	10	2
	8	●	MPS1-0940-L8C	151	77.1	107	110	149	1.7	10	2
	3	□	MPS1-0950S-DIN	89	32.5	47	49	87.3	1.7	10	4
	3	●	MPS1-0950S-DIN-C	89	32.5	47	49	87.3	1.7	10	2
9.9	5	□	MPS1-0950L-DIN	103	46.5	62	63	101.3	1.7	10	4
	5	●	MPS1-0950L-DIN-C	103	46.5	62	63	101.3	1.7	10	2
	8	●	MPS1-0950-L8C	151	78.0	107	110	149	1.7	10	2
	3	□	MPS1-0960S-DIN	89	32.3	47	49	87.3	1.7	10	4
10.0	3	●	MPS1-0960S-DIN-C	89	32.3	47	49	87.3	1.7	10	2
	5	□	MPS1-0960L-DIN	103	46.3	62	63	101.3	1.7	10	4
	5	●	MPS1-0960L-DIN-C	103	46.3	62	63	101.3	1.7	10	2
	8	●	MPS1-0960-L8C	156	78.8	112	115	154	1.7	10	2
10.1	3	□	MPS1-0970S-DIN	89	32.2	47	49	87.2	1.8	10	4
	3	●	MPS1-0970S-DIN-C	89	32.2	47	49	87.2	1.8	10	2
	5	□	MPS1-0970L-DIN	103	46.2	62	63	101.2	1.8	10	4
	5	●	MPS1-0970L-DIN-C	103	46.2	62	63	101.2	1.8	10	2
10.2	8	●	MPS1-0970-L8C	156	79.6	112	115	154	1.8	10	2
	3	□	MPS1-0980S-DIN	89	32.1	47	49	87.2	1.8	10	4
	3	●	MPS1-0980S-DIN-C	89	32.1	47	49	87.2	1.8	10	2
	5	□	MPS1-0980L-DIN	103	46.1	62	63	101.2	1.8	10	4
10.3	5	●	MPS1-0980L-DIN-C	103	46.1	62	63	101.2	1.8	10	2
	8	●	MPS1-0980-L8C	156	80.4	112	115	154	1.8	10	2
	3	□	MPS1-0990S-DIN	89	32.0	47	49	87.2	1.8	10	4
	3	●	MPS1-0990S-DIN-C	89	32.0	47	49	87.2	1.8	10	2
10.4	5	□	MPS1-0990L-DIN	103	46.0	62	63	101.2	1.8	10	4
	5	●	MPS1-0990L-DIN-C	103	46.0	62	63	101.2	1.8	10	2
	8	●	MPS1-0990-L8C	156	81.3	112	115	154	1.8	10	2
	3	□	MPS1-1000S-DIN	89	31.8	47	49	87.2	1.8	10	4
10.5	3	●	MPS1-1000S-DIN-C	89	31.8	47	49	87.2	1.8	10	2
	5	□	MPS1-1000L-DIN	103	45.8	62	63	101.2	1.8	10	4
	5	●	MPS1-1000L-DIN-C	103	45.8	62	63	101.2	1.8	10	2
	8	●	MPS1-1000-L8C	156	82.1	112	115	154	1.8	10	2
10.6	3	□	MPS1-1005S-DIN	102	39.8	55	57	100.2	1.8	12	4
	3	●	MPS1-1005S-DIN-C	102	39.8	55	57	100.2	1.8	12	2
	5	□	MPS1-1005L-DIN	118	55.8	71	73	116.2	1.8	12	4
	5	●	MPS1-1005L-DIN-C	118	55.8	71	73	116.2	1.8	12	2
10.7	3	□	MPS1-1010S-DIN	102	39.7	55	57	100.2	1.8	12	4
	3	●	MPS1-1010S-DIN-C	102	39.7	55	57	100.2	1.8	12	2
	5	□	MPS1-1010L-DIN	118	55.7	71	73	116.2	1.8	12	4
	5	●	MPS1-1010L-DIN-C	118	55.7	71	73	116.2	1.8	12	2
10.8	8	●	MPS1-1010-L8C	167	82.9	118	121	165	1.8	12	2

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
9.2	3	□	MPS1-0920S-DIN	89	32.9	47	49	87.3	1.7	10	4
	3	●	MPS1-0920S-DIN-C	89	32.9	47	49	87.3	1.7	10	2
	5	□	MPS1-0920L-DIN	103	46.9	62	63	101.3	1.7	10	4
	5	●	MPS1-0920L-DIN-C	103	46.9	62	63	101.3	1.7	10	2
	NEW	8	●	MPS1-0920-L8C	151	75.5	107	110	149	1.7	10
9.3	3	□	MPS1-0930S-DIN	89	32.7	47	49	87.3	1.7	10	4
	3	●	MPS1-0930S-DIN-C	89	32.7	47	49	87.3	1.7	10	2
	5	□	MPS1-0930L-DIN	103	46.7	62	63	101.3	1.7	10	4
	5	●	MPS1-0930L-DIN-C	103	46.7	62	63	101.3	1.7	10	2
	NEW	8	●	MPS1-0930-L8C	151	76.3	107	110	149	1.7	10
9.4	3	□	MPS1-0940S-DIN	89	32.6	47	49	87.3	1.7	10	4
	3	●	MPS1-0940S-DIN-C	89	32.6	47	49	87.3	1.7	10	2
	5	□	MPS1-0940L-DIN	103	46.6	62	63	101.3	1.7	10	4
	5	●	MPS1-0940L-DIN-C	103	46.6	62	63	101.3	1.7	10	2
	NEW	8	●	MPS1-0940-L8C	151	77.1	107	110	149	1.7	10
9.5	3	□	MPS1-0950S-DIN	89	32.5	47	49	87.3	1.7	10	4
	3	●	MPS1-0950S-DIN-C	89	32.5	47	49	87.3	1.7	10	2
	5	□	MPS1-0950L-DIN	103	46.5	62	63	101.3	1.7	10	4
	5	●	MPS1-0950L-DIN-C	103	46.5	62	63	101.3	1.7	10	2
	NEW	8	●	MPS1-0950-L8C	151	78.0	107	110	149	1.7	10
9.6	3	□	MPS1-0960S-DIN	89	32.3	47	49	87.3	1.7	10	4
	3	●	MPS1-0960S-DIN-C	89	32.3	47	49	87.3	1.7	10	2
	5	□	MPS1-0960L-DIN	103	46.3	62	63	101.3	1.7	10	4
	5	●	MPS1-0960L-DIN-C	103	46.3	62	63	101.3	1.7	10	2
	NEW	8	●	MPS1-0960-L8C	156	78.8	112	115	154	1.7	10
9.7	3	□	MPS1-0970S-DIN	89	32.2	47	49	87.2	1.8	10	4
	3	●	MPS1-0970S-DIN-C	89	32.2	47	49	87.2	1.8	10	2
	5	□	MPS1-0970L-DIN	103	46.2	62	63	101.2	1.8	10	4
	5	●	MPS1-0970L-DIN-C	103	46.2	62	63	101.2	1.8	10	2
	NEW	8	●	MPS1-0970-L8C	156	79.6	112	115	154	1.8	10
9.8	3	□	MPS1-0980S-DIN	89	32.1	47	49	87.2	1.8	10	4
	3	●	MPS1-0980S-DIN-C	89	32.1	47	49	87.2	1.8	10	2
	5	□	MPS1-0980L-DIN	103	46.1	62	63	101.2	1.8	10	4
	5	●	MPS1-0980L-DIN-C	103	46.1	62	63	101.2	1.8	10	2
	NEW	8	●	MPS1-0980-L8C	156	80.4	112	115	154	1.8	10
9.9	3	□	MPS1-0990S-DIN	89	32.0	47	49	87.2	1.8	10	4
	3	●	MPS1-0990S-DIN-C	89	32.0	47	49	87.2	1.8	10	2
	5	□	MPS1-0990L-DIN	103	46.0	62	63	101.2	1.8	10	4
	5	●	MPS1-0990L-DIN-C	103	46.0	62	63	101.2	1.8	10	2
	NEW	8	●	MPS1-0990-L8C	156	81.3	112	115	154	1.8	10
10.0	3	□	MPS1-1000S-DIN	89	31.8	47	49	87.2	1.8	10	4
	3	●	MPS1-1000S-DIN-C	89	31.8	47	49	87.2	1.8	10	2
	5	□	MPS1-1000L-DIN	103	45.8	62	63	101.2	1.8	10	4
	5	●	MPS1-1000L-DIN-C	103	45.8	62	63	101.2	1.8	10	2
	NEW	8	●	MPS1-1000-L8C	156	82.1	112	115	154	1.8	10
10.05	3	□	MPS1-1005S-DIN	102	39.8	55	57	100.2	1.8	12	4
	3	●	MPS1-1005S-DIN-C	102	39.8	55	57	100.2	1.8	12	2
	5	□	MPS1-1005L-DIN	118	55.8	71	73	116.2	1.8	12	4
	5	●	MPS1-1005L-DIN-C	118	55.8	71	73	116.2	1.8	12	2
10.1	3	□	MPS1-1010S-DIN	102	39.7	55	57	100.2	1.8	12	4
	3	●	MPS1-1010S-DIN-C	102	39.7	55	57	100.2	1.8	12	2
	5	□	MPS1-1010L-DIN	118	55.7	71	73	116.2	1.8	12	4
	5	●	MPS1-1010L-DIN-C	118	55.7	71	73	116.2	1.8	12	2
	NEW	8	●	MPS1-1010-L8C	167	82.9	118	121	165	1.8	12

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
10.2	3	□	MPS1-1020S-DIN	102	39.6	55	57	100.1	1.9	12	4
	3	●	MPS1-1020S-DIN-C	102	39.6	55	57	100.1	1.9	12	2
	5	□	MPS1-1020L-DIN	118	55.6	71	73	116.1	1.9	12	4
	5	●	MPS1-1020L-DIN-C	118	55.6	71	73	116.1	1.9	12	2
10.3	NEW 8	●	MPS1-1020-L8C	167	83.7	118	121	165	1.9	12	2
	3	□	MPS1-1030S-DIN	102	39.4	55	57	100.1	1.9	12	4
	3	●	MPS1-1030S-DIN-C	102	39.4	55	57	100.1	1.9	12	2
	5	□	MPS1-1030L-DIN	118	55.4	71	73	116.1	1.9	12	4
10.4	5	●	MPS1-1030L-DIN-C	118	55.4	71	73	116.1	1.9	12	2
	NEW 8	●	MPS1-1030-L8C	167	84.5	118	121	165	1.9	12	2
	3	□	MPS1-1040S-DIN	102	39.3	55	57	100.1	1.9	12	4
	3	●	MPS1-1040S-DIN-C	102	39.3	55	57	100.1	1.9	12	2
10.5	5	□	MPS1-1040L-DIN	118	55.3	71	73	116.1	1.9	12	4
	5	●	MPS1-1040L-DIN-C	118	55.3	71	73	116.1	1.9	12	2
	NEW 8	●	MPS1-1040-L8C	167	85.4	118	121	165	1.9	12	2
	3	□	MPS1-1050S-DIN	102	39.2	55	57	100.1	1.9	12	4
10.6	3	●	MPS1-1050S-DIN-C	102	39.2	55	57	100.1	1.9	12	2
	5	□	MPS1-1050L-DIN	118	55.2	71	73	116.1	1.9	12	4
	5	●	MPS1-1050L-DIN-C	118	55.2	71	73	116.1	1.9	12	2
	NEW 8	●	MPS1-1050-L8C	167	86.2	118	121	165	1.9	12	2
10.7	3	□	MPS1-1060S-DIN	102	39.0	55	57	100.1	1.9	12	4
	3	●	MPS1-1060S-DIN-C	102	39.0	55	57	100.1	1.9	12	2
	5	□	MPS1-1060L-DIN	118	55.0	71	73	116.1	1.9	12	4
	5	●	MPS1-1060L-DIN-C	118	55.0	71	73	116.1	1.9	12	2
10.8	NEW 8	●	MPS1-1060-L8C	172	87.0	123	126	170	1.9	12	2
	3	□	MPS1-1070S-DIN	102	38.9	55	57	100.1	1.9	12	4
	3	●	MPS1-1070S-DIN-C	102	38.9	55	57	100.1	1.9	12	2
	5	□	MPS1-1070L-DIN	118	54.9	71	73	116.1	1.9	12	4
10.9	5	●	MPS1-1070L-DIN-C	118	54.9	71	73	116.1	1.9	12	2
	NEW 8	●	MPS1-1070-L8C	172	87.8	123	126	170	1.9	12	2
	3	□	MPS1-1080S-DIN	102	38.8	55	57	100	2	12	4
	3	●	MPS1-1080S-DIN-C	102	38.8	55	57	100	2	12	2
11.0	5	□	MPS1-1080L-DIN	118	54.8	71	73	116	2	12	4
	5	●	MPS1-1080L-DIN-C	118	54.8	71	73	116	2	12	2
	NEW 8	●	MPS1-1080-L8C	172	88.6	123	126	170	2	12	2
	3	□	MPS1-1090S-DIN	102	38.6	55	57	100	2	12	4
11.1	3	●	MPS1-1090S-DIN-C	102	38.6	55	57	100	2	12	2
	5	□	MPS1-1090L-DIN	118	54.6	71	73	116	2	12	4
	5	●	MPS1-1090L-DIN-C	118	54.6	71	73	116	2	12	2
	NEW 8	●	MPS1-1090-L8C	172	89.5	123	126	170	2	12	2
11.2	3	□	MPS1-1100S-DIN	102	38.5	55	57	100	2	12	4
	3	●	MPS1-1100S-DIN-C	102	38.5	55	57	100	2	12	2
	5	□	MPS1-1100L-DIN	118	54.5	71	73	116	2	12	4
	5	●	MPS1-1100L-DIN-C	118	54.5	71	73	116	2	12	2
11.3	NEW 8	●	MPS1-1100-L8C	172	90.3	123	126	170	2	12	2
	3	□	MPS1-1110S-DIN	102	38.4	55	57	100	2	12	4
	3	●	MPS1-1110S-DIN-C	102	38.4	55	57	100	2	12	2
	5	□	MPS1-1110L-DIN	118	54.4	71	73	116	2	12	4
11.4	5	●	MPS1-1110L-DIN-C	118	54.4	71	73	116	2	12	2
	NEW 8	●	MPS1-1110-L8C	178	91.1	129	132	176	2	12	2
	3	□	MPS1-1120S-DIN	102	38.2	55	57	100	2	12	4
	3	●	MPS1-1120S-DIN-C	102	38.2	55	57	100	2	12	2
11.5	5	□	MPS1-1120L-DIN	118	54.2	71	73	116	2	12	4
	5	●	MPS1-1120L-DIN-C	118	54.2	71	73	116	2	12	2
	NEW 8	●	MPS1-1120-L8C	178	91.9	129	132	176	2	12	2
	3	□	MPS1-1130S-DIN	102	38.1	55	57	99.9	2.1	12	4
11.6	3	●	MPS1-1130S-DIN-C	102	38.1	55	57	99.9	2.1	12	2
	5	□	MPS1-1130L-DIN	118	54.1	71	73	115.9	2.1	12	4
	5	●	MPS1-1130L-DIN-C	118	54.1	71	73	115.9	2.1	12	2
	NEW 8	●	MPS1-1130-L8C	178	92.7	129	132	176	2.1	12	2
11.7	3	□	MPS1-1140S-DIN	102	38.0	55	57	99.9	2.1	12	4
	3	●	MPS1-1140S-DIN-C	102	38.0	55	57	99.9	2.1	12	2
	5	□	MPS1-1140L-DIN	118	54.0	71	73	115.9	2.1	12	4
	5	●	MPS1-1140L-DIN-C	118	54.0	71	73	115.9	2.1	12	2
11.8	NEW 8	●	MPS1-1140-L8C	178	93.6	129	132	176	2.1	12	2
	3	□	MPS1-1150S-DIN	102	37.8	55	57	99.9	2.1	12	4
	3	●	MPS1-1150S-DIN-C	102	37.8	55	57	99.9	2.1	12	2
	5	□	MPS1-1150L-DIN	118	53.8	71	73	115.9	2.1	12	4
11.9	5	●	MPS1-1150L-DIN-C	118	53.8	71	73	115.9	2.1	12	2
	NEW 8	●	MPS1-1150-L8C	178	94.4	129	132	176	2.1	12	2
	3	□	MPS1-1160S-DIN	102	37.7	55	57	99.9	2.1	12	4
	3	●	MPS1-1160S-DIN-C	102	37.7	55	57	99.9	2.1	12	2
12.0	5	□	MPS1-1160L-DIN	118	53.7	71	73	115.9	2.1	12	4
	5	●	MPS1-1160L-DIN-C	118	53.7	71	73	115.9	2.1	12	2
	NEW 8	●	MPS1-1160-L8C	183	95.2	134	137	181	2.1	12	2
	3	□	MPS1-1170S-DIN	102	37.6	55	57	99.9	2.1	12	4
12.1	3	●	MPS1-1170S-DIN-C	102	37.6	55	57	99.9	2.1	12	2
	5	□	MPS1-1170L-DIN	118	53.6	71	73	115.9	2.1	12	4
	5	●	MPS1-1170L-DIN-C	118	53.6	71	73	115.9	2.1	12	2
	NEW 8	●	MPS1-1170-L8C	183	96.0	134	137	181	2.1	12	2
12.2	3	□	MPS1-1180S-DIN	102	37.4	55	57	99.9	2.1	12	4
	3	●	MPS1-1180S-DIN-C	102	37.4	55	57	99.9	2.1	12	2
	5	□	MPS1-1180L-DIN	118	53.4	71	73	115.9	2.1	12	4
	5	●	MPS1-1180L-DIN-C	118	53.4	71	73	115.9	2.1	12	2
12.3	NEW 8	●	MPS1-1180-L8C	183	96.8	134	137	181	2.1	12	2
	3	□	MPS1-1190S-DIN	102	37.3	55	57	99.8	2.2	12	4
	3	●	MPS1-1190S-DIN-C	102	37.3	55	57	99.8	2.2	12	2
	5	□	MPS1-1190L-DIN	118	53.3	71	73	115.8	2.2	12	4
12.4	5	●	MPS1-1190L-DIN-C	118	53.3	71	73	115.8	2.2	12	2
	NEW 8	●	MPS1-1190-L8C	183	97.7	134	137	181	2.2	12	2
	3	□	MPS1-1200S-DIN	102	37.2	55	57	99.8	2.2	12	4
	3	●	MPS1-1200S-DIN-C	102	37.2	55	57	99.8	2.2	12	2
12.5	5	□	MPS1-1200L-DIN	118	53.2	71	73	115.8	2.2	12	4
	5	●	MPS1-1200L-DIN-C	118	53.2	71	73	115.8	2.2	12	2
	NEW 8	●	MPS1-1200-L8C	183	98.5	134	137	181	2.2	12	2
	3	□	MPS1-1205S-DIN	107	42.1	60	62	104.8	2.2	14	4
12.6	3	●	MPS1-1205S-DIN-C	107	42.1	60	62	104.8	2.2	14	2
	5	□	MPS1-1205L-DIN	124	59.1	77	79	121.8	2.2	14	4
	5	●	MPS1-1205L-DIN-C	124	59.1	77	79	121.8	2.2	14	2
12.7	3	□	MPS1-1210S-DIN	107	42.1	60	62	104.8	2.2	14	4
	3	●	MPS1-1210S-DIN-C	107	42.1	60	62	104.8	2.2	14	2
	5	□	MPS1-1210L-DIN	124	59.1	77	79	121.8	2.2	14	4
	5	●	MPS1-1210L-DIN-C	124	59.1	77	79	121.8	2.2	14	2
12.8	NEW 8	●	MPS1-1210-L8C	190	99.3	140	144	187	2.2	14	2
	3	□	MPS1-1220S-DIN	107	41.9	60	62	104.8	2.2	14	4
	3	●	MPS1-1220S-DIN-C	107	41.9	60	62	104.8	2.2	14	2
	5	□	MPS1-1220L-DIN	124	58.9	77	79	121.8	2.2	14	4
12.9	5	●	MPS1-1220L-DIN-C	124	58.9	77	79	121.8	2.2	14	2
	NEW 8	●	MPS1-1220-L8C	190	100.1	140	144	187	2.2	14	2

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
11.3	3	□	MPS1-1130S-DIN	102	38.1	55	57	99.9	2.1	12	4
	3	●	MPS1-1130S-DIN-C	102	38.1	55	57	99.9	2.1	12	2
	5	□	MPS1-1130L-DIN	118	54.1	71	73	115.9	2.1	12	4
	5	●	MPS1-1130L-DIN-C	118	54.1	71	73	115.9	2.1	12	2
	NEW	8	●	MPS1-1130-L8C	178	92.7	129	132	176	2.1	12
11.4	3	□	MPS1-1140S-DIN	102	38.0	55	57	99.9	2.1	12	4
	3	●	MPS1-1140S-DIN-C	102	38.0	55	57	99.9	2.1	12	2
	5	□	MPS1-1140L-DIN	118	54.0	71	73	115.9	2.1	12	4
	5	●	MPS1-1140L-DIN-C	118	54.0	71	73	115.9	2.1	12	2
	NEW	8	●	MPS1-1140-L8C	178	93.6	129	132	176	2.1	12
11.5	3	□	MPS1-1150S-DIN	102	37.8	55	57	99.9	2.1	12	4
	3	●	MPS1-1150S-DIN-C	102	37.8	55	57	99.9	2.1	12	2
	5	□	MPS1-1150L-DIN	118	53.8	71	73	115.9	2.1	12	4
	5	●	MPS1-1150L-DIN-C	118	53.8	71	73	115.9	2.1	12	2
	NEW	8	●	MPS1-1150-L8C	178	94.4	129	132	176	2.1	12
11.6	3	□	MPS1-1160S-DIN	102	37.7	55	57	99.9	2.1	12	4
	3	●	MPS1-1160S-DIN-C	102	37.7	55	57	99.9	2.1	12	2
	5	□	MPS1-1160L-DIN	118	53.7	71	73	115.9	2.1	12	4
	5	●	MPS1-1160L-DIN-C	118	53.7	71	73	115.9	2.1	12	2
	NEW	8	●	MPS1-1160-L8C	183	95.2	134	137	181	2.1	12
11.7	3	□	MPS1-1170S-DIN	102	37.6	55	57	99.9	2.1	12	4
	3	●	MPS1-1170S-DIN-C	102	37.6	55	57	99.9	2.1	12	2
	5	□	MPS1-1170L-DIN	118	53.6	71	73	115.9	2.1	12	4
	5	●	MPS1-1170L-DIN-C	118	53.6	71	73	115.9	2.1	12	2
	NEW	8	●	MPS1-1170-L8C	183	96.0	134	137	181	2.1	12
11.8	3	□	MPS1-1180S-DIN	102	37.4	55	57	99.9	2.1	12	4
	3	●	MPS1-1180S-DIN-C	102	37.4	55	57	99.9	2.1	12	2
	5	□	MPS1-1180L-DIN	118	53.4	71	73	115.9	2.1	12	4
	5	●	MPS1-1180L-DIN-C	118	53.4	71	73	115.9	2.1	12	2
	NEW	8	●	MPS1-1180-L8C	183	96.8	134	137	181	2.1	12
11.9	3	□	MPS1-1190S-DIN	102	37.3	55	57	99.8	2.2	12	4
	3	●	MPS1-1190S-DIN-C	102	37.3	55	57	99.8	2.2	12	2
	5	□	MPS1-1190L-DIN	118	53.3	71	73	115.8	2.2	12	4
	5	●	MPS1-1190L-DIN-C	118	53.3	71	73	115.8	2.2	12	2
	NEW	8	●	MPS1-1190-L8C	183	97.7	134	137	181	2.2	12
12.0	3	□	MPS1-1200S-DIN	102	37.2	55	57	99.8	2.2	12	4
	3	●	MPS1-1200S-DIN-C	102	37.2	55	57	99.8	2.2	12	2
	5	□	MPS1-1200L-DIN	118	53.2	71	73	115.8	2.2	12	4
	5	●	MPS1-1200L-DIN-C	118	53.2	71	73	115.8	2.2	12	2
	NEW	8	●	MPS1-1200-L8C	183	98.5	134	137	181	2.2	12
12.05	3	□	MPS1-1205S-DIN	107	42.1	60	62	104.8	2.2	14	4
	3	●	MPS1-1205S-DIN-C	107	42.1	60	62	104.8	2.2	14	2
	5	□	MPS1-1205L-DIN	124	59.1	77	79	121.8	2.2	14	4
	5	●	MPS1-1205L-DIN-C	124	59.1	77	79	121.8	2.2	14	2
12.1	3	□	MPS1-1210S-DIN	107	42.1	60	62	104.8	2.2	14	4
	3	●	MPS1-1210S-DIN-C	107	42.1	60	62	104.8	2.2	14	2
	5	□	MPS1-1210L-DIN	124	59.1	77	79	121.8	2.2	14	4
	5	●	MPS1-1210L-DIN-C	124	59.1	77	79	121.8	2.2	14	2
NEW	8	●	MPS1-1210-L8C	190	99.3	140	144	187	2.2	14	2
12.2	3	□	MPS1-1220S-DIN	107	41.9	60	62	104.8	2.2	14	4
	3	●	MPS1-1220S-DIN-C	107	41.9	60	62	104.8	2.2	14	2
	5	□	MPS1-1220L-DIN	124	58.9	77	79	121.8	2.2	14	4
	5	●	MPS1-1220L-DIN-C	124	58.9	77	79	121.8	2.2	14	2
	NEW	8	●	MPS1-1220-L8C	190	100.1	140	144	187	2.2	14

BOHREN (VOLLHARTMETALL)

MPS1

4-Fasenbohrer

DC	Bohrtiefe (mm)	Lager DP1021 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
12.3	3	□	MPS1-1230S-DIN	107	41.8	60	62	104.8	2.2	14	4
	3	●	MPS1-1230S-DIN-C	107	41.8	60	62	104.8	2.2	14	2
	5	□	MPS1-1230L-DIN	124	58.8	77	79	121.8	2.2	14	4
	5	●	MPS1-1230L-DIN-C	124	58.8	77	79	121.8	2.2	14	2
12.4	8	●	MPS1-1230-L8C	190	100.9	140	144	187	2.2	14	2
	3	□	MPS1-1240S-DIN	107	41.7	60	62	104.7	2.3	14	4
	3	●	MPS1-1240S-DIN-C	107	41.7	60	62	104.7	2.3	14	2
	5	□	MPS1-1240L-DIN	124	58.7	77	79	121.7	2.3	14	4
12.5	5	●	MPS1-1240L-DIN-C	124	58.7	77	79	121.7	2.3	14	2
	8	●	MPS1-1240-L8C	190	101.8	140	144	187	2.3	14	2
	3	□	MPS1-1250S-DIN	107	41.5	60	62	104.7	2.3	14	4
	3	●	MPS1-1250S-DIN-C	107	41.5	60	62	104.7	2.3	14	2
12.6	5	□	MPS1-1250L-DIN	124	58.5	77	79	121.7	2.3	14	4
	5	●	MPS1-1250L-DIN-C	124	58.5	77	79	121.7	2.3	14	2
	8	●	MPS1-1250-L8C	190	102.6	140	144	187	2.3	14	2
	3	□	MPS1-1260S-DIN	107	41.4	60	62	104.7	2.3	14	4
12.7	3	●	MPS1-1260S-DIN-C	107	41.4	60	62	104.7	2.3	14	2
	5	□	MPS1-1260L-DIN	124	58.4	77	79	121.7	2.3	14	4
	5	●	MPS1-1260L-DIN-C	124	58.4	77	79	121.7	2.3	14	2
	8	●	MPS1-1260-L8C	195	103.4	145	149	192	2.3	14	2
12.8	3	□	MPS1-1270S-DIN	107	41.3	60	62	104.7	2.3	14	4
	3	●	MPS1-1270S-DIN-C	107	41.3	60	62	104.7	2.3	14	2
	5	□	MPS1-1270L-DIN	124	58.3	77	79	121.7	2.3	14	4
	5	●	MPS1-1270L-DIN-C	124	58.3	77	79	121.7	2.3	14	2
12.9	8	●	MPS1-1270-L8C	195	104.2	145	149	192	2.3	14	2
	3	□	MPS1-1280S-DIN	107	41.1	60	62	104.7	2.3	14	4
	3	●	MPS1-1280S-DIN-C	107	41.1	60	62	104.7	2.3	14	2
	5	□	MPS1-1280L-DIN	124	58.1	77	79	121.7	2.3	14	4
13.0	5	●	MPS1-1280L-DIN-C	124	58.1	77	79	121.7	2.3	14	2
	8	●	MPS1-1280-L8C	195	105.1	145	149	192	2.3	14	2
	3	□	MPS1-1290S-DIN	107	41.0	60	62	104.7	2.3	14	4
	3	●	MPS1-1290S-DIN-C	107	41.0	60	62	104.7	2.3	14	2
13.1	5	□	MPS1-1290L-DIN	124	58.0	77	79	121.7	2.3	14	4
	5	●	MPS1-1290L-DIN-C	124	58.0	77	79	121.7	2.3	14	2
	8	●	MPS1-1290-L8C	195	105.9	145	149	192	2.3	14	2
	3	□	MPS1-1300S-DIN	107	40.9	60	62	104.6	2.4	14	4
13.2	3	●	MPS1-1300S-DIN-C	107	40.9	60	62	104.6	2.4	14	2
	5	□	MPS1-1300L-DIN	124	57.9	77	79	121.6	2.4	14	4
	5	●	MPS1-1300L-DIN-C	124	57.9	77	79	121.6	2.4	14	2
	8	●	MPS1-1300-L8C	195	106.7	145	149	192	2.4	14	2
13.3	3	□	MPS1-1310S-DIN	107	40.7	60	62	104.6	2.4	14	4
	3	●	MPS1-1310S-DIN-C	107	40.7	60	62	104.6	2.4	14	2
	5	□	MPS1-1310L-DIN	124	57.7	77	79	121.6	2.4	14	4
	5	●	MPS1-1310L-DIN-C	124	57.7	77	79	121.6	2.4	14	2
13.4	8	●	MPS1-1310-L8C	201	107.5	151	155	198	2.4	14	2
	3	□	MPS1-1320S-DIN	107	40.6	60	62	104.6	2.4	14	4
	3	●	MPS1-1320S-DIN-C	107	40.6	60	62	104.6	2.4	14	2
	5	□	MPS1-1320L-DIN	124	57.6	77	79	121.6	2.4	14	4
13.5	5	●	MPS1-1320L-DIN-C	124	57.6	77	79	121.6	2.4	14	2
	8	●	MPS1-1320-L8C	201	108.3	151	155	198	2.4	14	2
	3	□	MPS1-1330S-DIN	107	40.5	60	62	104.6	2.4	14	4
	3	●	MPS1-1330S-DIN-C	107	40.5	60	62	104.6	2.4	14	2
13.6	5	□	MPS1-1330L-DIN	124	57.5	77	79	121.6	2.4	14	4
	5	●	MPS1-1330L-DIN-C	124	57.5	77	79	121.6	2.4	14	2
	8	●	MPS1-1330-L8C	201	109.2	151	155	198	2.4	14	2
	3	□	MPS1-1340S-DIN	107	40.3	60	62	104.6	2.4	14	4
13.7	3	●	MPS1-1340S-DIN-C	107	40.3	60	62	104.6	2.4	14	2
	5	□	MPS1-1340L-DIN	124	57.3	77	79	121.6	2.4	14	4
	5	●	MPS1-1340L-DIN-C	124	57.3	77	79	121.6	2.4	14	2
	8	●	MPS1-1340-L8C	201	110.0	151	155	198	2.4	14	2
13.8	3	□	MPS1-1350S-DIN	107	40.2	60	62	104.5	2.5	14	4
	3	●	MPS1-1350S-DIN-C	107	40.2	60	62	104.5	2.5	14	2
	5	□	MPS1-1350L-DIN	124	57.2	77	79	121.5	2.5	14	4
	5	●	MPS1-1350L-DIN-C	124	57.2	77	79	121.5	2.5	14	2
13.9	8	●	MPS1-1350-L8C	201	110.8	151	155	198	2.5	14	2
	3	□	MPS1-1360S-DIN	107	40.1	60	62	104.5	2.5	14	4
	3	●	MPS1-1360S-DIN-C	107	40.1	60	62	104.5	2.5	14	2
	5	□	MPS1-1360L-DIN	124	57.1	77	79	121.5	2.5	14	4
14.0	5	●	MPS1-1360L-DIN-C	124	57.1	77	79	121.5	2.5	14	2
	8	●	MPS1-1360-L8C	206	111.6	156	160	203	2.5	14	2
	3	□	MPS1-1370S-DIN	107	39.9	60	62	104.5	2.5	14	4
	3	●	MPS1-1370S-DIN-C	107	39.9	60	62	104.5	2.5	14	2
14.1	5	□	MPS1-1370L-DIN	124	56.9	77	79	121.5	2.5	14	4
	5	●	MPS1-1370L-DIN-C	124	56.9	77	79	121.5	2.5	14	2
	8	●	MPS1-1370-L8C	206	112.4	156	160	203	2.5	14	2
	3	□	MPS1-1380S-DIN	107	39.8	60	62	104.5	2.5	14	4
14.2	3	●	MPS1-1380S-DIN-C	107	39.8	60	62	104.5	2.5	14	2
	5	□	MPS1-1380L-DIN	124	56.8	77	79	121.5	2.5	14	4
	5	●	MPS1-1380L-DIN-C	124	56.8	77	79	121.5	2.5	14	2
	8	●	MPS1-1380-L8C	206	113.3	156	160	203	2.5	14	2
14.3	3	□	MPS1-1390S-DIN	107	39.7	60	62	104.5	2.5	14	4
	3	●	MPS1-1390S-DIN-C	107	39.7	60	62	104.5	2.5	14	2
	5	□	MPS1-1390L-DIN	124	56.7	77	79	121.5	2.5	14	4
	5	●	MPS1-1390L-DIN-C	124	56.7	77	79	121.5	2.5	14	2
14.4	8	●	MPS1-1390-L8C	206	114.1	156	160	203	2.5	14	2
	3	□	MPS1-1400S-DIN	107	39.5	60	62	104.5	2.5	14	4
	3	●	MPS1-1400S-DIN-C	107	39.5	60	62	104.5	2.5	14	2
	5	□	MPS1-1400L-DIN	124	56.5	77	79	121.5	2.5	14	4
14.5	5	●	MPS1-1400L-DIN-C	124	56.5	77	79	121.5	2.5	14	2
	8	●	MPS1-1400-L8C	206	114.9	156	160	203	2.5	14	2
	3	□	MPS1-1420S-DIN	114	43.3	64	66	111.4	2.6	16	4
	3	●	MPS1-1420S-DIN-C	114	43.3	64	66	111.4	2.6	16	2
14.6	5	□	MPS1-1420L-DIN	132	61.3	82	84	129.4	2.6	16	4
	5	●	MPS1-1420L-DIN-C	132	61.3	82	84	129.4	2.6	16	2
	3	□	MPS1-1450S-DIN	114	42.9	64	66	111.4	2.6	16	4
	3	●	MPS1-1450S-DIN-C	114	42.9	64	66	111.4	2.6	16	2
14.7	5	□	MPS1-1450L-DIN	132	60.9	82	84	129.4	2.6	16	4
	5	●	MPS1-1450L-DIN-C	132	60.9	82	84	129.4	2.6	16	2
	3	□	MPS1-1500S-DIN	114	42.2	64	66	111.3	2.7	16	4
	3	●	MPS1-1500S-DIN-C	114	42.2	64	66	111.3	2.7	16	2
14.8	5	□	MPS1-1500L-DIN	132	60.2	82	84	129.3	2.7	16	4
	5	●	MPS1-1500L-DIN-C	132	60.2	82	84	129.3	2.7	16	2
	3	□	MPS1-1550S-DIN	115	41.6	65	67	112.2	2.8	16	4
	3	●	MPS1-1550S-DIN-C	115	41.6	65	67	112.2	2.8	16	2
14.9	5	□	MPS1-1550L-DIN	133	59.6	83	85	130.2	2.8	16	4
	5	●	MPS1-1550L-DIN-C	133	59.6	83	85	130.2	2.8	16	2
	3	□	MPS1-1600S-DIN	115	40.9	65	67	112.1	2.9	16	4
	3	●	MPS1-1600S-DIN-C	115	40.9	65	67	112.1	2.9	16	2
15.0	5	□	MPS1-1600L-DIN	133	58.9	83	85	130.1	2.9	16	4
	5	●	MPS1-1600L-DIN-C	133	58.9	83	85	130.1	2.9	16	2
	3	□	MPS1-1600S-DIN	115	40.9	65	67	112.1	2.9	16	4
	3	●	MPS1-1600S-DIN-C	115	40.9	65	67	112.1	2.9	16	2

DC

DC	Bohrtiefe (mm)	Lager DP1021	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
16.5	3	□	MPS1-1650S-DIN	123	48.3	73	75	120	3	18	4
	3	●	MPS1-1650S-DIN-C	123	48.3	73	75	120	3	18	2
	5	□	MPS1-1650L-DIN	143	68.3	93	95	140	3	18	4
	5	●	MPS1-1650L-DIN-C	143	68.3	93	95	140	3	18	2
17.0	3	□	MPS1-1700S-DIN	123	47.6	73	75	119.9	3.1	18	4
	3	●	MPS1-1700S-DIN-C	123	47.6	73	75	119.9	3.1	18	2
	5	□	MPS1-1700L-DIN	143	67.6	93	95	139.9	3.1	18	4
	5	●	MPS1-1700L-DIN-C	143	67.6	93	95	139.9	3.1	18	2
17.5	3	□	MPS1-1750S-DIN	123	46.9	73	75	119.8	3.2	18	4
	3	●	MPS1-1750S-DIN-C	123	46.9	73	75	119.8	3.2	18	2
	5	□	MPS1-1750L-DIN	143	66.9	93	95	139.8	3.2	18	4
	5	●	MPS1-1750L-DIN-C	143	66.9	93	95	139.8	3.2	18	2
18.0	3	□	MPS1-1800S-DIN	123	46.3	73	75	119.7	3.3	18	4
	3	●	MPS1-1800S-DIN-C	123	46.3	73	75	119.7	3.3	18	2
	5	□	MPS1-1800L-DIN	143	66.3	93	95	139.7	3.3	18	4
	5	●	MPS1-1800L-DIN-C	143	66.3	93	95	139.7	3.3	18	2

DC	Bohrtiefe (mm)	Lager DP1021	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
18.5	3	□	MPS1-1850S-DIN	131	51.6	79	81	127.6	3.4	20	4
	3	●	MPS1-1850S-DIN-C	131	51.6	79	81	127.6	3.4	20	2
	5	□	MPS1-1850L-DIN	153	73.6	101	103	149.6	3.4	20	4
	5	●	MPS1-1850L-DIN-C	153	73.6	101	103	149.6	3.4	20	2
19.0	3	□	MPS1-1900S-DIN	131	51.0	79	81	127.5	3.5	20	4
	3	●	MPS1-1900S-DIN-C	131	51.0	79	81	127.5	3.5	20	2
	5	□	MPS1-1900L-DIN	153	73.0	101	103	149.5	3.5	20	4
	5	●	MPS1-1900L-DIN-C	153	73.0	101	103	149.5	3.5	20	2
19.5	3	□	MPS1-1950S-DIN	131	50.3	79	81	127.5	3.5	20	4
	3	●	MPS1-1950S-DIN-C	131	50.3	79	81	127.5	3.5	20	2
	5	□	MPS1-1950L-DIN	153	72.3	101	103	149.5	3.5	20	4
	5	●	MPS1-1950L-DIN-C	153	72.3	101	103	149.5	3.5	20	2
20.0	3	□	MPS1-2000S-DIN	131	49.6	79	81	127.4	3.6	20	4
	3	●	MPS1-2000S-DIN-C	131	49.6	79	81	127.4	3.6	20	2
	5	□	MPS1-2000L-DIN	153	71.6	101	103	149.4	3.6	20	4
	5	●	MPS1-2000L-DIN-C	153	71.6	101	103	149.4	3.6	20	2

SCHNITTDATENEMPFEHLUNGEN

MPS1 (3xD, 5xD)

Werkstoff		Bohrer Durchm.	ϕ 3		ϕ 4		ϕ 5	
		Bedingung Härte	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P	Allg. Baustahl	≤180HB	100 (60–150)	0.15 (0.1–0.2)	120 (70–170)	0.19 (0.12–0.25)	130 (80–190)	0.23 (0.15–0.3)
	C-Stahl Leg. Stahl	180–250HB	90 (60–140)	0.15 (0.1–0.19)	100 (70–160)	0.18 (0.12–0.24)	110 (80–180)	0.22 (0.15–0.29)
		280–350HB	80 (50–110)	0.12 (0.1–0.14)	90 (60–120)	0.15 (0.12–0.18)	90 (70–140)	0.19 (0.15–0.22)
M	Rostfreier Stahl	—	40 (20–50)	0.08 (0.06–0.12)	40 (30–50)	0.09 (0.07–0.13)	40 (30–50)	0.11 (0.08–0.16)
K	Guss	≤350MPa	90 (60–100)	0.15 (0.1–0.2)	100 (70–110)	0.21 (0.12–0.3)	110 (80–130)	0.25 (0.15–0.35)
	Duktiler Guss	≤450MPa	80 (50–90)	0.12 (0.08–0.16)	90 (60–100)	0.17 (0.1–0.24)	90 (70–120)	0.21 (0.14–0.28)
		≤800MPa	60 (40–80)	0.09 (0.06–0.12)	70 (50–90)	0.13 (0.08–0.18)	70 (60–100)	0.17 (0.12–0.22)

Werkstoff		Bohrer Durchm.	ϕ 6		ϕ 8		ϕ 10	
		Bedingung Härte	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P	Allg. Baustahl	≤180HB	140 (90–210)	0.27 (0.18–0.35)	160 (100–240)	0.3 (0.2–0.4)	170 (100–250)	0.33 (0.2–0.45)
	C-Stahl Leg. Stahl	180–250HB	120 (90–190)	0.26 (0.18–0.33)	140 (100–220)	0.29 (0.2–0.38)	150 (100–230)	0.32 (0.2–0.43)
		280–350HB	100 (80–150)	0.22 (0.18–0.25)	120 (90–170)	0.24 (0.2–0.27)	130 (90–180)	0.25 (0.2–0.3)
M	Rostfreier Stahl	—	50 (40–70)	0.14 (0.11–0.18)	50 (40–70)	0.15 (0.12–0.2)	50 (40–70)	0.16 (0.12–0.22)
K	Guss	≤350MPa	120 (90–140)	0.29 (0.18–0.4)	140 (100–160)	0.33 (0.2–0.45)	150 (100–170)	0.35 (0.2–0.5)
	Duktiler Guss	≤450MPa	100 (80–130)	0.25 (0.16–0.34)	120 (90–150)	0.28 (0.18–0.38)	130 (90–160)	0.29 (0.18–0.4)
		≤800MPa	80 (70–110)	0.2 (0.14–0.26)	100 (80–130)	0.23 (0.16–0.3)	110 (80–140)	0.24 (0.16–0.32)

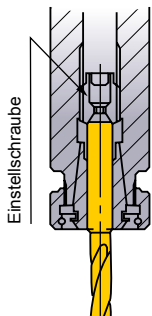
Werkstoff		Bohrer Durchm.	ϕ 12		ϕ 16		ϕ 20	
		Bedingung Härte	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P	Allg. Baustahl	≤180HB	180 (100–250)	0.35 (0.2–0.5)	180 (100–250)	0.38 (0.2–0.55)	180 (100–250)	0.4 (0.2–0.6)
	C-Stahl Leg. Stahl	180–250HB	160 (100–230)	0.34 (0.2–0.48)	160 (100–230)	0.36 (0.2–0.52)	160 (100–230)	0.39 (0.2–0.57)
		280–350HB	140 (90–180)	0.27 (0.2–0.34)	140 (90–180)	0.28 (0.2–0.36)	140 (90–180)	0.3 (0.2–0.4)
M	Rostfreier Stahl	—	50 (40–70)	0.18 (0.14–0.24)	50 (40–70)	0.19 (0.15–0.26)	50 (40–70)	0.21 (0.16–0.28)
K	Guss	≤350MPa	160 (100–170)	0.4 (0.2–0.6)	160 (100–170)	0.43 (0.2–0.65)	160 (100–170)	0.45 (0.2–0.7)
	Duktiler Guss	≤450MPa	140 (90–160)	0.31 (0.18–0.44)	140 (90–160)	0.33 (0.18–0.48)	140 (90–160)	0.35 (0.18–0.52)
		≤800MPa	110 (80–140)	0.25 (0.16–0.34)	110 (80–140)	0.27 (0.16–0.38)	110 (80–140)	0.28 (0.16–0.4)

MPS1

4-Fasenbohrer

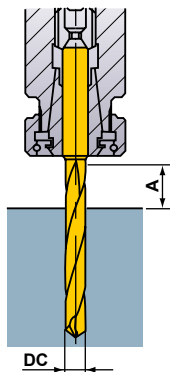
EINSATZ HINWEISE

Bohrer Aufnahme



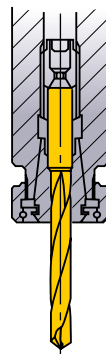
Präzisionsspannzangen können verwendet werden.

Max. Bohrtiefe



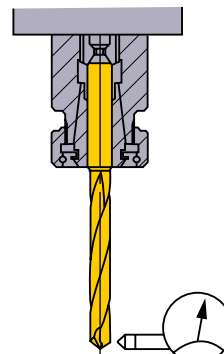
$$A \geq DC \times 1.5$$

Bohrer Einstellung



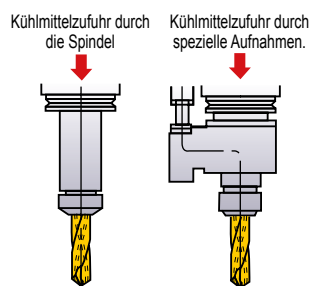
Nicht auf den Nuten spannen.

Rundlauftoleranz



Rundlaufabweichung $\leq 0.03\text{mm}$

Interne Kühlmittelzufuhr

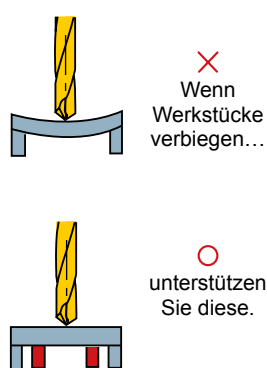


Kühlmitteldruck liegt bei etwa: 0.5—1MPa ($< \phi 5$: 2—3MPa).

Handling mit Kühlmittel

- 1) Kleine Partikel können die Kühlmittelbohrungen verstopfen. Verwenden Sie daher bitte einen Kühlmittelfilter.
- 2) Stark verschmutztes Kühlmittel reduziert den Spänefluss. Wir empfehlen ein regelmäßiges Wechseln des Kühlmittels. Bitte prüfen Sie eine einwandfreie Kühlmittelzufuhr!

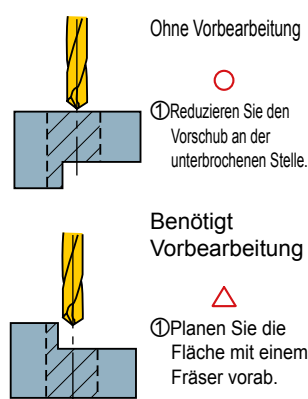
Dünne Werkstücke



Wenn Werkstücke verbiegen...

unterstützen Sie diese.

Unterbrochene Bearbeitung



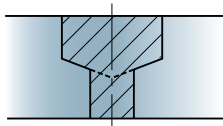
Ohne Vorbearbeitung

① Reduzieren Sie den Vorschub an der unterbrochenen Stelle.

Benötigt Vorbearbeitung

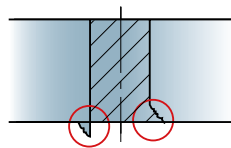
① Planen Sie die Fläche mit einem Fräser vorab.

Stufenbohrungen



- ① Geteilt in 2 Prozesse.
 - ② Bohren Sie das größere Loch zuerst.
- ★ Auf Anfrage bieten wir auch Stufenbohrer an, die Stufenbohrungen in einem Prozess herstellen können.

Gratbildung oder Ausbrüche am Werkstück



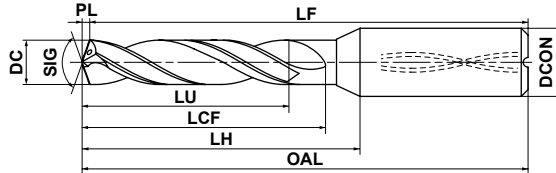
- ① Reduzieren Sie den Vorschub um ca. 50% beim Austritt.
- ② Schleifen Sie eine 45° Fase an den Bohrer.
- ③ Tauschen Sie den Bohrer durch einen anderen mit größerem Spitzenwinkel.

- Für Bohrtiefen von $l/d3 - l/d40$.
- VHM-Bohrer mit 4 Führungsfasen für hohe Bohrlochqualitäten.
- Alle Bohrer mit interner Kühlmittelzufuhr.



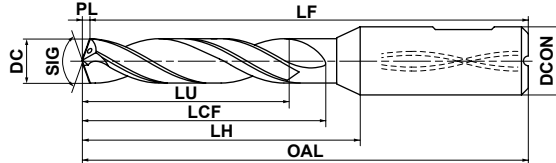
	$3 \leq D_1 \leq 6$	$6 < D_1 \leq 10$	$10 < D_1 \leq 18$	$18 < D_1 \leq 20$
DIN-Typ	+0.010 -0.002	+0.010 -0.005	+0.005 -0.013	+0.005 -0.016
Andere	0 -0.012	0 -0.015	0 -0.018	0 -0.021
h6	0 -0.008	0 -0.009	0 -0.011	0 -0.013

Typ 1 Zylinderschaft mit konischem Hinterschliff



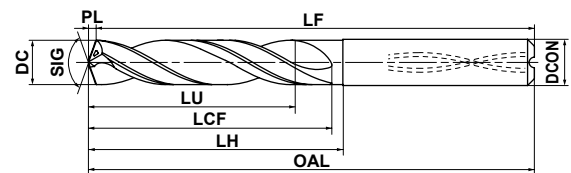
MPS----S/L-DIN-C

Typ 3 Whistle Notch Schaft mit konischem Hinterschliff



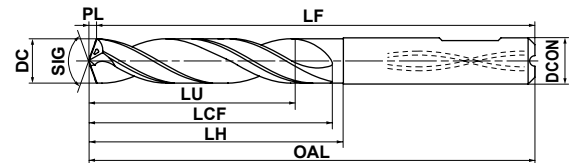
MPS----S/L-DIN (Whistle notch)

Typ 2 Zylinderschaft



MPS----S/L-DIN-C

Typ 4 Whistle Notch Schaft



MPS----S/L-DIN (Whistle notch)

DC (mm)	Bohrtiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
3.0	3	●	MPS0300S-DIN	62	15.0	20	25	61.0	0.5	6	3
	3	●	MPS0300S-DIN-C	62	15.0	20	25	61.0	0.5	6	1
	5	●	MPS0300L-DIN	66	23.0	28	29	65.0	0.5	6	3
	5	●	MPS0300L-DIN-C	66	23.0	28	29	65.0	0.5	6	1
	8	●	MPS0300-L8C	74	24.5	34	37	73.0	0.5	6	1
	10	●	MPS0300-L10C	80	30.5	40	43	79.0	0.5	6	1
	12	●	MPS0300-L12C	86	36.5	46	49	85.0	0.5	6	1
	15	●	MPS0300-L15C	95	45.5	55	58	94.0	0.5	6	1
	20	●	MPS0300-L20C	110	60.5	70	73	109.0	0.5	6	1
	25	●	MPS0300-L25C	125	75.5	85	88	124.0	0.5	6	1
	30	●	MPS0300-L30C	140	90.5	100	103	139.0	0.5	6	1
	35	□	MPS0300-L35C	159	105.5	116	122	158.0	0.5	6	1
3.05	40	●	MPS0300-L40C	174	120.5	131	137	173.0	0.5	6	1
	3	●	MPS0305S-DIN	62	15.0	20	25	61.0	0.6	6	3
	3	●	MPS0305S-DIN-C	62	15.0	20	25	61.0	0.6	6	1
	5	●	MPS0305L-DIN	66	23.0	28	29	65.0	0.6	6	3
3.1	5	●	MPS0305L-DIN-C	66	23.0	28	29	65.0	0.6	6	1
	3	●	MPS0310S-DIN	62	14.9	20	25	61.0	0.6	6	3
	3	●	MPS0310S-DIN-C	62	14.9	20	25	61.0	0.6	6	1
	5	●	MPS0310L-DIN	66	22.9	28	29	65.0	0.6	6	3
	5	●	MPS0310L-DIN-C	66	22.9	28	29	65.0	0.6	6	1
	8	●	MPS0310-L8C	80	25.4	40	43	79.0	0.6	6	1
	10	□	MPS0310-L10C	87	31.6	47	50	86.0	0.6	6	1
	12	●	MPS0310-L12C	94	37.8	54	57	93.0	0.6	6	1
	15	●	MPS0310-L15C	104	47.1	64	67	103.0	0.6	6	1
	20	□	MPS0310-L20C	122	62.6	82	85	121.0	0.6	6	1
	25	□	MPS0310-L25C	139	78.1	99	102	138.0	0.6	6	1
	30	□	MPS0310-L30C	157	93.6	117	120	156.0	0.6	6	1
3.3	35	□	MPS0310-L35C	176	109.1	126	139	175.0	0.6	6	1
	40	□	MPS0310-L40C	191	124.6	141	154	190.0	0.6	6	1

DC (mm)	Bohrtiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
3.2	3	●	MPS0320S-DIN	62	14.8	20	25	61.0	0.6	6	3
	3	●	MPS0320S-DIN-C	62	14.8	20	25	61.0	0.6	6	1
	5	●	MPS0320L-DIN	66	22.8	28	29	65.0	0.6	6	3
	5	●	MPS0320L-DIN-C	66	22.8	28	29	65.0	0.6	6	1
	8	●	MPS0320-L8C	80	26.2	40	43	79.0	0.6	6	1
	10	□	MPS0320-L10C	87	32.6	47	50	86.0	0.6	6	1
	12	●	MPS0320-L12C	94	39.0	54	57	93.0	0.6	6	1
	15	●	MPS0320-L15C	104	48.6	64	67	103.0	0.6	6	1
	20	□	MPS0320-L20C	122	64.6	82	85	121.0	0.6	6	1
	25	□	MPS0320-L25C	139	80.6	99	102	138.0	0.6	6	1
	30	□	MPS0320-L30C	157	96.6	117	120	156.0	0.6	6	1
	35	□	MPS0320-L35C	176	112.6	126	139	175.0	0.6	6	1
3.3	40	□	MPS0320-L40C	191	128.6	141	154	190.0	0.6	6	1
	3	●	MPS0330S-DIN	62	14.7	20	25	61.0	0.6	6	3
	3	●	MPS0330S-DIN-C	62	14.7	20	25	61.0	0.6	6	1
	5	●	MPS0330L-DIN	66	22.7	28	29	65.0	0.6	6	3
	5	●	MPS0330L-DIN-C	66	22.7	28	29	65.0	0.6	6	1
	8	●	MPS0330-L8C	80	27.0	40	43	79.0	0.6	6	1
	10	□	MPS0330-L10C	87	33.6	47	50	86.0	0.6	6	1
	12	●	MPS0330-L12C	94	40.2	54	57	93.0	0.6	6	1
3.3	15	●	MPS0330-L15C	104	50.1	64	67	103.0	0.6	6	1
	20	□	MPS0330-L20C	122	66.6	82	85	121.0	0.6	6	1
	25	□	MPS0330-L25C	139	83.1	99	102	138.0	0.6	6	1
	30	●	MPS0330-L30C	157	99.6	117	120	156.0	0.6	6	1
	35	□	MPS0330-L35C	176	116.1	135	139	175.0	0.6	6	1
	40	□	MPS0330-L40C	191	132.6	151	154	190.0	0.6	6	1

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
3.4	3	●	MPS0340S-DIN	62	14.5	20	25	61.0	0.6	6	3
	3	●	MPS0340S-DIN-C	62	14.5	20	25	61.0	0.6	6	1
	5	●	MPS0340L-DIN	66	22.5	28	29	65.0	0.6	6	3
	5	●	MPS0340L-DIN-C	66	22.5	28	29	65.0	0.6	6	1
	8	●	MPS0340-L8C	80	27.8	40	43	79.0	0.6	6	1
	10	□	MPS0340-L10C	87	34.6	47	50	86.0	0.6	6	1
	12	●	MPS0340-L12C	94	41.4	54	57	93.0	0.6	6	1
	15	●	MPS0340-L15C	104	51.6	64	67	103.0	0.6	6	1
	20	□	MPS0340-L20C	122	68.6	82	85	121.0	0.6	6	1
	25	□	MPS0340-L25C	139	85.6	99	102	138.0	0.6	6	1
	30	□	MPS0340-L30C	157	102.6	117	120	156.0	0.6	6	1
	35	□	MPS0340-L35C	176	119.6	135	139	175.0	0.6	6	1
	40	□	MPS0340-L40C	191	136.6	151	154	190.0	0.6	6	1
3.5	3	●	MPS0350S-DIN	62	14.4	20	25	61.0	0.6	6	3
	3	●	MPS0350S-DIN-C	62	14.4	20	25	61.0	0.6	6	1
	5	●	MPS0350L-DIN	66	22.4	28	29	65.0	0.6	6	3
	5	●	MPS0350L-DIN-C	66	22.4	28	29	65.0	0.6	6	1
	8	●	MPS0350-L8C	80	28.6	40	43	79.0	0.6	6	1
	10	□	MPS0350-L10C	87	35.6	47	50	86.0	0.6	6	1
	12	●	MPS0350-L12C	94	42.6	54	57	93.0	0.6	6	1
	15	●	MPS0350-L15C	104	53.1	64	67	103.0	0.6	6	1
	20	●	MPS0350-L20C	122	70.6	82	85	121.0	0.6	6	1
	25	□	MPS0350-L25C	139	88.1	99	102	138.0	0.6	6	1
	30	□	MPS0350-L30C	157	105.6	117	120	156.0	0.6	6	1
	35	□	MPS0350-L35C	176	123.1	135	139	175.0	0.6	6	1
	40	●	MPS0350-L40C	191	140.6	151	154	190.0	0.6	6	1
3.6	3	●	MPS0360S-DIN	62	14.3	20	25	61.0	0.7	6	3
	3	●	MPS0360S-DIN-C	62	14.3	20	25	61.0	0.7	6	1
	5	●	MPS0360L-DIN	66	22.3	28	29	65.0	0.7	6	3
	5	●	MPS0360L-DIN-C	66	22.3	28	29	65.0	0.7	6	1
	8	●	MPS0360-L8C	85	29.5	45	48	84.0	0.7	6	1
	10	□	MPS0360-L10C	93	36.7	53	56	92.0	0.7	6	1
	12	●	MPS0360-L12C	101	43.9	61	64	100.0	0.7	6	1
	15	●	MPS0360-L15C	113	54.7	73	76	112.0	0.7	6	1
	20	□	MPS0360-L20C	133	72.7	93	96	132.0	0.7	6	1
	25	□	MPS0360-L25C	153	90.7	113	116	152.0	0.7	6	1
	30	□	MPS0360-L30C	173	108.7	133	136	172.0	0.7	6	1
	35	□	MPS0360-L35C	193	126.7	146	156	192.0	0.7	6	1
	40	□	MPS0360-L40C	213	144.7	163	176	212.0	0.7	6	1
3.7	3	●	MPS0370S-DIN	62	14.1	20	25	61.0	0.7	6	3
	3	●	MPS0370S-DIN-C	62	14.1	20	25	61.0	0.7	6	1
	5	●	MPS0370L-DIN	66	22.1	28	29	65.0	0.7	6	3
	5	●	MPS0370L-DIN-C	66	22.1	28	29	65.0	0.7	6	1
	8	●	MPS0370-L8C	85	30.3	45	48	84.0	0.7	6	1
	10	□	MPS0370-L10C	93	37.7	53	56	92.0	0.7	6	1
	12	●	MPS0370-L12C	101	45.1	61	64	100.0	0.7	6	1
	15	●	MPS0370-L15C	113	56.2	73	76	112.0	0.7	6	1
	20	□	MPS0370-L20C	133	74.7	93	96	132.0	0.7	6	1
	25	□	MPS0370-L25C	153	93.2	113	116	152.0	0.7	6	1
	30	□	MPS0370-L30C	173	111.7	133	136	172.0	0.7	6	1
	35	□	MPS0370-L35C	193	130.2	146	156	192.0	0.7	6	1
	40	□	MPS0370-L40C	213	148.7	163	176	212.0	0.7	6	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
3.8	3	●	MPS0380S-DIN	66	18.0	24	29	65.0	0.7	6	3
	3	●	MPS0380S-DIN-C	66	18.0	24	29	65.0	0.7	6	1
	5	●	MPS0380L-DIN	74	30.0	36	37	73.0	0.7	6	3
	5	●	MPS0380L-DIN-C	74	30.0	36	37	73.0	0.7	6	1
	8	●	MPS0380-L8C	85	31.1	45	48	84.0	0.7	6	1
	10	□	MPS0380-L10C	93	38.7	53	56	92.0	0.7	6	1
	12	●	MPS0380-L12C	101	46.3	61	64	100.0	0.7	6	1
	15	●	MPS0380-L15C	113	57.7	73	76	112.0	0.7	6	1
	20	□	MPS0380-L20C	133	76.7	93	96	132.0	0.7	6	1
	25	□	MPS0380-L25C	153	95.7	113	116	152.0	0.7	6	1
	30	□	MPS0380-L30C	173	114.7	133	136	172.0	0.7	6	1
	35	□	MPS0380-L35C	193	133.7	153	156	192.0	0.7	6	1
	40	□	MPS0380-L40C	213	152.7	173	176	212.0	0.7	6	1
3.9	3	●	MPS0390S-DIN	66	17.9	24	29	65.0	0.7	6	3
	3	●	MPS0390S-DIN-C	66	17.9	24	29	65.0	0.7	6	1
	5	●	MPS0390L-DIN	74	29.9	36	37	73.0	0.7	6	3
	5	●	MPS0390L-DIN-C	74	29.9	36	37	73.0	0.7	6	1
	8	●	MPS0390-L8C	85	31.9	45	48	84.0	0.7	6	1
	10	□	MPS0390-L10C	93	39.7	53	56	92.0	0.7	6	1
	12	●	MPS0390-L12C	101	47.5	61	64	100.0	0.7	6	1
	15	●	MPS0390-L15C	113	59.2	73	76	112.0	0.7	6	1
	20	□	MPS0390-L20C	133	78.7	93	96	132.0	0.7	6	1
	25	□	MPS0390-L25C	153	98.2	113	116	152.0	0.7	6	1
	30	□	MPS0390-L30C	173	117.7	133	136	172.0	0.7	6	1
	35	□	MPS0390-L35C	193	137.2	153	156	192.0	0.7	6	1
	40	□	MPS0390-L40C	213	156.7	173	176	212.0	0.7	6	1
4.0	3	●	MPS0400S-DIN	66	17.7	24	29	65.0	0.7	6	3
	3	●	MPS0400S-DIN-C	66	17.7	24	29	65.0	0.7	6	1
	5	●	MPS0400L-DIN	74	29.7	36	37	73.0	0.7	6	3
	5	●	MPS0400L-DIN-C	74	29.7	36	37	73.0	0.7	6	1
	8	●	MPS0400-L8C	85	32.7	45	48	84.0	0.7	6	1
	10	●	MPS0400-L10C	93	40.7	53	56	92.0	0.7	6	1
	12	●	MPS0400-L12C	101	48.7	61	64	100.0	0.7	6	1
	15	●	MPS0400-L15C	113	60.7	73	76	112.0	0.7	6	1
	20	●	MPS0400-L20C	133	80.7	93	96	132.0	0.7	6	1
	25	●	MPS0400-L25C	153	100.7	113	116	152.0	0.7	6	1
	30	●	MPS0400-L30C	173	120.7	133	136	172.0	0.7	6	1
	35	□	MPS0400-L35C	193	140.7	153	156	192.0	0.7	6	1
	40	●	MPS0400-L40C	213	160.7	173	176	212.0	0.7	6	1
4.05	3	●	MPS0405S-DIN	66	17.7	24	29	65.0	0.7	6	3
	3	●	MPS0405S-DIN-C	66	17.7	24	29	65.0	0.7	6	1
	5	●	MPS0405L-DIN	74	29.7	36	37	73.0	0.7	6	3
	5	●	MPS0405L-DIN-C	74	29.7	36	37	73.0	0.7	6	1
4.1	3	●	MPS0410S-DIN	66	17.6	24	29	65.0	0.7	6	3
	3	●	MPS0410S-DIN-C	66	17.6	24	29	65.0	0.7	6	1
	5	●	MPS0410L-DIN	74	29.6	36	37	73.0	0.7	6	3
	5	●	MPS0410L-DIN-C	74	29.6	36	37	73.0	0.7	6	1
	8	●	MPS0410-L8C	91	33.5	51	54	90.0	0.7	6	1
	10	□	MPS0410-L10C	100	41.7	60	63	99.0	0.7	6	1
	12	●	MPS0410-L12C	109	49.9	69	72	108.0	0.7	6	1
	15	●	MPS0410-L15C	122	62.2	82	85	121.0	0.7	6	1
	20	□	MPS0410-L20C	145	82.7	105	108	144.0	0.7	6	1
	25	□	MPS0410-L25C	167	103.2	127	130	166.0	0.7	6	1
	30	□	MPS0410-L30C	190	123.7	150	153	189.0	0.7	6	1
	35	□	MPS0410-L35C	212	144.2	166	175	211.0	0.7	6	1
	40	□	MPS0410-L40C	236	164.7	186	199	235.0	0.7	6	1

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

DC	Bohrtiefe (mm)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
4.2	3	●	MPS0420S-DIN	66	17.5	24	29	65.0	0.8	6	3
	3	●	MPS0420S-DIN-C	66	17.5	24	29	65.0	0.8	6	1
	5	●	MPS0420L-DIN	74	29.5	36	37	73.0	0.8	6	3
	5	●	MPS0420L-DIN-C	74	29.5	36	37	73.0	0.8	6	1
	8	●	MPS0420-L8C	91	34.4	51	54	90.0	0.8	6	1
	10	□	MPS0420-L10C	100	42.8	60	63	99.0	0.8	6	1
	12	●	MPS0420-L12C	109	51.2	69	72	108.0	0.8	6	1
	15	●	MPS0420-L15C	122	63.8	82	85	121.0	0.8	6	1
	20	□	MPS0420-L20C	145	84.8	105	108	144.0	0.8	6	1
	25	□	MPS0420-L25C	167	105.8	127	130	166.0	0.8	6	1
	30	□	MPS0420-L30C	190	126.8	150	153	189.0	0.8	6	1
	35	●	MPS0420-L35C	212	147.8	166	175	211.0	0.8	6	1
	40	●	MPS0420-L40C	236	168.8	186	199	235.0	0.8	6	1
4.3	3	●	MPS0430S-DIN	66	17.3	24	29	65.0	0.8	6	3
	3	●	MPS0430S-DIN-C	66	17.3	24	29	65.0	0.8	6	1
	5	●	MPS0430L-DIN	74	29.3	36	37	73.0	0.8	6	3
	5	●	MPS0430L-DIN-C	74	29.3	36	37	73.0	0.8	6	1
	8	●	MPS0430-L8C	91	35.2	51	54	90.0	0.8	6	1
	10	□	MPS0430-L10C	100	43.8	60	63	99.0	0.8	6	1
	12	●	MPS0430-L12C	109	52.4	69	72	108.0	0.8	6	1
	15	●	MPS0430-L15C	122	65.3	82	85	121.0	0.8	6	1
	20	□	MPS0430-L20C	145	86.8	105	108	144.0	0.8	6	1
	25	□	MPS0430-L25C	167	108.3	127	130	166.0	0.8	6	1
	30	□	MPS0430-L30C	190	129.8	150	153	189.0	0.8	6	1
	35	□	MPS0430-L35C	212	151.3	172	175	211.0	0.8	6	1
	40	□	MPS0430-L40C	236	172.8	196	199	235.0	0.8	6	1
4.4	3	●	MPS0440S-DIN	66	17.2	24	29	65.0	0.8	6	3
	3	●	MPS0440S-DIN-C	66	17.2	24	29	65.0	0.8	6	1
	5	●	MPS0440L-DIN	74	29.2	36	37	73.0	0.8	6	3
	5	●	MPS0440L-DIN-C	74	29.2	36	37	73.0	0.8	6	1
	8	●	MPS0440-L8C	91	36.0	51	54	90.0	0.8	6	1
	10	□	MPS0440-L10C	100	44.8	60	63	99.0	0.8	6	1
	12	●	MPS0440-L12C	109	53.6	69	72	108.0	0.8	6	1
	15	●	MPS0440-L15C	122	66.8	82	85	121.0	0.8	6	1
	20	□	MPS0440-L20C	145	88.8	105	108	144.0	0.8	6	1
	25	□	MPS0440-L25C	167	110.8	127	130	166.0	0.8	6	1
	30	□	MPS0440-L30C	190	132.8	150	153	189.0	0.8	6	1
	35	□	MPS0440-L35C	212	154.8	172	175	211.0	0.8	6	1
	40	□	MPS0440-L40C	236	176.8	196	199	235.0	0.8	6	1
4.5	3	●	MPS0450S-DIN	66	17.1	24	29	65.0	0.8	6	3
	3	●	MPS0450S-DIN-C	66	17.1	24	29	65.0	0.8	6	1
	5	●	MPS0450L-DIN	74	29.1	36	37	73.0	0.8	6	3
	5	●	MPS0450L-DIN-C	74	29.1	36	37	73.0	0.8	6	1
	8	●	MPS0450-L8C	91	36.8	51	54	90.0	0.8	6	1
	10	□	MPS0450-L10C	100	45.8	60	63	99.0	0.8	6	1
	12	●	MPS0450-L12C	109	54.8	69	72	108.0	0.8	6	1
	15	●	MPS0450-L15C	122	68.3	82	85	121.0	0.8	6	1
	20	□	MPS0450-L20C	145	90.8	105	108	144.0	0.8	6	1
	25	□	MPS0450-L25C	167	113.3	127	130	166.0	0.8	6	1
	30	□	MPS0450-L30C	190	135.8	150	153	189.0	0.8	6	1
	35	□	MPS0450-L35C	212	158.3	172	175	211.0	0.8	6	1
	40	●	MPS0450-L40C	236	180.8	196	199	235.0	0.8	6	1

DC	Bohrtiefe (mm)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
4.6	3	●	MPS0460S-DIN	66	16.9	24	29	65.0	0.8	6	3
	3	●	MPS0460S-DIN-C	66	16.9	24	29	65.0	0.8	6	1
	5	●	MPS0460L-DIN	74	28.9	36	37	73.0	0.8	6	3
	5	●	MPS0460L-DIN-C	74	28.9	36	37	73.0	0.8	6	1
	8	●	MPS0460-L8C	96	37.6	56	59	95.0	0.8	6	1
	10	□	MPS0460-L10C	106	46.8	66	69	105.0	0.8	6	1
	12	●	MPS0460-L12C	116	56.0	76	79	115.0	0.8	6	1
	15	●	MPS0460-L15C	131	69.8	91	94	130.0	0.8	6	1
	20	□	MPS0460-L20C	156	92.8	116	119	155.0	0.8	6	1
	25	□	MPS0460-L25C	181	115.8	141	144	180.0	0.8	6	1
	30	□	MPS0460-L30C	206	138.8	166	169	205.0	0.8	6	1
	35	□	MPS0460-L35C	230	161.8	185	193	229.0	0.8	6	1
	40	□	MPS0460-L40C	255	184.8	205	218	254.0	0.8	6	1
4.65	3	●	MPS0465S-DIN	66	16.9	24	29	65.0	0.8	6	3
	3	●	MPS0465S-DIN-C	66	16.9	24	29	65.0	0.8	6	1
	5	●	MPS0465L-DIN	74	28.9	36	37	73.0	0.8	6	3
	5	●	MPS0465L-DIN-C	74	28.9	36	37	73.0	0.8	6	1
4.7	3	●	MPS0470S-DIN	66	16.8	24	29	65.0	0.9	6	3
	3	●	MPS0470S-DIN-C	66	16.8	24	29	65.0	0.9	6	1
	5	●	MPS0470L-DIN	74	28.8	36	37	73.0	0.9	6	3
	5	●	MPS0470L-DIN-C	74	28.8	36	37	73.0	0.9	6	1
	8	●	MPS0470-L8C	96	38.5	56	59	95.0	0.9	6	1
	10	□	MPS0470-L10C	106	47.9	66	69	105.0	0.9	6	1
	12	●	MPS0470-L12C	116	57.3	76	79	115.0	0.9	6	1
	15	●	MPS0470-L15C	131	71.4	91	94	130.0	0.9	6	1
	20	□	MPS0470-L20C	156	94.9	116	119	155.0	0.9	6	1
	25	□	MPS0470-L25C	181	118.4	141	144	180.0	0.9	6	1
	30	□	MPS0470-L30C	206	141.9	166	169	205.0	0.9	6	1
	35	□	MPS0470-L35C	230	165.4	185	193	229.0	0.9	6	1
	40	□	MPS0470-L40C	255	188.9	205	218	254.0	0.9	6	1
4.8	3	●	MPS0480S-DIN	66	20.7	28	29	65.0	0.9	6	3
	3	●	MPS0480S-DIN-C	66	20.7	28	29	65.0	0.9	6	1
	5	●	MPS0480L-DIN	82	36.7	44	45	81.0	0.9	6	3
	5	●	MPS0480L-DIN-C	82	36.7	44	45	81.0	0.9	6	1
	8	●	MPS0480-L8C	96	39.3	56	59	95.0	0.9	6	1
	10	□	MPS0480-L10C	106	48.9	66	69	105.0	0.9	6	1
	12	●	MPS0480-L12C	116	58.5	76	79	115.0	0.9	6	1
	15	●	MPS0480-L15C	131	72.9	91	94	130.0	0.9	6	1
	20	□	MPS0480-L20C	156	96.9	116	119	155.0	0.9	6	1
	25	□	MPS0480-L25C	181	120.9	141	144	180.0	0.9	6	1
	30	□	MPS0480-L30C	206	144.9	166	169	205.0	0.9	6	1
	35	□	MPS0480-L35C	230	168.9	191	193	229.0	0.9	6	1
	40	□	MPS0480-L40C	255	192.9	216	218	254.0	0.9	6	1
4.9	3	●	MPS0490S-DIN	66	20.5	28	29	65.0	0.9	6	3
	3	●	MPS0490S-DIN-C	66	20.5	28	29	65.0	0.9	6	1
	5	●	MPS0490L-DIN	82	36.5	44	45	81.0	0.9	6	3
	5	●	MPS0490L-DIN-C	82	36.5	44	45	81.0	0.9	6	1
	8	●	MPS0490-L8C	96	40.1	56	59	95.0	0.9	6	1
	10	□	MPS0490-L10C	106	49.9	66	69	105.0	0.9	6	1
	12	●	MPS0490-L12C	116	59.7	76	79	115.0	0.9	6	1
	15	●	MPS0490-L15C	131	74.4	91	94	130.0	0.9	6	1
	20	□	MPS0490-L20C	156	98.9	116	119	155.0	0.9	6	1
	25	□	MPS0490-L25C	181	123.4	141	144	180.0	0.9	6	1
	30	□	MPS0490-L30C	206	147.9	166	169	205.0	0.9	6	1
	35	□	MPS0490-L35C	230	172.4	191	193	229.0	0.9	6	1
	40	□	MPS0490-L40C	255	196.9	216	218	254.0	0.9	6	1

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

HARTMETALL

BOHREN

DC	Bohrtiefe (mm)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
5.0	3	●	MPS0500S-DIN	66	20.4	28	29	65.0	0.9	6	3
	3	●	MPS0500S-DIN-C	66	20.4	28	29	65.0	0.9	6	1
	5	●	MPS0500L-DIN	82	36.4	44	45	81.0	0.9	6	3
	5	●	MPS0500L-DIN-C	82	36.4	44	45	81.0	0.9	6	1
	8	●	MPS0500-L8C	96	40.9	56	59	95.0	0.9	6	1
	10	●	MPS0500-L10C	106	50.9	66	69	105.0	0.9	6	1
	12	●	MPS0500-L12C	116	60.9	76	79	115.0	0.9	6	1
	15	●	MPS0500-L15C	131	75.9	91	94	130.0	0.9	6	1
	20	●	MPS0500-L20C	156	100.9	116	119	155.0	0.9	6	1
	25	●	MPS0500-L25C	181	125.9	141	144	180.0	0.9	6	1
	30	●	MPS0500-L30C	206	150.9	166	169	205.0	0.9	6	1
	35	□	MPS0500-L35C	230	175.9	191	193	229.0	0.9	6	1
5.05	40	●	MPS0500-L40C	255	200.9	216	218	254.0	0.9	6	1
	3	●	MPS0505S-DIN	66	20.3	28	29	65.0	0.9	6	3
	3	●	MPS0505S-DIN-C	66	20.3	28	29	65.0	0.9	6	1
	5	●	MPS0505L-DIN	82	36.3	44	45	81.0	0.9	6	3
5.1	5	●	MPS0505L-DIN-C	82	36.3	44	45	81.0	0.9	6	1
	3	●	MPS0510S-DIN	66	20.3	28	29	65.0	0.9	6	3
	3	●	MPS0510S-DIN-C	66	20.3	28	29	65.0	0.9	6	1
	5	●	MPS0510L-DIN	82	36.3	44	45	81.0	0.9	6	3
	5	●	MPS0510L-DIN-C	82	36.3	44	45	81.0	0.9	6	1
	8	●	MPS0510-L8C	102	41.7	62	65	101.0	0.9	6	1
	10	□	MPS0510-L10C	113	51.9	73	76	112.0	0.9	6	1
	12	●	MPS0510-L12C	124	62.1	84	87	123.0	0.9	6	1
	15	●	MPS0510-L15C	140	77.4	100	103	139.0	0.9	6	1
	20	□	MPS0510-L20C	168	102.9	128	131	167.0	0.9	6	1
	25	□	MPS0510-L25C	195	128.4	155	158	194.0	0.9	6	1
	30	□	MPS0510-L30C	223	153.9	183	186	222.0	0.9	6	1
5.2	35	□	MPS0510-L35C	249	179.4	204	212	248.0	0.9	6	1
	40	□	MPS0510-L40C	279	204.9	231	242	278.0	0.9	6	1
	3	●	MPS0520S-DIN	66	20.1	28	29	65.0	0.9	6	3
	3	●	MPS0520S-DIN-C	66	20.1	28	29	65.0	0.9	6	1
	5	●	MPS0520L-DIN	82	36.1	44	45	81.0	0.9	6	3
	5	●	MPS0520L-DIN-C	82	36.1	44	45	81.0	0.9	6	1
	8	●	MPS0520-L8C	102	42.5	62	65	101.0	0.9	6	1
	10	□	MPS0520-L10C	113	52.9	73	76	112.0	0.9	6	1
	12	●	MPS0520-L12C	124	63.3	84	87	123.0	0.9	6	1
	15	●	MPS0520-L15C	140	78.9	100	103	139.0	0.9	6	1
	20	□	MPS0520-L20C	168	104.9	128	131	167.0	0.9	6	1
	25	□	MPS0520-L25C	195	130.9	155	158	194.0	0.9	6	1
5.3	30	□	MPS0520-L30C	223	156.9	183	186	222.0	0.9	6	1
	35	□	MPS0520-L35C	249	182.9	204	212	248.0	0.9	6	1
	40	□	MPS0520-L40C	279	208.9	231	242	278.0	0.9	6	1
	3	●	MPS0530S-DIN	66	20.0	28	29	65.0	1.0	6	3
	3	●	MPS0530S-DIN-C	66	20.0	28	29	65.0	1.0	6	1
	5	●	MPS0530L-DIN	82	36.0	44	45	81.0	1.0	6	3
	5	●	MPS0530L-DIN-C	82	36.0	44	45	81.0	1.0	6	1
	8	●	MPS0530-L8C	102	43.4	62	65	101.0	1.0	6	1
	10	□	MPS0530-L10C	113	54.0	73	76	112.0	1.0	6	1
	12	●	MPS0530-L12C	124	64.6	84	87	123.0	1.0	6	1
	15	●	MPS0530-L15C	140	80.5	100	103	139.0	1.0	6	1
	20	□	MPS0530-L20C	168	107.0	128	131	167.0	1.0	6	1
5.5	25	□	MPS0530-L25C	195	133.5	155	158	194.0	1.0	6	1
	30	□	MPS0530-L30C	223	160.0	183	186	222.0	1.0	6	1
	35	□	MPS0530-L35C	249	186.5	210	212	248.0	1.0	6	1
	40	□	MPS0530-L40C	279	213.0	241	242	278.0	1.0	6	1
	3	●	MPS0550S-DIN	66	19.8	28	29	65.0	1.0	6	3
	3	●	MPS0550S-DIN-C	66	19.8	28	29	65.0	1.0	6	1
	5	●	MPS0550L-DIN	82	35.8	44	45	81.0	1.0	6	3
	5	●	MPS0550L-DIN-C	82	35.8	44	45	81.0	1.0	6	1
5.55	8	●	MPS0550-L8C	102	45.0	62	65	101.0	1.0	6	1
	10	□	MPS0550-L10C	113	56.0	73	76	112.0	1.0	6	1
	12	●	MPS0550-L12C	124	67.0	84	87	123.0	1.0	6	1
	15	●	MPS0550-L15C	140	83.5	100	103	139.0	1.0	6	1
	20	□	MPS0550-L20C	168	111.0	128	131	167.0	1.0	6	1
	25	□	MPS0550-L25C	195	138.5	155	158	194.0	1.0	6	1
	30	□	MPS0550-L30C	223	166.0	183	186	222.0	1.0	6	1
	35	□	MPS0550-L35C	249	193.5	210	212	248.0	1.0	6	1
	40	●	MPS0550-L40C	279	221.0	241	242	278.0	1.0	6	1
	3	●	MPS0555S-DIN	66	19.7	28	29	65.0	1.0	6	3
	3	●	MPS0555S-DIN-C	66	19.7	28	29	65.0	1.0	6	1
	5	●	MPS0555L-DIN	82	35.7	44	45	81.0	1.0	6	3
	5	●	MPS0555L-DIN-C	82	35.7	44	45	81.0	1.0	6	1
5.6	3	●	MPS0560S-DIN	66	19.6	28	29	65.0	1.0	6	3
	3	●	MPS0560S-DIN-C	66	19.6	28	29	65.0	1.0	6	1
	5	●	MPS0560L-DIN	82	35.6	44	45	81.0	1.0	6	3
	5	●	MPS0560L-DIN-C	82	35.6	44	45	81.0	1.0	6	1
	8	●	MPS0560-L8C	107	45.8	67	70	106.0	1.0	6	1
	10	□	MPS0560-L10C	119	57.0	79	82	118.0	1.0	6	1
	12	●	MPS0560-L12C	131	68.2	91	94	130.0	1.0	6	1
	15	●	MPS0560-L15C	149	85.0	109	112	148.0	1.0	6	1
	20	□	MPS0560-L20C	179	113.0	139	142	178.0	1.0	6	1
	25	□	MPS0560-L25C	209	141.0	169	172	208.0	1.0	6	1
	30	□	MPS0560-L30C	239	169.0	199	202	238.0	1.0	6	1
	35	□	MPS0560-L35C	268	197.0	223	231	267.0	1.0	6	1
5.7	40	□	MPS0560-L40C	299	225.0	251	262	298.0	1.0	6	1
	3	●	MPS0570S-DIN	66	19.5	28	29	65.0	1.0	6	3
	3	●	MPS0570S-DIN-C	66	19.5	28	29	65.0	1.0	6	1
	5	●	MPS0570L-DIN	82	35.5	44	45	81.0	1.0	6	3
	5	●	MPS0570L-DIN-C	82	35.5	44	45	81.0	1.0	6	1
	8	●	MPS0570-L8C	107	46.6	67	70	106.0	1.0	6	1
	10	□	MPS0570-L10C	119	58.0	79	82	118.0	1.0	6	1
	12	●	MPS0570-L12C	131	69.4	91	94	130.0	1.0	6	1
	15	●	MPS0570-L15C	149	86.5	109	112	148.0	1.0	6	1
	20	□	MPS0570-L20C	179	115.0	139	142	178.0	1.0	6	1
	25	□	MPS0570-L25C	209	143.5	169	172	208.0	1.0	6	1
	30	□	MPS0570-L30C	239	172.0	199	202	238.0	1.0	6	1
5.7	35	□	MPS0570-L35C	268	200.5	223	231	267.0	1.0	6	1
	40	□	MPS0570-L40C	299	229.0	251	262	298.0	1.0	6	1

DC	Bohrtiefe (mm)	Lager		Bestellbezeichnung	Abmessungen (mm)							Typ
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON	
5.4	3	●		MPS0540S-DIN	66	19.9	28	29	65.0	1.0	6	3
	3	●		MPS0540S-DIN-C	66	19.9	28	29	65.0	1.0	6	1
	5	●		MPS0540L-DIN	82	35.9	44	45	81.0	1.0	6	3
	5	●		MPS0540L-DIN-C	82	35.9	44	45	81.0	1.0	6	1
	8	●		MPS0540-L8C	102	44.2	62	65	101.0	1.0	6	1
	10	□		MPS0540-L10C	113	55.0	73	76	112.0	1.0	6	1
	12	●		MPS0540-L12C	124	65.8	84	87	123.0	1.0	6	1
	15	●		MPS0540-L15C	140	82.0	100	103	139.0	1.0	6	1
	20	□		MPS0540-L20C	168	109.0	128	131	167.0	1.0	6	1
	25	□		MPS0540-L25C	195	136.0	155	158	194.0	1.0	6	1
	30	□		MPS0540-L30C	223	163.0	183	186	222.0	1.0	6	1
	35	□		MPS0540-L35C	249	190.0	210	212	248.0	1.0	6	1
40	□		MPS0540-L40C	279	217.0	241	242	278.0	1.0	6	1	
5.5	3	●		MPS0550S-DIN	66	19.8	28	29	65.0	1.0	6	3
	3	●		MPS0550S-DIN-C	66	19.8	28	29	65.0	1.0	6	1
	5	●		MPS0550L-DIN	82	35.8	44	45	81.0	1.0	6	3
	5	●		MPS0550L-DIN-C	82	35.8	44	45	81.0	1.0	6	1
	8	●		MPS0550-L8C	102	45.0	62	65	101.0	1.0	6	1
	10	□		MPS0550-L10C	113	56.0	73	76	112.0	1.0	6	1
	12	●		MPS0550-L12C	124	67.0	84	87	123.0	1.0	6	1
	15	●		MPS0550-L15C	140	83.5	100	103	139.0	1.0	6	1
	20	□		MPS0550-L20C	168	111.0	128	131	167.0	1.0	6	1
	25	□		MPS0550-L25C	195	138.5	155	158	194.0	1.0	6	1
	30	□		MPS0550-L30C	223	166.0	183	186	222.0	1.0	6	1
	35	□		MPS0550-L35C	249	193.5	210	212	248.0	1.0	6	1
40	●		MPS0550-L40C	279	221.0	241	242	278.0	1.0	6	1	
5.55	3	●		MPS0555S-DIN	66	19.7	28	29	65.0	1.0	6	3
	3	●		MPS0555S-DIN-C	66	19.7	28	29	65.0	1.0	6	1
	5	●		MPS0555L-DIN	82	35.7	44	45	81.0	1.0	6	3
	5	●		MPS0555L-DIN-C	82	35.7	44	45	81.0	1.0	6	1
5.6	3	●		MPS0560S-DIN	66	19.6	28	29	65.0	1.0	6	3
	3	●		MPS0560S-DIN-C	66	19.6	28	29	65.0	1.0	6	1
	5	●		MPS0560L-DIN	82	35.6	44	45	81.0	1.0	6	3
	5	●		MPS0560L-DIN-C	82	35.6	44	45	81.0	1.0	6	1
	8	●		MPS0560-L8C	107	45.8	67	70	106.0	1.0	6	1
	10	□		MPS0560-L10C	119	57.0	79	82	118.0	1.0	6	1
	12	●		MPS0560-L12C	131	68.2	91	94	130.0	1.0	6	1
	15	●		MPS0560-L15C	149	85.0	109	112	148.0	1.0	6	1
	20	□		MPS0560-L20C	179	113.0	139	142	178.0	1.0	6	1
	25	□		MPS0560-L25C	209	141.0	169	172	208.0	1.0	6	1
	30	□		MPS0560-L30C	239	169.0	199	202	238.0	1.0	6	1
	35	□		MPS0560-L35C	268	197.0	223	231	267.0	1.0	6	1
40	□		MPS0560-L40C	299	225.0	251	262	298.0	1.0	6	1	
5.7	3	●		MPS0570S-DIN	66	19.5	28	29	65.0	1.0	6	3
	3	●		MPS0570S-DIN-C	66	19.5	28	29	65.0	1.0	6	1
	5	●		MPS0570L-DIN	82	35.5	44	45	81.0	1.0	6	3
	5	●		MPS0570L-DIN-C	82	35.5	44	45	81.0	1.0	6	1
	8	●		MPS0570-L8C	107	46.6	67	70	106.0	1.0	6	1
	10	□		MPS0570-L10C	119	58.0	79	82	118.0	1.0	6	1
	12	●		MPS0570-L12C	131	69.4	91	94	130.0	1.0	6	1
	15	●		MPS0570-L15C	149	86.5	109	112	148.0	1.0	6	1
	20	□		MPS0570-L20C	179	115.0	139	142	178.0	1.0	6	1
	25	□		MPS0570-L25C	209	143.5	169	172	208.0	1.0	6	1
	30	□		MPS0570-L30C	239	172.0	199	202	238.0	1.0	6	1
	35	□		MPS0570-L35C	268	200.5	223	231	267.0	1.0	6	1
40	□		MPS0570-L40C	299	229.0	251	262	298.0	1.0	6	1	

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
5.8	3	●	MPS0580S-DIN	66	19.4	28	29	65.0	1.1	6	3
	3	●	MPS0580S-DIN-C	66	19.4	28	29	65.0	1.1	6	1
	5	●	MPS0580L-DIN	82	35.4	44	45	81.0	1.1	6	3
	5	●	MPS0580L-DIN-C	82	35.4	44	45	81.0	1.1	6	1
	8	●	MPS0580-L8C	107	47.5	67	70	106.0	1.1	6	1
	10	□	MPS0580-L10C	119	59.1	79	82	118.0	1.1	6	1
	12	●	MPS0580-L12C	131	70.7	91	94	130.0	1.1	6	1
	15	●	MPS0580-L15C	149	88.1	109	112	148.0	1.1	6	1
	20	□	MPS0580-L20C	179	117.1	139	142	178.0	1.1	6	1
	25	□	MPS0580-L25C	209	146.1	169	172	208.0	1.1	6	1
	30	□	MPS0580-L30C	239	175.1	199	202	238.0	1.1	6	1
	35	□	MPS0580-L35C	268	204.1	229	231	267.0	1.1	6	1
	40	□	MPS0580-L40C	299	233.1	261	262	298.0	1.1	6	1
5.9	3	●	MPS0590S-DIN	66	19.2	28	29	65.0	1.1	6	3
	3	●	MPS0590S-DIN-C	66	19.2	28	29	65.0	1.1	6	1
	5	●	MPS0590L-DIN	82	35.2	44	45	81.0	1.1	6	3
	5	●	MPS0590L-DIN-C	82	35.2	44	45	81.0	1.1	6	1
	8	●	MPS0590-L8C	107	48.3	67	70	106.0	1.1	6	1
	10	□	MPS0590-L10C	119	60.1	79	82	118.0	1.1	6	1
	12	●	MPS0590-L12C	131	71.9	91	94	130.0	1.1	6	1
	15	●	MPS0590-L15C	149	89.6	109	112	148.0	1.1	6	1
	20	□	MPS0590-L20C	179	119.1	139	142	178.0	1.1	6	1
	25	□	MPS0590-L25C	209	148.6	169	172	208.0	1.1	6	1
	30	□	MPS0590-L30C	239	178.1	199	202	238.0	1.1	6	1
	35	□	MPS0590-L35C	268	207.6	229	231	267.0	1.1	6	1
	40	□	MPS0590-L40C	299	237.1	261	262	298.0	1.1	6	1
6.0	3	●	MPS0600S-DIN	66	19.1	28	29	65.0	1.1	6	4
	3	●	MPS0600S-DIN-C	66	19.1	28	29	65.0	1.1	6	2
	5	●	MPS0600L-DIN	82	35.1	44	45	81.0	1.1	6	4
	5	●	MPS0600L-DIN-C	82	35.1	44	45	81.0	1.1	6	2
	8	●	MPS0600-L8C	107	49.1	67	70	106.0	1.1	6	2
	10	●	MPS0600-L10C	119	61.1	79	82	118.0	1.1	6	2
	12	●	MPS0600-L12C	131	73.1	91	94	130.0	1.1	6	2
	15	●	MPS0600-L15C	149	91.1	109	112	148.0	1.1	6	2
	20	●	MPS0600-L20C	179	121.1	139	142	178.0	1.1	6	2
	25	●	MPS0600-L25C	209	151.1	169	172	208.0	1.1	6	2
	30	●	MPS0600-L30C	239	181.1	199	202	238.0	1.1	6	2
	35	□	MPS0600-L35C	268	211.1	229	231	267.0	1.1	6	2
	40	●	MPS0600-L40C	299	241.1	261	262	298.0	1.1	6	2
6.05	3	●	MPS0605S-DIN	79	25.0	34	42	78.0	1.1	8	3
	3	●	MPS0605S-DIN-C	79	25.0	34	42	78.0	1.1	8	1
	5	●	MPS0605L-DIN	91	44.0	53	54	90.0	1.1	8	3
	5	●	MPS0605L-DIN-C	91	44.0	53	54	90.0	1.1	8	1
6.1	3	●	MPS0610S-DIN	79	25.0	34	42	78.0	1.1	8	3
	3	●	MPS0610S-DIN-C	79	25.0	34	42	78.0	1.1	8	1
	5	●	MPS0610L-DIN	91	44.0	53	54	90.0	1.1	8	3
	5	●	MPS0610L-DIN-C	91	44.0	53	54	90.0	1.1	8	1
	8	●	MPS0610-L8C	113	49.9	73	76	112.0	1.1	8	1
	10	□	MPS0610-L10C	126	62.1	86	89	125.0	1.1	8	1
	12	●	MPS0610-L12C	139	74.3	99	102	138.0	1.1	8	1
	15	●	MPS0610-L15C	158	92.6	118	121	157.0	1.1	8	1
	20	□	MPS0610-L20C	191	123.1	151	154	190.0	1.1	8	1
	25	□	MPS0610-L25C	223	153.6	183	186	222.0	1.1	8	1
	30	□	MPS0610-L30C	256	184.1	216	219	255.0	1.1	8	1
	35	□	MPS0610-L35C	287	214.6	241	250	286.0	1.1	8	1
	40	□	MPS0610-L40C	321	245.1	271	284	320.0	1.1	8	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
6.2	3	●	MPS0620S-DIN	79	24.8	34	42	78.0	1.1	8	3
	3	●	MPS0620S-DIN-C	79	24.8	34	42	78.0	1.1	8	1
	5	●	MPS0620L-DIN	91	43.8	53	54	90.0	1.1	8	3
	5	●	MPS0620L-DIN-C	91	43.8	53	54	90.0	1.1	8	1
	8	●	MPS0620-L8C	113	50.7	73	76	112.0	1.1	8	1
	10	□	MPS0620-L10C	126	63.1	86	89	125.0	1.1	8	1
	12	●	MPS0620-L12C	139	75.5	99	102	138.0	1.1	8	1
	15	●	MPS0620-L15C	158	94.1	118	121	157.0	1.1	8	1
	20	□	MPS0620-L20C	191	125.1	151	154	190.0	1.1	8	1
	25	□	MPS0620-L25C	223	156.1	183	186	222.0	1.1	8	1
	30	□	MPS0620-L30C	256	187.1	216	219	255.0	1.1	8	1
	35	□	MPS0620-L35C	287	218.1	241	250	286.0	1.1	8	1
	40	□	MPS0620-L40C	321	249.1	271	284	320.0	1.1	8	1
6.3	3	●	MPS0630S-DIN	79	24.7	34	42	78.0	1.1	8	3
	3	●	MPS0630S-DIN-C	79	24.7	34	42	78.0	1.1	8	1
	5	●	MPS0630L-DIN	91	43.7	53	54	90.0	1.1	8	3
	5	●	MPS0630L-DIN-C	91	43.7	53	54	90.0	1.1	8	1
	8	●	MPS0630-L8C	113	51.5	73	76	112.0	1.1	8	1
	10	□	MPS0630-L10C	126	64.1	86	89	125.0	1.1	8	1
	12	●	MPS0630-L12C	139	76.7	99	102	138.0	1.1	8	1
	15	●	MPS0630-L15C	158	95.6	118	121	157.0	1.1	8	1
	20	□	MPS0630-L20C	191	127.1	151	154	190.0	1.1	8	1
	25	□	MPS0630-L25C	223	158.6	183	186	222.0	1.1	8	1
	30	□	MPS0630-L30C	256	190.1	216	219	255.0	1.1	8	1
	35	□	MPS0630-L35C	287	221.6	248	250	286.0	1.1	8	1
	40	□	MPS0630-L40C	321	253.1	281	284	320.0	1.1	8	1
6.4	3	●	MPS0640S-DIN	79	24.6	34	42	78.0	1.2	8	3
	3	●	MPS0640S-DIN-C	79	24.6	34	42	78.0	1.2	8	1
	5	●	MPS0640L-DIN	91	43.6	53	54	90.0	1.2	8	3
	5	●	MPS0640L-DIN-C	91	43.6	53	54	90.0	1.2	8	1
	8	●	MPS0640-L8C	113	52.4	73	76	112.0	1.2	8	1
	10	□	MPS0640-L10C	126	65.2	86	89	125.0	1.2	8	1
	12	●	MPS0640-L12C	139	78.0	99	102	138.0	1.2	8	1
	15	●	MPS0640-L15C	158	97.2	118	121	157.0	1.2	8	1
	20	□	MPS0640-L20C	191	129.2	151	154	190.0	1.2	8	1
	25	□	MPS0640-L25C	223	161.2	183	186	222.0	1.2	8	1
	30	□	MPS0640-L30C	256	193.2	216	219	255.0	1.2	8	1
	35	□	MPS0640-L35C	287	225.2	248	250	286.0	1.2	8	1
	40	□	MPS0640-L40C	321	257.2	281	284	320.0	1.2	8	1
6.5	3	●	MPS0650S-DIN	79	24.4	34	42	78.0	1.2	8	3
	3	●	MPS0650S-DIN-C	79	24.4	34	42	78.0	1.2	8	1
	5	●	MPS0650L-DIN	91	43.4	53	54	90.0	1.2	8	3
	5	●	MPS0650L-DIN-C	91	43.4	53	54	90.0	1.2	8	1
	8	●	MPS0650-L8C	113	53.2	73	76	112.0	1.2	8	1
	10	□	MPS0650-L10C	126	66.2	86	89	125.0	1.2	8	1
	12	●	MPS0650-L12C	139	79.2	99	102	138.0	1.2	8	1
	15	●	MPS0650-L15C	158	98.7	118	121	157.0	1.2	8	1
	20	□	MPS0650-L20C	191	131.2	151	154	190.0	1.2	8	1
	25	□	MPS0650-L25C	223	163.7	183	186	222.0	1.2	8	1
	30	□	MPS0650-L30C	256	196.2	216	219	255.0	1.2	8	1
	35	□	MPS0650-L35C	287	228.7	248	250	286.0	1.2	8	1
	40	●	MPS0650-L40C	321	261.2	281	284	320.0	1.2	8	1

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
6.6	3	●	MPS0660S-DIN	79	24.3	34	42	78.0	1.2	8	3
	3	●	MPS0660S-DIN-C	79	24.3	34	42	78.0	1.2	8	1
	5	●	MPS0660L-DIN	91	43.3	53	54	90.0	1.2	8	3
	5	●	MPS0660L-DIN-C	91	43.3	53	54	90.0	1.2	8	1
	8	●	MPS0660-L8C	118	54.0	78	81	117.0	1.2	8	1
	10	□	MPS0660-L10C	132	67.2	92	95	131.0	1.2	8	1
	12	●	MPS0660-L12C	146	80.4	106	109	145.0	1.2	8	1
	15	●	MPS0660-L15C	167	100.2	127	130	166.0	1.2	8	1
	20	□	MPS0660-L20C	202	133.2	162	165	201.0	1.2	8	1
	25	□	MPS0660-L25C	237	166.2	197	200	236.0	1.2	8	1
	30	□	MPS0660-L30C	272	199.2	232	235	271.0	1.2	8	1
	35	□	MPS0660-L35C	306	232.2	267	269	305.0	1.2	8	1
	40	□	MPS0660-L40C	341	265.2	301	304	340.0	1.2	8	1
6.7	3	●	MPS0670S-DIN	79	24.2	34	42	78.0	1.2	8	3
	3	●	MPS0670S-DIN-C	79	24.2	34	42	78.0	1.2	8	1
	5	●	MPS0670L-DIN	91	43.2	53	54	90.0	1.2	8	3
	5	●	MPS0670L-DIN-C	91	43.2	53	54	90.0	1.2	8	1
	8	●	MPS0670-L8C	118	54.8	78	81	117.0	1.2	8	1
	10	□	MPS0670-L10C	132	68.2	92	95	131.0	1.2	8	1
	12	●	MPS0670-L12C	146	81.6	106	109	145.0	1.2	8	1
	15	●	MPS0670-L15C	167	101.7	127	130	166.0	1.2	8	1
	20	□	MPS0670-L20C	202	135.2	162	165	201.0	1.2	8	1
	25	□	MPS0670-L25C	237	168.7	197	200	236.0	1.2	8	1
	30	□	MPS0670-L30C	272	202.2	232	235	271.0	1.2	8	1
	35	□	MPS0670-L35C	306	235.7	267	269	305.0	1.2	8	1
	40	□	MPS0670-L40C	341	269.2	301	304	340.0	1.2	8	1
6.8	3	●	MPS0680S-DIN	79	24.0	34	42	78.0	1.2	8	3
	3	●	MPS0680S-DIN-C	79	24.0	34	42	78.0	1.2	8	1
	5	●	MPS0680L-DIN	91	43.0	53	54	90.0	1.2	8	3
	5	●	MPS0680L-DIN-C	91	43.0	53	54	90.0	1.2	8	1
	8	●	MPS0680-L8C	118	55.6	78	81	117.0	1.2	8	1
	10	□	MPS0680-L10C	132	69.2	92	95	131.0	1.2	8	1
	12	●	MPS0680-L12C	146	82.8	106	109	145.0	1.2	8	1
	15	●	MPS0680-L15C	167	103.2	127	130	166.0	1.2	8	1
	20	□	MPS0680-L20C	202	137.2	162	165	201.0	1.2	8	1
	25	□	MPS0680-L25C	237	171.2	197	200	236.0	1.2	8	1
	30	□	MPS0680-L30C	272	205.2	232	235	271.0	1.2	8	1
	35	□	MPS0680-L35C	306	239.2	267	269	305.0	1.2	8	1
	40	●	MPS0680-L40C	341	273.2	301	304	340.0	1.2	8	1
6.9	3	●	MPS0690S-DIN	79	23.9	34	42	78.0	1.3	8	3
	3	●	MPS0690S-DIN-C	79	23.9	34	42	78.0	1.3	8	1
	5	●	MPS0690L-DIN	91	42.9	53	54	90.0	1.3	8	3
	5	●	MPS0690L-DIN-C	91	42.9	53	54	90.0	1.3	8	1
	8	●	MPS0690-L8C	118	56.5	78	81	117.0	1.3	8	1
	10	□	MPS0690-L10C	132	70.3	92	95	131.0	1.3	8	1
	12	●	MPS0690-L12C	146	84.1	106	109	145.0	1.3	8	1
	15	●	MPS0690-L15C	167	104.8	127	130	166.0	1.3	8	1
	20	□	MPS0690-L20C	202	139.3	162	165	201.0	1.3	8	1
	25	□	MPS0690-L25C	237	173.8	197	200	236.0	1.3	8	1
	30	□	MPS0690-L30C	272	208.3	232	235	271.0	1.3	8	1
	35	□	MPS0690-L35C	306	242.8	267	269	305.0	1.3	8	1
	40	□	MPS0690-L40C	341	277.3	301	304	340.0	1.3	8	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
7.0	3	●	MPS0700S-DIN	79	23.8	34	42	78.0	1.3	8	3
	3	●	MPS0700S-DIN-C	79	23.8	34	42	78.0	1.3	8	1
	5	●	MPS0700L-DIN	91	42.8	53	54	90.0	1.3	8	3
	5	●	MPS0700L-DIN-C	91	42.8	53	54	90.0	1.3	8	1
	8	●	MPS0700-L8C	118	57.3	78	81	117.0	1.3	8	1
	10	●	MPS0700-L10C	132	71.3	92	95	131.0	1.3	8	1
	12	●	MPS0700-L12C	146	85.3	106	109	145.0	1.3	8	1
	15	●	MPS0700-L15C	167	106.3	127	130	166.0	1.3	8	1
	20	●	MPS0700-L20C	202	141.3	162	165	201.0	1.3	8	1
	25	□	MPS0700-L25C	237	176.3	197	200	236.0	1.3	8	1
	30	●	MPS0700-L30C	272	211.3	232	235	271.0	1.3	8	1
	35	□	MPS0700-L35C	306	246.3	267	269	305.0	1.3	8	1
	40	●	MPS0700-L40C	341	281.3	301	304	340.0	1.3	8	1
7.1	3	●	MPS0710S-DIN	79	30.6	41	42	78.0	1.3	8	3
	3	●	MPS0710S-DIN-C	79	30.6	41	42	78.0	1.3	8	1
	5	●	MPS0710L-DIN	91	42.6	53	54	90.0	1.3	8	3
	5	●	MPS0710L-DIN-C	91	42.6	53	54	90.0	1.3	8	1
	8	●	MPS0710-L8C	124	58.1	84	87	123.0	1.3	8	1
	10	□	MPS0710-L10C	139	72.3	99	102	138.0	1.3	8	1
	12	●	MPS0710-L12C	154	86.5	114	117	153.0	1.3	8	1
	15	●	MPS0710-L15C	176	107.8	136	139	175.0	1.3	8	1
	20	□	MPS0710-L20C	214	143.3	174	177	213.0	1.3	8	1
	25	□	MPS0710-L25C	251	178.8	211	214	250.0	1.3	8	1
	30	□	MPS0710-L30C	289	214.3	249	252	288.0	1.3	8	1
	35	□	MPS0710-L35C	325	249.8	286	288	324.0	1.3	8	1
	40	□	MPS0710-L40C	360	285.3	321	323	359.0	1.3	8	1
7.2	3	●	MPS0720S-DIN	79	30.5	41	42	78.0	1.3	8	3
	3	●	MPS0720S-DIN-C	79	30.5	41	42	78.0	1.3	8	1
	5	●	MPS0720L-DIN	91	42.5	53	54	90.0	1.3	8	3
	5	●	MPS0720L-DIN-C	91	42.5	53	54	90.0	1.3	8	1
	8	●	MPS0720-L8C	124	58.9	84	87	123.0	1.3	8	1
	10	□	MPS0720-L10C	139	73.3	99	102	138.0	1.3	8	1
	12	●	MPS0720-L12C	154	87.7	114	117	153.0	1.3	8	1
	15	□	MPS0720-L15C	176	109.3	136	139	175.0	1.3	8	1
	20	□	MPS0720-L20C	214	145.3	174	177	213.0	1.3	8	1
	25	□	MPS0720-L25C	251	181.3	211	214	250.0	1.3	8	1
	30	□	MPS0720-L30C	289	217.3	249	252	288.0	1.3	8	1
	35	□	MPS0720-L35C	325	253.3	286	288	324.0	1.3	8	1
	40	□	MPS0720-L40C	360	289.3	321	323	359.0	1.3	8	1
7.3	3	●	MPS0730S-DIN	79	30.4	41	42	78.0	1.3	8	3
	3	●	MPS0730S-DIN-C	79	30.4	41	42	78.0	1.3	8	1
	5	●	MPS0730L-DIN	91	42.4	53	54	90.0	1.3	8	3
	5	●	MPS0730L-DIN-C	91	42.4	53	54	90.0	1.3	8	1
	8	●	MPS0730-L8C	124	59.7	84	87	123.0	1.3	8	1
	10	□	MPS0730-L10C	139	74.3	99	102	138.0	1.3	8	1
	12	●	MPS0730-L12C	154	88.9	114	117	153.0	1.3	8	1
	15	□	MPS0730-L15C	176	110.8	136	139	175.0	1.3	8	1
	20	□	MPS0730-L20C	214	147.3	174	177	213.0	1.3	8	1
	25	□	MPS0730-L25C	251	183.8	211	214	250.0	1.3	8	1
	30	□	MPS0730-L30C	289	220.3	249	252	288.0	1.3	8	1
	35	□	MPS0730-L35C	325	256.8	286	288	324.0	1.3	8	1
	40	□	MPS0730-L40C	360	293.3	321	323	359.0	1.3	8	1

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)							Typ
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON	
7.4	3	●		MPS0740S-DIN	79	30.2	41	42	78.0	1.3	8	3
	3	●		MPS0740S-DIN-C	79	30.2	41	42	78.0	1.3	8	1
	5	●		MPS0740L-DIN	91	42.2	53	54	90.0	1.3	8	3
	5	●		MPS0740L-DIN-C	91	42.2	53	54	90.0	1.3	8	1
	8	●		MPS0740-L8C	124	60.5	84	87	123.0	1.3	8	1
	10	□		MPS0740-L10C	139	75.3	99	102	138.0	1.3	8	1
	12	●		MPS0740-L12C	154	90.1	114	117	153.0	1.3	8	1
	15	□		MPS0740-L15C	176	112.3	136	139	175.0	1.3	8	1
	20	□		MPS0740-L20C	214	149.3	174	177	213.0	1.3	8	1
	25	□		MPS0740-L25C	251	186.3	211	214	250.0	1.3	8	1
	30	□		MPS0740-L30C	289	223.3	249	252	288.0	1.3	8	1
	35	□		MPS0740-L35C	325	260.3	286	288	324.0	1.3	8	1
	40	□		MPS0740-L40C	360	297.3	321	323	359.0	1.3	8	1
7.5	3	●		MPS0750S-DIN	79	30.1	41	42	78.0	1.4	8	3
	3	●		MPS0750S-DIN-C	79	30.1	41	42	78.0	1.4	8	1
	5	●		MPS0750L-DIN	91	42.1	53	54	90.0	1.4	8	3
	5	●		MPS0750L-DIN-C	91	42.1	53	54	90.0	1.4	8	1
	8	●		MPS0750-L8C	124	61.4	84	87	123.0	1.4	8	1
	10	□		MPS0750-L10C	139	76.4	99	102	138.0	1.4	8	1
	12	●		MPS0750-L12C	154	91.4	114	117	153.0	1.4	8	1
	15	●		MPS0750-L15C	176	113.9	136	139	175.0	1.4	8	1
	20	□		MPS0750-L20C	214	151.4	174	177	213.0	1.4	8	1
	25	□		MPS0750-L25C	251	188.9	211	214	250.0	1.4	8	1
	30	□		MPS0750-L30C	289	226.4	249	252	288.0	1.4	8	1
	35	□		MPS0750-L35C	325	263.9	286	288	324.0	1.4	8	1
	40	●		MPS0750-L40C	360	301.4	321	323	359.0	1.4	8	1
7.6	3	●		MPS0760S-DIN	79	30.0	41	42	78.0	1.4	8	3
	3	●		MPS0760S-DIN-C	79	30.0	41	42	78.0	1.4	8	1
	5	●		MPS0760L-DIN	91	42.0	53	54	90.0	1.4	8	3
	5	●		MPS0760L-DIN-C	91	42.0	53	54	90.0	1.4	8	1
	8	●		MPS0760-L8C	129	62.2	89	92	128.0	1.4	8	1
	10	□		MPS0760-L10C	145	77.4	105	108	144.0	1.4	8	1
	12	●		MPS0760-L12C	161	92.6	121	124	160.0	1.4	8	1
	15	●		MPS0760-L15C	185	115.4	145	148	184.0	1.4	8	1
	20	□		MPS0760-L20C	225	153.4	185	188	224.0	1.4	8	1
	25	□		MPS0760-L25C	265	191.4	225	228	264.0	1.4	8	1
	30	□		MPS0760-L30C	305	229.4	265	268	304.0	1.4	8	1
	35	□		MPS0760-L35C	344	267.4	305	307	343.0	1.4	8	1
	40	□		MPS0760-L40C	379	305.4	341	342	378.0	1.4	8	1
7.7	3	●		MPS0770S-DIN	79	29.9	41	42	78.0	1.4	8	3
	3	●		MPS0770S-DIN-C	79	29.9	41	42	78.0	1.4	8	1
	5	●		MPS0770L-DIN	91	41.9	53	54	90.0	1.4	8	3
	5	●		MPS0770L-DIN-C	91	41.9	53	54	90.0	1.4	8	1
	8	●		MPS0770-L8C	129	63.0	89	92	128.0	1.4	8	1
	10	□		MPS0770-L10C	145	78.4	105	108	144.0	1.4	8	1
	12	●		MPS0770-L12C	161	93.8	121	124	160.0	1.4	8	1
	15	●		MPS0770-L15C	185	116.9	145	148	184.0	1.4	8	1
	20	□		MPS0770-L20C	225	155.4	185	188	224.0	1.4	8	1
	25	□		MPS0770-L25C	265	193.9	225	228	264.0	1.4	8	1
	30	□		MPS0770-L30C	305	232.4	265	268	304.0	1.4	8	1
	35	□		MPS0770-L35C	344	270.9	305	307	343.0	1.4	8	1
	40	□		MPS0770-L40C	379	309.4	341	342	378.0	1.4	8	1

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)							Typ
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON	
7.8	3	●		MPS0780S-DIN	79	29.7	41	42	78.0	1.4	8	3
	3	●		MPS0780S-DIN-C	79	29.7	41	42	78.0	1.4	8	1
	5	●		MPS0780L-DIN	91	41.7	53	54	90.0	1.4	8	3
	5	●		MPS0780L-DIN-C	91	41.7	53	54	90.0	1.4	8	1
	8	●		MPS0780-L8C	129	63.8	89	92	128.0	1.4	8	1
	10	□		MPS0780-L10C	145	79.4	105	108	144.0	1.4	8	1
	12	●		MPS0780-L12C	161	95.0	121	124	160.0	1.4	8	1
	15	●		MPS0780-L15C	185	118.4	145	148	184.0	1.4	8	1
	20	□		MPS0780-L20C	225	157.4	185	188	224.0	1.4	8	1
	25	□		MPS0780-L25C	265	196.4	225	228	264.0	1.4	8	1
	30	□		MPS0780-L30C	305	235.4	265	268	304.0	1.4	8	1
	35	□		MPS0780-L35C	344	274.4	305	307	343.0	1.4	8	1
	40	□		MPS0780-L40C	379	313.4	341	342	378.0	1.4	8	1
7.9	3	●		MPS0790S-DIN	79	29.6	41	42	78.0	1.4	8	3
	3	●		MPS0790S-DIN-C	79	29.6	41	42	78.0	1.4	8	1
	5	●		MPS0790L-DIN	91	41.6	53	54	90.0	1.4	8	3
	5	●		MPS0790L-DIN-C	91	41.6	53	54	90.0	1.4	8	1
	8	●		MPS0790-L8C	129	64.6	89	92	128.0	1.4	8	1
	10	□		MPS0790-L10C	145	80.4	105	108	144.0	1.4	8	1
	12	●		MPS0790-L12C	161	96.2	121	124	160.0	1.4	8	1
	15	□		MPS0790-L15C	185	119.9	145	148	184.0	1.4	8	1
	20	□		MPS0790-L20C	225	159.4	185	188	224.0	1.4	8	1
	25	□		MPS0790-L25C	265	198.9	225	228	264.0	1.4	8	1
	30	□		MPS0790-L30C	305	238.4	265	268	304.0	1.4	8	1
	35	□		MPS0790-L35C	344	277.9	305	307	343.0	1.4	8	1
	40	□		MPS0790-L40C	379	317.4	341	342	378.0	1.4	8	1
8.0	3	●		MPS0800S-DIN	79	29.5	41	42	78.0	1.5	8	4
	3	●		MPS0800S-DIN-C	79	29.5	41	42	78.0	1.5	8	2
	5	●		MPS0800L-DIN	91	41.5	53	54	90.0	1.5	8	4
	5	●		MPS0800L-DIN-C	91	41.5	53	54	90.0	1.5	8	2
	8	●		MPS0800-L8C	129	65.5	89	92	128.0	1.5	8	2
	10	●		MPS0800-L10C	145	81.5	105	108	144.0	1.5	8	2
	12	●		MPS0800-L12C	161	97.5	121	124	160.0	1.5	8	2
	15	●		MPS0800-L15C	185	121.5	145	148	184.0	1.5	8	2
	20	●		MPS0800-L20C	225	161.5	185	188	224.0	1.5	8	2
	25	●		MPS0800-L25C	265	201.5	225	228	264.0	1.5	8	2
	30	●		MPS0800-L30C	305	241.5	265	268	304.0	1.5	8	2
	35	□		MPS0800-L35C	344	281.5	305	307	343.0	1.5	8	2
	40	●		MPS0800-L40C	379	321.5	341	342	378.0	1.5	8	2
8.05	3	●		MPS0805S-DIN	88	34.4	46	47	87.0	1.5	10	3
	3	●		MPS0805S-DIN-C	88	34.4	46	47	87.0	1.5	10	1
	5	●		MPS0805L-DIN	102	48.4	60	61	101.0	1.5	10	3
	5	●		MPS0805L-DIN-C	102	48.4	60	61	101.0	1.5	10	1
8.1	3	●		MPS0810S-DIN	88	34.3	46	47	87.0	1.5	10	3
	3	●		MPS0810S-DIN-C	88	34.3	46	47	87.0	1.5	10	1
	5	●		MPS0810L-DIN	102	48.3	60	61	101.0	1.5	10	3
	5	●		MPS0810L-DIN-C	102	48.3	60	61	101.0	1.5	10	1
	8	●		MPS0810-L8C	139	66.3	95	98	138.0	1.5	10	1
	10	□		MPS0810-L10C	156	82.5	112	115	155.0	1.5	10	1
	12	●		MPS0810-L12C	173	98.7	129	132	172.0	1.5	10	1
	15	●		MPS0810-L15C	198	123.0	154	157	197.0	1.5	10	1
	20	□		MPS0810-L20C	241	163.5	197	200	240.0	1.5	10	1
	25	□		MPS0810-L25C	283	204.0	239	242	282.0	1.5	10	1
	30	□		MPS0810-L30C	325	244.5	281	284	324.0	1.5	10	1
	35	□		MPS0810-L35C	367	285.0	324	326	366.0	1.5	10	1
	40	□		MPS0810-L40C	411	325.5	366	370	410.0	1.5	10	1

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
8.2	3	●	MPS0820S-DIN	88	34.2	46	47	87.0	1.5	10	3
	3	●	MPS0820S-DIN-C	88	34.2	46	47	87.0	1.5	10	1
	5	●	MPS0820L-DIN	102	48.2	60	61	101.0	1.5	10	3
	5	●	MPS0820L-DIN-C	102	48.2	60	61	101.0	1.5	10	1
	8	●	MPS0820-L8C	139	67.1	95	98	138.0	1.5	10	1
	10	□	MPS0820-L10C	156	83.5	112	115	155.0	1.5	10	1
	12	●	MPS0820-L12C	173	99.9	129	132	172.0	1.5	10	1
	15	●	MPS0820-L15C	198	124.5	154	157	197.0	1.5	10	1
	20	□	MPS0820-L20C	241	165.5	197	200	240.0	1.5	10	1
	25	□	MPS0820-L25C	283	206.5	239	242	282.0	1.5	10	1
	30	□	MPS0820-L30C	325	247.5	281	284	324.0	1.5	10	1
	35	□	MPS0820-L35C	367	288.5	324	326	366.0	1.5	10	1
	40	□	MPS0820-L40C	411	329.5	366	370	410.0	1.5	10	1
8.3	3	●	MPS0830S-DIN	89	34.1	47	48	87.0	1.5	10	3
	3	●	MPS0830S-DIN-C	89	34.1	47	48	87.0	1.5	10	1
	5	●	MPS0830L-DIN	103	48.1	61	62	101.0	1.5	10	3
	5	●	MPS0830L-DIN-C	103	48.1	61	62	101.0	1.5	10	1
	8	●	MPS0830-L8C	140	67.9	96	99	138.0	1.5	10	1
	10	□	MPS0830-L10C	157	84.5	113	116	155.0	1.5	10	1
	12	●	MPS0830-L12C	174	101.1	130	133	172.0	1.5	10	1
	15	□	MPS0830-L15C	199	126.0	155	158	197.0	1.5	10	1
	20	□	MPS0830-L20C	242	167.5	198	201	240.0	1.5	10	1
	25	□	MPS0830-L25C	284	209.0	240	243	282.0	1.5	10	1
	30	□	MPS0830-L30C	326	250.5	282	285	324.0	1.5	10	1
	35	□	MPS0830-L35C	368	292.0	325	327	366.0	1.5	10	1
	40	□	MPS0830-L40C	412	333.5	367	371	410.0	1.5	10	1
8.4	3	●	MPS0840S-DIN	89	33.9	47	48	87.0	1.5	10	3
	3	●	MPS0840S-DIN-C	89	33.9	47	48	87.0	1.5	10	1
	5	●	MPS0840L-DIN	103	47.9	61	62	101.0	1.5	10	3
	5	●	MPS0840L-DIN-C	103	47.9	61	62	101.0	1.5	10	1
	8	●	MPS0840-L8C	140	68.7	96	99	138.0	1.5	10	1
	10	□	MPS0840-L10C	157	85.5	113	116	155.0	1.5	10	1
	12	●	MPS0840-L12C	174	102.3	130	133	172.0	1.5	10	1
	15	●	MPS0840-L15C	199	127.5	155	158	197.0	1.5	10	1
	20	□	MPS0840-L20C	242	169.5	198	201	240.0	1.5	10	1
	25	□	MPS0840-L25C	284	211.5	240	243	282.0	1.5	10	1
	30	□	MPS0840-L30C	326	253.5	282	285	324.0	1.5	10	1
	35	□	MPS0840-L35C	368	295.5	325	327	366.0	1.5	10	1
	40	□	MPS0840-L40C	412	337.5	367	371	410.0	1.5	10	1
8.5	3	●	MPS0850S-DIN	89	33.8	47	48	87.0	1.5	10	3
	3	●	MPS0850S-DIN-C	89	33.8	47	48	87.0	1.5	10	1
	5	●	MPS0850L-DIN	103	47.8	61	62	101.0	1.5	10	3
	5	●	MPS0850L-DIN-C	103	47.8	61	62	101.0	1.5	10	1
	8	●	MPS0850-L8C	140	69.5	96	99	138.0	1.5	10	1
	10	□	MPS0850-L10C	157	86.5	113	116	155.0	1.5	10	1
	12	●	MPS0850-L12C	174	103.5	130	133	172.0	1.5	10	1
	15	●	MPS0850-L15C	199	129.0	155	158	197.0	1.5	10	1
	20	□	MPS0850-L20C	242	171.5	198	201	240.0	1.5	10	1
	25	□	MPS0850-L25C	284	214.0	240	243	282.0	1.5	10	1
	30	□	MPS0850-L30C	326	256.5	282	285	324.0	1.5	10	1
	35	□	MPS0850-L35C	368	299.0	325	327	366.0	1.5	10	1
	40	●	MPS0850-L40C	412	341.5	367	371	410.0	1.5	10	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
8.6	3	●	MPS0860S-DIN	89	33.7	47	48	87.0	1.6	10	3
	3	●	MPS0860S-DIN-C	89	33.7	47	48	87.0	1.6	10	1
	5	●	MPS0860L-DIN	103	47.7	61	62	101.0	1.6	10	3
	5	●	MPS0860L-DIN-C	103	47.7	61	62	101.0	1.6	10	1
	8	●	MPS0860-L8C	145	70.4	101	104	143.0	1.6	10	1
	10	□	MPS0860-L10C	163	87.6	119	122	161.0	1.6	10	1
	12	●	MPS0860-L12C	181	104.8	137	140	179.0	1.6	10	1
	15	●	MPS0860-L15C	208	130.6	164	167	206.0	1.6	10	1
	20	□	MPS0860-L20C	253	173.6	209	212	251.0	1.6	10	1
	25	□	MPS0860-L25C	298	216.6	254	257	296.0	1.6	10	1
	30	□	MPS0860-L30C	342	259.6	298	301	340.0	1.6	10	1
	35	□	MPS0860-L35C	387	302.6	344	346	385.0	1.6	10	1
	40	□	MPS0860-L40C	436	345.6	392	395	434.0	1.6	10	1
8.7	3	●	MPS0870S-DIN	89	33.5	47	48	87.0	1.6	10	3
	3	●	MPS0870S-DIN-C	89	33.5	47	48	87.0	1.6	10	1
	5	●	MPS0870L-DIN	103	47.5	61	62	101.0	1.6	10	3
	5	●	MPS0870L-DIN-C	103	47.5	61	62	101.0	1.6	10	1
	8	●	MPS0870-L8C	145	71.2	101	104	143.0	1.6	10	1
	10	□	MPS0870-L10C	163	88.6	119	122	161.0	1.6	10	1
	12	●	MPS0870-L12C	181	106.0	137	140	179.0	1.6	10	1
	15	●	MPS0870-L15C	208	132.1	164	167	206.0	1.6	10	1
	20	□	MPS0870-L20C	253	175.6	209	212	251.0	1.6	10	1
	25	□	MPS0870-L25C	298	219.1	254	257	296.0	1.6	10	1
	30	□	MPS0870-L30C	342	262.6	298	301	340.0	1.6	10	1
	35	□	MPS0870-L35C	387	306.1	344	346	385.0	1.6	10	1
	40	□	MPS0870-L40C	436	349.6	392	395	434.0	1.6	10	1
8.8	3	●	MPS0880S-DIN	89	33.4	47	48	87.0	1.6	10	3
	3	●	MPS0880S-DIN-C	89	33.4	47	48	87.0	1.6	10	1
	5	●	MPS0880L-DIN	103	47.4	61	62	101.0	1.6	10	3
	5	●	MPS0880L-DIN-C	103	47.4	61	62	101.0	1.6	10	1
	8	●	MPS0880-L8C	145	72.0	101	104	143.0	1.6	10	1
	10	□	MPS0880-L10C	163	89.6	119	122	161.0	1.6	10	1
	12	●	MPS0880-L12C	181	107.2	137	140	179.0	1.6	10	1
	15	●	MPS0880-L15C	208	133.6	164	167	206.0	1.6	10	1
	20	□	MPS0880-L20C	253	177.6	209	212	251.0	1.6	10	1
	25	□	MPS0880-L25C	298	221.6	254	257	296.0	1.6	10	1
	30	□	MPS0880-L30C	342	265.6	298	301	340.0	1.6	10	1
	35	□	MPS0880-L35C	387	309.6	344	346	385.0	1.6	10	1
	40	□	MPS0880-L40C	436	353.6	392	395	434.0	1.6	10	1
8.9	3	●	MPS0890S-DIN	89	33.3	47	48	87.0	1.6	10	3
	3	●	MPS0890S-DIN-C	89	33.3	47	48	87.0	1.6	10	1
	5	●	MPS0890L-DIN	103	47.3	61	62	101.0	1.6	10	3
	5	●	MPS0890L-DIN-C	103	47.3	61	62	101.0	1.6	10	1
	8	●	MPS0890-L8C	145	72.8	101	104	143.0	1.6	10	1
	10	□	MPS0890-L10C	163	90.6	119	122	161.0	1.6	10	1
	12	●	MPS0890-L12C	181	108.4	137	140	179.0	1.6	10	1
	15	□	MPS0890-L15C	208	135.1	164	167	206.0	1.6	10	1
	20	□	MPS0890-L20C	253	179.6	209	212	251.0	1.6	10	1
	25	□	MPS0890-L25C	298	224.1	254	257	296.0	1.6	10	1
	30	□	MPS0890-L30C	342	268.6	298	301	340.0	1.6	10	1
	35	□	MPS0890-L35C	387	313.1	344	346	385.0	1.6	10	1
	40	□	MPS0890-L40C	436	357.6	392	395	434.0	1.6	10	1

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
9.0	3	●	MPS0900S-DIN	89	33.1	47	48	87.0	1.6	10	3
	3	●	MPS0900S-DIN-C	89	33.1	47	48	87.0	1.6	10	1
	5	●	MPS0900L-DIN	103	47.1	61	62	101.0	1.6	10	3
	5	●	MPS0900L-DIN-C	103	47.1	61	62	101.0	1.6	10	1
	8	●	MPS0900-L8C	145	73.6	101	104	143.0	1.6	10	1
	10	●	MPS0900-L10C	163	91.6	119	122	161.0	1.6	10	1
	12	●	MPS0900-L12C	181	109.6	137	140	179.0	1.6	10	1
	15	●	MPS0900-L15C	208	136.6	164	167	206.0	1.6	10	1
	20	●	MPS0900-L20C	253	181.6	209	212	251.0	1.6	10	1
	25	□	MPS0900-L25C	298	226.6	254	257	296.0	1.6	10	1
	30	□	MPS0900-L30C	342	271.6	298	301	340.0	1.6	10	1
	35	□	MPS0900-L35C	387	316.6	344	346	385.0	1.6	10	1
9.1	40	●	MPS0900-L40C	436	361.6	392	395	434.0	1.6	10	1
	3	●	MPS0910S-DIN	89	33.0	47	48	87.0	1.7	10	3
	3	●	MPS0910S-DIN-C	89	33.0	47	48	87.0	1.7	10	1
	5	●	MPS0910L-DIN	103	47.0	61	62	101.0	1.7	10	3
	5	●	MPS0910L-DIN-C	103	47.0	61	62	101.0	1.7	10	1
	8	●	MPS0910-L8C	151	74.5	107	110	149.0	1.7	10	1
	10	□	MPS0910-L10C	170	92.7	126	129	168.0	1.7	10	1
	12	●	MPS0910-L12C	189	110.9	145	148	187.0	1.7	10	1
	15	●	MPS0910-L15C	217	138.2	173	176	215.0	1.7	10	1
	20	□	MPS0910-L20C	265	183.7	221	224	263.0	1.7	10	1
	25	□	MPS0910-L25C	312	229.2	268	271	310.0	1.7	10	1
	30	□	MPS0910-L30C	360	274.7	316	319	358.0	1.7	10	1
9.2	35	□	MPS0910-L35C	406	320.2	363	365	404.0	1.7	10	1
	3	●	MPS0920S-DIN	89	32.9	47	48	87.0	1.7	10	3
	3	●	MPS0920S-DIN-C	89	32.9	47	48	87.0	1.7	10	1
	5	●	MPS0920L-DIN	103	46.9	61	62	101.0	1.7	10	3
	5	●	MPS0920L-DIN-C	103	46.9	61	62	101.0	1.7	10	1
	8	●	MPS0920-L8C	151	75.3	107	110	149.0	1.7	10	1
	10	□	MPS0920-L10C	170	93.7	126	129	168.0	1.7	10	1
	12	●	MPS0920-L12C	189	112.1	145	148	187.0	1.7	10	1
	15	●	MPS0920-L15C	217	139.7	173	176	215.0	1.7	10	1
	20	□	MPS0920-L20C	265	185.7	221	224	263.0	1.7	10	1
	25	□	MPS0920-L25C	312	231.7	268	271	310.0	1.7	10	1
	30	□	MPS0920-L30C	360	277.7	316	319	358.0	1.7	10	1
9.3	35	□	MPS0920-L35C	406	323.7	363	365	404.0	1.7	10	1
	3	●	MPS0930S-DIN	89	32.7	47	48	87.0	1.7	10	3
	3	●	MPS0930S-DIN-C	89	32.7	47	48	87.0	1.7	10	1
	5	●	MPS0930L-DIN	103	46.7	61	62	101.0	1.7	10	3
	5	●	MPS0930L-DIN-C	103	46.7	61	62	101.0	1.7	10	1
	8	●	MPS0930-L8C	151	76.1	107	110	149.0	1.7	10	1
	10	□	MPS0930-L10C	170	94.7	126	129	168.0	1.7	10	1
	12	●	MPS0930-L12C	189	113.3	145	148	187.0	1.7	10	1
	15	□	MPS0930-L15C	217	141.2	173	176	215.0	1.7	10	1
	20	□	MPS0930-L20C	265	187.7	221	224	263.0	1.7	10	1
	25	□	MPS0930-L25C	312	234.2	268	271	310.0	1.7	10	1
	30	□	MPS0930-L30C	360	280.7	316	319	358.0	1.7	10	1
9.4	35	□	MPS0930-L35C	406	327.2	363	365	404.0	1.7	10	1
	3	●	MPS0940S-DIN	89	32.6	47	48	87.0	1.7	10	3
	3	●	MPS0940S-DIN-C	89	32.6	47	48	87.0	1.7	10	1
	5	●	MPS0940L-DIN	103	46.6	61	62	101.0	1.7	10	3
	5	●	MPS0940L-DIN-C	103	46.6	61	62	101.0	1.7	10	1
	8	●	MPS0940-L8C	151	76.9	107	110	149.0	1.7	10	1
	10	□	MPS0940-L10C	170	95.7	126	129	168.0	1.7	10	1
	12	●	MPS0940-L12C	189	114.5	145	148	187.0	1.7	10	1
	15	□	MPS0940-L15C	217	142.7	173	176	215.0	1.7	10	1
	20	□	MPS0940-L20C	265	189.7	221	224	263.0	1.7	10	1
	25	□	MPS0940-L25C	312	236.7	268	271	310.0	1.7	10	1
	30	□	MPS0940-L30C	360	283.7	316	319	358.0	1.7	10	1
9.5	35	□	MPS0940-L35C	406	330.7	363	365	404.0	1.7	10	1
	3	●	MPS0950S-DIN	89	32.5	47	48	87.0	1.7	10	3
	3	●	MPS0950S-DIN-C	89	32.5	47	48	87.0	1.7	10	1
	5	●	MPS0950L-DIN	103	46.5	61	62	101.0	1.7	10	3
	5	●	MPS0950L-DIN-C	103	46.5	61	62	101.0	1.7	10	1
	8	●	MPS0950-L8C	151	77.7	107	110	149.0	1.7	10	1
	10	□	MPS0950-L10C	170	96.7	126	129	168.0	1.7	10	1
	12	●	MPS0950-L12C	189	115.7	145	148	187.0	1.7	10	1
	15	●	MPS0950-L15C	217	144.2	173	176	215.0	1.7	10	1
	20	□	MPS0950-L20C	265	191.7	221	224	263.0	1.7	10	1
	25	□	MPS0950-L25C	312	239.2	268	271	310.0	1.7	10	1
	30	□	MPS0950-L30C	360	286.7	316	319	358.0	1.7	10	1
9.6	35	□	MPS0950-L35C	406	334.2	363	365	404.0	1.7	10	1
	3	●	MPS0960S-DIN	89	32.3	47	48	87.0	1.7	10	3
	3	●	MPS0960S-DIN-C	89	32.3	47	48	87.0	1.7	10	1
	5	●	MPS0960L-DIN	103	46.3	61	62	101.0	1.7	10	3
	5	●	MPS0960L-DIN-C	103	46.3	61	62	101.0	1.7	10	1
	8	●	MPS0960-L8C	156	78.5	112	115	154.0	1.7	10	1
	10	□	MPS0960-L10C	176	97.7	132	135	174.0	1.7	10	1
	12	●	MPS0960-L12C	196	116.9	152	155	194.0	1.7	10	3
	15	●	MPS0960-L15C	226	145.7	182	185	224.0	1.7	10	1
	20	□	MPS0960-L20C	276	193.7	232	235	274.0	1.7	10	3
	25	□	MPS0960-L25C	326	241.7	282	285	324.0	1.7	10	1
	30	□	MPS0960-L30C	376	289.7	332	335	374.0	1.7	10	1
9.7	35	□	MPS0960-L35C	425	337.7	382	384	423.0	1.7	10	1
	3	●	MPS0970S-DIN	89	32.2	47	48	87.0	1.8	10	3
	3	●	MPS0970S-DIN-C	89	32.2	47	48	87.0	1.8	10	1
	5	●	MPS0970L-DIN	103	46.2	61	62	101.0	1.8	10	3
	5	●	MPS0970L-DIN-C	103	46.2	61	62	101.0	1.8	10	1
	8	●	MPS0970-L8C	156	79.4	112	115	154.0	1.8	10	1
	10	□	MPS0970-L10C	176	98.8	132	135	174.0	1.8	10	1
	12	●	MPS0970-L12C	196	118.2	152	155	194.0	1.8	10	1
	15	●	MPS0970-L15C	226	147.3	182	185	224.0	1.8	10	1
	20	□	MPS0970-L20C	276	195.8	232	235	274.0	1.8	10	1
	25	□	MPS0970-L25C	326	244.3	282	285	324.0	1.8	10	1
	30	□	MPS0970-L30C	376	292.8	332	335	374.0	1.8	10	1
9.8	35	□	MPS0970-L35C	425	341.3	382	384	423.0	1.8	10	1

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

HARTMETALL

BOHREN

DC (mm)	Bohrtiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
9.8	3	●	MPS0980S-DIN	89	32.1	47	48	87.0	1.8	10	3
	3	●	MPS0980S-DIN-C	89	32.1	47	48	87.0	1.8	10	1
	5	●	MPS0980L-DIN	103	46.1	61	62	101.0	1.8	10	3
	5	●	MPS0980L-DIN-C	103	46.1	61	62	101.0	1.8	10	1
	8	●	MPS0980-L8C	156	80.2	112	115	154.0	1.8	10	1
	10	□	MPS0980-L10C	176	99.8	132	135	174.0	1.8	10	1
	12	●	MPS0980-L12C	196	119.4	152	155	194.0	1.8	10	1
	15	●	MPS0980-L15C	226	148.8	182	185	224.0	1.8	10	1
	20	□	MPS0980-L20C	276	197.8	232	235	274.0	1.8	10	1
	25	□	MPS0980-L25C	326	246.8	282	285	324.0	1.8	10	1
	30	□	MPS0980-L30C	376	295.8	332	335	374.0	1.8	10	1
	35	□	MPS0980-L35C	425	344.8	382	384	423.0	1.8	10	1
9.9	3	●	MPS0990S-DIN	89	32.0	47	48	87.0	1.8	10	3
	3	●	MPS0990S-DIN-C	89	32.0	47	48	87.0	1.8	10	1
	5	●	MPS0990L-DIN	103	46.0	61	62	101.0	1.8	10	3
	5	●	MPS0990L-DIN-C	103	46.0	61	62	101.0	1.8	10	1
	8	●	MPS0990-L8C	156	81.0	112	115	154.0	1.8	10	1
	10	□	MPS0990-L10C	176	100.8	132	135	174.0	1.8	10	1
	12	●	MPS0990-L12C	196	120.6	152	155	194.0	1.8	10	1
	15	●	MPS0990-L15C	226	150.3	182	185	224.0	1.8	10	1
	20	□	MPS0990-L20C	276	199.8	232	235	274.0	1.8	10	1
	25	□	MPS0990-L25C	326	249.3	282	285	324.0	1.8	10	1
	30	□	MPS0990-L30C	376	298.8	332	335	374.0	1.8	10	1
	35	□	MPS0990-L35C	425	348.3	382	384	423.0	1.8	10	1
10.0	3	●	MPS1000S-DIN	89	31.8	47	48	87.0	1.8	10	4
	3	●	MPS1000S-DIN-C	89	31.8	47	48	87.0	1.8	10	2
	5	●	MPS1000L-DIN	103	45.8	61	62	101.0	1.8	10	4
	5	●	MPS1000L-DIN-C	103	45.8	61	62	101.0	1.8	10	2
	8	●	MPS1000-L8C	156	81.8	112	115	154.0	1.8	10	2
	10	●	MPS1000-L10C	176	101.8	132	135	174.0	1.8	10	2
	12	●	MPS1000-L12C	196	121.8	152	155	194.0	1.8	10	2
	15	●	MPS1000-L15C	226	151.8	182	185	224.0	1.8	10	2
	20	●	MPS1000-L20C	276	201.8	232	235	274.0	1.8	10	2
	25	□	MPS1000-L25C	326	251.8	282	285	324.0	1.8	10	2
	30	□	MPS1000-L30C	376	301.8	332	335	374.0	1.8	10	2
	35	□	MPS1000-L35C	425	351.8	382	384	423.0	1.8	10	2
10.05	3	●	MPS1005S-DIN	102	39.8	55	56	100.0	1.8	12	3
	3	●	MPS1005S-DIN-C	102	39.8	55	56	100.0	1.8	12	1
	5	●	MPS1005L-DIN	118	55.8	71	72	116.0	1.8	12	3
	5	●	MPS1005L-DIN-C	118	55.8	71	72	116.0	1.8	12	1
10.1	3	●	MPS1010S-DIN	102	39.7	55	56	100.0	1.8	12	3
	3	●	MPS1010S-DIN-C	102	39.7	55	56	100.0	1.8	12	1
	5	●	MPS1010L-DIN	118	55.7	71	72	116.0	1.8	12	3
	5	●	MPS1010L-DIN-C	118	55.7	71	72	116.0	1.8	12	1
	8	●	MPS1010-L8C	167	82.6	118	121	165.0	1.8	12	1
	10	□	MPS1010-L10C	188	102.8	139	142	186.0	1.8	12	1
	12	●	MPS1010-L12C	209	123.0	160	163	207.0	1.8	12	1
	15	●	MPS1010-L15C	240	153.3	191	194	238.0	1.8	12	1
	20	□	MPS1010-L20C	293	203.8	244	247	291.0	1.8	12	1
	25	□	MPS1010-L25C	345	254.3	296	299	343.0	1.8	12	1
10.2	3	●	MPS1020S-DIN	102	39.6	55	56	100.0	1.9	12	3
	3	●	MPS1020S-DIN-C	102	39.6	55	56	100.0	1.9	12	1
	5	●	MPS1020L-DIN	118	55.6	71	72	116.0	1.9	12	3
	5	●	MPS1020L-DIN-C	118	55.6	71	72	116.0	1.9	12	1
	8	●	MPS1020-L8C	167	83.5	118	121	165.0	1.9	12	1

DC (mm)	Bohrtiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
10.2	10	□	MPS1020-L10C	188	103.9	139	142	186.0	1.9	12	1
	12	●	MPS1020-L12C	209	124.3	160	163	207.0	1.9	12	1
	15	●	MPS1020-L15C	240	154.9	191	194	238.0	1.9	12	1
	20	□	MPS1020-L20C	293	205.9	244	247	291.0	1.9	12	1
	25	□	MPS1020-L25C	345	256.9	296	299	343.0	1.9	12	1
10.3	3	●	MPS1030S-DIN	102	39.4	55	56	100.0	1.9	12	3
	3	●	MPS1030S-DIN-C	102	39.4	55	56	100.0	1.9	12	1
	5	●	MPS1030L-DIN	118	55.4	71	72	116.0	1.9	12	3
	5	●	MPS1030L-DIN-C	118	55.4	71	72	116.0	1.9	12	1
	8	●	MPS1030-L8C	167	84.3	118	121	165.0	1.9	12	1
	10	□	MPS1030-L10C	188	104.9	139	142	186.0	1.9	12	1
	12	●	MPS1030-L12C	209	125.5	160	163	207.0	1.9	12	1
	15	□	MPS1030-L15C	240	156.4	191	194	238.0	1.9	12	1
10.4	20	□	MPS1030-L20C	293	207.9	244	247	291.0	1.9	12	1
	25	□	MPS1030-L25C	345	259.4	296	299	343.0	1.9	12	1
10.5	3	●	MPS1040S-DIN	102	39.3	55	56	100.0	1.9	12	3
	3	●	MPS1040S-DIN-C	102	39.3	55	56	100.0	1.9	12	1
	5	●	MPS1040L-DIN	118	55.3	71	72	116.0	1.9	12	3
	5	●	MPS1040L-DIN-C	118	55.3	71	72	116.0	1.9	12	1
	8	●	MPS1040-L8C	167	85.1	118	121	165.0	1.9	12	1
	10	□	MPS1040-L10C	188	105.9	139	142	186.0	1.9	12	1
	12	●	MPS1040-L12C	209	126.7	160	163	207.0	1.9	12	1
	15	□	MPS1040-L15C	240	157.9	191	194	238.0	1.9	12	1
	20	□	MPS1040-L20C	293	209.9	244	247	291.0	1.9	12	1
	25	□	MPS1040-L25C	345	261.9	296	299	343.0	1.9	12	1
10.6	3	●	MPS1050S-DIN	102	39.2	55	56	100.0	1.9	12	3
	3	●	MPS1050S-DIN-C	102	39.2	55	56	100.0	1.9	12	1
	5	●	MPS1050L-DIN	118	55.2	71	72	116.0	1.9	12	3
	5	●	MPS1050L-DIN-C	118	55.2	71	72	116.0	1.9	12	1
	8	●	MPS1050-L8C	167	85.9	118	121	165.0	1.9	12	1
	10	□	MPS1050-L10C	188	106.9	139	142	186.0	1.9	12	1
	12	●	MPS1050-L12C	209	127.9	160	163	207.0	1.9	12	1
	15	●	MPS1050-L15C	240	159.4	191	194	238.0	1.9	12	1
	20	□	MPS1050-L20C	293	211.9	244	247	291.0	1.9	12	1
	25	□	MPS1050-L25C	345	264.4	296	299	343.0	1.9	12	1
10.7	3	●	MPS1060S-DIN	102	39.0	55	56	100.0	1.9	12	3
	3	●	MPS1060S-DIN-C	102	39.0	55	56	100.0	1.9	12	1
	5	●	MPS1060L-DIN	118	55.0	71	72	116.0	1.9	12	3
	5	●	MPS1060L-DIN-C	118	55.0	71	72	116.0	1.9	12	1
	8	●	MPS1060-L8C	172	86.7	123	126	170.0	1.9	12	1
	10	□	MPS1060-L10C	194	107.9	145	148	192.0	1.9	12	1
	12	□	MPS1060-L12C	216	129.1	167	170	214.0	1.9	12	1
	15	□	MPS1060-L15C	249	160.9	198	203	247.0	1.9	12	1
	20	□	MPS1060-L20C	304	213.9	255	258	302.0	1.9	12	1
	25	□	MPS1060-L25C	359	266.9	310	313	357.0	1.9	12	1
10.7	3	●	MPS1070S-DIN	102	38.9	55	56	100.0	1.9	12	3
	3	●	MPS1070S-DIN-C	102	38.9	55	56	100.0	1.9	12	1
	5	●	MPS1070L-DIN	118	54.9	71	72	116.0	1.9	12	3
	5	●	MPS1070L-DIN-C	118	54.9	71	72	116.0	1.9	12	1
	8	●	MPS1070-L8C	172	87.5	123	126	170.0	1.9	12	1
	10	□	MPS1070-L10C	194	108.9	145	148	192.0	1.9	12	1
	12	●	MPS1070-L12C	216	130.3	167	170	214.0	1.9	12	1
	15	□	MPS1070-L15C	249	162.4	198	203	247.0	1.9	12	1
10.7	20	□	MPS1070-L20C	304	215.9	255	258	302.0	1.9	12	1
	25	□	MPS1070-L25C	359	269.4	310	313	357.0	1.9	12	1

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)							Typ
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON	
10.8	3	●		MPS1080S-DIN	102	38.8	55	56	100.0	2.0	12	3
	3	●		MPS1080S-DIN-C	102	38.8	55	56	100.0	2.0	12	1
	5	●		MPS1080L-DIN	118	54.8	71	72	116.0	2.0	12	3
	5	●		MPS1080L-DIN-C	118	54.8	71	72	116.0	2.0	12	1
	8	●		MPS1080-L8C	172	88.4	123	126	170.0	2.0	12	1
	10	□		MPS1080-L10C	194	110.0	145	148	192.0	2.0	12	1
	12	●		MPS1080-L12C	216	131.6	167	170	214.0	2.0	12	1
	15	□		MPS1080-L15C	249	164.0	198	203	247.0	2.0	12	1
	20	□		MPS1080-L20C	304	218.0	255	258	302.0	2.0	12	1
	25	□		MPS1080-L25C	359	272.0	310	313	357.0	2.0	12	1
10.9	3	●		MPS1090S-DIN	102	38.6	55	56	100.0	2.0	12	3
	3	●		MPS1090S-DIN-C	102	38.6	55	56	100.0	2.0	12	1
	5	●		MPS1090L-DIN	118	54.6	71	72	116.0	2.0	12	3
	5	●		MPS1090L-DIN-C	118	54.6	71	72	116.0	2.0	12	1
	8	●		MPS1090-L8C	172	89.2	123	126	170.0	2.0	12	1
	10	□		MPS1090-L10C	194	111.0	145	148	192.0	2.0	12	1
	12	□		MPS1090-L12C	216	132.8	167	170	214.0	2.0	12	1
	15	□		MPS1090-L15C	249	165.5	198	203	247.0	2.0	12	1
	20	□		MPS1090-L20C	304	220.0	255	258	302.0	2.0	12	1
	25	□		MPS1090-L25C	359	274.5	310	313	357.0	2.0	12	1
11.0	3	●		MPS1100S-DIN	102	38.5	55	56	100.0	2.0	12	3
	3	●		MPS1100S-DIN-C	102	38.5	55	56	100.0	2.0	12	1
	5	●		MPS1100L-DIN	118	54.5	71	72	116.0	2.0	12	3
	5	●		MPS1100L-DIN-C	118	54.5	71	72	116.0	2.0	12	1
	8	●		MPS1100-L8C	172	90.0	123	126	170.0	2.0	12	1
	10	□		MPS1100-L10C	194	112.0	145	148	192.0	2.0	12	1
	12	●		MPS1100-L12C	216	134.0	167	170	214.0	2.0	12	1
	15	●		MPS1100-L15C	249	167.0	198	203	247.0	2.0	12	1
	20	□		MPS1100-L20C	304	222.0	255	258	302.0	2.0	12	1
	25	□		MPS1100-L25C	359	277.0	310	313	357.0	2.0	12	1
11.1	3	●		MPS1110S-DIN	102	38.4	55	56	100.0	2.0	12	3
	3	●		MPS1110S-DIN-C	102	38.4	55	56	100.0	2.0	12	1
	5	●		MPS1110L-DIN	118	54.4	71	72	116.0	2.0	12	3
	5	●		MPS1110L-DIN-C	118	54.4	71	72	116.0	2.0	12	1
	8	●		MPS1110-L8C	178	90.8	129	132	176.0	2.0	12	1
	10	□		MPS1110-L10C	201	113.0	152	155	199.0	2.0	12	1
	12	●		MPS1110-L12C	224	135.2	175	178	222.0	2.0	12	1
	15	●		MPS1110-L15C	258	168.5	209	212	256.0	2.0	12	1
	20	□		MPS1110-L20C	316	224.0	267	270	314.0	2.0	12	1
	25	□		MPS1110-L25C	373	279.5	324	327	371.0	2.0	12	1
11.2	3	●		MPS1120S-DIN	102	38.2	55	56	100.0	2.0	12	3
	3	●		MPS1120S-DIN-C	102	38.2	55	56	100.0	2.0	12	1
	5	●		MPS1120L-DIN	118	54.2	71	72	116.0	2.0	12	3
	5	●		MPS1120L-DIN-C	118	54.2	71	72	116.0	2.0	12	1
	8	●		MPS1120-L8C	178	91.6	129	132	176.0	2.0	12	1
	10	□		MPS1120-L10C	201	114.0	152	155	199.0	2.0	12	1
	12	□		MPS1120-L12C	224	136.4	175	178	222.0	2.0	12	1
	15	□		MPS1120-L15C	258	170.0	209	212	256.0	2.0	12	1
	20	□		MPS1120-L20C	316	226.0	267	270	314.0	2.0	12	1
	25	□		MPS1120-L25C	373	282.0	324	327	371.0	2.0	12	1
11.3	3	●		MPS1130S-DIN	102	38.1	55	56	100.0	2.1	12	3
	3	●		MPS1130S-DIN-C	102	38.1	55	56	100.0	2.1	12	1
	5	●		MPS1130L-DIN	118	54.1	71	72	116.0	2.1	12	3
	5	●		MPS1130L-DIN-C	118	54.1	71	72	116.0	2.1	12	1
	8	●		MPS1130-L8C	178	92.5	129	132	176.0	2.1	12	1

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)							Typ
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON	
11.3	10	□		MPS1130-L10C	201	115.1	152	155	199.0	2.1	12	1
	12	□		MPS1130-L12C	224	137.7	175	178	221.9	2.1	12	1
	15	□		MPS1130-L15C	258	171.6	209	212	256.0	2.1	12	1
	20	□		MPS1130-L20C	316	228.1	267	270	314.0	2.1	12	1
	25	□		MPS1130-L25C	373	284.6	324	327	371.0	2.1	12	1
11.4	3	●		MPS1140S-DIN	102	38.0	55	56	100.0	2.1	12	3
	3	●		MPS1140S-DIN-C	102	38.0	55	56	100.0	2.1	12	1
	5	●		MPS1140L-DIN	118	54.0	71	72	116.0	2.1	12	3
	5	●		MPS1140L-DIN-C	118	54.0	71	72	116.0	2.1	12	1
	8	●		MPS1140-L8C	178	93.3	129	132	176.0	2.1	12	1
	10	□		MPS1140-L10C	201	116.1	152	155	199.0	2.1	12	1
	12	□		MPS1140-L12C	224	138.9	175	178	221.9	2.1	12	1
	15	□		MPS1140-L15C	258	173.1	209	212	256.0	2.1	12	1
	20	□		MPS1140-L20C	316	230.1	267	270	314.0	2.1	12	1
	25	□		MPS1140-L25C	373	287.1	324	327	371.0	2.1	12	1
11.5	3	●		MPS1150S-DIN	102	37.8	55	56	100.0	2.1	12	3
	3	●		MPS1150S-DIN-C	102	37.8	55	56	100.0	2.1	12	1
	5	●		MPS1150L-DIN	118	53.8	71	72	116.0	2.1	12	3
	5	●		MPS1150L-DIN-C	118	53.8	71	72	116.0	2.1	12	1
	8	●		MPS1150-L8C	178	94.1	129	132	176.0	2.1	12	1
	10	□		MPS1150-L10C	201	117.1	152	155	199.0	2.1	12	1
	12	●		MPS1150-L12C	224	140.1	175	178	221.9	2.1	12	1
	15	●		MPS1150-L15C	258	174.6	209	212	256.0	2.1	12	1
	20	□		MPS1150-L20C	316	232.1	267	270	314.0	2.1	12	1
25	□		MPS1150-L25C	373	289.6	324	327	371.0	2.1	12	1	
11.6	3	●		MPS1160S-DIN	102	37.7	55	56	100.0	2.1	12	3
	3	●		MPS1160S-DIN-C	102	37.7	55	56	100.0	2.1	12	1
	5	●		MPS1160L-DIN	118	53.7	71	72	116.0	2.1	12	3
	5	●		MPS1160L-DIN-C	118	53.7	71	72	116.0	2.1	12	1
	8	●		MPS1160-L8C	183	94.9	134	137	181.0	2.1	12	1
	10	□		MPS1160-L10C	207	118.1	158	161	205.0	2.1	12	1
	12	□		MPS1160-L12C	231	141.3	182	185	229.0	2.1	12	1
	15	□		MPS1160-L15C	267	176.1	218	221	265.0	2.1	12	1
	20	□		MPS1160-L20C	327	234.1	278	281	325.0	2.1	12	1
25	□		MPS1160-L25C	387	292.1	338	341	385.0	2.1	12	1	
11.7	3	●		MPS1170S-DIN	102	37.6	55	56	100.0	2.1	12	3
	3	●		MPS1170S-DIN-C	102	37.6	55	56	100.0	2.1	12	1
	5	●		MPS1170L-DIN	118	53.6	71	72	116.0	2.1	12	3
	5	●		MPS1170L-DIN-C	118	53.6	71	72	116.0	2.1	12	1
	8	●		MPS1170-L8C	183	95.7	134	137	181.0	2.1	12	1
	10	□		MPS1170-L10C	207	119.1	158	161	205.0	2.1	12	1
	12	●		MPS1170-L12C	231	142.5	182	185	229.0	2.1	12	1
	15	●		MPS1170-L15C	267	177.6	218	221	265.0	2.1	12	1
	20	□		MPS1170-L20C	327	236.1	278	281	325.0	2.1	12	1
25	□		MPS1170-L25C	387	294.6	338	341	385.0	2.1	12	1	
11.8	3	●		MPS1180S-DIN	102	37.4	55	56	100.0	2.1	12	3
	3	●		MPS1180S-DIN-C	102	37.4	55	56	100.0	2.1	12	1
	5	●		MPS1180L-DIN	118	53.4	71	72	116.0	2.1	12	3
	5	●		MPS1180L-DIN-C	118	53.4	71	72	116.0	2.1	12	1
	8	●		MPS1180-L8C	183	96.5	134	137	181.0	2.1	12	1
	10	□		MPS1180-L10C	207	120.1	158	161	205.0	2.1	12	1
	12	●		MPS1180-L12C	231	143.7	182	185	229.0	2.1	12	1
	15	●		MPS1180-L15C	267	179.1	218	221	265.0	2.1	12	1
	20	□		MPS1180-L20C	327	238.1	278	281	325.0	2.1	12	1
25	□		MPS1180-L25C	387	297.1	338	341	385.0	2.1	12	1	

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

HARTMETALL

BOHREN

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
11.9	3	●	MPS1190S-DIN	102	37.3	55	56	100.0	2.2	12	3
	3	●	MPS1190S-DIN-C	102	37.3	55	56	100.0	2.2	12	1
	5	●	MPS1190L-DIN	118	53.3	71	72	116.0	2.2	12	3
	5	●	MPS1190L-DIN-C	118	53.3	71	72	116.0	2.2	12	1
	8	●	MPS1190-L8C	183	97.4	134	137	181.0	2.2	12	1
	10	□	MPS1190-L10C	207	121.2	158	161	205.0	2.2	12	1
	12	□	MPS1190-L12C	231	145.0	182	185	229.0	2.2	12	1
	15	□	MPS1190-L15C	267	180.7	218	221	265.0	2.2	12	1
	20	□	MPS1190-L20C	327	240.2	278	281	325.0	2.2	12	1
	25	□	MPS1190-L25C	387	299.7	338	341	385.0	2.2	12	1
12.0	3	●	MPS1200S-DIN	102	37.2	55	56	100.0	2.2	12	4
	3	●	MPS1200S-DIN-C	102	37.2	55	56	100.0	2.2	12	2
	5	●	MPS1200L-DIN	118	53.2	71	72	116.0	2.2	12	4
	5	●	MPS1200L-DIN-C	118	53.2	71	72	116.0	2.2	12	2
	8	●	MPS1200-L8C	183	98.2	134	137	181.0	2.2	12	2
	10	□	MPS1200-L10C	207	122.2	158	161	205.0	2.2	12	2
	12	●	MPS1200-L12C	231	146.2	182	185	229.0	2.2	12	2
	15	●	MPS1200-L15C	267	182.2	218	221	265.0	2.2	12	2
12.05	20	□	MPS1200-L20C	327	242.2	278	281	325.0	2.2	12	2
	25	□	MPS1200-L25C	387	302.2	338	341	385.0	2.2	12	2
12.05	3	●	MPS1205S-DIN	107	42.1	60	61	105.0	2.2	14	3
	3	●	MPS1205S-DIN-C	107	42.1	60	61	105.0	2.2	14	1
	5	●	MPS1205L-DIN	124	59.1	77	78	122.0	2.2	14	3
	5	●	MPS1205L-DIN-C	124	59.1	77	78	122.0	2.2	14	1
12.1	3	●	MPS1210S-DIN	107	42.1	60	61	105.0	2.2	14	3
	3	●	MPS1210S-DIN-C	107	42.1	60	61	105.0	2.2	14	1
	5	●	MPS1210L-DIN	124	59.1	77	78	122.0	2.2	14	3
	5	●	MPS1210L-DIN-C	124	59.1	77	78	122.0	2.2	14	1
	8	●	MPS1210-L8C	189	99.0	140	143	187.0	2.2	14	1
	10	□	MPS1210-L10C	214	123.2	165	168	212.0	2.2	14	1
	12	●	MPS1210-L12C	239	147.4	190	193	237.0	2.2	14	1
	15	●	MPS1210-L15C	276	183.7	227	230	274.0	2.2	14	1
12.2	20	□	MPS1210-L20C	339	244.2	290	293	337.0	2.2	14	1
	3	●	MPS1220S-DIN	107	41.9	60	61	105.0	2.2	14	3
	3	●	MPS1220S-DIN-C	107	41.9	60	61	105.0	2.2	14	1
	5	●	MPS1220L-DIN	124	58.9	77	78	122.0	2.2	14	3
	5	●	MPS1220L-DIN-C	124	58.9	77	78	122.0	2.2	14	1
	8	●	MPS1220-L8C	189	99.8	140	143	187.0	2.2	14	1
	10	□	MPS1220-L10C	214	124.2	165	168	212.0	2.2	14	1
	12	●	MPS1220-L12C	239	148.6	190	193	237.0	2.2	14	1
	15	●	MPS1220-L15C	276	185.2	227	230	274.0	2.2	14	1
	20	□	MPS1220-L20C	339	246.2	290	293	337.0	2.2	14	1
12.3	3	●	MPS1230S-DIN	107	41.8	60	61	105.0	2.2	14	3
	3	●	MPS1230S-DIN-C	107	41.8	60	61	105.0	2.2	14	1
	5	●	MPS1230L-DIN	124	58.8	77	78	122.0	2.2	14	3
	5	●	MPS1230L-DIN-C	124	58.8	77	78	122.0	2.2	14	1
	8	●	MPS1230-L8C	189	100.6	140	143	187.0	2.2	14	1
	10	□	MPS1230-L10C	214	125.2	165	168	212.0	2.2	14	1
	12	□	MPS1230-L12C	239	149.8	190	193	237.0	2.2	14	1
	15	□	MPS1230-L15C	276	186.7	227	230	274.0	2.2	14	1
12.4	20	□	MPS1230-L20C	339	248.2	290	293	337.0	2.2	14	1
	3	●	MPS1240S-DIN	107	41.7	60	61	105.0	2.3	14	3
	3	●	MPS1240S-DIN-C	107	41.7	60	61	105.0	2.3	14	1
	5	●	MPS1240L-DIN	124	58.7	77	78	122.0	2.3	14	3
	5	●	MPS1240L-DIN-C	124	58.7	77	78	122.0	2.3	14	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
12.4	8	●	MPS1240-L8C	189	101.5	140	143	187.0	2.3	14	1
	10	□	MPS1240-L10C	214	126.3	165	168	212.0	2.3	14	1
	12	□	MPS1240-L12C	239	151.1	190	193	237.0	2.3	14	1
	15	□	MPS1240-L15C	276	188.3	227	230	274.0	2.3	14	1
	20	□	MPS1240-L20C	339	250.3	290	293	337.0	2.3	14	1
12.5	3	●	MPS1250S-DIN	107	41.5	60	61	105.0	2.3	14	3
	3	●	MPS1250S-DIN-C	107	41.5	60	61	105.0	2.3	14	1
	5	●	MPS1250L-DIN	124	58.5	77	78	122.0	2.3	14	3
	5	●	MPS1250L-DIN-C	124	58.5	77	78	122.0	2.3	14	1
	8	●	MPS1250-L8C	189	102.3	140	143	187.0	2.3	14	1
	10	□	MPS1250-L10C	214	127.3	165	168	212.0	2.3	14	1
	12	●	MPS1250-L12C	239	152.3	190	193	237.0	2.3	14	1
12.6	15	●	MPS1250-L15C	276	189.8	227	230	274.0	2.3	14	1
	20	□	MPS1250-L20C	339	252.3	290	293	337.0	2.3	14	1
12.6	3	●	MPS1260S-DIN	107	41.4	60	61	105.0	2.3	14	3
	3	●	MPS1260S-DIN-C	107	41.4	60	61	105.0	2.3	14	1
	5	●	MPS1260L-DIN	124	58.4	77	78	122.0	2.3	14	3
	5	●	MPS1260L-DIN-C	124	58.4	77	78	122.0	2.3	14	1
	8	●	MPS1260-L8C	194	103.1	145	148	192.0	2.3	14	1
	10	□	MPS1260-L10C	220	128.3	171	174	218.0	2.3	14	1
	12	□	MPS1260-L12C	246	153.5	197	200	244.0	2.3	14	1
	15	□	MPS1260-L15C	285	191.3	236	239	283.0	2.3	14	1
12.7	20	□	MPS1260-L20C	350	254.3	301	304	348.0	2.3	14	1
	3	●	MPS1270S-DIN	107	41.3	60	61	105.0	2.3	14	3
	3	●	MPS1270S-DIN-C	107	41.3	60	61	105.0	2.3	14	1
	5	●	MPS1270L-DIN	124	58.3	77	78	122.0	2.3	14	3
	5	●	MPS1270L-DIN-C	124	58.3	77	78	122.0	2.3	14	1
12.8	8	●	MPS1270-L8C	194	103.9	145	148	192.0	2.3	14	1
	10	□	MPS1270-L10C	220	129.3	171	174	218.0	2.3	14	1
	12	●	MPS1270-L12C	246	154.7	197	200	244.0	2.3	14	1
	15	□	MPS1270-L15C	285	192.8	236	239	283.0	2.3	14	1
	20	□	MPS1270-L20C	350	256.3	301	304	348.0	2.3	14	1
	3	●	MPS1280S-DIN	107	41.1	60	61	105.0	2.3	14	3
12.9	3	●	MPS1280S-DIN-C	107	41.1	60	61	105.0	2.3	14	1
	5	●	MPS1280L-DIN	124	58.1	77	78	122.0	2.3	14	3
	5	●	MPS1280L-DIN-C	124	58.1	77	78	122.0	2.3	14	1
	8	●	MPS1280-L8C	194	104.7	145	148	192.0	2.3	14	1
	10	□	MPS1280-L10C	220	130.3	171	174	218.0	2.3	14	1
	12	●	MPS1280-L12C	246	155.9	197	200	244.0	2.3	14	1
	15	□	MPS1280-L15C	285	194.3	236	239	283.0	2.3	14	1
13.0	20	□	MPS1280-L20C	350	258.3	301	304	348.0	2.3	14	1
	3	●	MPS1290S-DIN	107	41.0	60	61	105.0	2.3	14	3
	3	●	MPS1290S-DIN-C	107	41.0	60	61	105.0	2.3	14	1
	5	●	MPS1290L-DIN	124	58.0	77	78	122.0	2.3	14	3
	5	●	MPS1290L-DIN-C	124	58.0	77	78	122.0	2.3	14	1
13.0	8	●	MPS1290-L8C	194	105.5	145	148	192.0	2.3	14	1
	10	□	MPS1290-L10C	220	131.3	171	174	218.0	2.3	14	1
	12	□	MPS1290-L12C	246	157.1	197	200	244.0	2.3	14	1
	15	□	MPS1290-L15C	285	195.8	236	239	283.0	2.3	14	1
	20	□	MPS1290-L20C	350	260.3	301	304	348.0	2.3	14	1
13.0	3	●	MPS1300S-DIN	107	40.9	60	61	105.0	2.4	14	3
	3	●	MPS1300S-DIN-C	107	40.9	60	61	105.0	2.4	14	1
	5	●	MPS1300L-DIN	124	57.9	77	78	122.0	2.4	14	3
	5	●	MPS1300L-DIN-C	124	57.9	77	78	122.0	2.4	14	1
	8	●	MPS1300-L8C	194	106.4	145	148	192.0	2.4	14	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
13.0	10	□	MPS1300-L10C	220	132.4	171	174	218.0	2.4	14	1
	12	●	MPS1300-L12C	246	158.4	197	200	244.0	2.4	14	1
	15	●	MPS1300-L15C	285	197.4	236	239	283.0	2.4	14	1
	20	□	MPS1300-L20C	350	262.4	301	304	348.0	2.4	14	1
13.1	3	●	MPS1310S-DIN	107	40.7	60	61	105.0	2.4	14	3
	3	●	MPS1310S-DIN-C	107	40.7	60	61	105.0	2.4	14	1
	5	●	MPS1310L-DIN	124	57.7	77	78	122.0	2.4	14	3
	5	●	MPS1310L-DIN-C	124	57.7	77	78	122.0	2.4	14	1
	8	●	MPS1310-L8C	200	107.2	151	154	198.0	2.4	14	1
	10	□	MPS1310-L10C	227	133.4	178	181	225.0	2.4	14	1
	12	□	MPS1310-L12C	254	159.6	205	208	252.0	2.4	14	1
	15	□	MPS1310-L15C	294	198.9	245	248	292.0	2.4	14	1
	20	□	MPS1310-L20C	362	264.4	313	316	360.0	2.4	14	1
13.2	3	●	MPS1320S-DIN	107	40.6	60	61	105.0	2.4	14	3
	3	●	MPS1320S-DIN-C	107	40.6	60	61	105.0	2.4	14	1
	5	●	MPS1320L-DIN	124	57.6	77	78	122.0	2.4	14	3
	5	●	MPS1320L-DIN-C	124	57.6	77	78	122.0	2.4	14	1
	8	●	MPS1320-L8C	200	108.0	151	154	198.0	2.4	14	1
	10	□	MPS1320-L10C	227	134.4	178	181	225.0	2.4	14	1
	12	●	MPS1320-L12C	254	160.8	205	208	252.0	2.4	14	1
	15	□	MPS1320-L15C	294	200.4	245	248	292.0	2.4	14	1
	20	□	MPS1320-L20C	362	266.4	313	316	360.0	2.4	14	1
13.3	3	●	MPS1330S-DIN	107	40.5	60	61	105.0	2.4	14	3
	3	●	MPS1330S-DIN-C	107	40.5	60	61	105.0	2.4	14	1
	5	●	MPS1330L-DIN	124	57.5	77	78	122.0	2.4	14	3
	5	●	MPS1330L-DIN-C	124	57.5	77	78	122.0	2.4	14	1
	8	●	MPS1330-L8C	200	108.8	151	154	198.0	2.4	14	1
	10	□	MPS1330-L10C	227	135.4	178	181	225.0	2.4	14	1
	12	□	MPS1330-L12C	254	162.0	205	208	252.0	2.4	14	1
	15	□	MPS1330-L15C	294	201.9	245	248	292.0	2.4	14	1
	20	□	MPS1330-L20C	362	268.4	313	316	360.0	2.4	14	1
13.4	3	●	MPS1340S-DIN	107	40.3	60	61	105.0	2.4	14	3
	3	●	MPS1340S-DIN-C	107	40.3	60	61	105.0	2.4	14	1
	5	●	MPS1340L-DIN	124	57.3	77	78	122.0	2.4	14	3
	5	●	MPS1340L-DIN-C	124	57.3	77	78	122.0	2.4	14	1
	8	●	MPS1340-L8C	200	109.6	151	154	198.0	2.4	14	1
	10	□	MPS1340-L10C	227	136.4	178	181	225.0	2.4	14	1
	12	□	MPS1340-L12C	254	163.2	205	208	252.0	2.4	14	1
	15	□	MPS1340-L15C	294	203.4	245	248	292.0	2.4	14	1
	20	□	MPS1340-L20C	362	270.4	313	316	360.0	2.4	14	1
13.5	3	●	MPS1350S-DIN	107	40.2	60	61	105.0	2.5	14	3
	3	●	MPS1350S-DIN-C	107	40.2	60	61	105.0	2.5	14	1
	5	●	MPS1350L-DIN	124	57.2	77	78	122.0	2.5	14	3
	5	●	MPS1350L-DIN-C	124	57.2	77	78	122.0	2.5	14	1
	8	●	MPS1350-L8C	200	110.5	151	154	198.0	2.5	14	1
	10	□	MPS1350-L10C	227	137.5	178	181	225.0	2.5	14	1
	12	●	MPS1350-L12C	254	164.5	205	208	252.0	2.5	14	1
	15	□	MPS1350-L15C	294	205.0	245	248	292.0	2.5	14	1
	20	□	MPS1350-L20C	362	272.5	313	316	360.0	2.5	14	1
13.6	3	●	MPS1360S-DIN	107	40.1	60	61	105.0	2.5	14	3
	3	●	MPS1360S-DIN-C	107	40.1	60	61	105.0	2.5	14	1
	5	●	MPS1360L-DIN	124	57.1	77	78	122.0	2.5	14	3
	5	●	MPS1360L-DIN-C	124	57.1	77	78	122.0	2.5	14	1
	8	●	MPS1360-L8C	205	111.3	156	159	203.0	2.5	14	1
	10	□	MPS1360-L10C	233	138.5	184	187	231.0	2.5	14	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
13.6	12	□	MPS1360-L12C	261	165.7	212	215	259.0	2.5	14	1
	15	□	MPS1360-L15C	303	206.5	254	257	301.0	2.5	14	1
	20	□	MPS1360-L20C	373	274.5	324	327	371.0	2.5	14	1
13.7	3	●	MPS1370S-DIN	107	39.9	60	61	105.0	2.5	14	3
	3	●	MPS1370S-DIN-C	107	39.9	60	61	105.0	2.5	14	1
	5	●	MPS1370L-DIN	124	56.9	77	78	122.0	2.5	14	3
	5	●	MPS1370L-DIN-C	124	56.9	77	78	122.0	2.5	14	1
	8	●	MPS1370-L8C	205	112.1	156	159	203.0	2.5	14	1
	10	□	MPS1370-L10C	233	139.5	184	187	231.0	2.5	14	1
	12	□	MPS1370-L12C	261	166.9	212	215	259.0	2.5	14	1
	15	□	MPS1370-L15C	303	208.0	254	257	301.0	2.5	14	1
	20	□	MPS1370-L20C	373	276.5	324	327	371.0	2.5	14	1
13.8	3	●	MPS1380S-DIN	108	39.8	61	62	105.0	2.5	14	3
	3	●	MPS1380S-DIN-C	108	39.8	61	62	105.0	2.5	14	1
	5	●	MPS1380L-DIN	125	56.8	78	79	122.0	2.5	14	3
	5	●	MPS1380L-DIN-C	125	56.8	78	79	122.0	2.5	14	1
	8	●	MPS1380-L8C	206	112.9	157	160	203.0	2.5	14	1
	10	□	MPS1380-L10C	234	140.5	185	188	231.0	2.5	14	1
	12	□	MPS1380-L12C	262	168.1	213	216	259.0	2.5	14	1
	15	□	MPS1380-L15C	304	209.5	255	258	301.0	2.5	14	1
	20	□	MPS1380-L20C	374	278.5	325	328	371.0	2.5	14	1
13.9	3	●	MPS1390S-DIN	108	39.7	61	62	105.0	2.5	14	3
	3	●	MPS1390S-DIN-C	108	39.7	61	62	105.0	2.5	14	1
	5	●	MPS1390L-DIN	125	56.7	78	79	122.0	2.5	14	3
	5	●	MPS1390L-DIN-C	125	56.7	78	79	122.0	2.5	14	1
	8	●	MPS1390-L8C	206	113.7	157	160	203.0	2.5	14	1
	10	□	MPS1390-L10C	234	141.5	185	188	231.0	2.5	14	1
	12	□	MPS1390-L12C	262	169.3	213	216	259.0	2.5	14	1
	15	□	MPS1390-L15C	304	211.0	255	258	301.0	2.5	14	1
	20	□	MPS1390-L20C	374	280.5	325	328	371.0	2.5	14	1
14.0	3	●	MPS1400S-DIN	108	39.5	61	62	105.0	2.5	14	4
	3	●	MPS1400S-DIN-C	108	39.5	61	62	105.0	2.5	14	2
	5	●	MPS1400L-DIN	125	56.5	78	79	122.0	2.5	14	4
	5	●	MPS1400L-DIN-C	125	56.5	78	79	122.0	2.5	14	2
	8	●	MPS1400-L8C	206	114.5	157	160	203.0	2.5	14	2
	10	□	MPS1400-L10C	234	142.5	185	188	231.0	2.5	14	2
	12	●	MPS1400-L12C	262	170.5	213	216	259.0	2.5	14	2
	15	●	MPS1400-L15C	304	212.5	255	258	301.0	2.5	14	2
	20	□	MPS1400-L20C	374	282.5	325	328	371.0	2.5	14	2
14.1	3	□	MPS1410S-DIN	115	43.4	65	66	112.0	2.6	16	3
	3	□	MPS1410S-DIN-C	115	43.4	65	66	112.0	2.6	16	1
	5	□	MPS1410L-DIN	133	61.4	83	84	130.0	2.6	16	3
	5	□	MPS1410L-DIN-C	133	61.4	83	84	130.0	2.6	16	1
14.2	3	●	MPS1420S-DIN	115	43.3	65	66	112.0	2.6	16	3
	3	●	MPS1420S-DIN-C	115	43.3	65	66	112.0	2.6	16	1
	5	●	MPS1420L-DIN	133	61.3	83	84	130.0	2.6	16	3
	5	●	MPS1420L-DIN-C	133	61.3	83	84	130.0	2.6	16	1
14.3	3	□	MPS1430S-DIN	115	43.2	65	66	112.0	2.6	16	3
	3	□	MPS1430S-DIN-C	115	43.2	65	66	112.0	2.6	16	1
	5	□	MPS1430L-DIN	133	61.2	83	84	130.0	2.6	16	3
	5	□	MPS1430L-DIN-C	133	61.2	83	84	130.0	2.6	16	1
14.4	3	□	MPS1440S-DIN	115	43.0	65	66	112.0	2.6	16	3
	3	□	MPS1440S-DIN-C	115	43.0	65	66	112.0	2.6	16	1
	5	□	MPS1440L-DIN	133	61.0	83	84	130.0	2.6	16	3
	5	□	MPS1440L-DIN-C	133	61.0	83	84	130.0	2.6	16	1

BOHREN (VOLLHARTMETALL)

MPS

4-Fasenbohrer

HARTMETALL

BOHREN

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DCON	
14.5	3	●	MPS1450S-DIN	115	42.9	65	66	112.0	2.6	16	3
	3	●	MPS1450S-DIN-C	115	42.9	65	66	112.0	2.6	16	1
	5	●	MPS1450L-DIN	133	60.9	83	84	130.0	2.6	16	3
	5	●	MPS1450L-DIN-C	133	60.9	83	84	130.0	2.6	16	1
14.6	3	□	MPS1460S-DIN	115	42.8	65	66	112.0	2.7	16	3
	3	□	MPS1460S-DIN-C	115	42.8	65	66	112.0	2.7	16	1
	5	□	MPS1460L-DIN	133	60.8	83	84	130.0	2.7	16	3
	5	□	MPS1460L-DIN-C	133	60.8	83	84	130.0	2.7	16	1
14.7	3	□	MPS1470S-DIN	115	42.6	65	66	112.0	2.7	16	3
	3	□	MPS1470S-DIN-C	115	42.6	65	66	112.0	2.7	16	1
	5	□	MPS1470L-DIN	133	60.6	83	84	130.0	2.7	16	3
	5	□	MPS1470L-DIN-C	133	60.6	83	84	130.0	2.7	16	1
14.8	3	□	MPS1480S-DIN	115	42.5	65	66	112.0	2.7	16	3
	3	□	MPS1480S-DIN-C	115	42.5	65	66	112.0	2.7	16	1
	5	□	MPS1480L-DIN	133	60.5	83	84	130.0	2.7	16	3
	5	□	MPS1480L-DIN-C	133	60.5	83	84	130.0	2.7	16	1
14.9	3	□	MPS1490S-DIN	115	42.4	65	66	112.0	2.7	16	3
	3	□	MPS1490S-DIN-C	115	42.4	65	66	112.0	2.7	16	1
	5	□	MPS1490L-DIN	133	60.4	83	84	130.0	2.7	16	3
	5	□	MPS1490L-DIN-C	133	60.4	83	84	130.0	2.7	16	1
15.0	3	●	MPS1500S-DIN	115	42.2	65	66	112.0	2.7	16	3
	3	●	MPS1500S-DIN-C	115	42.2	65	66	112.0	2.7	16	1
	5	●	MPS1500L-DIN	133	60.2	83	84	130.0	2.7	16	3
	5	●	MPS1500L-DIN-C	133	60.2	83	84	130.0	2.7	16	1
15.1	3	□	MPS1510S-DIN	115	42.1	65	66	112.0	2.7	16	3
	3	□	MPS1510S-DIN-C	115	42.1	65	66	112.0	2.7	16	1
	5	□	MPS1510L-DIN	133	60.1	83	84	130.0	2.7	16	3
	5	□	MPS1510L-DIN-C	133	60.1	83	84	130.0	2.7	16	1
15.2	3	□	MPS1520S-DIN	115	42.0	65	66	112.0	2.8	16	3
	3	□	MPS1520S-DIN-C	115	42.0	65	66	112.0	2.8	16	1
	5	□	MPS1520L-DIN	133	60.0	83	84	130.0	2.8	16	3
	5	□	MPS1520L-DIN-C	133	60.0	83	84	130.0	2.8	16	1
15.3	3	□	MPS1530S-DIN	115	41.8	65	66	112.0	2.8	16	3
	3	□	MPS1530S-DIN-C	115	41.8	65	66	112.0	2.8	16	1
	5	□	MPS1530L-DIN	133	59.8	83	84	130.0	2.8	16	3
	5	□	MPS1530L-DIN-C	133	59.8	83	84	130.0	2.8	16	1
15.4	3	□	MPS1540S-DIN	115	41.7	65	66	112.0	2.8	16	3
	3	□	MPS1540S-DIN-C	115	41.7	65	66	112.0	2.8	16	1
	5	□	MPS1540L-DIN	133	59.7	83	84	130.0	2.8	16	3
	5	□	MPS1540L-DIN-C	133	59.7	83	84	130.0	2.8	16	1
15.5	3	●	MPS1550S-DIN	115	41.6	65	66	112.0	2.8	16	3
	3	●	MPS1550S-DIN-C	115	41.6	65	66	112.0	2.8	16	1
	5	●	MPS1550L-DIN	133	59.6	83	84	130.0	2.8	16	3
	5	●	MPS1550L-DIN-C	133	59.6	83	84	130.0	2.8	16	1
15.6	3	□	MPS1560S-DIN	115	41.4	65	66	112.0	2.8	16	3
	3	□	MPS1560S-DIN-C	115	41.4	65	66	112.0	2.8	16	1
	5	□	MPS1560L-DIN	133	59.4	83	84	130.0	2.8	16	3
	5	□	MPS1560L-DIN-C	133	59.4	83	84	130.0	2.8	16	1
15.7	3	□	MPS1570S-DIN	115	41.3	65	66	112.0	2.9	16	3
	3	□	MPS1570S-DIN-C	115	41.3	65	66	112.0	2.9	16	1
	5	□	MPS1570L-DIN	133	59.3	83	84	130.0	2.9	16	3
	5	□	MPS1570L-DIN-C	133	59.3	83	84	130.0	2.9	16	1
15.8	3	□	MPS1580S-DIN	115	41.2	65	66	112.0	2.9	16	3
	3	□	MPS1580S-DIN-C	115	41.2	65	66	112.0	2.9	16	1
	5	□	MPS1580L-DIN	133	59.2	83	84	130.0	2.9	16	3
	5	□	MPS1580L-DIN-C	133	59.2	83	84	130.0	2.9	16	1

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)							Typ
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON	
15.9	3	☐		MPS1590S-DIN	115	41.0	65	66	112.0	2.9	16	3
	3	☐		MPS1590S-DIN-C	115	41.0	65	66	112.0	2.9	16	1
	5	☐		MPS1590L-DIN	133	59.0	83	84	130.0	2.9	16	3
	5	☐		MPS1590L-DIN-C	133	59.0	83	84	130.0	2.9	16	1
16.0	3	☒		MPS1600S-DIN	115	40.9	65	66	112.0	2.9	16	4
	3	☒		MPS1600S-DIN-C	115	40.9	65	66	112.0	2.9	16	
	5	☒		MPS1600L-DIN	133	58.9	83	84	130.0	2.9	16	4
	5	☒		MPS1600L-DIN-C	133	58.9	83	84	130.0	2.9	16	2
16.1	3	☐		MPS1610S-DIN	123	48.8	73	74	120.0	2.9	18	3
	3	☐		MPS1610S-DIN-C	123	48.8	73	74	120.0	2.9	18	1
	5	☐		MPS1610L-DIN	143	68.8	93	94	140.0	2.9	18	3
	5	☐		MPS1610L-DIN-C	143	68.8	93	94	140.0	2.9	18	1
16.2	3	☐		MPS1620S-DIN	123	48.6	73	74	120.0	2.9	18	3
	3	☐		MPS1620S-DIN-C	123	48.6	73	74	120.0	2.9	18	1
	5	☐		MPS1620L-DIN	143	68.6	93	94	140.0	2.9	18	3
	5	☐		MPS1620L-DIN-C	143	68.6	93	94	140.0	2.9	18	1
16.3	3	☐		MPS1630S-DIN	123	48.5	73	74	120.0	3.0	18	3
	3	☐		MPS1630S-DIN-C	123	48.5	73	74	120.0	3.0	18	1
	5	☐		MPS1630L-DIN	143	68.5	93	94	140.0	3.0	18	3
	5	☐		MPS1630L-DIN-C	143	68.5	93	94	140.0	3.0	18	1
16.4	3	☐		MPS1640S-DIN	123	48.4	73	74	120.0	3.0	18	3
	3	☐		MPS1640S-DIN-C	123	48.4	73	74	120.0	3.0	18	1
	5	☐		MPS1640L-DIN	143	68.4	93	94	140.0	3.0	18	3
	5	☐		MPS1640L-DIN-C	143	68.4	93	94	140.0	3.0	18	1
16.5	3	☒		MPS1650S-DIN	123	48.3	73	74	120.0	3.0	18	3
	3	☒		MPS1650S-DIN-C	123	48.3	73	74	120.0	3.0	18	1
	5	☒		MPS1650L-DIN	143	68.3	93	94	140.0	3.0	18	3
	5	☒		MPS1650L-DIN-C	143	68.3	93	94	140.0	3.0	18	1
16.6	3	☐		MPS1660S-DIN	123	48.1	73	74	120.0	3.0	18	3
	3	☐		MPS1660S-DIN-C	123	48.1	73	74	120.0	3.0	18	1
	5	☐		MPS1660L-DIN	143	68.1	93	94	140.0	3.0	18	3
	5	☐		MPS1660L-DIN-C	143	68.1	93	94	140.0	3.0	18	1
16.7	3	☐		MPS1670S-DIN	123	48.0	73	74	120.0	3.0	18	3
	3	☐		MPS1670S-DIN-C	123	48.0	73	74	120.0	3.0	18	1
	5	☐		MPS1670L-DIN	143	68.0	93	94	140.0	3.0	18	3
	5	☐		MPS1670L-DIN-C	143	68.0	93	94	140.0	3.0	18	1
16.8	3	☐		MPS1680S-DIN	123	47.9	73	74	120.0	3.1	18	3
	3	☐		MPS1680S-DIN-C	123	47.9	73	74	120.0	3.1	18	1
	5	☐		MPS1680L-DIN	143	67.9	93	94	140.0	3.1	18	3
	5	☐		MPS1680L-DIN-C	143	67.9	93	94	140.0	3.1	18	1
16.9	3	☐		MPS1690S-DIN	123	47.7	73	74	120.0	3.1	18	3
	3	☐		MPS1690S-DIN-C	123	47.7	73	74	120.0	3.1	18	1
	5	☐		MPS1690L-DIN	143	67.7	93	94	140.0	3.1	18	3
	5	☐		MPS1690L-DIN-C	143	67.7	93	94	140.0	3.1	18	1
17.0	3	☒		MPS1700S-DIN	123	47.6	73	74	120.0	3.1	18	3
	3	☒		MPS1700S-DIN-C	123	47.6	73	74	120.0	3.1	18	1
	5	☒		MPS1700L-DIN	143	67.6	93	94	140.0	3.1	18	3
	5	☒		MPS1700L-DIN-C	143	67.6	93	94	140.0	3.1	18	1
17.1	3	☐		MPS1710S-DIN	123	47.5	73	74	120.0	3.1	18	3
	3	☐		MPS1710S-DIN-C	123	47.5	73	74	120.0	3.1	18	1
	5	☐		MPS1710L-DIN	143	67.5	93	94	140.0	3.1	18	3
	5	☐		MPS1710L-DIN-C	143	67.5	93	94	140.0	3.1	18	1
17.2	3	☐		MPS1720S-DIN	123	47.3	73	74	120.0	3.1	18	3
	3	☐		MPS1720S-DIN-C	123	47.3	73	74	120.0	3.1	18	1
	5	☐		MPS1720L-DIN	143	67.3	93	94	140.0	3.1	18	3
	5	☐		MPS1720L-DIN-C	143	67.3	93	94	140.0	3.1	18	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DON	
17.3	3	□	MPS1730S-DIN	123	47.2	73	74	120.0	3.1	18	3
	3	□	MPS1730S-DIN-C	123	47.2	73	74	120.0	3.1	18	1
	5	□	MPS1730L-DIN	143	67.2	93	94	140.0	3.1	18	3
	5	□	MPS1730L-DIN-C	143	67.2	93	94	140.0	3.1	18	1
17.4	3	□	MPS1740S-DIN	123	47.1	73	74	120.0	3.2	18	3
	3	□	MPS1740S-DIN-C	123	47.1	73	74	120.0	3.2	18	1
	5	□	MPS1740L-DIN	143	67.1	93	94	140.0	3.2	18	3
	5	□	MPS1740L-DIN-C	143	67.1	93	94	140.0	3.2	18	1
17.5	3	●	MPS1750S-DIN	123	46.9	73	74	120.0	3.2	18	3
	3	●	MPS1750S-DIN-C	123	46.9	73	74	120.0	3.2	18	1
	5	●	MPS1750L-DIN	143	66.9	93	94	140.0	3.2	18	3
	5	●	MPS1750L-DIN-C	143	66.9	93	94	140.0	3.2	18	1
17.6	3	□	MPS1760S-DIN	123	46.8	73	74	120.0	3.2	18	3
	3	□	MPS1760S-DIN-C	123	46.8	73	74	120.0	3.2	18	1
	5	□	MPS1760L-DIN	143	66.8	93	94	140.0	3.2	18	3
	5	□	MPS1760L-DIN-C	143	66.8	93	94	140.0	3.2	18	1
17.7	3	□	MPS1770S-DIN	123	46.7	73	74	120.0	3.2	18	3
	3	□	MPS1770S-DIN-C	123	46.7	73	74	120.0	3.2	18	1
	5	□	MPS1770L-DIN	143	66.7	93	94	140.0	3.2	18	3
	5	□	MPS1770L-DIN-C	143	66.7	93	94	140.0	3.2	18	1
17.8	3	□	MPS1780S-DIN	123	46.5	73	74	120.0	3.2	18	3
	3	□	MPS1780S-DIN-C	123	46.5	73	74	120.0	3.2	18	1
	5	□	MPS1780L-DIN	143	66.5	93	94	140.0	3.2	18	3
	5	□	MPS1780L-DIN-C	143	66.5	93	94	140.0	3.2	18	1
17.9	3	□	MPS1790S-DIN	123	46.4	73	74	120.0	3.3	18	3
	3	□	MPS1790S-DIN-C	123	46.4	73	74	120.0	3.3	18	1
	5	□	MPS1790L-DIN	143	66.4	93	94	140.0	3.3	18	3
	5	□	MPS1790L-DIN-C	143	66.4	93	94	140.0	3.3	18	1
18.0	3	●	MPS1800S-DIN	123	46.3	73	74	120.0	3.3	18	4
	3	●	MPS1800S-DIN-C	123	46.3	73	74	120.0	3.3	18	2
	5	●	MPS1800L-DIN	143	66.3	93	94	140.0	3.3	18	4
	5	●	MPS1800L-DIN-C	143	66.3	93	94	140.0	3.3	18	2
18.1	3	□	MPS1810S-DIN	131	52.1	79	80	128.0	3.3	20	3
	3	□	MPS1810S-DIN-C	131	52.1	79	80	128.0	3.3	20	1
	5	□	MPS1810L-DIN	153	74.1	101	102	150.0	3.3	20	3
	5	□	MPS1810L-DIN-C	153	74.1	101	102	150.0	3.3	20	1
18.2	3	□	MPS1820S-DIN	131	52.0	79	80	128.0	3.3	20	3
	3	□	MPS1820S-DIN-C	131	52.0	79	80	128.0	3.3	20	1
	5	□	MPS1820L-DIN	153	74.0	101	102	150.0	3.3	20	3
	5	□	MPS1820L-DIN-C	153	74.0	101	102	150.0	3.3	20	1
18.3	3	□	MPS1830S-DIN	131	51.9	79	80	128.0	3.3	20	3
	3	□	MPS1830S-DIN-C	131	51.9	79	80	128.0	3.3	20	1
	5	□	MPS1830L-DIN	153	73.9	101	102	150.0	3.3	20	3
	5	□	MPS1830L-DIN-C	153	73.9	101	102	150.0	3.3	20	1
18.4	3	□	MPS1840S-DIN	131	51.7	79	80	128.0	3.3	20	3
	3	□	MPS1840S-DIN-C	131	51.7	79	80	128.0	3.3	20	1
	5	□	MPS1840L-DIN	153	73.7	101	102	150.0	3.3	20	3
	5	□	MPS1840L-DIN-C	153	73.7	101	102	150.0	3.3	20	1
18.5	3	●	MPS1850S-DIN	131	51.6	79	80	128.0	3.4	20	3
	3	●	MPS1850S-DIN-C	131	51.6	79	80	128.0	3.4	20	1
	5	●	MPS1850L-DIN	153	73.6	101	102	150.0	3.4	20	3
	5	●	MPS1850L-DIN-C	153	73.6	101	102	150.0	3.4	20	1
18.6	3	□	MPS1860S-DIN	131	51.5	79	80	128.0	3.4	20	3
	3	□	MPS1860S-DIN-C	131	51.5	79	80	128.0	3.4	20	1
	5	□	MPS1860L-DIN	153	73.5	101	102	150.0	3.4	20	3
	5	□	MPS1860L-DIN-C	153	73.5	101	102	150.0	3.4	20	1

DC	Bohrtiefe (mm)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
				OAL	LU	LCF	LH	LF	PL	DON	
18.7	3	□	MPS1870S-DIN	131	51.4	79	80	128.0	3.4	20	3
	3	□	MPS1870S-DIN-C	131	51.4	79	80	128.0	3.4	20	1
	5	□	MPS1870L-DIN	153	73.4	101	102	150.0	3.4	20	3
	5	□	MPS1870L-DIN-C	153	73.4	101	102	150.0	3.4	20	1
18.8	3	□	MPS1880S-DIN	131	51.2	79	80	128.0	3.4	20	3
	3	□	MPS1880S-DIN-C	131	51.2	79	80	128.0	3.4	20	1
	5	□	MPS1880L-DIN	153	73.2	101	102	150.0	3.4	20	3
	5	□	MPS1880L-DIN-C	153	73.2	101	102	150.0	3.4	20	1
18.9	3	□	MPS1890S-DIN	131	51.1	79	80	128.0	3.4	20	3
	3	□	MPS1890S-DIN-C	131	51.1	79	80	128.0	3.4	20	1
	5	□	MPS1890L-DIN	153	73.1	101	102	150.0	3.4	20	3
	5	□	MPS1890L-DIN-C	153	73.1	101	102	150.0	3.4	20	1
19.0	3	●	MPS1900S-DIN	131	51.0	79	80	128.0	3.5	20	3
	3	●	MPS1900S-DIN-C	131	51.0	79	80	128.0	3.5	20	1
	5	●	MPS1900L-DIN	153	73.0	101	102	150.0	3.5	20	3
	5	●	MPS1900L-DIN-C	153	73.0	101	102	150.0	3.5	20	1
19.1	3	□	MPS1910S-DIN	131	50.8	79	80	128.0	3.5	20	3
	3	□	MPS1910S-DIN-C	131	50.8	79	80	128.0	3.5	20	1
	5	□	MPS1910L-DIN	153	72.8	101	102	150.0	3.5	20	3
	5	□	MPS1910L-DIN-C	153	72.8	101	102	150.0	3.5	20	1
19.2	3	□	MPS1920S-DIN	131	50.7	79	80	128.0	3.5	20	3
	3	□	MPS1920S-DIN-C	131	50.7	79	80	128.0	3.5	20	1
	5	□	MPS1920L-DIN	153	72.7	101	102	150.0	3.5	20	3
	5	□	MPS1920L-DIN-C	153	72.7	101	102	150.0	3.5	20	1
19.3	3	□	MPS1930S-DIN	132	50.6	80	81	128.0	3.5	20	3
	3	□	MPS1930S-DIN-C	132	50.6	80	81	128.0	3.5	20	1
	5	□	MPS1930L-DIN	154	72.6	102	103	150.0	3.5	20	3
	5	□	MPS1930L-DIN-C	154	72.6	102	103	150.0	3.5	20	1
19.4	3	□	MPS1940S-DIN	132	50.4	80	81	128.0	3.5	20	3
	3	□	MPS1940S-DIN-C	132	50.4	80	81	128.0	3.5	20	1
	5	□	MPS1940L-DIN	154	72.4	102	103	150.0	3.5	20	3
	5	□	MPS1940L-DIN-C	154	72.4	102	103	150.0	3.5	20	1
19.5	3	●	MPS1950S-DIN	132	50.3	80	81	128.0	3.5	20	3
	3	□	MPS1950S-DIN-C	132	50.3	80	81	128.0	3.5	20	1
	5	●	MPS1950L-DIN	154	72.3	102	103	150.0	3.5	20	3
	5	●	MPS1950L-DIN-C	154	72.3	102	103	150.0	3.5	20	1
19.6	3	□	MPS1960S-DIN	132	50.2	80	81	128.0	3.6	20	3
	3	□	MPS1960S-DIN-C	132	50.2	80	81	128.0	3.6	20	1
	5	□	MPS1960L-DIN	154	72.2	102	103	150.0	3.6	20	3
	5	□	MPS1960L-DIN-C	154	72.2	102	103	150.0	3.6	20	1
19.7	3	□	MPS1970S-DIN	132	50.0	80	81	128.0	3.6	20	3
	3	□	MPS1970S-DIN-C	132	50.0	80	81	128.0	3.6	20	1
	5	□	MPS1970L-DIN	154	72.0	102	103	150.0	3.6	20	3
	5	□	MPS1970L-DIN-C	154	72.0	102	103	150.0	3.6	20	1
19.8	3	□	MPS1980S-DIN	132	49.9	80	81	128.0	3.6	20	3
	3	□	MPS1980S-DIN-C	132	49.9	80	81	128.0	3.6	20	1
	5	□	MPS1980L-DIN	154	71.9	102	103	150.0	3.6	20	3
	5	□	MPS1980L-DIN-C	154	71.9	102	103	150.0	3.6	20	1
19.9	3	□	MPS1990S-DIN	132	49.8	80	81	128.0	3.6	20	3
	3	□	MPS1990S-DIN-C	132	49.8	80	81	128.0	3.6	20	1
	5	□	MPS1990L-DIN	154	71.8	102	103	150.0	3.6	20	3
	5	□	MPS1990L-DIN-C	154	71.8	102	103	150.0	3.6	20	1
20.0	3	●	MPS2000S-DIN	132	49.6	80	81	128.0	3.6	20	4
	3	●	MPS2000S-DIN-C	132	49.6	80	81	128.0	3.6	20	2
	5	●	MPS2000L-DIN	154	71.6	102	103	150.0	3.6	20	4
	5	●	MPS2000L-DIN-C	154	71.6	102	103	150.0	3.6	20	2

BOHREN (VOLLHARTMETALL)

MSL
2-Fasenbohrer

- Für Bohrtiefen von l/d20—l/d30.
- 2-Fasen VHM-Bohrer für präzises und prozesssicheres Bohren.
- Alle Bohrer mit interner Kühlmittelzufuhr.

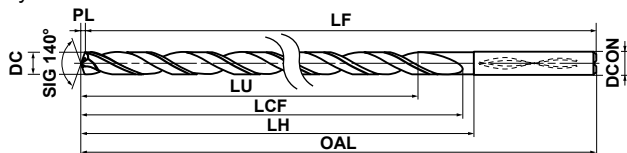


P	M	K	N	S	H
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	3.0 ≤ DC ≤ 6.0	6.0 < DC ≤ 10.0	10.0 < DC ≤ 18.0	18.0 < DC ≤ 20.0
	$\begin{matrix} 0 \\ -0.012 \end{matrix}$	$\begin{matrix} 0 \\ -0.015 \end{matrix}$	$\begin{matrix} 0 \\ -0.018 \end{matrix}$	$\begin{matrix} 0 \\ -0.021 \end{matrix}$
	$\begin{matrix} 0 \\ -0.008 \end{matrix}$	$\begin{matrix} 0 \\ -0.009 \end{matrix}$	$\begin{matrix} 0 \\ -0.011 \end{matrix}$	$\begin{matrix} 0 \\ -0.013 \end{matrix}$



● Zylind. Schaft



MSL (l/d 20—30)

DC (mm)	Bohrtiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)						
				OAL	LU	LCF	LH	LF	PL	DCON
3.0	20	●	MSL0300-L20C	110	60.0	70	74	109.5	0.5	6
	25	●	MSL0300-L25C	125	75.0	85	89	124.5	0.5	6
	30	●	MSL0300-L30C	140	90.0	100	104	139.5	0.5	6
3.1	20	●	MSL0310-L20C	122	62.0	82	86	121.4	0.6	6
	25	●	MSL0310-L25C	139	77.5	99	103	138.4	0.6	6
	30	●	MSL0310-L30C	157	93.0	117	121	156.4	0.6	6
3.2	20	●	MSL0320-L20C	122	64.0	82	86	121.4	0.6	6
	25	●	MSL0320-L25C	139	80.0	99	103	138.4	0.6	6
	30	●	MSL0320-L30C	157	96.0	117	121	156.4	0.6	6
3.3	20	●	MSL0330-L20C	122	66.0	82	86	121.4	0.6	6
	25	●	MSL0330-L25C	139	82.5	99	103	138.4	0.6	6
	30	●	MSL0330-L30C	157	99.0	117	121	156.4	0.6	6
3.4	20	●	MSL0340-L20C	122	68.0	82	86	121.4	0.6	6
	25	●	MSL0340-L25C	139	85.0	99	103	138.4	0.6	6
	30	●	MSL0340-L30C	157	102.0	117	121	156.4	0.6	6
3.5	20	●	MSL0350-L20C	122	70.0	82	86	121.4	0.6	6
	25	●	MSL0350-L25C	139	87.5	99	103	138.4	0.6	6
	30	●	MSL0350-L30C	157	105.0	117	121	156.4	0.6	6
3.6	20	●	MSL0360-L20C	133	72.0	93	97	132.3	0.7	6
	25	□	MSL0360-L25C	153	90.0	113	117	152.3	0.7	6
	30	●	MSL0360-L30C	173	108.0	133	137	172.3	0.7	6
3.7	20	●	MSL0370-L20C	133	74.0	93	97	132.3	0.7	6
	25	□	MSL0370-L25C	153	92.5	113	117	152.3	0.7	6
	30	●	MSL0370-L30C	173	111.0	133	137	172.3	0.7	6
3.8	20	●	MSL0380-L20C	133	76.0	93	97	132.3	0.7	6
	25	●	MSL0380-L25C	153	95.0	113	117	152.3	0.7	6
	30	●	MSL0380-L30C	173	114.0	133	137	172.3	0.7	6
3.9	20	●	MSL0390-L20C	133	78.0	93	97	132.3	0.7	6
	25	□	MSL0390-L25C	153	97.5	113	117	152.3	0.7	6
	30	●	MSL0390-L30C	173	117.0	133	137	172.3	0.7	6
4.0	20	●	MSL0400-L20C	133	80.0	93	97	132.3	0.7	6
	25	●	MSL0400-L25C	153	100.0	113	117	152.3	0.7	6
	30	●	MSL0400-L30C	173	120.0	133	137	172.3	0.7	6
4.1	20	●	MSL0410-L20C	145	82.0	105	109	144.3	0.7	6
	25	●	MSL0410-L25C	167	102.5	127	131	166.3	0.7	6
	30	●	MSL0410-L30C	190	123.0	150	154	189.3	0.7	6
4.2	20	●	MSL0420-L20C	145	84.0	105	109	144.2	0.8	6
	25	●	MSL0420-L25C	167	105.0	127	131	166.2	0.8	6
	30	●	MSL0420-L30C	190	126.0	150	154	189.2	0.8	6
4.3	20	●	MSL0430-L20C	145	86.0	105	109	144.2	0.8	6
	25	●	MSL0430-L25C	167	107.5	127	131	166.2	0.8	6
	30	●	MSL0430-L30C	190	129.0	150	154	189.2	0.8	6

DC (mm)	Bohrtiefe (l/d)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)						
				OAL	LU	LCF	LH	LF	PL	DCON
4.4	20	□	MSL0440-L20C	145	88.0	105	109	144.2	0.8	6
	25	□	MSL0440-L25C	167	110.0	127	131	166.2	0.8	6
	30	□	MSL0440-L30C	190	132.0	150	154	189.2	0.8	6
4.5	20	●	MSL0450-L20C	145	90.0	105	109	144.2	0.8	6
	25	●	MSL0450-L25C	167	112.5	127	131	166.2	0.8	6
	30	●	MSL0450-L30C	190	135.0	150	154	189.2	0.8	6
4.6	20	●	MSL0460-L20C	156	92.0	116	120	155.2	0.8	6
	25	●	MSL0460-L25C	181	115.0	141	145	180.2	0.8	6
	30	●	MSL0460-L30C	206	138.0	166	170	205.2	0.8	6
4.7	20	●	MSL0470-L20C	156	94.0	116	120	155.1	0.9	6
	25	●	MSL0470-L25C	181	117.5	141	145	180.1	0.9	6
	30	●	MSL0470-L30C	206	141.0	166	170	205.1	0.9	6
4.8	20	●	MSL0480-L20C	156	96.0	116	120	155.1	0.9	6
	25	●	MSL0480-L25C	181	120.0	141	145	180.1	0.9	6
	30	●	MSL0480-L30C	206	144.0	166	170	205.1	0.9	6
4.9	20	□	MSL0490-L20C	156	98.0	116	120	155.1	0.9	6
	25	●	MSL0490-L25C	181	122.5	141	145	180.1	0.9	6
	30	●	MSL0490-L30C	206	147.0	166	170	205.1	0.9	6
5.0	20	●	MSL0500-L20C	156	100.0	116	120	155.1	0.9	6
	25	●	MSL0500-L25C	181	125.0	141	145	180.1	0.9	6
	30	●	MSL0500-L30C	206	150.0	166	170	205.1	0.9	6
5.1	20	●	MSL0510-L20C	168	102.0	128	132	167.1	0.9	6
	25	●	MSL0510-L25C	195	127.5	155	159	194.1	0.9	6
	30	●	MSL0510-L30C	223	153.0	183	187	222.1	0.9	6
5.2	20	●	MSL0520-L20C	168	104.0	128	132	167.1	0.9	6
	25	●	MSL0520-L25C	195	130.0	155	159	194.1	0.9	6
	30	●	MSL0520-L30C	223	156.0	183	187	222.1	0.9	6
5.3	20	□	MSL0530-L20C	168	106.0	128	132	167.0	1.0	6
	25	●	MSL0530-L25C	195	132.5	155	159	194.0	1.0	6
	30	□	MSL0530-L30C	223	159.0	183	187	222.0	1.0	6
5.4	20	●	MSL0540-L20C	168	108.0	128	132	167.0	1.0	6
	25	□	MSL0540-L25C	195	135.0	155	159	194.0	1.0	6
	30	□	MSL0540-L30C	223	162.0	183	187	222.0	1.0	6
5.5	20	●	MSL0550-L20C	168	110.0	128	132	167.0	1.0	6
	25	●	MSL0550-L25C	195	137.5	155	159	194.0	1.0	6
	30	●	MSL0550-L30C	223	165.0	183	187	222.0	1.0	6
5.6	20	□	MSL0560-L20C	179	112.0	139	143	178.0	1.0	6
	25	□	MSL0560-L25C	209	140.0	169	173	208.0	1.0	6
	30	●	MSL0560-L30C	239	168.0	199	203	238.0	1.0	6
5.7	20	□	MSL0570-L20C	179	114.0	139	143	178.0	1.0	6
	25	●	MSL0570-L25C	209	142.5	169	173	208.0	1.0	6
	30	□	MSL0570-L30C	239	171.0	199	203	238.0	1.0	6

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)						
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON
5.8	20	●		MSL0580-L20C	179	116.0	139	143	177.9	1.1	6
	25	□		MSL 0580-L25C	209	145.0	169	173	207.9	1.1	6
	30	●		MSL 0580-L30C	239	174.0	199	203	237.9	1.1	6
5.9	20	●		MSL 0590-L20C	179	118.0	139	143	177.9	1.1	6
	25	●		MSL 0590-L25C	209	147.5	169	173	207.9	1.1	6
	30	□		MSL 0590-L30C	239	177.0	199	203	237.9	1.1	6
6.0	20	●		MSL0600-L20C	179	120.0	139	143	177.9	1.1	6
	25	●		MSL 0600-L25C	209	150.0	169	173	207.9	1.1	6
	30	●		MSL 0600-L30C	239	180.0	199	203	237.9	1.1	6
6.1	20	●		MSL 0610-L20C	191	122.0	151	155	189.9	1.1	8
	25	●		MSL 0610-L25C	223	152.5	183	187	221.9	1.1	8
	30	●		MSL 0610-L30C	256	183.0	216	220	254.9	1.1	8
6.2	20	●		MSL0620-L20C	191	124.0	151	155	189.9	1.1	8
	25	□		MSL 0620-L25C	223	155.0	183	187	221.9	1.1	8
	30	□		MSL 0620-L30C	256	186.0	216	220	254.9	1.1	8
6.3	20	●		MSL0630-L20C	191	126.0	151	155	189.9	1.1	8
	25	□		MSL 0630-L25C	223	157.5	183	187	221.9	1.1	8
	30	●		MSL 0630-L30C	256	189.0	216	220	254.9	1.1	8
6.4	20	●		MSL0640-L20C	191	128.0	151	155	189.8	1.2	8
	25	●		MSL 0640-L25C	223	160.0	183	187	221.8	1.2	8
	30	●		MSL 0640-L30C	256	192.0	216	220	254.8	1.2	8
6.5	20	●		MSL 0650-L20C	191	130.0	151	155	189.8	1.2	8
	25	●		MSL 0650-L25C	223	162.5	183	187	221.8	1.2	8
	30	●		MSL 0650-L30C	256	195.0	216	220	254.8	1.2	8
6.6	20	□		MSL0660-L20C	202	132.0	162	166	200.8	1.2	8
	25	●		MSL 0660-L25C	237	165.0	197	201	235.8	1.2	8
	30	●		MSL 0660-L30C	272	198.0	232	236	270.8	1.2	8
6.7	20	□		MSL 0670-L20C	202	134.0	162	166	200.8	1.2	8
	25	□		MSL 0670-L25C	237	167.5	197	201	235.8	1.2	8
	30	●		MSL 0670-L30C	272	201.0	232	236	270.8	1.2	8
6.8	20	●		MSL0680-L20C	202	136.0	162	166	200.8	1.2	8
	25	●		MSL 0680-L25C	237	170.0	197	201	235.8	1.2	8
	30	●		MSL 0680-L30C	272	204.0	232	236	270.8	1.2	8
6.9	20	●		MSL0690-L20C	202	138.0	162	166	200.7	1.3	8
	25	●		MSL 0690-L25C	237	172.5	197	201	235.7	1.3	8
	30	●		MSL 0690-L30C	272	207.0	232	236	270.7	1.3	8
7.0	20	●		MSL0700-L20C	202	140.0	162	166	200.7	1.3	8
	25	●		MSL 0700-L25C	237	175.0	197	201	235.7	1.3	8
	30	●		MSL 0700-L30C	272	210.0	232	236	270.7	1.3	8
7.1	20	●		MSL0710-L20C	214	142.0	174	178	212.7	1.3	8
	25	●		MSL 0710-L25C	251	177.5	211	215	249.7	1.3	8
	30	□		MSL 0710-L30C	289	213.0	249	253	287.7	1.3	8
7.2	20	□		MSL0720-L20C	214	144.0	174	178	212.7	1.3	8
	25	□		MSL 0720-L25C	251	180.0	211	215	249.7	1.3	8
	30	□		MSL 0720-L30C	289	216.0	249	253	287.7	1.3	8
7.3	20	□		MSL 0730-L20C	214	146.0	174	178	212.7	1.3	8
	25	□		MSL 0730-L25C	251	182.5	211	215	249.7	1.3	8
	30	□		MSL 0730-L30C	289	219.0	249	253	287.7	1.3	8
7.4	20	□		MSL0740-L20C	214	148.0	174	178	212.7	1.3	8
	25	□		MSL 0740-L25C	251	185.0	211	215	249.7	1.3	8
	30	□		MSL 0740-L30C	289	222.0	249	253	287.7	1.3	8
7.5	20	●		MSL 0750-L20C	214	150.0	174	178	212.6	1.4	8
	25	●		MSL 0750-L25C	251	187.5	211	215	249.6	1.4	8
	30	●		MSL 0750-L30C	289	225.0	249	253	287.6	1.4	8

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)						
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON
7.6	20	□		MSL0760-L20C	225	152.0	185	189	223.6	1.4	8
	25	●		MSL 0760-L25C	265	190.0	225	229	263.6	1.4	8
	30	□		MSL 0760-L30C	305	228.0	265	269	303.6	1.4	8
7.7	20	□		MSL 0770-L20C	225	154.0	185	189	223.6	1.4	8
	25	●		MSL 0770-L25C	265	192.5	225	229	263.6	1.4	8
	30	□		MSL 0770-L30C	305	231.0	265	269	303.6	1.4	8
7.8	20	□		MSL 0780-L20C	225	156.0	185	189	223.6	1.4	8
	25	□		MSL 0780-L25C	265	195.0	225	229	263.6	1.4	8
	30	●		MSL 0780-L30C	305	234.0	265	269	303.6	1.4	8
7.9	20	□		MSL 0790-L20C	225	158.0	185	189	223.6	1.4	8
	25	●		MSL 0790-L25C	265	197.5	225	229	263.6	1.4	8
	30	□		MSL 0790-L30C	305	237.0	265	269	303.6	1.4	8
8.0	20	●		MSL0800-L20C	225	160.0	185	189	223.5	1.5	8
	25	●		MSL 0800-L25C	265	200.0	225	229	263.5	1.5	8
	30	●		MSL 0800-L30C	305	240.0	265	269	303.5	1.5	8
8.1	20	●		MSL 0810-L20C	241	162.0	197	201	239.5	1.5	10
	25	□		MSL 0810-L25C	283	202.5	239	243	281.5	1.5	10
	30	□		MSL 0810-L30C	326	243.0	282	286	324.5	1.5	10
8.2	20	●		MSL 0820-L20C	241	164.0	197	201	239.5	1.5	10
	25	□		MSL 0820-L25C	283	205.0	239	243	281.5	1.5	10
	30	□		MSL 0820-L30C	326	246.0	282	286	324.5	1.5	10
8.3	20	□		MSL 0830-L20C	241	166.0	197	201	239.5	1.5	10
	25	□		MSL 0830-L25C	283	207.5	239	243	281.5	1.5	10
	30	□		MSL 0830-L30C	326	249.0	282	286	324.5	1.5	10
8.4	20	□		MSL 0840-L20C	241	168.0	197	201	239.5	1.5	10
	25	□		MSL 0840-L25C	283	210.0	239	243	281.5	1.5	10
	30	□		MSL 0840-L30C	326	252.0	282	286	324.5	1.5	10
8.5	20	●		MSL 0850-L20C	241	170.0	197	201	239.5	1.5	10
	25	●		MSL 0850-L25C	283	212.5	239	243	281.5	1.5	10
	30	●		MSL 0850-L30C	326	255.0	282	286	324.5	1.5	10
8.6	20	□		MSL 0860-L20C	252	172.0	208	212	250.4	1.6	10
	25	●		MSL 0860-L25C	297	215.0	253	257	295.4	1.6	10
	30	●		MSL 0860-L30C	342	258.0	298	302	340.4	1.6	10
8.7	20	□		MSL 0870-L20C	252	174.0	208	212	250.4	1.6	10
	25	●		MSL 0870-L25C	297	217.5	253	257	295.4	1.6	10
	30	□		MSL 0870-L30C	342	261.0	298	302	340.4	1.6	10
8.8	20	●		MSL 0880-L20C	252	176.0	208	212	250.4	1.6	10
	25	●		MSL 0880-L25C	297	220.0	253	257	295.4	1.6	10
	30	●		MSL 0880-L30C	342	264.0	298	302	340.4	1.6	10
8.9	20	□		MSL 0890-L20C	252	178.0	208	212	250.4	1.6	10
	25	□		MSL 0890-L25C	297	222.5	253	257	295.4	1.6	10
	30	□		MSL 0890-L30C	342	267.0	298	302	340.4	1.6	10
9.0	20	●		MSL 0900-L20C	252	180.0	208	212	250.4	1.6	10
	25	●		MSL 0900-L25C	297	225.0	253	257	295.4	1.6	10
	30	●		MSL 0900-L30C	342	270.0	298	302	340.4	1.6	10
9.1	20	□		MSL 0910-L20C	265	182.0	221	225	263.3	1.7	10
	25	□		MSL 0910-L25C	312	227.5	268	272	310.3	1.7	10
	30	□		MSL 0910-L30C	360	273.0	316	320	358.3	1.7	10
9.2	20	□		MSL 0920-L20C	265	184.0	221	225	263.3	1.7	10
	25	□		MSL 0920-L25C	312	230.0	268	272	310.3	1.7	10
	30	□		MSL 0920-L30C	360	276.0	316	320	358.3	1.7	10
9.3	20	□		MSL 0930-L20C	265	186.0	221	225	263.3	1.7	10
	25	□		MSL 0930-L25C	312	232.5	268	272	310.3	1.7	10
	30	□		MSL 0930-L30C	360	279.0	316	320	358.3	1.7	10

BOHREN (VOLLHARTMETALL)

MSL
2-Fasenbohrer

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)						
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON
9.4	20	□		MSL0940-L20C	265	188.0	221	225	263.3	1.7	10
	25	□		MSL0940-L25C	312	235.0	268	272	310.3	1.7	10
	30	□		MSL0940-L30C	360	282.0	316	320	358.3	1.7	10
9.5	20	●		MSL0950-L20C	265	190.0	221	225	263.3	1.7	10
	25	●		MSL0950-L25C	312	237.5	268	272	310.3	1.7	10
	30	●		MSL0950-L30C	360	285.0	316	320	358.3	1.7	10
9.6	20	□		MSL0960-L20C	276	192.0	232	236	274.3	1.7	10
	25	□		MSL0960-L25C	326	240.0	282	286	324.3	1.7	10
	30	□		MSL0960-L30C	376	288.0	332	336	374.3	1.7	10
9.7	20	□		MSL0970-L20C	276	194.0	232	236	274.2	1.8	10
	25	□		MSL0970-L25C	326	242.5	282	286	324.2	1.8	10
	30	□		MSL0970-L30C	376	291.0	332	336	374.2	1.8	10
9.8	20	●		MSL0980-L20C	276	196.0	232	236	274.2	1.8	10
	25	□		MSL0980-L25C	326	245.0	282	286	324.2	1.8	10
	30	●		MSL0980-L30C	376	294.0	332	336	374.2	1.8	10
9.9	20	□		MSL0990-L20C	276	198.0	232	236	274.2	1.8	10
	25	□		MSL0990-L25C	326	247.5	282	286	324.2	1.8	10
	30	□		MSL0990-L30C	376	297.0	332	336	374.2	1.8	10
10.0	20	●		MSL1000-L20C	276	200.0	232	236	274.2	1.8	10
	25	●		MSL1000-L25C	326	250.0	282	286	324.2	1.8	10
	30	●		MSL1000-L30C	376	300.0	332	336	374.2	1.8	10
10.1	20	●		MSL1010-L20C	293	202.0	244	248	291.2	1.8	12
	25	□		MSL1010-L25C	345	252.5	296	300	343.2	1.8	12
10.2	20	●		MSL1020-L20C	293	204.0	244	248	291.1	1.9	12
	25	□		MSL1020-L25C	345	255.0	296	300	343.1	1.9	12
10.3	20	□		MSL1030-L20C	293	206.0	244	248	291.1	1.9	12
	25	□		MSL1030-L25C	345	257.5	296	300	343.1	1.9	12
10.4	20	□		MSL1040-L20C	293	208.0	244	248	291.1	1.9	12
	25	□		MSL1040-L25C	345	260.0	296	300	343.1	1.9	12
10.5	20	●		MSL1050-L20C	293	210.0	244	248	291.1	1.9	12
	25	●		MSL1050-L25C	345	262.5	296	300	343.1	1.9	12
10.6	20	□		MSL1060-L20C	304	212.0	255	259	302.1	1.9	12
	25	□		MSL1060-L25C	359	265.0	310	314	357.1	1.9	12
10.7	20	□		MSL1070-L20C	304	214.0	255	259	302.1	1.9	12
	25	□		MSL1070-L25C	359	267.5	310	314	357.1	1.9	12
10.8	20	□		MSL1080-L20C	304	216.0	255	259	302.0	2.0	12
	25	□		MSL1080-L25C	359	270.0	310	314	357.0	2.0	12
10.9	20	□		MSL1090-L20C	304	218.0	255	259	302.0	2.0	12
	25	□		MSL1090-L25C	359	272.5	310	314	357.0	2.0	12
11.0	20	●		MSL1100-L20C	304	220.0	255	259	302.0	2.0	12
	25	●		MSL1100-L25C	359	275.0	310	314	357.0	2.0	12
11.1	20	□		MSL1110-L20C	316	222.0	267	271	314.0	2.0	12
	25	□		MSL1110-L25C	373	277.5	324	328	371.0	2.0	12
11.2	20	□		MSL1120-L20C	316	224.0	267	271	314.0	2.0	12
	25	□		MSL1120-L25C	373	280.0	324	328	371.0	2.0	12
11.3	20	□		MSL1130-L20C	316	226.0	267	271	313.9	2.1	12
	25	□		MSL1130-L25C	373	282.5	324	328	370.9	2.1	12
11.4	20	□		MSL1140-L20C	316	228.0	267	271	313.9	2.1	12
	25	□		MSL1140-L25C	373	285.0	324	328	370.9	2.1	12
11.5	20	●		MSL1150-L20C	316	230.0	267	271	313.9	2.1	12
	25	●		MSL1150-L25C	373	287.5	324	328	370.9	2.1	12
11.6	20	□		MSL1160-L20C	327	232.0	278	282	324.9	2.1	12
	25	□		MSL1160-L25C	387	290.0	338	342	384.9	2.1	12

DC (mm)	Bohrtiefe (l/d)	Lager		Bestellbezeichnung	Abmessungen (mm)						
		VP15TF			OAL	LU	LCF	LH	LF	PL	DCON
11.7	20	□		MSL1170-L20C	327	234.0	278	282	324.9	2.1	12
	25	□		MSL1170-L25C	387	292.5	338	342	384.9	2.1	12
11.8	20	□		MSL1180-L20C	327	236.0	278	282	324.9	2.1	12
	25	□		MSL1180-L25C	387	295.0	338	342	384.9	2.1	12
11.9	20	□		MSL1190-L20C	327	238.0	278	282	324.8	2.2	12
	25	□		MSL1190-L25C	387	297.5	338	342	384.8	2.2	12
12.0	20	●		MSL1200-L20C	327	240.0	278	282	324.8	2.2	12
	25	●		MSL1200-L25C	387	300.0	338	342	384.8	2.2	12
12.1	20	□		MSL1210-L20C	339	242.0	290	294	336.8	2.2	14
12.2	20	□		MSL1220-L20C	339	244.0	290	294	336.8	2.2	14
12.3	20	□		MSL1230-L20C	339	246.0	290	294	336.8	2.2	14
12.4	20	□		MSL1240-L20C	339	248.0	290	294	336.7	2.3	14
12.5	20	□		MSL1250-L20C	339	250.0	290	294	336.7	2.3	14
12.6	20	□		MSL1260-L20C	350	252.0	301	305	347.7	2.3	14
12.7	20	□		MSL1270-L20C	350	254.0	301	305	347.7	2.3	14
12.8	20	□		MSL1280-L20C	350	256.0	301	305	347.7	2.3	14
12.9	20	□		MSL1290-L20C	350	258.0	301	305	347.7	2.3	14
13.0	20	●		MSL1300-L20C	350	260.0	301	305	347.6	2.4	14
13.1	20	□		MSL1310-L20C	362	262.0	313	317	359.6	2.4	14
13.2	20	□		MSL1320-L20C	362	264.0	313	317	359.6	2.4	14
13.3	20	□		MSL1330-L20C	362	266.0	313	317	359.6	2.4	14
13.4	20	□		MSL1340-L20C	362	268.0	313	317	359.6	2.4	14
13.5	20	□		MSL1350-L20C	362	270.0	313	317	359.5	2.5	14
13.6	20	□		MSL1360-L20C	373	272.0	324	328	370.5	2.5	14
13.7	20	□		MSL1370-L20C	373	274.0	324	328	370.5	2.5	14
13.8	20	□		MSL1380-L20C	373	276.0	324	328	370.5	2.5	14
13.9	20	□		MSL1390-L20C	373	278.0	324	328	370.5	2.5	14
14.0	20	●		MSL1400-L20C	373	280.0	324	328	370.5	2.5	14

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

SCHNITTDATENEMPFEHLUNGEN

● MPS (3xD, 5xD, 8xD, 12xD)

Werkstoff	Bohrer Durchm.	$\phi 3.0 - \phi 6.0$		$\phi 6.0 - \phi 10.0$		$\phi 10.0 - \phi 14.0$		$\phi 14.0 - \phi 20.0$	
	Bedingung Härte	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P Allg. Baustahl	$\leq 180\text{HB}$	110 (50–120)	0.20 (0.15–0.25)	130 (80–140)	0.25 (0.20–0.35)	150 (90–170)	0.30 (0.20–0.40)	160 (100–180)	0.35 (0.20–0.40)
	180–280HB	90 (50–100)	0.20 (0.15–0.25)	110 (70–120)	0.25 (0.20–0.35)	130 (80–140)	0.25 (0.20–0.40)	140 (100–150)	0.30 (0.20–0.40)
	280–350HB	80 (40–90)	0.20 (0.15–0.30)	90 (60–110)	0.25 (0.15–0.30)	110 (70–130)	0.25 (0.15–0.40)	120 (90–140)	0.30 (0.20–0.40)
M Rostfreier Stahl	$\leq 200\text{HB}$	50 (20–100)	0.10 (0.05–0.15)	60 (40–120)	0.20 (0.10–0.25)	70 (50–120)	0.25 (0.15–0.30)	80 (60–120)	0.25 (0.15–0.30)
K Guss	Zugfestigkeit $\leq 350\text{MPa}$	100 (70–120)	0.25 (0.15–0.30)	130 (100–140)	0.30 (0.20–0.35)	150 (110–160)	0.35 (0.25–0.40)	160 (120–170)	0.35 (0.25–0.40)
	Duktiler Guss Zugfestigkeit $\leq 450\text{MPa}$	60 (30–80)	0.20 (0.15–0.25)	70 (40–90)	0.20 (0.15–0.30)	90 (50–110)	0.25 (0.20–0.40)	100 (60–110)	0.3 (0.20–0.40)
S Hitzebeständiger Stahl	–	20 (10–25)	0.10 (0.05–0.15)	25 (15–30)	0.12 (0.05–0.15)	25 (15–30)	0.15 (0.10–0.20)	30 (25–35)	0.15 (0.10–0.20)

● MPS (l/d=15–30), MSL (l/d=20–30)

Werkstoff	Bohrer Durchm.	$\phi 3.0 - \phi 6.0$		$\phi 6.0 - \phi 10.0$		$\phi 10.0 - \phi 14.0$	
	Bedingung Härte	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P Allg. Baustahl	$\leq 180\text{HB}$	85 (35–100)	0.20 (0.15–0.25)	85 (45–120)	0.25 (0.15–0.35)	90 (55–120)	0.30 (0.20–0.35)
	180–280HB	80 (40–95)	0.20 (0.15–0.25)	90 (50–120)	0.25 (0.20–0.35)	90 (60–130)	0.30 (0.15–0.35)
	280–350HB	75 (35–80)	0.15 (0.15–0.20)	80 (45–115)	0.20 (0.15–0.25)	85 (55–115)	0.25 (0.15–0.30)
M Rostfreier Stahl	$\leq 200\text{HB}$	50 (20–80)	0.10 (0.05–0.15)	60 (20–90)	0.12 (0.05–0.15)	70 (20–90)	0.15 (0.10–0.20)
K Guss	Zugfestigkeit $\leq 350\text{MPa}$	70 (40–85)	0.25 (0.15–0.30)	75 (50–90)	0.30 (0.20–0.35)	80 (50–95)	0.35 (0.20–0.40)
	Duktiler Guss Zugfestigkeit $\leq 450\text{MPa}$	65 (35–80)	0.20 (0.15–0.25)	70 (45–85)	0.25 (0.15–0.30)	75 (45–90)	0.30 (0.20–0.35)
S Hitzebeständiger Stahl	–	20 (10–25)	0.10 (0.05–0.15)	25 (15–30)	0.12 (0.05–0.15)	25 (15–30)	0.15 (0.10–0.20)

● MPS (l/d=35–40)

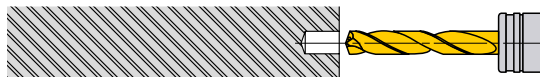
Werkstoff	Bohrer Durchm.	$\phi 3.0 - \phi 4.0$		$\phi 5.0 - \phi 6.0$		$\phi 6.0 - \phi 9.0$	
	Bedingung Härte	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P Allg. Baustahl	$\leq 180\text{HB}$	60 (50–70)	0.18 (0.13–0.20)	70 (55–80)	0.20 (0.15–0.23)	75 (60–85)	0.25 (0.18–0.28)
	180–280HB	55 (40–65)	0.15 (0.10–0.18)	65 (45–75)	0.18 (0.13–0.22)	70 (55–80)	0.23 (0.15–0.25)
	280–350HB	50 (40–60)	0.12 (0.08–0.15)	55 (40–65)	0.17 (0.13–0.20)	60 (40–75)	0.20 (0.15–0.23)
M Rostfreier Stahl	$\leq 200\text{HB}$	35 (30–45)	0.10 (0.07–0.15)	40 (30–50)	0.12 (0.08–0.15)	45 (30–60)	0.15 (0.13–0.20)
K Guss	Zugfestigkeit $\leq 350\text{MPa}$	55 (35–70)	0.15 (0.10–0.20)	60 (40–65)	0.20 (0.15–0.23)	60 (45–70)	0.23 (0.18–0.28)
	Duktiler Guss Zugfestigkeit $\leq 450\text{MPa}$	45 (30–60)	0.12 (0.08–0.15)	50 (40–60)	0.17 (0.13–0.20)	55 (40–65)	0.20 (0.15–0.23)
S Hitzebeständiger Stahl	–	15 (10–25)	0.07 (0.05–0.10)	20 (10–25)	0.07 (0.05–0.10)	20 (10–25)	0.10 (0.06–0.12)

Die aufgeführten Schnittdaten können je nach Maschinenleistung, Werkstückbeschaffenheit oder Spannung modifiziert werden, und gelten als allgemeine Empfehlung. Für Bohrtiefen $> l/d10$ empfehlen wir eine Pitotbohrung.

VERWENDUNG VON SUPER LONG BOHRERN

● Sacklochbohrung setzen

■ 1. Pilotbohrung setzen



- ① Für die Pilotbohrungen empfehlen wir den Einsatz von Mitsubishi Bohrern Typ MPS.
- ② Bitte stellen Sie eine präzise Pilotbohrung her, um einen einwandfreien Prozess beim Tieflochbohren zu gewährleisten.
- ③ Pilotbohrung : Min. 1 x DC oder tiefer.
(Passen Sie die Tiefe der Pilotbohrung der Länge Ihres SuperLong Bohrers an)

■ 2. Einfahren in die Pilotbohrung



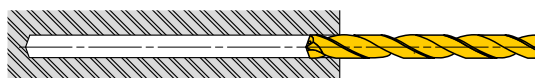
- ① Mit niedriger Drehzahl in das Führungsloch eindringen.
(Schnittgeschwindigkeit 20–30m/min, Vorschub 0.2–0.3mm/U)
- ② Langbohrer 1–3mm vor dem Boden des Führungslochs stoppen.

■ 3. Tieflochbohren



- ① Erhöhen Sie die Drehzahl und den Vorschub auf einen Zyklus und bohren Sie bis zur gewünschten Bohrtiefe.

■ 4. Herausfahren des Bohrers



- ① Nach dem Bohren Schnittgeschwindigkeit etwa 1–2mm vom Bohrungsende entfernt reduzieren (Schnittgeschwindigkeit 20–30m/min.)
- ② Fahren Sie den Bohrer bis zur Tiefe der Pilotbohrung heraus
(Vf=3000mm/min.)
- ③ Fahren Sie den Bohrer aus der Pilotbohrung mit geringer Drehzahl
(n=300, Vf=3000mm/min)

● Bohrungen in angewinkelten Werkstücken

■ 1. Planfräsen



- ① Fräsen Sie eine ebene Fläche in das Werkstück und setzen Sie einen Fräser mit gleichem Durchmesser wie die gewünschte Bohrung ein.

■ 2. Pilotbohrung setzen



- ① Für die Pilotbohrungen empfehlen wir den Einsatz von Mitsubishi Bohrern Typ MPS.
- ② Bitte stellen Sie eine präzise Pilotbohrung her, um einen einwandfreien Prozess beim Tieflochbohren zu gewährleisten.
- ③ Pilotbohrung : Min. 1 x DC oder tiefer.
(Passen Sie die Tiefe der Pilotbohrung der Länge Ihres SuperLong Bohrers an)

■ 3. Einfahren in die Pilotbohrung



- ① Mit niedriger Drehzahl in das Führungsloch eindringen.
(Schnittgeschwindigkeit 20–30m/min, Vorschub 0.2–0.3mm/U)
- ② Langbohrer 1–3mm vor dem Boden des Führungslochs stoppen.

■ 4. Tieflochbohren



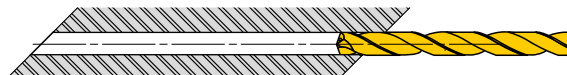
- ① Erhöhen Sie die Drehzahl und den Vorschub auf einen Zyklus und bohren Sie bis zur gewünschten Bohrtiefe.

■ 5. Durchgangsbohren

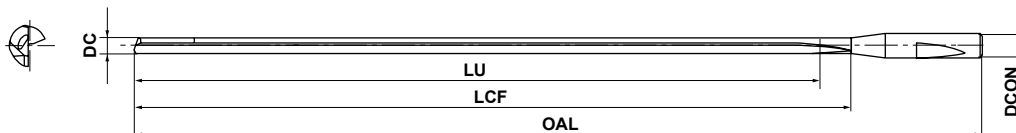


- ① Beim Austritt aus dem Werkstück kann die Schneidkante des Bohrers ausbrechen.
- ② Reduzieren Sie den Vorschub auf Vf=0.05mm–0.1mm/U

■ 6. Herausfahren des Bohrers



- ① Bohrer auf Pilotbohrung-Startpunkttiefe herausziehen bei einem Vorschub von 3000mm/min.
- ② Dann Bohrung mit einer Schnittgeschwindigkeit von 20–30m/min und einem Vorschub von 0.2–0.3mm/U bearbeiten.



(Bemerkung) MGS Bohrer eignen sich für die Verwendung mit Schrumpfaufnahmen.

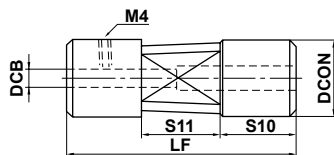
DC (mm)	Bohrtiefe (l/d)	Kühlung (Int./Ext.)	Lager HT10	Bestellbezeichnung	Abmessungen (mm)			
					LU	LCF	OAL	DCON
0.7	50	Int.	★	MGS0070L040B	35.0	40	80	3
	80	Int.	★	MGS0070L060B	56.0	60	100	3
0.8	45	Int.	★	MGS0080L040B	36.0	40	80	3
	70	Int.	★	MGS0080L060B	56.0	60	100	3
0.9	40	Int.	★	MGS0090L040B	36.0	40	80	3
	60	Int.	★	MGS0090L060B	54.0	60	100	3
1.0	35	Int.	★	MGS0100L040B	35.0	40	80	3
	55	Int.	★	MGS0100L060B	55.0	60	100	3
	75	Int.	★	MGS0100L080B	75.0	80	120	3
1.1	30	Int.	★	MGS0110L040B	33.0	40	80	3
	50	Int.	★	MGS0110L060B	55.0	60	100	3
	65	Int.	★	MGS0110L080B	71.5	80	120	3
1.2	30	Int.	★	MGS0120L040B	36.0	40	80	3
	45	Int.	★	MGS0120L060B	54.0	60	100	3
	60	Int.	★	MGS0120L080B	72.0	80	120	3
1.3	40	Int.	★	MGS0130L060B	52.0	60	100	3
	55	Int.	★	MGS0130L080B	71.5	80	120	3
	70	Int.	★	MGS0130L100B	91.0	100	140	3
1.4	35	Int.	★	MGS0140L060B	49.0	60	100	3
	50	Int.	★	MGS0140L080B	70.0	80	120	3
	65	Int.	★	MGS0140L100B	91.0	100	140	3
1.5	35	Int.	★	MGS0150L060B	52.5	60	100	3
	50	Int.	★	MGS0150L080B	75.0	80	120	3
	60	Int.	★	MGS0150L100B	90.0	100	140	3
1.6	30	Int.	★	MGS0160L060B	48.0	60	100	3
	45	Int.	★	MGS0160L080B	72.0	80	120	3
	55	Int.	★	MGS0160L100B	88.0	100	140	3
1.7	30	Int.	★	MGS0170L060B	51.0	60	100	3
	40	Int.	★	MGS0170L080B	68.0	80	120	3
	55	Int.	★	MGS0170L100B	93.5	100	140	3

DC (mm)	Bohrtiefe (l/d)	Kühlung (Int./Ext.)	Lager HT10	Bestellbezeichnung	Abmessungen (mm)			
					LU	LCF	OAL	DCON
1.8	30	Int.	★	MGS0180L060B	54.0	60	100	3
	40	Int.	★	MGS0180L080B	72.0	80	120	3
	50	Int.	★	MGS0180L100B	90.0	100	140	3
1.9	25	Int.	★	MGS0190L060B	47.5	60	100	3
	35	Int.	★	MGS0190L080B	66.5	80	120	3
	45	Int.	★	MGS0190L100B	85.5	100	140	3
2.0	25	Int.	★	MGS0200L060B	50.0	60	100	3
	35	Int.	★	MGS0200L080B	70.0	80	120	3
	45	Int.	★	MGS0200L100B	90.0	100	140	3
2.1	35	Int.	★	MGS0210L080B	73.5	80	120	3
	40	Int.	★	MGS0210L100B	84.0	100	140	3
2.2	30	Int.	★	MGS0220L080B	66.0	80	120	3
	40	Int.	★	MGS0220L100B	88.0	100	140	3
2.3	30	Int.	★	MGS0230L080B	69.0	80	120	3
	40	Int.	★	MGS0230L100B	92.0	100	140	3
2.4	30	Int.	★	MGS0240L080B	72.0	80	120	3
	35	Int.	★	MGS0240L100B	84.0	100	140	3
2.5	25	Int.	★	MGS0250L080B	62.5	80	120	3
	35	Int.	★	MGS0250L100B	87.5	100	140	3
2.6	25	Int.	★	MGS0260L080B	65.0	80	120	3
	35	Int.	★	MGS0260L100B	91.0	100	140	3
2.7	25	Int.	★	MGS0270L080B	67.5	80	120	3
	30	Int.	★	MGS0270L100B	81.0	100	140	3
2.8	25	Int.	★	MGS0280L080B	70.0	80	120	3
	30	Int.	★	MGS0280L100B	84.0	100	140	3
2.9	20	Int.	★	MGS0290L080B	58.0	80	120	3
	30	Int.	★	MGS0290L100B	87.0	100	140	3
3.0	20	Int.	★	MGS0300L080B	60.0	80	120	3
	30	Int.	★	MGS0300L100B	90.0	100	140	3

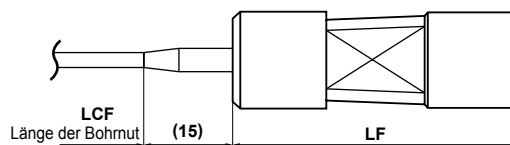
(Bemerkung) Bitte setzen Sie sich mit uns in Verbindung, um Informationen zu beschichteten Bohrern zu erhalten.

(VP, GP und LP besch. Hartmetall).

SCHRAUBENDREHER



BEI VERWENDUNG EINER BOHRBUCHSE



Bestellbezeichnung	Lager	Abmessungen (mm)					Schraube	Schlüssel
		DCON	DCB	LF	S10	S11		
MGD38	★	12.7	3.0	38.1	12.6	12.7	HSS04004	HKY20F
MGD70	★	12.7	3.0	70.0	25.0	20.0	HSS04004	HKY20F

SCHNITTDATENEMPFEHLUNGEN

Werkstoff	Allg. Baustahl ($\leq 180\text{HB}$)				C-Stahl Leg. Stahl ($180-280\text{HB}$)			
	Ck10				Ck45, 42CrMo4			
Kühlmittel	Nicht wasserlösliche Emulsion				Nicht wasserlösliche Emulsion			
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
0.8	50	19800	0.01 (0.005—0.016)	195	40	15900	0.01 (0.005—0.016)	155
1.0	50	15900	0.01 (0.007—0.020)	155	40	12700	0.01 (0.007—0.020)	125
1.2	60	15900	0.015 (0.008—0.024)	235	50	13200	0.015 (0.008—0.024)	195
1.6	60	11900	0.02 (0.011—0.032)	235	50	9900	0.02 (0.011—0.032)	195
2.0	60	9500	0.025 (0.013—0.040)	235	50	7900	0.025 (0.013—0.040)	195
2.5	70	8900	0.03 (0.017—0.050)	265	60	7600	0.03 (0.017—0.050)	225
3.0	70	7400	0.04 (0.020—0.060)	295	60	6300	0.04 (0.020—0.060)	250

Werkstoff	C-Stahl Leg. Stahl ($280-350\text{HB}$)				Rostfreier Stahl (austenitisch) ($\leq 200\text{HB}$)			
	36CrNiMo4				X5CrNi1810, X5CrNiMo17-12-2			
Kühlmittel	Nicht wasserlösliche Emulsion				Nicht wasserlösliche Emulsion			
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
0.8	30	11900	0.005 (0.004—0.005)	55	30	11900	0.01 (0.005—0.016)	115
1.0	30	9500	0.005 (0.005—0.007)	45	30	9500	0.01 (0.007—0.020)	95
1.2	40	10600	0.005 (0.006—0.008)	50	30	7900	0.015 (0.008—0.024)	115
1.6	40	7900	0.01 (0.008—0.011)	75	40	7900	0.02 (0.011—0.032)	155
2.0	40	6300	0.01 (0.010—0.013)	60	40	6300	0.025 (0.013—0.040)	155
2.5	50	6300	0.015 (0.013—0.017)	90	40	5000	0.03 (0.017—0.050)	150
3.0	50	5300	0.015 (0.015—0.020)	75	40	4200	0.04 (0.020—0.060)	165

Werkstoff	Grauguß ($\leq 350\text{MPa}$)				Duktiler Guss ($\leq 450\text{MPa}$)			
	GG30				GGG45			
Kühlmittel	Nicht wasserlösliche Emulsion • Wasserlösliche Emulsion				Nicht wasserlösliche Emulsion • Wasserlösliche Emulsion			
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
0.8	50	19800	0.01 (0.008—0.016)	195	40	15900	0.005 (0.005—0.008)	75
1.0	50	15900	0.015 (0.010—0.020)	235	40	12700	0.005 (0.007—0.010)	60
1.2	60	15900	0.015 (0.012—0.024)	235	50	13200	0.01 (0.008—0.012)	130
1.6	60	11900	0.02 (0.016—0.032)	235	50	9900	0.01 (0.011—0.016)	95
2.0	60	9500	0.03 (0.020—0.040)	285	50	7900	0.015 (0.013—0.020)	115
2.5	70	8900	0.035 (0.025—0.050)	310	60	7600	0.02 (0.017—0.025)	150
3.0	70	7400	0.045 (0.030—0.060)	330	60	6300	0.025 (0.020—0.030)	155

1) Zur Verbesserung der Prozesssicherheit und Produktivität wird der Einsatz eines Kühlmittels empfohlen. (Mindestkühlmitteldruck = 1000 PSI)

2) Der Kühlmittelfilter muss feiner als 5 Mikrometer sein.

Eine Feinfiltration ist notwendig, um die Blockierung der Kühlmittleitungen zu vermeiden.

3) Eine Pilotbohrung oder Führungsbuchse ist erforderlich.

★ : Lagerstandard in Japan.

SCNITTDATENEMPFEHLUNGEN

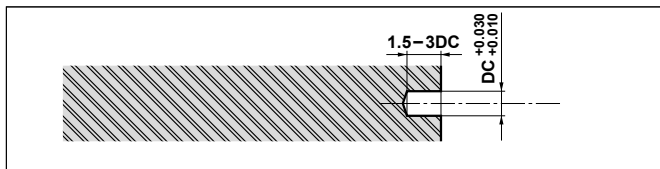
Werkstoff	Aluminium Leg. (Si<5%)				Kupfer • Kupfer Leg.			
Kühlmittel	Nicht wasserlösliche Emulsion • Wasserlösliche Emulsion				Nicht wasserlösliche Emulsion • Wasserlösliche Emulsion			
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Tischvorschub (mm/min)
0.8	50	19800	0.01 (0.008—0.016)	195	40	15900	0.01 (0.008—0.016)	155
1.0	60	19000	0.015 (0.010—0.020)	285	50	15900	0.015 (0.010—0.020)	235
1.2	70	18500	0.015 (0.012—0.024)	275	60	15900	0.015 (0.012—0.024)	235
1.6	80	15900	0.02 (0.016—0.032)	315	70	13900	0.02 (0.016—0.032)	275
2.0	90	14300	0.03 (0.020—0.040)	425	80	12700	0.03 (0.020—0.040)	380
2.5	100	12700	0.035 (0.025—0.050)	440	90	11400	0.035 (0.025—0.050)	395
3.0	100	10600	0.045 (0.030—0.060)	475	100	10600	0.045 (0.030—0.060)	475

- 1) Zur Verbesserung der Prozesssicherheit und Produktivität wird der Einsatz eines Kühlmittels empfohlen. (Mindestkühlmitteldruck = 1000 PSI)
- 2) Der Kühlmittelfilter muss feiner als 5 Mikrometer sein.
Eine Feinfilterung ist notwendig, um die Blockierung der Kühlmittleitungen zu vermeiden.
- 3) Eine Pilotbohrung oder Führungsbuchse ist erforderlich.

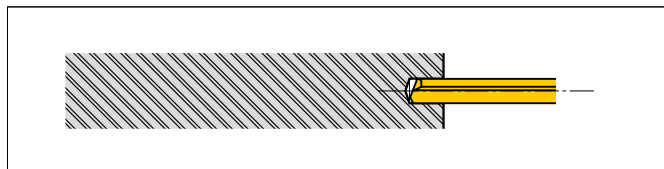
HINWEISE ZU SPEZIALANWENDUNGEN

- Eine Pilotbohrung oder Führungsbuchse ist erforderlich.
- Der Kühlmittelfilter muss feiner als 5 Mikrometer sein.
Eine Feinfilterung ist notwendig, um die Blockierung der Kühlmittleitungen zu vermeiden.
- Es muss Hochdruckkühlmittel verwendet werden. Mindestens 10MPa.
(Bei zu niedrigem Druck können Späne die Öffnungen blockieren).

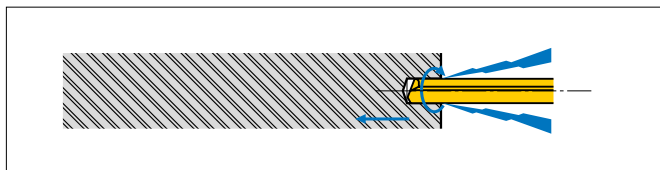
ANWENDUNGSANLEITUNG



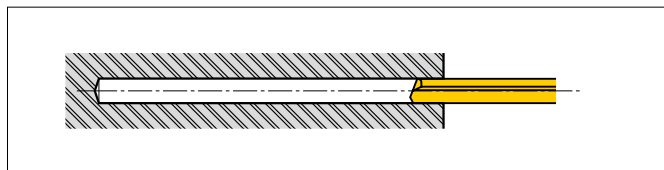
1. Pilotbohrung.
(MWE-, MWS-Bohrer von Mitsubishi empfohlen.)



- 2 Eintritt in die Pilotbohrung im Stillstand oder mit gegenläufiger Drehzahl von < 300 U/Min.



3. Kühlmittelzufuhr einschalten, Schnittgeschwindigkeit und Vorschub auf die empfohlenen Schnittdaten einstellen und mit dem Bohren beginnen.



4. Nach dem Bohren die Maschine auf Position 2 zurücksetzen, Kühlmittelzufuhr stoppen und Drehzahl ausschalten.

BOHREN (VOLLHARTMETALL)

MMS

- Für das hochpräzise und effiziente Bohren von rostfreien Stahlorten.
- Trigon-Bohrungen beginnen ab einem Durchmesser von 4.60 mm.

P

M

K

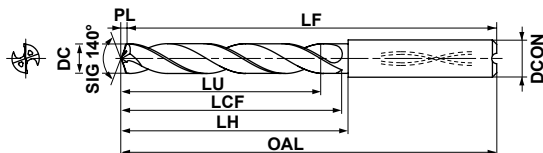
N

S

H

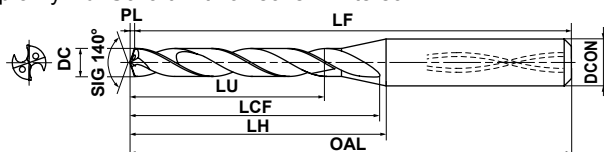


● Typ 1 Zylind. Schaft



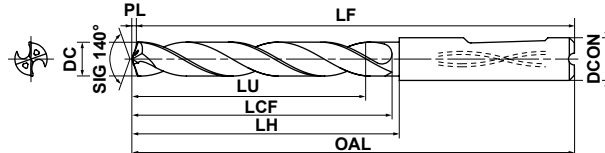
MMS---S/L-DIN-C (l/d 3-5)
MMS---X3/X5DB (l/d 3-5)

● Typ 3 Zylind. Schaft mit konischer Hinterschliff



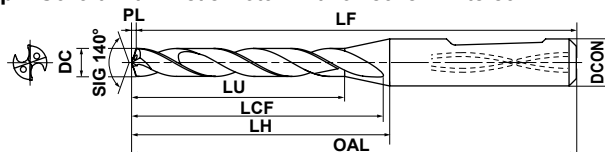
MMS---S/L-DIN-C (l/d 3-5)
MMS---X3/X5DB (l/d 3-5)

● Typ 2 Schaft mit Whistle Notch



MMS---S/L-DIN (l/d 3-5)

● Typ 4 Schaft mit Whistle Notch mit konischer Hinterschliff



MMS---S/L-DIN (l/d 3-5)

Interne Kühlung

DC (mm)	Bohrtiefe (l/d)	Lager DP7020	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
3.0	3	●	MMS0300S-DIN	9.0	20.0	26.0	62.0	61.5	0.5	6	4
	3	●	MMS0300S-DIN-C	9.0	20.0	26.0	62.0	61.5	0.5	6	3
	5	●	MMS0300L-DIN	15.0	28.0	30.0	66.0	65.5	0.5	6	4
	5	●	MMS0300L-DIN-C	15.0	28.0	30.0	66.0	65.5	0.5	6	3
	3	★	MMS0300X3DB	9.0	22.0	24.0	70.5	70.0	0.5	6	3
	5	★	MMS0300X5DB	15.0	29.0	32.0	78.5	78.0	0.5	6	3
3.05	3	□	MMS0305S-DIN	9.2	20.0	26.0	62.0	61.4	0.6	6	4
	3	●	MMS0305S-DIN-C	9.2	20.0	26.0	62.0	61.4	0.6	6	3
	5	□	MMS0305L-DIN	15.3	28.0	30.0	66.0	65.4	0.6	6	4
	5	●	MMS0305L-DIN-C	15.3	28.0	30.0	66.0	65.4	0.6	6	3
3.1	3	□	MMS0310S-DIN	9.3	20.0	26.0	62.0	61.4	0.6	6	4
	3	●	MMS0310S-DIN-C	9.3	20.0	26.0	62.0	61.4	0.6	6	3
	5	□	MMS0310L-DIN	15.5	28.0	30.0	66.0	65.4	0.6	6	4
	5	●	MMS0310L-DIN-C	15.5	28.0	30.0	66.0	65.4	0.6	6	3
	3	★	MMS0310X3DB	9.3	22.0	24.0	70.6	70.0	0.6	6	3
	5	★	MMS0310X5DB	15.5	29.0	32.0	78.6	78.0	0.6	6	3
3.2	3	□	MMS0320S-DIN	9.6	20.0	26.0	62.0	61.4	0.6	6	4
	3	●	MMS0320S-DIN-C	9.6	20.0	26.0	62.0	61.4	0.6	6	3
	5	□	MMS0320L-DIN	16.0	28.0	30.0	66.0	65.4	0.6	6	4
	5	●	MMS0320L-DIN-C	16.0	28.0	30.0	66.0	65.4	0.6	6	3
	3	★	MMS0320X3DB	9.6	22.0	24.0	70.6	70.0	0.6	6	3
	5	★	MMS0320X5DB	16.0	29.0	32.0	78.6	78.0	0.6	6	3
3.3	3	□	MMS0330S-DIN	9.9	20.0	26.0	62.0	61.4	0.6	6	4
	3	●	MMS0330S-DIN-C	9.9	20.0	26.0	62.0	61.4	0.6	6	3
	5	□	MMS0330L-DIN	16.5	28.0	30.0	66.0	65.4	0.6	6	4
	5	●	MMS0330L-DIN-C	16.5	28.0	30.0	66.0	65.4	0.6	6	3
	3	★	MMS0330X3DB	9.9	22.0	24.0	70.6	70.0	0.6	6	3
	5	★	MMS0330X5DB	16.5	29.0	32.0	78.6	78.0	0.6	6	3
3.4	3	□	MMS0340S-DIN	10.2	20.0	26.0	62.0	61.4	0.6	6	4
	3	●	MMS0340S-DIN-C	10.2	20.0	26.0	62.0	61.4	0.6	6	3
	5	□	MMS0340L-DIN	17.0	28.0	30.0	66.0	65.4	0.6	6	4

Interne Kühlung

DC (mm)	Bohrtiefe (l/d)	Lager DP7020	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
3.4	5	●	MMS0340L-DIN-C	17.0	28.0	30.0	66.0	65.4	0.6	6	3
	3	★	MMS0340X3DB	10.2	22.0	24.0	70.6	70.0	0.6	6	3
	5	★	MMS0340X5DB	17.0	29.0	32.0	78.6	78.0	0.6	6	3
3.5	3	□	MMS0350S-DIN	10.5	20.0	26.0	62.0	61.4	0.6	6	4
	3	●	MMS0350S-DIN-C	10.5	20.0	26.0	62.0	61.4	0.6	6	3
	5	□	MMS0350L-DIN	17.5	28.0	30.0	66.0	65.4	0.6	6	4
	5	●	MMS0350L-DIN-C	17.5	28.0	30.0	66.0	65.4	0.6	6	3
	3	★	MMS0350X3DB	10.5	22.0	24.0	70.6	70.0	0.6	6	3
	5	★	MMS0350X5DB	17.5	29.0	32.0	78.6	78.0	0.6	6	3
3.6	3	□	MMS0360S-DIN	10.8	20.0	26.0	62.0	61.3	0.7	6	4
	3	●	MMS0360S-DIN-C	10.8	20.0	26.0	62.0	61.3	0.7	6	3
	5	□	MMS0360L-DIN	18.0	28.0	30.0	66.0	65.3	0.7	6	4
	5	●	MMS0360L-DIN-C	18.0	28.0	30.0	66.0	65.3	0.7	6	3
	3	★	MMS0360X3DB	10.8	23.0	24.0	70.7	70.0	0.7	6	3
	5	★	MMS0360X5DB	18.0	31.0	32.0	78.7	78.0	0.7	6	3
3.7	3	□	MMS0370S-DIN	11.1	20.0	26.0	62.0	61.3	0.7	6	4
	3	●	MMS0370S-DIN-C	11.1	20.0	26.0	62.0	61.3	0.7	6	3
	5	□	MMS0370L-DIN	18.5	28.0	30.0	66.0	65.3	0.7	6	4
	5	●	MMS0370L-DIN-C	18.5	28.0	30.0	66.0	65.3	0.7	6	3
	3	★	MMS0370X3DB	11.1	23.0	24.0	70.7	70.0	0.7	6	3
	5	★	MMS0370X5DB	18.5	31.0	32.0	78.7	78.0	0.7	6	3
3.8	3	□	MMS0380S-DIN	11.4	24.0	30.0	66.0	65.3	0.7	6	4
	3	●	MMS0380S-DIN-C	11.4	24.0	30.0	66.0	65.3	0.7	6	3
	5	□	MMS0380L-DIN	19.0	36.0	38.0	74.0	73.3	0.7	6	4
	5	●	MMS0380L-DIN-C	19.0	36.0	38.0	74.0	73.3	0.7	6	3
	3	★	MMS0380X3DB	11.4	23.0	24.0	70.7	70.0	0.7	6	3
	5	★	MMS0380X5DB	19.0	31.0	32.0	78.7	78.0	0.7	6	3
3.9	3	□	MMS0390S-DIN	11.7	24.0	30.0	66.0	65.3	0.7	6	4
	3	●	MMS0390S-DIN-C	11.7	24.0	30.0	66.0	65.3	0.7	6	3
	5	□	MMS0390L-DIN	19.5	36.0	38.0	74.0	73.3	0.7	6	4
	5	●	MMS0390L-DIN-C	19.5	36.0	38.0	74.0	73.3	0.7	6	3

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
3.9	3	★	MMS0390X3DB	11.7	23.0	24.0	70.7	70.0	0.7	6	3
	5	★	MMS0390X5DB	19.5	31.0	32.0	78.7	78.0	0.7	6	3
4.0	3	●	MMS0400S-DIN	12.0	24.0	30.0	66.0	65.3	0.7	6	4
	3	●	MMS0400S-DIN-C	12.0	24.0	30.0	66.0	65.3	0.7	6	3
	5	●	MMS0400L-DIN	20.0	36.0	38.0	74.0	73.3	0.7	6	4
	5	●	MMS0400L-DIN-C	20.0	36.0	38.0	74.0	73.3	0.7	6	3
	3	★	MMS0400X3DB	12.0	23.0	24.0	70.7	70.0	0.7	6	3
	5	★	MMS0400X5DB	20.0	31.0	32.0	78.7	78.0	0.7	6	3
4.05	3	□	MMS0405S-DIN	12.2	24.0	30.0	66.0	65.3	0.7	6	4
	3	●	MMS0405S-DIN-C	12.2	24.0	30.0	66.0	65.3	0.7	6	3
	5	□	MMS0405L-DIN	20.3	36.0	38.0	74.0	73.3	0.7	6	4
	5	●	MMS0405L-DIN-C	20.3	36.0	38.0	74.0	73.3	0.7	6	3
4.1	3	□	MMS0410S-DIN	12.3	24.0	30.0	66.0	65.3	0.7	6	4
	3	●	MMS0410S-DIN-C	12.3	24.0	30.0	66.0	65.3	0.7	6	3
	5	□	MMS0410L-DIN	20.5	36.0	38.0	74.0	73.3	0.7	6	4
	5	●	MMS0410L-DIN-C	20.5	36.0	38.0	74.0	73.3	0.7	6	3
	3	★	MMS0410X3DB	12.3	25.0	27.0	73.7	73.0	0.7	6	3
	5	★	MMS0410X5DB	20.5	34.0	36.0	82.7	82.0	0.7	6	3
4.2	3	●	MMS0420S-DIN	12.6	24.0	30.0	66.0	65.2	0.8	6	4
	3	●	MMS0420S-DIN-C	12.6	24.0	30.0	66.0	65.2	0.8	6	3
	5	●	MMS0420L-DIN	21.0	36.0	38.0	74.0	73.2	0.8	6	4
	5	●	MMS0420L-DIN-C	21.0	36.0	38.0	74.0	73.2	0.8	6	3
	3	★	MMS0420X3DB	12.6	25.0	27.0	73.8	73.0	0.8	6	3
	5	★	MMS0420X5DB	21.0	34.0	36.0	82.8	82.0	0.8	6	3
4.3	3	□	MMS0430S-DIN	12.9	24.0	30.0	66.0	65.2	0.8	6	4
	3	●	MMS0430S-DIN-C	12.9	24.0	30.0	66.0	65.2	0.8	6	3
	5	□	MMS0430L-DIN	21.5	36.0	38.0	74.0	73.2	0.8	6	4
	5	●	MMS0430L-DIN-C	21.5	36.0	38.0	74.0	73.2	0.8	6	3
	3	★	MMS0430X3DB	12.9	25.0	27.0	73.8	73.0	0.8	6	3
	5	★	MMS0430X5DB	21.5	34.0	36.0	82.8	82.0	0.8	6	3
4.4	3	□	MMS0440S-DIN	13.2	24.0	30.0	66.0	65.2	0.8	6	4
	3	□	MMS0440S-DIN-C	13.2	24.0	30.0	66.0	65.2	0.8	6	3
	5	□	MMS0440L-DIN	22.0	36.0	38.0	74.0	73.2	0.8	6	4
	5	□	MMS0440L-DIN-C	22.0	36.0	38.0	74.0	73.2	0.8	6	3
	3	★	MMS0440X3DB	13.2	25.0	27.0	73.8	73.0	0.8	6	3
	5	★	MMS0440X5DB	22.0	34.0	36.0	82.8	82.0	0.8	6	3
4.5	3	□	MMS0450S-DIN	13.5	24.0	30.0	66.0	65.2	0.8	6	4
	3	●	MMS0450S-DIN-C	13.5	24.0	30.0	66.0	65.2	0.8	6	3
	5	□	MMS0450L-DIN	22.5	36.0	38.0	74.0	73.2	0.8	6	4
	5	●	MMS0450L-DIN-C	22.5	36.0	38.0	74.0	73.2	0.8	6	3
	3	★	MMS0450X3DB	13.5	25.0	27.0	73.8	73.0	0.8	6	3
	5	★	MMS0450X5DB	22.5	34.0	36.0	82.8	82.0	0.8	6	3
4.6	3	□	MMS0460S-DIN	13.8	24.0	30.0	66.0	65.2	0.8	6	2
	3	●	MMS0460S-DIN-C	13.8	24.0	30.0	66.0	65.2	0.8	6	1
	5	□	MMS0460L-DIN	23.0	36.0	38.0	74.0	73.2	0.8	6	2
	5	●	MMS0460L-DIN-C	23.0	36.0	38.0	74.0	73.2	0.8	6	1
	3	★	MMS0460X3DB	13.8	26.0	29.0	75.8	75.0	0.8	6	1
	5	★	MMS0460X5DB	23.0	36.0	39.0	85.8	85.0	0.8	6	1
4.65	3	□	MMS0465S-DIN	14.0	24.0	30.0	66.0	65.2	0.8	6	2
	3	●	MMS0465S-DIN-C	14.0	24.0	30.0	66.0	65.2	0.8	6	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
4.65	5	□	MMS0465L-DIN	23.3	36.0	38.0	74.0	73.2	0.8	6	2
	5	●	MMS0465L-DIN-C	23.3	36.0	38.0	74.0	73.2	0.8	6	1
4.7	3	□	MMS0470S-DIN	14.1	24.0	30.0	66.0	65.1	0.9	6	2
	3	□	MMS0470S-DIN-C	14.1	24.0	30.0	66.0	65.1	0.9	6	1
	5	□	MMS0470L-DIN	23.5	36.0	38.0	74.0	73.1	0.9	6	2
	5	□	MMS0470L-DIN-C	23.5	36.0	38.0	74.0	73.1	0.9	6	1
	3	★	MMS0470X3DB	14.1	26.0	29.0	75.9	75.0	0.9	6	1
	5	★	MMS0470X5DB	23.5	36.0	39.0	85.9	85.0	0.9	6	1
4.8	3	□	MMS0480S-DIN	14.4	28.0	30.0	66.0	65.1	0.9	6	2
	3	●	MMS0480S-DIN-C	14.4	28.0	30.0	66.0	65.1	0.9	6	1
	5	□	MMS0480L-DIN	24.0	44.0	46.0	82.0	81.1	0.9	6	2
	5	●	MMS0480L-DIN-C	24.0	44.0	46.0	82.0	81.1	0.9	6	1
	3	★	MMS0480X3DB	14.4	26.0	29.0	75.9	75.0	0.9	6	1
	5	★	MMS0480X5DB	24.0	36.0	39.0	85.9	85.0	0.9	6	1
4.9	3	□	MMS0490S-DIN	14.7	28.0	30.0	66.0	65.1	0.9	6	2
	3	□	MMS0490S-DIN-C	14.7	28.0	30.0	66.0	65.1	0.9	6	1
	5	□	MMS0490L-DIN	24.5	44.0	46.0	82.0	81.1	0.9	6	2
	5	□	MMS0490L-DIN-C	24.5	44.0	46.0	82.0	81.1	0.9	6	1
	3	★	MMS0490X3DB	14.7	26.0	29.0	75.9	75.0	0.9	6	1
	5	★	MMS0490X5DB	24.5	36.0	39.0	85.9	85.0	0.9	6	1
5.0	3	●	MMS0500S-DIN	15.0	28.0	30.0	66.0	65.1	0.9	6	2
	3	●	MMS0500S-DIN-C	15.0	28.0	30.0	66.0	65.1	0.9	6	1
	5	●	MMS0500L-DIN	25.0	44.0	46.0	82.0	81.1	0.9	6	2
	5	●	MMS0500L-DIN-C	25.0	44.0	46.0	82.0	81.1	0.9	6	1
	3	★	MMS0500X3DB	15.0	26.0	29.0	75.9	75.0	0.9	6	1
	5	★	MMS0500X5DB	25.0	36.0	39.0	85.9	85.0	0.9	6	1
5.05	3	□	MMS0505S-DIN	15.2	28.0	30.0	66.0	65.1	0.9	6	2
	3	●	MMS0505S-DIN-C	15.2	28.0	30.0	66.0	65.1	0.9	6	1
	5	□	MMS0505L-DIN	25.3	44.0	46.0	82.0	81.1	0.9	6	2
	5	●	MMS0505L-DIN-C	25.3	44.0	46.0	82.0	81.1	0.9	6	1
	3	□	MMS0510S-DIN	15.3	28.0	30.0	66.0	65.1	0.9	6	2
	3	●	MMS0510S-DIN-C	15.3	28.0	30.0	66.0	65.1	0.9	6	1
5.1	5	□	MMS0510L-DIN	25.5	44.0	46.0	82.0	81.1	0.9	6	2
	5	●	MMS0510L-DIN-C	25.5	44.0	46.0	82.0	81.1	0.9	6	1
	3	★	MMS0510X3DB	15.3	29.0	31.0	81.9	81.0	0.9	6	1
	5	★	MMS0510X5DB	25.5	40.0	43.0	89.9	89.0	0.9	6	1
	3	□	MMS0520S-DIN	15.6	28.0	30.0	66.0	65.1	0.9	6	2
	3	●	MMS0520S-DIN-C	15.6	28.0	30.0	66.0	65.1	0.9	6	1
5.2	5	□	MMS0520L-DIN	26.0	44.0	46.0	82.0	81.1	0.9	6	2
	5	●	MMS0520L-DIN-C	26.0	44.0	46.0	82.0	81.1	0.9	6	1
	3	★	MMS0520X3DB	15.6	29.0	31.0	81.9	81.0	0.9	6	1
	5	★	MMS0520X5DB	26.0	40.0	43.0	89.9	89.0	0.9	6	1
	3	□	MMS0530S-DIN	15.9	28.0	30.0	66.0	65.0	1.0	6	2
	3	□	MMS0530S-DIN-C	15.9	28.0	30.0	66.0	65.0	1.0	6	1
5.3	5	□	MMS0530L-DIN	26.5	44.0	46.0	82.0	81.0	1.0	6	2
	5	□	MMS0530L-DIN-C	26.5	44.0	46.0	82.0	81.0	1.0	6	1
	3	★	MMS0530X3DB	15.9	29.0	31.0	82.0	81.0	1.0	6	1
	5	★	MMS0530X5DB	26.5	40.0	43.0	90.0	89.0	1.0	6	1
	3	□	MMS0540S-DIN	16.2	28.0	30.0	66.0	65.0	1.0	6	2
	3	□	MMS0540S-DIN-C	16.2	28.0	30.0	66.0	65.0	1.0	6	1

BOHREN (VOLLHARTMETALL)

MMS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
5.4	5	□	MMS0540L-DIN	27.0	44.0	46.0	82.0	81.0	1.0	6	2
	5	□	MMS0540L-DIN-C	27.0	44.0	46.0	82.0	81.0	1.0	6	1
	3	★	MMS0540X3DB	16.2	29.0	31.0	82.0	81.0	1.0	6	1
	5	★	MMS0540X5DB	27.0	40.0	43.0	90.0	89.0	1.0	6	1
5.5	3	□	MMS0550S-DIN	16.5	28.0	30.0	66.0	65.0	1.0	6	2
	3	●	MMS0550S-DIN-C	16.5	28.0	30.0	66.0	65.0	1.0	6	1
	5	□	MMS0550L-DIN	27.5	44.0	46.0	82.0	81.0	1.0	6	2
	5	●	MMS0550L-DIN-C	27.5	44.0	46.0	82.0	81.0	1.0	6	1
	3	★	MMS0550X3DB	16.5	29.0	31.0	82.0	81.0	1.0	6	1
	5	★	MMS0550X5DB	27.5	40.0	43.0	90.0	89.0	1.0	6	1
5.55	3	□	MMS0555S-DIN	16.7	28.0	30.0	66.0	65.0	1.0	6	2
	3	●	MMS0555S-DIN-C	16.7	28.0	30.0	66.0	65.0	1.0	6	1
	5	●	MMS0555L-DIN-C	27.8	44.0	46.0	82.0	81.0	1.0	6	1
5.6	3	□	MMS0560S-DIN	16.8	28.0	30.0	66.0	65.0	1.0	6	2
	3	●	MMS0560S-DIN-C	16.8	28.0	30.0	66.0	65.0	1.0	6	1
	5	□	MMS0560L-DIN	28.0	44.0	46.0	82.0	81.0	1.0	6	2
	5	●	MMS0560L-DIN-C	28.0	44.0	46.0	82.0	81.0	1.0	6	1
	3	★	MMS0560X3DB	16.8	31.0	31.0	82.0	81.0	1.0	6	1
5.7	5	★	MMS0560X5DB	28.0	43.0	43.0	90.0	89.0	1.0	6	1
	3	□	MMS0570S-DIN	17.1	28.0	30.0	66.0	65.0	1.0	6	2
	3	●	MMS0570S-DIN-C	17.1	28.0	30.0	66.0	65.0	1.0	6	1
	5	□	MMS0570L-DIN	28.5	44.0	46.0	82.0	81.0	1.0	6	2
	5	●	MMS0570L-DIN-C	28.5	44.0	46.0	82.0	81.0	1.0	6	1
5.8	3	★	MMS0570X3DB	17.1	31.0	31.0	82.0	81.0	1.0	6	1
	5	★	MMS0570X5DB	28.5	43.0	43.0	90.0	89.0	1.0	6	1
	3	□	MMS0580S-DIN	17.4	28.0	30.0	66.0	64.9	1.1	6	2
	3	●	MMS0580S-DIN-C	17.4	28.0	30.0	66.0	64.9	1.1	6	1
	5	□	MMS0580L-DIN	29.0	44.0	46.0	82.0	80.9	1.1	6	2
5.9	5	●	MMS0580L-DIN-C	29.0	44.0	46.0	82.0	80.9	1.1	6	1
	3	★	MMS0580X3DB	17.4	31.0	31.0	82.1	81.0	1.1	6	1
	5	★	MMS0580X5DB	29.0	43.0	43.0	90.1	89.0	1.1	6	1
	3	□	MMS0590S-DIN	17.7	28.0	30.0	66.0	64.9	1.1	6	2
	3	□	MMS0590S-DIN-C	17.7	28.0	30.0	66.0	64.9	1.1	6	1
6.0	5	□	MMS0590L-DIN	29.5	44.0	46.0	82.0	80.9	1.1	6	2
	5	□	MMS0590L-DIN-C	29.5	44.0	46.0	82.0	80.9	1.1	6	1
	3	★	MMS0590X3DB	17.7	31.0	31.0	82.1	81.0	1.1	6	1
	5	★	MMS0590X5DB	29.5	43.0	43.0	90.1	89.0	1.1	6	1
	3	●	MMS0600S-DIN	18.0	28.0	30.0	66.0	64.9	1.1	6	2
6.05	3	●	MMS0600S-DIN-C	18.0	28.0	30.0	66.0	64.9	1.1	6	1
	5	●	MMS0600L-DIN	30.0	44.0	46.0	82.0	80.9	1.1	6	2
	5	●	MMS0600L-DIN-C	30.0	44.0	46.0	82.0	80.9	1.1	6	1
	3	★	MMS0600X3DB	18.0	31.0	31.0	82.1	81.0	1.1	6	1
	5	★	MMS0600X5DB	30.0	43.0	43.0	90.1	89.0	1.1	6	1
6.1	3	□	MMS0605S-DIN	18.2	34.0	43.0	79.0	77.9	1.1	8	2
	3	●	MMS0605S-DIN-C	18.2	34.0	43.0	79.0	77.9	1.1	8	1
	5	□	MMS0605L-DIN	30.3	53.0	55.0	91.0	89.9	1.1	8	2
6.1	5	●	MMS0605L-DIN-C	30.3	53.0	55.0	91.0	89.9	1.1	8	1
	3	□	MMS0610S-DIN	18.3	34.0	43.0	79.0	77.9	1.1	8	2
	3	●	MMS0610S-DIN-C	18.3	34.0	43.0	79.0	77.9	1.1	8	1
6.1	5	□	MMS0610L-DIN	30.5	53.0	55.0	91.0	89.9	1.1	8	2
	5	●	MMS0610L-DIN-C	30.5	53.0	55.0	91.0	89.9	1.1	8	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
6.1	3	★	MMS0610X3DB	18.3	34.0	36.0	87.1	86.0	1.1	8	1
	5	★	MMS0610X5DB	30.5	47.0	49.0	96.1	95.0	1.1	8	1
6.2	3	□	MMS0620S-DIN	18.6	34.0	43.0	79.0	77.9	1.1	8	2
	3	●	MMS0620S-DIN-C	18.6	34.0	43.0	79.0	77.9	1.1	8	1
	5	□	MMS0620L-DIN	31.0	53.0	55.0	91.0	89.9	1.1	8	2
	5	●	MMS0620L-DIN-C	31.0	53.0	55.0	91.0	89.9	1.1	8	1
	3	★	MMS0620X3DB	18.6	34.0	36.0	87.1	86.0	1.1	8	1
6.3	5	★	MMS0620X5DB	31.0	47.0	49.0	96.1	95.0	1.1	8	1
	3	□	MMS0630S-DIN	18.9	34.0	43.0	79.0	77.9	1.1	8	2
	3	□	MMS0630S-DIN-C	18.9	34.0	43.0	79.0	77.9	1.1	8	1
	5	□	MMS0630L-DIN	31.5	53.0	55.0	91.0	89.9	1.1	8	2
	5	□	MMS0630L-DIN-C	31.5	53.0	55.0	91.0	89.9	1.1	8	1
6.4	3	★	MMS0630X3DB	18.9	34.0	36.0	87.1	86.0	1.1	8	1
	5	★	MMS0630X5DB	31.5	47.0	49.0	96.1	95.0	1.1	8	1
	3	□	MMS0640S-DIN	19.2	34.0	43.0	79.0	77.8	1.2	8	2
	3	□	MMS0640S-DIN-C	19.2	34.0	43.0	79.0	77.8	1.2	8	1
	5	□	MMS0640L-DIN	32.0	53.0	55.0	91.0	89.8	1.2	8	2
6.5	5	□	MMS0640L-DIN-C	32.0	53.0	55.0	91.0	89.8	1.2	8	1
	3	★	MMS0640X3DB	19.2	34.0	36.0	87.2	86.0	1.2	8	1
	5	★	MMS0640X5DB	32.0	47.0	49.0	96.2	95.0	1.2	8	1
	3	□	MMS0650S-DIN	19.5	34.0	43.0	79.0	77.8	1.2	8	2
	3	●	MMS0650S-DIN-C	19.5	34.0	43.0	79.0	77.8	1.2	8	1
6.6	5	□	MMS0650L-DIN	32.5	53.0	55.0	91.0	89.8	1.2	8	2
	5	●	MMS0650L-DIN-C	32.5	53.0	55.0	91.0	89.8	1.2	8	1
	3	★	MMS0650X3DB	19.5	34.0	36.0	87.2	86.0	1.2	8	1
	5	★	MMS0650X5DB	32.5	47.0	49.0	96.2	95.0	1.2	8	1
	3	□	MMS0660S-DIN	19.8	34.0	43.0	79.0	77.8	1.2	8	2
6.7	3	●	MMS0660S-DIN-C	19.8	34.0	43.0	79.0	77.8	1.2	8	1
	5	□	MMS0660L-DIN	33.0	53.0	55.0	91.0	89.8	1.2	8	2
	5	●	MMS0660L-DIN-C	33.0	53.0	55.0	91.0	89.8	1.2	8	1
	3	★	MMS0660X3DB	19.8	36.0	38.0	91.2	90.0	1.2	8	1
	5	★	MMS0660X5DB	33.0	50.0	52.0	99.2	98.0	1.2	8	1
6.8	3	□	MMS0670S-DIN	20.1	34.0	43.0	79.0	77.8	1.2	8	2
	3	□	MMS0670S-DIN-C	20.1	34.0	43.0	79.0	77.8	1.2	8	1
	5	□	MMS0670L-DIN	33.5	53.0	55.0	91.0	89.8	1.2	8	2
	5	□	MMS0670L-DIN-C	33.5	53.0	55.0	91.0	89.8	1.2	8	1
	3	★	MMS0670X3DB	20.1	36.0	38.0	91.2	90.0	1.2	8	1
6.9	5	★	MMS0670X5DB	33.5	50.0	52.0	99.2	98.0	1.2	8	1
	3	●	MMS0680S-DIN	20.4	34.0	43.0	79.0	77.8	1.2	8	2
	3	●	MMS0680S-DIN-C	20.4	34.0	43.0	79.0	77.8	1.2	8	1
	5	●	MMS0680L-DIN	34.0	53.0	55.0	91.0	89.8	1.2	8	2
	5	●	MMS0680L-DIN-C	34.0	53.0	55.0	91.0	89.8	1.2	8	1
6.9	3	★	MMS0680X3DB	20.4	36.0	38.0	91.2	90.0	1.2	8	1
	5	★	MMS0680X5DB	34.0	50.0	52.0	99.2	98.0	1.2	8	1
	3	□	MMS0690S-DIN	20.7	34.0	43.0	79.0	77.7	1.3	8	2
	3	●	MMS0690S-DIN-C	20.7	34.0	43.0	79.0	77.7	1.3	8	1
	5	□	MMS0690L-DIN	34.5	53.0	55.0	91.0	89.7	1.3	8	2
6.9	5	●	MMS0690L-DIN-C	34.5	53.0	55.0	91.0	89.7	1.3	8	1
	3	★	MMS0690X3DB	20.7	36.0	38.0	91.3	90.0	1.3	8	1
	5	★	MMS0690X5DB	34.5	50.0	52.0	99.3	98.0	1.3	8	1

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
7.0	3	●	MMS0700S-DIN	21.0	34.0	43.0	79.0	77.7	1.3	8	2
	3	●	MMS0700S-DIN-C	21.0	34.0	43.0	79.0	77.7	1.3	8	1
	5	●	MMS0700L-DIN	35.0	53.0	55.0	91.0	89.7	1.3	8	2
	5	●	MMS0700L-DIN-C	35.0	53.0	55.0	91.0	89.7	1.3	8	1
	3	★	MMS0700X3DB	21.0	36.0	38.0	91.3	90.0	1.3	8	1
	5	★	MMS0700X5DB	35.0	50.0	52.0	99.3	98.0	1.3	8	1
7.1	3	□	MMS0710S-DIN	21.3	41.0	43.0	79.0	77.7	1.3	8	2
	3	□	MMS0710S-DIN-C	21.3	41.0	43.0	79.0	77.7	1.3	8	1
	5	□	MMS0710L-DIN	35.5	53.0	55.0	91.0	89.7	1.3	8	2
	5	□	MMS0710L-DIN-C	35.5	53.0	55.0	91.0	89.7	1.3	8	1
	3	★	MMS0710X3DB	21.3	39.0	40.0	91.3	90.0	1.3	8	1
	5	★	MMS0710X5DB	35.5	54.0	57.0	104.3	103.0	1.3	8	1
7.2	3	□	MMS0720S-DIN	21.6	41.0	43.0	79.0	77.7	1.3	8	2
	3	□	MMS0720S-DIN-C	21.6	41.0	43.0	79.0	77.7	1.3	8	1
	5	□	MMS0720L-DIN	36.0	53.0	55.0	91.0	89.7	1.3	8	2
	5	□	MMS0720L-DIN-C	36.0	53.0	55.0	91.0	89.7	1.3	8	1
	3	★	MMS0720X3DB	21.6	39.0	40.0	91.3	90.0	1.3	8	1
	5	★	MMS0720X5DB	36.0	54.0	57.0	104.3	103.0	1.3	8	1
7.3	3	□	MMS0730S-DIN	21.9	41.0	43.0	79.0	77.7	1.3	8	2
	3	●	MMS0730S-DIN-C	21.9	41.0	43.0	79.0	77.7	1.3	8	1
	5	□	MMS0730L-DIN	36.5	53.0	55.0	91.0	89.7	1.3	8	2
	5	●	MMS0730L-DIN-C	36.5	53.0	55.0	91.0	89.7	1.3	8	1
	3	★	MMS0730X3DB	21.9	39.0	40.0	91.3	90.0	1.3	8	1
	5	★	MMS0730X5DB	36.5	54.0	57.0	104.3	103.0	1.3	8	1
7.4	3	□	MMS0740S-DIN	22.2	41.0	43.0	79.0	77.7	1.3	8	2
	3	●	MMS0740S-DIN-C	22.2	41.0	43.0	79.0	77.7	1.3	8	1
	5	□	MMS0740L-DIN	37.0	53.0	55.0	91.0	89.7	1.3	8	2
	5	●	MMS0740L-DIN-C	37.0	53.0	55.0	91.0	89.7	1.3	8	1
	3	★	MMS0740X3DB	22.2	39.0	40.0	91.3	90.0	1.3	8	1
	5	★	MMS0740X5DB	37.0	54.0	57.0	104.3	103.0	1.3	8	1
7.5	3	□	MMS0750S-DIN	22.5	41.0	43.0	79.0	77.6	1.4	8	2
	3	●	MMS0750S-DIN-C	22.5	41.0	43.0	79.0	77.6	1.4	8	1
	5	□	MMS0750L-DIN	37.5	53.0	55.0	91.0	89.6	1.4	8	2
	5	●	MMS0750L-DIN-C	37.5	53.0	55.0	91.0	89.6	1.4	8	1
	3	★	MMS0750X3DB	22.5	39.0	40.0	91.4	90.0	1.4	8	1
	5	★	MMS0750X5DB	37.5	54.0	57.0	104.4	103.0	1.4	8	1
7.6	3	□	MMS0760S-DIN	22.8	41.0	43.0	79.0	77.6	1.4	8	2
	3	□	MMS0760S-DIN-C	22.8	41.0	43.0	79.0	77.6	1.4	8	1
	5	□	MMS0760L-DIN	38.0	53.0	55.0	91.0	89.6	1.4	8	2
	5	□	MMS0760L-DIN-C	38.0	53.0	55.0	91.0	89.6	1.4	8	1
	3	★	MMS0760X3DB	22.8	41.0	41.0	91.4	90.0	1.4	8	1
	5	★	MMS0760X5DB	38.0	57.0	57.0	104.4	103.0	1.4	8	1
7.7	3	□	MMS0770S-DIN	23.1	41.0	43.0	79.0	77.6	1.4	8	2
	3	□	MMS0770S-DIN-C	23.1	41.0	43.0	79.0	77.6	1.4	8	1
	5	□	MMS0770L-DIN	38.5	53.0	55.0	91.0	89.6	1.4	8	2
	5	□	MMS0770L-DIN-C	38.5	53.0	55.0	91.0	89.6	1.4	8	1
	3	★	MMS0770X3DB	23.1	41.0	41.0	91.4	90.0	1.4	8	1
	5	★	MMS0770X5DB	38.5	57.0	57.0	104.4	103.0	1.4	8	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
7.8	3	□	MMS0780S-DIN	23.4	41.0	43.0	79.0	77.6	1.4	8	2
	3	●	MMS0780S-DIN-C	23.4	41.0	43.0	79.0	77.6	1.4	8	1
	5	□	MMS0780L-DIN	39.0	53.0	55.0	91.0	89.6	1.4	8	2
	5	●	MMS0780L-DIN-C	39.0	53.0	55.0	91.0	89.6	1.4	8	1
	3	★	MMS0780X3DB	23.4	41.0	41.0	91.4	90.0	1.4	8	1
	5	★	MMS0780X5DB	39.0	57.0	57.0	104.4	103.0	1.4	8	1
7.9	3	□	MMS0790S-DIN	23.7	41.0	43.0	79.0	77.6	1.4	8	2
	3	□	MMS0790S-DIN-C	23.7	41.0	43.0	79.0	77.6	1.4	8	1
	5	□	MMS0790L-DIN	39.5	53.0	55.0	91.0	89.6	1.4	8	2
	5	□	MMS0790L-DIN-C	39.5	53.0	55.0	91.0	89.6	1.4	8	1
	3	★	MMS0790X3DB	23.7	41.0	41.0	91.4	90.0	1.4	8	1
	5	★	MMS0790X5DB	39.5	57.0	57.0	104.4	103.0	1.4	8	1
8.0	3	●	MMS0800S-DIN	24.0	41.0	43.0	79.0	77.5	1.5	8	2
	3	●	MMS0800S-DIN-C	24.0	41.0	43.0	79.0	77.5	1.5	8	1
	5	●	MMS0800L-DIN	40.0	53.0	55.0	91.0	89.5	1.5	8	2
	5	●	MMS0800L-DIN-C	40.0	53.0	55.0	91.0	89.5	1.5	8	1
	3	★	MMS0800X3DB	24.0	41.0	41.0	91.5	90.0	1.5	8	1
	5	★	MMS0800X5DB	40.0	57.0	57.0	104.5	103.0	1.5	8	1
8.05	3	□	MMS0805S-DIN	24.2	46.0	48.0	88.0	86.5	1.5	10	2
	3	●	MMS0805S-DIN-C	24.2	46.0	48.0	88.0	86.5	1.5	10	1
	5	□	MMS0805L-DIN	40.3	60.0	62.0	102.0	100.5	1.5	10	2
	5	●	MMS0805L-DIN-C	40.3	60.0	62.0	102.0	100.5	1.5	10	1
	3	□	MMS0810S-DIN	24.3	46.0	48.0	88.0	86.5	1.5	10	2
	3	□	MMS0810S-DIN-C	24.3	46.0	48.0	88.0	86.5	1.5	10	1
8.1	5	□	MMS0810L-DIN	40.5	60.0	62.0	102.0	100.5	1.5	10	2
	5	□	MMS0810L-DIN-C	40.5	60.0	62.0	102.0	100.5	1.5	10	1
	3	★	MMS0810X3DB	24.3	44.0	46.0	97.5	96.0	1.5	10	1
	5	★	MMS0810X5DB	40.5	61.0	63.0	114.5	113.0	1.5	10	1
	3	□	MMS0820S-DIN	24.6	46.0	48.0	88.0	86.5	1.5	10	2
	3	□	MMS0820S-DIN-C	24.6	46.0	48.0	88.0	86.5	1.5	10	1
8.2	5	□	MMS0820L-DIN	41.0	60.0	62.0	102.0	100.5	1.5	10	2
	5	□	MMS0820L-DIN-C	41.0	60.0	62.0	102.0	100.5	1.5	10	1
	3	★	MMS0820X3DB	24.6	44.0	46.0	97.5	96.0	1.5	10	1
	5	★	MMS0820X5DB	41.0	61.0	63.0	114.5	113.0	1.5	10	1
	3	□	MMS0830S-DIN	24.9	46.0	48.0	88.0	86.5	1.5	10	2
	3	●	MMS0830S-DIN-C	24.9	46.0	48.0	88.0	86.5	1.5	10	1
8.3	5	□	MMS0830L-DIN	41.5	60.0	62.0	102.0	100.5	1.5	10	2
	5	●	MMS0830L-DIN-C	41.5	60.0	62.0	102.0	100.5	1.5	10	1
	3	★	MMS0830X3DB	24.9	44.0	46.0	97.5	96.0	1.5	10	1
	5	★	MMS0830X5DB	41.5	61.0	63.0	114.5	113.0	1.5	10	1
	3	□	MMS0840S-DIN	25.2	46.0	48.0	88.0	86.5	1.5	10	2
	3	□	MMS0840S-DIN-C	25.2	46.0	48.0	88.0	86.5	1.5	10	1
8.4	5	□	MMS0840L-DIN	42.0	60.0	62.0	102.0	100.5	1.5	10	2
	5	□	MMS0840L-DIN-C	42.0	60.0	62.0	102.0	100.5	1.5	10	1
	3	★	MMS0840X3DB	25.2	44.0	46.0	97.5	96.0	1.5	10	1
	5	★	MMS0840X5DB	42.0	61.0	63.0	114.5	113.0	1.5	10	1

BOHREN (VOLLHARTMETALL)

MMS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.5	3	●	MMS0850S-DIN	25.5	46.0	48.0	88.0	86.5	1.5	10	2
	3	●	MMS0850S-DIN-C	25.5	46.0	48.0	88.0	86.5	1.5	10	1
	5	●	MMS0850L-DIN	42.5	60.0	62.0	102.0	100.5	1.5	10	2
	5	●	MMS0850L-DIN-C	42.5	60.0	62.0	102.0	100.5	1.5	10	1
	3	★	MMS0850X3DB	25.5	44.0	46.0	97.5	96.0	1.5	10	1
	5	★	MMS0850X5DB	42.5	61.0	63.0	114.5	113.0	1.5	10	1
8.6	3	□	MMS0860S-DIN	25.8	46.0	48.0	88.0	86.4	1.6	10	2
	3	●	MMS0860S-DIN-C	25.8	46.0	48.0	88.0	86.4	1.6	10	1
	5	□	MMS0860L-DIN	43.0	60.0	62.0	102.0	100.4	1.6	10	2
	5	●	MMS0860L-DIN-C	43.0	60.0	62.0	102.0	100.4	1.6	10	1
	3	★	MMS0860X3DB	25.8	47.0	49.0	102.6	101.0	1.6	10	1
	5	★	MMS0860X5DB	43.0	65.0	67.0	117.6	116.0	1.6	10	1
8.7	3	□	MMS0870S-DIN	26.1	46.0	48.0	88.0	86.4	1.6	10	2
	3	●	MMS0870S-DIN-C	26.1	46.0	48.0	88.0	86.4	1.6	10	1
	5	□	MMS0870L-DIN	43.5	60.0	62.0	102.0	100.4	1.6	10	2
	5	●	MMS0870L-DIN-C	43.5	60.0	62.0	102.0	100.4	1.6	10	1
	3	★	MMS0870X3DB	26.1	47.0	49.0	102.6	101.0	1.6	10	1
	5	★	MMS0870X5DB	43.5	65.0	67.0	117.6	116.0	1.6	10	1
8.8	3	□	MMS0880S-DIN	26.4	46.0	48.0	88.0	86.4	1.6	10	2
	3	●	MMS0880S-DIN-C	26.4	46.0	48.0	88.0	86.4	1.6	10	1
	5	□	MMS0880L-DIN	44.0	60.0	62.0	102.0	100.4	1.6	10	2
	5	●	MMS0880L-DIN-C	44.0	60.0	62.0	102.0	100.4	1.6	10	1
	3	★	MMS0880X3DB	26.4	47.0	49.0	102.6	101.0	1.6	10	1
	5	★	MMS0880X5DB	44.0	65.0	67.0	117.6	116.0	1.6	10	1
8.9	3	□	MMS0890S-DIN	26.7	46.0	48.0	88.0	86.4	1.6	10	2
	3	□	MMS0890S-DIN-C	26.7	46.0	48.0	88.0	86.4	1.6	10	1
	5	□	MMS0890L-DIN	44.5	60.0	62.0	102.0	100.4	1.6	10	2
	5	□	MMS0890L-DIN-C	44.5	60.0	62.0	102.0	100.4	1.6	10	1
	3	★	MMS0890X3DB	26.7	47.0	49.0	102.6	101.0	1.6	10	1
	5	★	MMS0890X5DB	44.5	65.0	67.0	117.6	116.0	1.6	10	1
9.0	3	□	MMS0900S-DIN	27.0	46.0	48.0	88.0	86.4	1.6	10	2
	3	●	MMS0900S-DIN-C	27.0	46.0	48.0	88.0	86.4	1.6	10	1
	5	□	MMS0900L-DIN	45.0	60.0	62.0	102.0	100.4	1.6	10	2
	5	●	MMS0900L-DIN-C	45.0	60.0	62.0	102.0	100.4	1.6	10	1
	3	★	MMS0900X3DB	27.0	47.0	49.0	102.6	101.0	1.6	10	1
	5	★	MMS0900X5DB	45.0	65.0	67.0	117.6	116.0	1.6	10	1
9.1	3	□	MMS0910S-DIN	27.3	47.0	49.0	89.0	87.3	1.7	10	2
	3	□	MMS0910S-DIN-C	27.3	47.0	49.0	89.0	87.3	1.7	10	1
	5	□	MMS0910L-DIN	45.5	62.0	63.0	103.0	101.3	1.7	10	2
	5	□	MMS0910L-DIN-C	45.5	62.0	63.0	103.0	101.3	1.7	10	1
	3	★	MMS0910X3DB	27.3	50.0	52.0	102.7	101.0	1.7	10	1
	5	★	MMS0910X5DB	45.5	69.0	72.0	122.7	121.0	1.7	10	1
9.2	3	□	MMS0920S-DIN	27.6	47.0	49.0	89.0	87.3	1.7	10	2
	3	□	MMS0920S-DIN-C	27.6	47.0	49.0	89.0	87.3	1.7	10	1
	5	□	MMS0920L-DIN	46.0	62.0	63.0	103.0	101.3	1.7	10	2
	5	□	MMS0920L-DIN-C	46.0	62.0	63.0	103.0	101.3	1.7	10	1
	3	★	MMS0920X3DB	27.6	50.0	52.0	102.7	101.0	1.7	10	1
	5	★	MMS0920X5DB	46.0	69.0	72.0	122.7	121.0	1.7	10	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
9.3	3	□	MMS0930S-DIN	27.9	47.0	49.0	89.0	87.3	1.7	10	2
	3	●	MMS0930S-DIN-C	27.9	47.0	49.0	89.0	87.3	1.7	10	1
	5	□	MMS0930L-DIN	46.5	62.0	63.0	103.0	101.3	1.7	10	2
	5	●	MMS0930L-DIN-C	46.5	62.0	63.0	103.0	101.3	1.7	10	1
	3	★	MMS0930X3DB	27.9	50.0	52.0	102.7	101.0	1.7	10	1
	5	★	MMS0930X5DB	46.5	69.0	72.0	122.7	121.0	1.7	10	1
9.4	3	□	MMS0940S-DIN	28.2	47.0	49.0	89.0	87.3	1.7	10	2
	3	□	MMS0940S-DIN-C	28.2	47.0	49.0	89.0	87.3	1.7	10	1
	5	□	MMS0940L-DIN	47.0	62.0	63.0	103.0	101.3	1.7	10	2
	5	□	MMS0940L-DIN-C	47.0	62.0	63.0	103.0	101.3	1.7	10	1
	3	★	MMS0940X3DB	28.2	50.0	52.0	102.7	101.0	1.7	10	1
	5	★	MMS0940X5DB	47.0	69.0	72.0	122.7	121.0	1.7	10	1
9.5	3	□	MMS0950S-DIN	28.5	47.0	49.0	89.0	87.3	1.7	10	2
	3	●	MMS0950S-DIN-C	28.5	47.0	49.0	89.0	87.3	1.7	10	1
	5	□	MMS0950L-DIN	47.5	62.0	63.0	103.0	101.3	1.7	10	2
	5	●	MMS0950L-DIN-C	47.5	62.0	63.0	103.0	101.3	1.7	10	1
	3	★	MMS0950X3DB	28.5	50.0	52.0	102.7	101.0	1.7	10	1
	5	★	MMS0950X5DB	47.5	69.0	72.0	122.7	121.0	1.7	10	1
9.6	3	□	MMS0960S-DIN	28.8	47.0	49.0	89.0	87.3	1.7	10	2
	3	□	MMS0960S-DIN-C	28.8	47.0	49.0	89.0	87.3	1.7	10	1
	5	□	MMS0960L-DIN	48.0	62.0	63.0	103.0	101.3	1.7	10	2
	5	□	MMS0960L-DIN-C	48.0	62.0	63.0	103.0	101.3	1.7	10	1
	3	★	MMS0960X3DB	28.8	52.0	52.0	102.7	101.0	1.7	10	1
	5	★	MMS0960X5DB	48.0	72.0	72.0	122.7	121.0	1.7	10	1
9.7	3	□	MMS0970S-DIN	29.1	47.0	49.0	89.0	87.2	1.8	10	2
	3	□	MMS0970S-DIN-C	29.1	47.0	49.0	89.0	87.2	1.8	10	1
	5	□	MMS0970L-DIN	48.5	62.0	63.0	103.0	101.2	1.8	10	2
	5	□	MMS0970L-DIN-C	48.5	62.0	63.0	103.0	101.2	1.8	10	1
	3	★	MMS0970X3DB	29.1	52.0	52.0	102.8	101.0	1.8	10	1
	5	★	MMS0970X5DB	48.5	72.0	72.0	122.8	121.0	1.8	10	1
9.8	3	□	MMS0980S-DIN	29.4	47.0	49.0	89.0	87.2	1.8	10	2
	3	●	MMS0980S-DIN-C	29.4	47.0	49.0	89.0	87.2	1.8	10	1
	5	□	MMS0980L-DIN	49.0	62.0	63.0	103.0	101.2	1.8	10	2
	5	●	MMS0980L-DIN-C	49.0	62.0	63.0	103.0	101.2	1.8	10	1
	3	★	MMS0980X3DB	29.4	52.0	52.0	102.8	101.0	1.8	10	1
	5	★	MMS0980X5DB	49.0	72.0	72.0	122.8	121.0	1.8	10	1
9.9	3	□	MMS0990S-DIN	29.7	47.0	49.0	89.0	87.2	1.8	10	2
	3	□	MMS0990S-DIN-C	29.7	47.0	49.0	89.0	87.2	1.8	10	1
	5	□	MMS0990L-DIN	49.5	62.0	63.0	103.0	101.2	1.8	10	2
	5	□	MMS0990L-DIN-C	49.5	62.0	63.0	103.0	101.2	1.8	10	1
	3	★	MMS0990X3DB	29.7	52.0	52.0	102.8	101.0	1.8	10	1
	5	★	MMS0990X5DB	49.5	72.0	72.0	122.8	121.0	1.8	10	1
10.0	3	●	MMS1000S-DIN	30.0	47.0	49.0	89.0	87.2	1.8	10	2
	3	●	MMS1000S-DIN-C	30.0	47.0	49.0	89.0	87.2	1.8	10	1
	5	●	MMS1000L-DIN	50.0	62.0	63.0	103.0	101.2	1.8	10	2
	5	●	MMS1000L-DIN-C	50.0	62.0	63.0	103.0	101.2	1.8	10	1
	3	★	MMS1000X3DB	30.0	52.0	52.0	102.8	101.0	1.8	10	1
	5	★	MMS1000X5DB	50.0	72.0	72.0	122.8	121.0	1.8	10	1

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.05	3	□	MMS1005S-DIN	30.2	55.0	57.0	102.0	100.2	1.8	12	2
	3	●	MMS1005S-DIN-C	30.2	55.0	57.0	102.0	100.2	1.8	12	1
	5	□	MMS1005L-DIN	50.3	71.0	73.0	118.0	116.2	1.8	12	2
	5	●	MMS1005L-DIN-C	50.3	71.0	73.0	118.0	116.2	1.8	12	1
10.1	3	□	MMS1010S-DIN	30.3	55.0	57.0	102.0	100.2	1.8	12	2
	3	□	MMS1010S-DIN-C	30.3	55.0	57.0	102.0	100.2	1.8	12	1
	5	□	MMS1010L-DIN	50.5	71.0	73.0	118.0	116.2	1.8	12	2
	5	□	MMS1010L-DIN-C	50.5	71.0	73.0	118.0	116.2	1.8	12	1
	3	★	MMS1010X3DB	30.3	55.0	57.0	112.8	111.0	1.8	12	1
	5	★	MMS1010X5DB	50.5	76.0	80.0	135.8	134.0	1.8	12	1
10.2	3	□	MMS1020S-DIN	30.6	55.0	57.0	102.0	100.1	1.9	12	2
	3	●	MMS1020S-DIN-C	30.6	55.0	57.0	102.0	100.1	1.9	12	1
	5	□	MMS1020L-DIN	51.0	71.0	73.0	118.0	116.1	1.9	12	2
	5	●	MMS1020L-DIN-C	51.0	71.0	73.0	118.0	116.1	1.9	12	1
	3	★	MMS1020X3DB	30.6	55.0	57.0	112.9	111.0	1.9	12	1
	5	★	MMS1020X5DB	51.0	76.0	80.0	135.9	134.0	1.9	12	1
10.3	3	□	MMS1030S-DIN	30.9	55.0	57.0	102.0	100.1	1.9	12	2
	3	●	MMS1030S-DIN-C	30.9	55.0	57.0	102.0	100.1	1.9	12	1
	5	□	MMS1030L-DIN	51.5	71.0	73.0	118.0	116.1	1.9	12	2
	5	●	MMS1030L-DIN-C	51.5	71.0	73.0	118.0	116.1	1.9	12	1
	3	★	MMS1030X3DB	30.9	55.0	57.0	112.9	111.0	1.9	12	1
	5	★	MMS1030X5DB	51.5	76.0	80.0	135.9	134.0	1.9	12	1
10.4	3	□	MMS1040S-DIN	31.2	55.0	57.0	102.0	100.1	1.9	12	2
	3	●	MMS1040S-DIN-C	31.2	55.0	57.0	102.0	100.1	1.9	12	1
	5	□	MMS1040L-DIN	52.0	71.0	73.0	118.0	116.1	1.9	12	2
	5	●	MMS1040L-DIN-C	52.0	71.0	73.0	118.0	116.1	1.9	12	1
	3	★	MMS1040X3DB	31.2	55.0	57.0	112.9	111.0	1.9	12	1
	5	★	MMS1040X5DB	52.0	76.0	80.0	135.9	134.0	1.9	12	1
10.5	3	□	MMS1050S-DIN	31.5	55.0	57.0	102.0	100.1	1.9	12	2
	3	●	MMS1050S-DIN-C	31.5	55.0	57.0	102.0	100.1	1.9	12	1
	5	□	MMS1050L-DIN	52.5	71.0	73.0	118.0	116.1	1.9	12	2
	5	●	MMS1050L-DIN-C	52.5	71.0	73.0	118.0	116.1	1.9	12	1
	3	★	MMS1050X3DB	31.5	55.0	57.0	112.9	111.0	1.9	12	1
	5	★	MMS1050X5DB	52.5	76.0	80.0	135.9	134.0	1.9	12	1
10.6	3	□	MMS1060S-DIN	31.8	55.0	57.0	102.0	100.1	1.9	12	2
	3	□	MMS1060S-DIN-C	31.8	55.0	57.0	102.0	100.1	1.9	12	1
	5	□	MMS1060L-DIN	53.0	71.0	73.0	118.0	116.1	1.9	12	2
	5	□	MMS1060L-DIN-C	53.0	71.0	73.0	118.0	116.1	1.9	12	1
	3	★	MMS1060X3DB	31.8	57.0	58.0	117.9	116.0	1.9	12	1
	5	★	MMS1060X5DB	53.0	79.0	80.0	135.9	134.0	1.9	12	1
10.7	3	□	MMS1070S-DIN	32.1	55.0	57.0	102.0	100.1	1.9	12	2
	3	●	MMS1070S-DIN-C	32.1	55.0	57.0	102.0	100.1	1.9	12	1
	5	□	MMS1070L-DIN	53.5	71.0	73.0	118.0	116.1	1.9	12	2
	5	●	MMS1070L-DIN-C	53.5	71.0	73.0	118.0	116.1	1.9	12	1
	3	★	MMS1070X3DB	32.1	57.0	58.0	117.9	116.0	1.9	12	1
	5	★	MMS1070X5DB	53.5	79.0	80.0	135.9	134.0	1.9	12	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.8	3	□	MMS1080S-DIN	32.4	55.0	57.0	102.0	100.0	2.0	12	2
	3	●	MMS1080S-DIN-C	32.4	55.0	57.0	102.0	100.0	2.0	12	1
	5	□	MMS1080L-DIN	54.0	71.0	73.0	118.0	116.0	2.0	12	2
	5	●	MMS1080L-DIN-C	54.0	71.0	73.0	118.0	116.0	2.0	12	1
	3	★	MMS1080X3DB	32.4	57.0	58.0	118.0	116.0	2.0	12	1
	5	★	MMS1080X5DB	54.0	79.0	80.0	136.0	134.0	2.0	12	1
10.9	3	□	MMS1090S-DIN	32.7	55.0	57.0	102.0	100.0	2.0	12	2
	3	□	MMS1090S-DIN-C	32.7	55.0	57.0	102.0	100.0	2.0	12	1
	5	□	MMS1090L-DIN	54.5	71.0	73.0	118.0	116.0	2.0	12	2
	5	□	MMS1090L-DIN-C	54.5	71.0	73.0	118.0	116.0	2.0	12	1
	3	★	MMS1090X3DB	32.7	57.0	58.0	118.0	116.0	2.0	12	1
	5	★	MMS1090X5DB	54.5	79.0	80.0	136.0	134.0	2.0	12	1
11.0	3	□	MMS1100S-DIN	33.0	55.0	57.0	102.0	100.0	2.0	12	2
	3	●	MMS1100S-DIN-C	33.0	55.0	57.0	102.0	100.0	2.0	12	1
	5	□	MMS1100L-DIN	55.0	71.0	73.0	118.0	116.0	2.0	12	2
	5	●	MMS1100L-DIN-C	55.0	71.0	73.0	118.0	116.0	2.0	12	1
	3	★	MMS1100X3DB	33.0	57.0	58.0	118.0	116.0	2.0	12	1
	5	★	MMS1100X5DB	55.0	79.0	80.0	136.0	134.0	2.0	12	1
11.1	3	□	MMS1110S-DIN	33.3	55.0	57.0	102.0	100.0	2.0	12	2
	3	□	MMS1110S-DIN-C	33.3	55.0	57.0	102.0	100.0	2.0	12	1
	5	□	MMS1110L-DIN	55.5	71.0	73.0	118.0	116.0	2.0	12	2
	5	□	MMS1110L-DIN-C	55.5	71.0	73.0	118.0	116.0	2.0	12	1
	3	★	MMS1110X3DB	33.3	60.0	62.0	118.0	116.0	2.0	12	1
	5	★	MMS1110X5DB	55.5	83.0	86.0	142.0	140.0	2.0	12	1
11.2	3	□	MMS1120S-DIN	33.6	55.0	57.0	102.0	100.0	2.0	12	2
	3	●	MMS1120S-DIN-C	33.6	55.0	57.0	102.0	100.0	2.0	12	1
	5	□	MMS1120L-DIN	56.0	71.0	73.0	118.0	116.0	2.0	12	2
	5	●	MMS1120L-DIN-C	56.0	71.0	73.0	118.0	116.0	2.0	12	1
	3	★	MMS1120X3DB	33.6	60.0	62.0	118.0	116.0	2.0	12	1
	5	★	MMS1120X5DB	56.0	83.0	86.0	142.0	140.0	2.0	12	1
11.3	3	□	MMS1130S-DIN	33.9	55.0	57.0	102.0	99.9	2.1	12	2
	3	□	MMS1130S-DIN-C	33.9	55.0	57.0	102.0	99.9	2.1	12	1
	5	□	MMS1130L-DIN	56.5	71.0	73.0	118.0	115.9	2.1	12	2
	5	□	MMS1130L-DIN-C	56.5	71.0	73.0	118.0	115.9	2.1	12	1
	3	★	MMS1130X3DB	33.9	60.0	62.0	118.1	116.0	2.1	12	1
	5	★	MMS1130X5DB	56.5	83.0	86.0	142.1	140.0	2.1	12	1
11.4	3	□	MMS1140S-DIN	34.2	55.0	57.0	102.0	99.9	2.1	12	2
	3	●	MMS1140S-DIN-C	34.2	55.0	57.0	102.0	99.9	2.1	12	1
	5	□	MMS1140L-DIN	57.0	71.0	73.0	118.0	115.9	2.1	12	2
	5	●	MMS1140L-DIN-C	57.0	71.0	73.0	118.0	115.9	2.1	12	1
	3	★	MMS1140X3DB	34.2	60.0	62.0	118.1	116.0	2.1	12	1
	5	★	MMS1140X5DB	57.0	83.0	86.0	142.1	140.0	2.1	12	1
11.5	3	□	MMS1150S-DIN	34.5	55.0	57.0	102.0	99.9	2.1	12	2
	3	●	MMS1150S-DIN-C	34.5	55.0	57.0	102.0	99.9	2.1	12	1
	5	□	MMS1150L-DIN	57.5	71.0	73.0	118.0	115.9	2.1	12	2
	5	●	MMS1150L-DIN-C	57.5	71.0	73.0	118.0	115.9	2.1	12	1
	3	★	MMS1150X3DB	34.5	60.0	62.0	118.1	116.0	2.1	12	1
	5	★	MMS1150X5DB	57.5	83.0	86.0	142.1	140.0	2.1	12	1

BOHREN (VOLLHARTMETALL)

MMS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
11.6	3	□	MMS1160S-DIN	34.8	55.0	57.0	102.0	99.9	2.1	12	2
	3	□	MMS1160S-DIN-C	34.8	55.0	57.0	102.0	99.9	2.1	12	1
	5	□	MMS1160L-DIN	58.0	71.0	73.0	118.0	115.9	2.1	12	2
	5	□	MMS1160L-DIN-C	58.0	71.0	73.0	118.0	115.9	2.1	12	1
	3	★	MMS1160X3DB	34.8	62.0	62.0	118.1	116.0	2.1	12	1
	5	★	MMS1160X5DB	58.0	86.0	86.0	142.1	140.0	2.1	12	1
11.7	3	□	MMS1170S-DIN	35.1	55.0	57.0	102.0	99.9	2.1	12	2
	3	●	MMS1170S-DIN-C	35.1	55.0	57.0	102.0	99.9	2.1	12	1
	5	□	MMS1170L-DIN	58.5	71.0	73.0	118.0	115.9	2.1	12	2
	5	●	MMS1170L-DIN-C	58.5	71.0	73.0	118.0	115.9	2.1	12	1
	3	★	MMS1170X3DB	35.1	62.0	62.0	118.1	116.0	2.1	12	1
	5	★	MMS1170X5DB	58.5	86.0	86.0	142.1	140.0	2.1	12	1
11.8	3	□	MMS1180S-DIN	35.4	55.0	57.0	102.0	99.9	2.1	12	2
	3	●	MMS1180S-DIN-C	35.4	55.0	57.0	102.0	99.9	2.1	12	1
	5	□	MMS1180L-DIN	59.0	71.0	73.0	118.0	115.9	2.1	12	2
	5	●	MMS1180L-DIN-C	59.0	71.0	73.0	118.0	115.9	2.1	12	1
	3	★	MMS1180X3DB	35.4	62.0	62.0	118.1	116.0	2.1	12	1
	5	★	MMS1180X5DB	59.0	86.0	86.0	142.1	140.0	2.1	12	1
11.9	3	□	MMS1190S-DIN	35.7	55.0	57.0	102.0	99.8	2.2	12	2
	3	□	MMS1190S-DIN-C	35.7	55.0	57.0	102.0	99.8	2.2	12	1
	5	□	MMS1190L-DIN	59.5	71.0	73.0	118.0	115.8	2.2	12	2
	5	□	MMS1190L-DIN-C	59.5	71.0	73.0	118.0	115.8	2.2	12	1
	3	★	MMS1190X3DB	35.7	62.0	62.0	118.2	116.0	2.2	12	1
	5	★	MMS1190X5DB	59.5	86.0	86.0	142.2	140.0	2.2	12	1
12.0	3	●	MMS1200S-DIN	36.0	55.0	57.0	102.0	99.8	2.2	12	2
	3	●	MMS1200S-DIN-C	36.0	55.0	57.0	102.0	99.8	2.2	12	1
	5	●	MMS1200L-DIN	60.0	71.0	73.0	118.0	115.8	2.2	12	2
	5	●	MMS1200L-DIN-C	60.0	71.0	73.0	118.0	115.8	2.2	12	1
	3	★	MMS1200X3DB	36.0	62.0	62.0	118.2	116.0	2.2	12	1
	5	★	MMS1200X5DB	60.0	86.0	86.0	142.2	140.0	2.2	12	1
12.05	3	□	MMS1205S-DIN	36.2	60.0	62.0	107.0	104.8	2.2	14	2
	3	●	MMS1205S-DIN-C	36.2	60.0	62.0	107.0	104.8	2.2	14	1
	5	□	MMS1205L-DIN	60.3	77.0	79.0	124.0	121.8	2.2	14	2
	5	●	MMS1205L-DIN-C	60.3	77.0	79.0	124.0	121.8	2.2	14	1
12.1	3	□	MMS1210S-DIN	36.3	60.0	62.0	107.0	104.8	2.2	14	2
	3	□	MMS1210S-DIN-C	36.3	60.0	62.0	107.0	104.8	2.2	14	1
	5	□	MMS1210L-DIN	60.5	77.0	79.0	124.0	121.8	2.2	14	2
	5	□	MMS1210L-DIN-C	60.5	77.0	79.0	124.0	121.8	2.2	14	1
	3	★	MMS1210X3DB	36.3	65.0	68.0	124.2	122.0	2.2	14	1
	5	★	MMS1210X5DB	60.5	90.0	94.0	150.2	148.0	2.2	14	1
12.2	3	□	MMS1220S-DIN	36.6	60.0	62.0	107.0	104.8	2.2	14	2
	3	□	MMS1220S-DIN-C	36.6	60.0	62.0	107.0	104.8	2.2	14	1
	5	□	MMS1220L-DIN	61.0	77.0	79.0	124.0	121.8	2.2	14	2
	5	□	MMS1220L-DIN-C	61.0	77.0	79.0	124.0	121.8	2.2	14	1
	3	★	MMS1220X3DB	36.6	65.0	68.0	124.2	122.0	2.2	14	1
	5	★	MMS1220X5DB	61.0	90.0	94.0	150.2	148.0	2.2	14	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
12.3	3	□	MMS1230S-DIN	36.9	60.0	62.0	107.0	104.8	2.2	14	2
	3	□	MMS1230S-DIN-C	36.9	60.0	62.0	107.0	104.8	2.2	14	1
	5	□	MMS1230L-DIN	61.5	77.0	79.0	124.0	121.8	2.2	14	2
	5	□	MMS1230L-DIN-C	61.5	77.0	79.0	124.0	121.8	2.2	14	1
	3	★	MMS1230X3DB	36.9	65.0	68.0	124.2	122.0	2.2	14	1
	5	★	MMS1230X5DB	61.5	90.0	94.0	150.2	148.0	2.2	14	1
12.4	3	□	MMS1240S-DIN	37.2	60.0	62.0	107.0	104.7	2.3	14	2
	3	□	MMS1240S-DIN-C	37.2	60.0	62.0	107.0	104.7	2.3	14	1
	5	□	MMS1240L-DIN	62.0	77.0	79.0	124.0	121.7	2.3	14	2
	5	□	MMS1240L-DIN-C	62.0	77.0	79.0	124.0	121.7	2.3	14	1
	3	★	MMS1240X3DB	37.2	65.0	68.0	124.3	122.0	2.3	14	1
	5	★	MMS1240X5DB	62.0	90.0	94.0	150.3	148.0	2.3	14	1
12.5	3	□	MMS1250S-DIN	37.5	60.0	62.0	107.0	104.7	2.3	14	2
	3	●	MMS1250S-DIN-C	37.5	60.0	62.0	107.0	104.7	2.3	14	1
	5	□	MMS1250L-DIN	62.5	77.0	79.0	124.0	121.7	2.3	14	2
	5	●	MMS1250L-DIN-C	62.5	77.0	79.0	124.0	121.7	2.3	14	1
	3	★	MMS1250X3DB	37.5	65.0	68.0	124.3	122.0	2.3	14	1
	5	★	MMS1250X5DB	62.5	90.0	94.0	150.3	148.0	2.3	14	1
12.6	3	□	MMS1260S-DIN	37.8	60.0	62.0	107.0	104.7	2.3	14	2
	3	●	MMS1260S-DIN-C	37.8	60.0	62.0	107.0	104.7	2.3	14	1
	5	□	MMS1260L-DIN	63.0	77.0	79.0	124.0	121.7	2.3	14	2
	5	●	MMS1260L-DIN-C	63.0	77.0	79.0	124.0	121.7	2.3	14	1
	3	★	MMS1260X3DB	37.8	67.0	68.0	124.3	122.0	2.3	14	1
	5	★	MMS1260X5DB	63.0	93.0	94.0	150.3	148.0	2.3	14	1
12.7	3	□	MMS1270S-DIN	38.1	60.0	62.0	107.0	104.7	2.3	14	2
	3	●	MMS1270S-DIN-C	38.1	60.0	62.0	107.0	104.7	2.3	14	1
	5	□	MMS1270L-DIN	63.5	77.0	79.0	124.0	121.7	2.3	14	2
	5	●	MMS1270L-DIN-C	63.5	77.0	79.0	124.0	121.7	2.3	14	1
	3	★	MMS1270X3DB	38.1	67.0	68.0	124.3	122.0	2.3	14	1
	5	★	MMS1270X5DB	63.5	93.0	94.0	150.3	148.0	2.3	14	1
12.8	3	□	MMS1280S-DIN	38.4	60.0	62.0	107.0	104.7	2.3	14	2
	3	□	MMS1280S-DIN-C	38.4	60.0	62.0	107.0	104.7	2.3	14	1
	5	□	MMS1280L-DIN	64.0	77.0	79.0	124.0	121.7	2.3	14	2
	5	□	MMS1280L-DIN-C	64.0	77.0	79.0	124.0	121.7	2.3	14	1
	3	★	MMS1280X3DB	38.4	67.0	68.0	124.3	122.0	2.3	14	1
	5	★	MMS1280X5DB	64.0	93.0	94.0	150.3	148.0	2.3	14	1
12.9	3	□	MMS1290S-DIN	38.7	60.0	62.0	107.0	104.7	2.3	14	2
	3	□	MMS1290S-DIN-C	38.7	60.0	62.0	107.0	104.7	2.3	14	1
	5	□	MMS1290L-DIN	64.5	77.0	79.0	124.0	121.7	2.3	14	2
	5	□	MMS1290L-DIN-C	64.5	77.0	79.0	124.0	121.7	2.3	14	1
	3	★	MMS1290X3DB	38.7	67.0	68.0	124.3	122.0	2.3	14	1
	5	★	MMS1290X5DB	64.5	93.0	94.0	150.3	148.0	2.3	14	1
13.0	3	□	MMS1300S-DIN	39.0	60.0	62.0	107.0	104.6	2.4	14	2
	3	●	MMS1300S-DIN-C	39.0	60.0	62.0	107.0	104.6	2.4	14	1
	5	□	MMS1300L-DIN	65.0	77.0	79.0	124.0	121.6	2.4	14	2
	5	●	MMS1300L-DIN-C	65.0	77.0	79.0	124.0	121.6	2.4	14	1
	3	★	MMS1300X3DB	39.0	67.0	68.0	124.4	122.0	2.4	14	1
	5	★	MMS1300X5DB	65.0	93.0	94.0	150.4	148.0	2.4	14	1

BOHREN

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
13.1	3	□	MMS1310S-DIN	39.3	60.0	62.0	107.0	104.6	2.4	14	2
	3	□	MMS1310S-DIN-C	39.3	60.0	62.0	107.0	104.6	2.4	14	1
	5	□	MMS1310L-DIN	65.5	77.0	79.0	124.0	121.6	2.4	14	2
	5	□	MMS1310L-DIN-C	65.5	77.0	79.0	124.0	121.6	2.4	14	1
	3	★	MMS1310X3DB	39.3	70.0	72.0	128.4	126.0	2.4	14	1
	5	★	MMS1310X5DB	65.5	97.0	100.0	156.4	154.0	2.4	14	1
13.2	3	□	MMS1320S-DIN	39.6	60.0	62.0	107.0	104.6	2.4	14	2
	3	□	MMS1320S-DIN-C	39.6	60.0	62.0	107.0	104.6	2.4	14	1
	5	□	MMS1320L-DIN	66.0	77.0	79.0	124.0	121.6	2.4	14	2
	5	□	MMS1320L-DIN-C	66.0	77.0	79.0	124.0	121.6	2.4	14	1
	3	★	MMS1320X3DB	39.6	70.0	72.0	128.4	126.0	2.4	14	1
	5	★	MMS1320X5DB	66.0	97.0	100.0	156.4	154.0	2.4	14	1
13.3	3	□	MMS1330S-DIN	39.9	60.0	62.0	107.0	104.6	2.4	14	2
	3	□	MMS1330S-DIN-C	39.9	60.0	62.0	107.0	104.6	2.4	14	1
	5	□	MMS1330L-DIN	66.5	77.0	79.0	124.0	121.6	2.4	14	2
	5	□	MMS1330L-DIN-C	66.5	77.0	79.0	124.0	121.6	2.4	14	1
	3	★	MMS1330X3DB	39.9	70.0	72.0	128.4	126.0	2.4	14	1
	5	★	MMS1330X5DB	66.5	97.0	100.0	156.4	154.0	2.4	14	1
13.4	3	□	MMS1340S-DIN	40.2	60.0	62.0	107.0	104.6	2.4	14	2
	3	□	MMS1340S-DIN-C	40.2	60.0	62.0	107.0	104.6	2.4	14	1
	5	□	MMS1340L-DIN	67.0	77.0	79.0	124.0	121.6	2.4	14	2
	5	□	MMS1340L-DIN-C	67.0	77.0	79.0	124.0	121.6	2.4	14	1
	3	★	MMS1340X3DB	40.2	70.0	72.0	128.4	126.0	2.4	14	1
	5	★	MMS1340X5DB	67.0	97.0	100.0	156.4	154.0	2.4	14	1
13.5	3	□	MMS1350S-DIN	40.5	60.0	62.0	107.0	104.5	2.5	14	2
	3	●	MMS1350S-DIN-C	40.5	60.0	62.0	107.0	104.5	2.5	14	1
	5	□	MMS1350L-DIN	67.5	77.0	79.0	124.0	121.5	2.5	14	2
	5	●	MMS1350L-DIN-C	67.5	77.0	79.0	124.0	121.5	2.5	14	1
	3	★	MMS1350X3DB	40.5	70.0	72.0	128.5	126.0	2.5	14	1
	5	★	MMS1350X5DB	67.5	97.0	100.0	156.5	154.0	2.5	14	1
13.6	3	□	MMS1360S-DIN	40.8	60.0	62.0	107.0	104.5	2.5	14	2
	3	□	MMS1360S-DIN-C	40.8	60.0	62.0	107.0	104.5	2.5	14	1
	5	□	MMS1360L-DIN	68.0	77.0	79.0	124.0	121.5	2.5	14	2
	5	□	MMS1360L-DIN-C	68.0	77.0	79.0	124.0	121.5	2.5	14	1
	3	★	MMS1360X3DB	40.8	72.0	72.0	128.5	126.0	2.5	14	1
	5	★	MMS1360X5DB	68.0	100.0	100.0	156.5	154.0	2.5	14	1
13.7	3	□	MMS1370S-DIN	41.1	60.0	62.0	107.0	104.5	2.5	14	2
	3	●	MMS1370S-DIN-C	41.1	60.0	62.0	107.0	104.5	2.5	14	1
	5	□	MMS1370L-DIN	68.5	77.0	79.0	124.0	121.5	2.5	14	2
	5	●	MMS1370L-DIN-C	68.5	77.0	79.0	124.0	121.5	2.5	14	1
	3	★	MMS1370X3DB	41.1	72.0	72.0	128.5	126.0	2.5	14	1
	5	★	MMS1370X5DB	68.5	100.0	100.0	156.5	154.0	2.5	14	1
13.8	3	□	MMS1380S-DIN	41.4	60.0	62.0	107.0	104.5	2.5	14	2
	3	□	MMS1380S-DIN-C	41.4	60.0	62.0	107.0	104.5	2.5	14	1
	5	□	MMS1380L-DIN	69.0	77.0	79.0	124.0	121.5	2.5	14	2
	5	□	MMS1380L-DIN-C	69.0	77.0	79.0	124.0	121.5	2.5	14	1
	3	★	MMS1380X3DB	41.4	72.0	72.0	128.5	126.0	2.5	14	1
	5	★	MMS1380X5DB	69.0	100.0	100.0	156.5	154.0	2.5	14	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
13.9	3	□	MMS1390S-DIN	41.7	60.0	62.0	107.0	104.5	2.5	14	2
	3	□	MMS1390S-DIN-C	41.7	60.0	62.0	107.0	104.5	2.5	14	1
	5	□	MMS1390L-DIN	69.5	77.0	79.0	124.0	121.5	2.5	14	2
	5	□	MMS1390L-DIN-C	69.5	77.0	79.0	124.0	121.5	2.5	14	1
	3	★	MMS1390X3DB	41.7	72.0	72.0	128.5	126.0	2.5	14	1
	5	★	MMS1390X5DB	69.5	100.0	100.0	156.5	154.0	2.5	14	1
14.0	3	●	MMS1400S-DIN	42.0	60.0	62.0	107.0	104.5	2.5	14	2
	3	●	MMS1400S-DIN-C	42.0	60.0	62.0	107.0	104.5	2.5	14	1
	5	●	MMS1400L-DIN	70.0	77.0	79.0	124.0	121.5	2.5	14	2
	5	●	MMS1400L-DIN-C	70.0	77.0	79.0	124.0	121.5	2.5	14	1
	3	★	MMS1400X3DB	42.0	72.0	72.0	128.5	126.0	2.5	14	1
	5	★	MMS1400X5DB	70.0	100.0	100.0	156.5	154.0	2.5	14	1
14.05	3	●	MMS1405S-DIN	42.2	64.0	66.0	114.0	111.4	2.6	16	2
	3	□	MMS1405S-DIN-C	42.2	64.0	66.0	114.0	111.4	2.6	16	1
	5	●	MMS1405L-DIN	70.3	82.0	84.0	132.0	129.4	2.6	16	2
	5	□	MMS1405L-DIN-C	70.3	82.0	84.0	132.0	129.4	2.6	16	1
14.1	3	□	MMS1410S-DIN	42.3	64.0	66.0	114.0	111.4	2.6	16	2
	3	□	MMS1410S-DIN-C	42.3	64.0	66.0	114.0	111.4	2.6	16	1
	5	□	MMS1410L-DIN	70.5	82.0	84.0	132.0	129.4	2.6	16	2
	5	□	MMS1410L-DIN-C	70.5	82.0	84.0	132.0	129.4	2.6	16	1
	3	★	MMS1410X3DB	42.3	76.0	79.0	137.6	135.0	2.6	16	1
	5	★	MMS1410X5DB	70.5	105.0	109.0	167.6	165.0	2.6	16	1
14.2	3	□	MMS1420S-DIN	42.6	64.0	66.0	114.0	111.4	2.6	16	2
	3	□	MMS1420S-DIN-C	42.6	64.0	66.0	114.0	111.4	2.6	16	1
	5	□	MMS1420L-DIN	71.0	82.0	84.0	132.0	129.4	2.6	16	2
	5	□	MMS1420L-DIN-C	71.0	82.0	84.0	132.0	129.4	2.6	16	1
	3	★	MMS1420X3DB	42.6	76.0	79.0	137.6	135.0	2.6	16	1
	5	★	MMS1420X5DB	71.0	105.0	109.0	167.6	165.0	2.6	16	1
14.3	3	□	MMS1430S-DIN	42.9	64.0	66.0	114.0	111.4	2.6	16	2
	3	□	MMS1430S-DIN-C	42.9	64.0	66.0	114.0	111.4	2.6	16	1
	5	□	MMS1430L-DIN	71.5	82.0	84.0	132.0	129.4	2.6	16	2
	5	□	MMS1430L-DIN-C	71.5	82.0	84.0	132.0	129.4	2.6	16	1
	3	★	MMS1430X3DB	42.9	76.0	79.0	137.6	135.0	2.6	16	1
	5	★	MMS1430X5DB	71.5	105.0	109.0	167.6	165.0	2.6	16	1
14.4	3	□	MMS1440S-DIN	43.2	64.0	66.0	114.0	111.4	2.6	16	2
	3	□	MMS1440S-DIN-C	43.2	64.0	66.0	114.0	111.4	2.6	16	1
	5	□	MMS1440L-DIN	72.0	82.0	84.0	132.0	129.4	2.6	16	2
	5	□	MMS1440L-DIN-C	72.0	82.0	84.0	132.0	129.4	2.6	16	1
	3	★	MMS1440X3DB	43.2	76.0	79.0	137.6	135.0	2.6	16	1
	5	★	MMS1440X5DB	72.0	105.0	109.0	167.6	165.0	2.6	16	1
14.5	3	●	MMS1450S-DIN	43.5	64.0	66.0	114.0	111.4	2.6	16	2
	3	□	MMS1450S-DIN-C	43.5	64.0	66.0	114.0	111.4	2.6	16	1
	5	●	MMS1450L-DIN	72.5	82.0	84.0	132.0	129.4	2.6	16	2
	5	□	MMS1450L-DIN-C	72.5	82.0	84.0	132.0	129.4	2.6	16	1
	3	★	MMS1450X3DB	43.5	76.0	79.0	137.6	135.0	2.6	16	1
	5	★	MMS1450X5DB	72.5	105.0	109.0	167.6	165.0	2.6	16	1

BOHREN (VOLLHARTMETALL)

MMS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
14.6	3	□	MMS1460S-DIN	43.8	64.0	66.0	114.0	111.3	2.7	16	2
	3	□	MMS1460S-DIN-C	43.8	64.0	66.0	114.0	111.3	2.7	16	1
	5	□	MMS1460L-DIN	73.0	82.0	84.0	132.0	129.3	2.7	16	2
	5	□	MMS1460L-DIN-C	73.0	82.0	84.0	132.0	129.3	2.7	16	1
	3	★	MMS1460X3DB	43.8	78.0	79.0	137.7	135.0	2.7	16	1
	5	★	MMS1460X5DB	73.0	108.0	109.0	167.7	165.0	2.7	16	1
14.7	3	□	MMS1470S-DIN	44.1	64.0	66.0	114.0	111.3	2.7	16	2
	3	□	MMS1470S-DIN-C	44.1	64.0	66.0	114.0	111.3	2.7	16	1
	5	□	MMS1470L-DIN	73.5	82.0	84.0	132.0	129.3	2.7	16	2
	5	□	MMS1470L-DIN-C	73.5	82.0	84.0	132.0	129.3	2.7	16	1
	3	★	MMS1470X3DB	44.1	78.0	79.0	137.7	135.0	2.7	16	1
	5	★	MMS1470X5DB	73.5	108.0	109.0	167.7	165.0	2.7	16	1
14.8	3	□	MMS1480S-DIN	44.4	64.0	66.0	114.0	111.3	2.7	16	2
	3	□	MMS1480S-DIN-C	44.4	64.0	66.0	114.0	111.3	2.7	16	1
	5	□	MMS1480L-DIN	74.0	82.0	84.0	132.0	129.3	2.7	16	2
	5	□	MMS1480L-DIN-C	74.0	82.0	84.0	132.0	129.3	2.7	16	1
	3	★	MMS1480X3DB	44.4	78.0	79.0	137.7	135.0	2.7	16	1
	5	★	MMS1480X5DB	74.0	108.0	109.0	167.7	165.0	2.7	16	1
14.9	3	□	MMS1490S-DIN	44.7	64.0	66.0	114.0	111.3	2.7	16	2
	3	□	MMS1490S-DIN-C	44.7	64.0	66.0	114.0	111.3	2.7	16	1
	5	□	MMS1490L-DIN	74.5	82.0	84.0	132.0	129.3	2.7	16	2
	5	□	MMS1490L-DIN-C	74.5	82.0	84.0	132.0	129.3	2.7	16	1
	3	★	MMS1490X3DB	44.7	78.0	79.0	137.7	135.0	2.7	16	1
	5	★	MMS1490X5DB	74.5	108.0	109.0	167.7	165.0	2.7	16	1
15.0	3	●	MMS1500S-DIN	45.0	64.0	66.0	114.0	111.3	2.7	16	2
	3	□	MMS1500S-DIN-C	45.0	64.0	66.0	114.0	111.3	2.7	16	1
	5	●	MMS1500L-DIN	75.0	82.0	84.0	132.0	129.3	2.7	16	2
	5	□	MMS1500L-DIN-C	75.0	82.0	84.0	132.0	129.3	2.7	16	1
	3	★	MMS1500X3DB	45.0	78.0	79.0	137.7	135.0	2.7	16	1
	5	★	MMS1500X5DB	75.0	108.0	109.0	167.7	165.0	2.7	16	1
15.1	3	□	MMS1510S-DIN	45.3	65.0	67.0	115.0	112.3	2.7	16	2
	3	□	MMS1510S-DIN-C	45.3	65.0	67.0	115.0	112.3	2.7	16	1
	5	□	MMS1510L-DIN	75.5	83.0	85.0	133.0	130.3	2.7	16	2
	5	□	MMS1510L-DIN-C	75.5	83.0	85.0	133.0	130.3	2.7	16	1
	3	★	MMS1510X3DB	45.3	81.0	83.0	141.7	139.0	2.7	16	1
	5	★	MMS1510X5DB	75.5	112.0	115.0	173.7	171.0	2.7	16	1
15.2	3	□	MMS1520S-DIN	45.6	65.0	67.0	115.0	112.2	2.8	16	2
	3	□	MMS1520S-DIN-C	45.6	65.0	67.0	115.0	112.2	2.8	16	1
	5	□	MMS1520L-DIN	76.0	83.0	85.0	133.0	130.2	2.8	16	2
	5	□	MMS1520L-DIN-C	76.0	83.0	85.0	133.0	130.2	2.8	16	1
	3	★	MMS1520X3DB	45.6	81.0	83.0	141.8	139.0	2.8	16	1
	5	★	MMS1520X5DB	76.0	112.0	115.0	173.8	171.0	2.8	16	1
15.3	3	□	MMS1530S-DIN	45.9	65.0	67.0	115.0	112.2	2.8	16	2
	3	□	MMS1530S-DIN-C	45.9	65.0	67.0	115.0	112.2	2.8	16	1
	5	□	MMS1530L-DIN	76.5	83.0	85.0	133.0	130.2	2.8	16	2
	5	□	MMS1530L-DIN-C	76.5	83.0	85.0	133.0	130.2	2.8	16	1
	3	★	MMS1530X3DB	45.9	81.0	83.0	141.8	139.0	2.8	16	1
	5	★	MMS1530X5DB	76.5	112.0	115.0	173.8	171.0	2.8	16	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
15.4	3	□	MMS1540S-DIN	46.2	65.0	67.0	115.0	112.2	2.8	16	2
	3	□	MMS1540S-DIN-C	46.2	65.0	67.0	115.0	112.2	2.8	16	1
	5	□	MMS1540L-DIN	77.0	83.0	85.0	133.0	130.2	2.8	16	2
	5	□	MMS1540L-DIN-C	77.0	83.0	85.0	133.0	130.2	2.8	16	1
	3	★	MMS1540X3DB	46.2	81.0	83.0	141.8	139.0	2.8	16	1
	5	★	MMS1540X5DB	77.0	112.0	115.0	173.8	171.0	2.8	16	1
15.5	3	●	MMS1550S-DIN	46.5	65.0	67.0	115.0	112.2	2.8	16	2
	3	□	MMS1550S-DIN-C	46.5	65.0	67.0	115.0	112.2	2.8	16	1
	5	●	MMS1550L-DIN	77.5	83.0	85.0	133.0	130.2	2.8	16	2
	5	□	MMS1550L-DIN-C	77.5	83.0	85.0	133.0	130.2	2.8	16	1
	3	★	MMS1550X3DB	46.5	81.0	83.0	141.8	139.0	2.8	16	1
	5	★	MMS1550X5DB	77.5	112.0	115.0	173.8	171.0	2.8	16	1
15.6	3	□	MMS1560S-DIN	46.8	65.0	67.0	115.0	112.2	2.8	16	2
	3	□	MMS1560S-DIN-C	46.8	65.0	67.0	115.0	112.2	2.8	16	1
	5	□	MMS1560L-DIN	78.0	83.0	85.0	133.0	130.2	2.8	16	2
	5	□	MMS1560L-DIN-C	78.0	83.0	85.0	133.0	130.2	2.8	16	1
	3	★	MMS1560X3DB	46.8	83.0	83.0	141.8	139.0	2.8	16	1
	5	★	MMS1560X5DB	78.0	115.0	115.0	173.8	171.0	2.8	16	1
15.7	3	□	MMS1570S-DIN	47.1	65.0	67.0	115.0	112.1	2.9	16	2
	3	□	MMS1570S-DIN-C	47.1	65.0	67.0	115.0	112.1	2.9	16	1
	5	□	MMS1570L-DIN	78.5	83.0	85.0	133.0	130.1	2.9	16	2
	5	□	MMS1570L-DIN-C	78.5	83.0	85.0	133.0	130.1	2.9	16	1
	3	★	MMS1570X3DB	47.1	83.0	83.0	141.9	139.0	2.9	16	1
	5	★	MMS1570X5DB	78.5	115.0	115.0	173.9	171.0	2.9	16	1
15.8	3	□	MMS1580S-DIN	47.4	65.0	67.0	115.0	112.1	2.9	16	2
	3	□	MMS1580S-DIN-C	47.4	65.0	67.0	115.0	112.1	2.9	16	1
	5	□	MMS1580L-DIN	79.0	83.0	85.0	133.0	130.1	2.9	16	2
	5	□	MMS1580L-DIN-C	79.0	83.0	85.0	133.0	130.1	2.9	16	1
	3	★	MMS1580X3DB	47.4	83.0	83.0	141.9	139.0	2.9	16	1
	5	★	MMS1580X5DB	79.0	115.0	115.0	173.9	171.0	2.9	16	1
15.9	3	□	MMS1590S-DIN	47.7	65.0	67.0	115.0	112.1	2.9	16	2
	3	□	MMS1590S-DIN-C	47.7	65.0	67.0	115.0	112.1	2.9	16	1
	5	□	MMS1590L-DIN	79.5	83.0	85.0	133.0	130.1	2.9	16	2
	5	□	MMS1590L-DIN-C	79.5	83.0	85.0	133.0	130.1	2.9	16	1
	3	★	MMS1590X3DB	47.7	83.0	83.0	141.9	139.0	2.9	16	1
	5	★	MMS1590X5DB	79.5	115.0	115.0	173.9	171.0	2.9	16	1
16.0	3	●	MMS1600S-DIN	48.0	65.0	67.0	115.0	112.1	2.9	16	2
	3	□	MMS1600S-DIN-C	48.0	65.0	67.0	115.0	112.1	2.9	16	1
	5	●	MMS1600L-DIN	80.0	83.0	85.0	133.0	130.1	2.9	16	2
	5	□	MMS1600L-DIN-C	80.0	83.0	85.0	133.0	130.1	2.9	16	1
	3	★	MMS1600X3DB	48.0	83.0	83.0	141.9	139.0	2.9	16	1
	5	★	MMS1600X5DB	80.0	115.0	115.0	173.9	171.0	2.9	16	1
16.1	3	□	MMS1610S-DIN	48.3	73.0	75.0	123.0	120.1	2.9	18	2
	3	□	MMS1610S-DIN-C	48.3	73.0	75.0	123.0	120.1	2.9	18	1
	5	□	MMS1610L-DIN	80.5	93.0	95.0	143.0	140.1	2.9	18	2
	5	□	MMS1610L-DIN-C	80.5	93.0	95.0	143.0	140.1	2.9	18	1
	3	□	MMS1610X3DB	48.3	86.0	89.0	147.9	145.0	2.9	18	1
	5	□	MMS1610X5DB	80.5	119.0	123.0	181.9	179.0	2.9	18	1

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
16.2	3	□	MMS1620S-DIN	48.6	73.0	75.0	123.0	120.1	2.9	18	2
	3	□	MMS1620S-DIN-C	48.6	73.0	75.0	123.0	120.1	2.9	18	1
	5	□	MMS1620L-DIN	81.0	93.0	95.0	143.0	140.1	2.9	18	2
	5	□	MMS1620L-DIN-C	81.0	93.0	95.0	143.0	140.1	2.9	18	1
	3	□	MMS1620X3DB	48.6	86.0	89.0	147.9	145.0	2.9	18	1
	5	□	MMS1620X5DB	81.0	119.0	123.0	181.9	179.0	2.9	18	1
16.3	3	□	MMS1630S-DIN	48.9	73.0	75.0	123.0	120.0	3.0	18	2
	3	□	MMS1630S-DIN-C	48.9	73.0	75.0	123.0	120.0	3.0	18	1
	5	□	MMS1630L-DIN	81.5	93.0	95.0	143.0	140.0	3.0	18	2
	5	□	MMS1630L-DIN-C	81.5	93.0	95.0	143.0	140.0	3.0	18	1
	3	□	MMS1630X3DB	48.9	86.0	89.0	148.0	145.0	3.0	18	1
	5	□	MMS1630X5DB	81.5	119.0	123.0	182.0	179.0	3.0	18	1
16.4	3	□	MMS1640S-DIN	49.2	73.0	75.0	123.0	120.0	3.0	18	2
	3	□	MMS1640S-DIN-C	49.2	73.0	75.0	123.0	120.0	3.0	18	1
	5	□	MMS1640L-DIN	82.0	93.0	95.0	143.0	140.0	3.0	18	2
	5	□	MMS1640L-DIN-C	82.0	93.0	95.0	143.0	140.0	3.0	18	1
	3	□	MMS1640X3DB	49.2	86.0	89.0	148.0	145.0	3.0	18	1
	5	□	MMS1640X5DB	82.0	119.0	123.0	182.0	179.0	3.0	18	1
16.5	3	●	MMS1650S-DIN	49.5	73.0	75.0	123.0	120.0	3.0	18	2
	3	□	MMS1650S-DIN-C	49.5	73.0	75.0	123.0	120.0	3.0	18	1
	5	●	MMS1650L-DIN	82.5	93.0	95.0	143.0	140.0	3.0	18	2
	5	□	MMS1650L-DIN-C	82.5	93.0	95.0	143.0	140.0	3.0	18	1
	3	★	MMS1650X3DB	49.5	86.0	89.0	148.0	145.0	3.0	18	1
	5	★	MMS1650X5DB	82.5	119.0	123.0	182.0	179.0	3.0	18	1
16.6	3	□	MMS1660S-DIN	49.8	73.0	75.0	123.0	120.0	3.0	18	2
	3	□	MMS1660S-DIN-C	49.8	73.0	75.0	123.0	120.0	3.0	18	1
	5	□	MMS1660L-DIN	83.0	93.0	95.0	143.0	140.0	3.0	18	2
	5	□	MMS1660L-DIN-C	83.0	93.0	95.0	143.0	140.0	3.0	18	1
	3	□	MMS1660X3DB	49.8	88.0	89.0	148.0	145.0	3.0	18	1
	5	□	MMS1660X5DB	83.0	122.0	123.0	182.0	179.0	3.0	18	1
16.7	3	□	MMS1670S-DIN	50.1	73.0	75.0	123.0	120.0	3.0	18	2
	3	□	MMS1670S-DIN-C	50.1	73.0	75.0	123.0	120.0	3.0	18	1
	5	□	MMS1670L-DIN	83.5	93.0	95.0	143.0	140.0	3.0	18	2
	5	□	MMS1670L-DIN-C	83.5	93.0	95.0	143.0	140.0	3.0	18	1
	3	□	MMS1670X3DB	50.1	88.0	89.0	148.0	145.0	3.0	18	1
	5	□	MMS1670X5DB	83.5	122.0	123.0	182.0	179.0	3.0	18	1
16.8	3	□	MMS1680S-DIN	50.4	73.0	75.0	123.0	119.9	3.1	18	2
	3	□	MMS1680S-DIN-C	50.4	73.0	75.0	123.0	119.9	3.1	18	1
	5	□	MMS1680L-DIN	84.0	93.0	95.0	143.0	139.9	3.1	18	2
	5	□	MMS1680L-DIN-C	84.0	93.0	95.0	143.0	139.9	3.1	18	1
	3	□	MMS1680X3DB	50.4	88.0	89.0	148.1	145.0	3.1	18	1
	5	□	MMS1680X5DB	84.0	122.0	123.0	182.1	179.0	3.1	18	1
16.9	3	□	MMS1690S-DIN	50.7	73.0	75.0	123.0	119.9	3.1	18	2
	3	□	MMS1690S-DIN-C	50.7	73.0	75.0	123.0	119.9	3.1	18	1
	5	□	MMS1690L-DIN	84.5	93.0	95.0	143.0	139.9	3.1	18	2
	5	□	MMS1690L-DIN-C	84.5	93.0	95.0	143.0	139.9	3.1	18	1
	3	□	MMS1690X3DB	50.7	88.0	89.0	148.1	145.0	3.1	18	1
	5	□	MMS1690X5DB	84.5	122.0	123.0	182.1	179.0	3.1	18	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
17.0	3	●	MMS1700S-DIN	51.0	73.0	75.0	123.0	119.9	3.1	18	2
	3	□	MMS1700S-DIN-C	51.0	73.0	75.0	123.0	119.9	3.1	18	1
	5	●	MMS1700L-DIN	85.0	93.0	95.0	143.0	139.9	3.1	18	2
	5	□	MMS1700L-DIN-C	85.0	93.0	95.0	143.0	139.9	3.1	18	1
	3	★	MMS1700X3DB	51.0	88.0	89.0	148.1	145.0	3.1	18	1
	5	★	MMS1700X5DB	85.0	122.0	123.0	182.1	179.0	3.1	18	1
17.1	3	□	MMS1710S-DIN	51.3	73.0	75.0	123.0	119.9	3.1	18	2
	3	□	MMS1710S-DIN-C	51.3	73.0	75.0	123.0	119.9	3.1	18	1
	5	□	MMS1710L-DIN	85.5	93.0	95.0	143.0	139.9	3.1	18	2
	5	□	MMS1710L-DIN-C	85.5	93.0	95.0	143.0	139.9	3.1	18	1
	3	□	MMS1710X3DB	51.3	91.0	93.0	152.1	149.0	3.1	18	1
	5	□	MMS1710X5DB	85.5	126.0	129.0	188.1	185.0	3.1	18	1
17.2	3	□	MMS1720S-DIN	51.6	73.0	75.0	123.0	119.9	3.1	18	2
	3	□	MMS1720S-DIN-C	51.6	73.0	75.0	123.0	119.9	3.1	18	1
	5	□	MMS1720L-DIN	86.0	93.0	95.0	143.0	139.9	3.1	18	2
	5	□	MMS1720L-DIN-C	86.0	93.0	95.0	143.0	139.9	3.1	18	1
	3	□	MMS1720X3DB	51.6	91.0	93.0	152.1	149.0	3.1	18	1
	5	□	MMS1720X5DB	86.0	126.0	129.0	188.1	185.0	3.1	18	1
17.3	3	□	MMS1730S-DIN	51.9	73.0	75.0	123.0	119.9	3.1	18	2
	3	□	MMS1730S-DIN-C	51.9	73.0	75.0	123.0	119.9	3.1	18	1
	5	□	MMS1730L-DIN	86.5	93.0	95.0	143.0	139.9	3.1	18	2
	5	□	MMS1730L-DIN-C	86.5	93.0	95.0	143.0	139.9	3.1	18	1
	3	□	MMS1730X3DB	51.9	91.0	93.0	152.1	149.0	3.1	18	1
	5	□	MMS1730X5DB	86.5	126.0	129.0	188.1	185.0	3.1	18	1
17.4	3	□	MMS1740S-DIN	52.2	73.0	75.0	123.0	119.8	3.2	18	2
	3	□	MMS1740S-DIN-C	52.2	73.0	75.0	123.0	119.8	3.2	18	1
	5	□	MMS1740L-DIN	87.0	93.0	95.0	143.0	139.8	3.2	18	2
	5	□	MMS1740L-DIN-C	87.0	93.0	95.0	143.0	139.8	3.2	18	1
	3	□	MMS1740X3DB	52.2	91.0	93.0	152.2	149.0	3.2	18	1
	5	□	MMS1740X5DB	87.0	126.0	129.0	188.2	185.0	3.2	18	1
17.5	3	●	MMS1750S-DIN	52.5	73.0	75.0	123.0	119.8	3.2	18	2
	3	□	MMS1750S-DIN-C	52.5	73.0	75.0	123.0	119.8	3.2	18	1
	5	●	MMS1750L-DIN	87.5	93.0	95.0	143.0	139.8	3.2	18	2
	5	□	MMS1750L-DIN-C	87.5	93.0	95.0	143.0	139.8	3.2	18	1
	3	★	MMS1750X3DB	52.5	91.0	93.0	152.2	149.0	3.2	18	1
	5	★	MMS1750X5DB	87.5	126.0	129.0	188.2	185.0	3.2	18	1
17.6	3	□	MMS1760S-DIN	52.8	73.0	75.0	123.0	119.8	3.2	18	2
	3	□	MMS1760S-DIN-C	52.8	73.0	75.0	123.0	119.8	3.2	18	1
	5	□	MMS1760L-DIN	88.0	93.0	95.0	143.0	139.8	3.2	18	2
	5	□	MMS1760L-DIN-C	88.0	93.0	95.0	143.0	139.8	3.2	18	1
	3	□	MMS1760X3DB	52.8	93.0	93.0	152.2	149.0	3.2	18	1
	5	□	MMS1760X5DB	88.0	129.0	129.0	188.2	185.0	3.2	18	1
17.7	3	□	MMS1770S-DIN	53.1	73.0	75.0	123.0	119.8	3.2	18	2
	3	□	MMS1770S-DIN-C	53.1	73.0	75.0	123.0	119.8	3.2	18	1
	5	□	MMS1770L-DIN	88.5	93.0	95.0	143.0	139.8	3.2	18	2
	5	□	MMS1770L-DIN-C	88.5	93.0	95.0	143.0	139.8	3.2	18	1
	3	□	MMS1770X3DB	53.1	93.0	93.0	152.2	149.0	3.2	18	1
	5	□	MMS1770X5DB	88.5	129.0	129.0	188.2	185.0	3.2	18	1

BOHREN (VOLLHARTMETALL)

MMS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
17.8	3	□	MMS1780S-DIN	53.4	73.0	75.0	123.0	119.8	3.2	18	2
	3	□	MMS1780S-DIN-C	53.4	73.0	75.0	123.0	119.8	3.2	18	1
	5	□	MMS1780L-DIN	89.0	93.0	95.0	143.0	139.8	3.2	18	2
	5	□	MMS1780L-DIN-C	89.0	93.0	95.0	143.0	139.8	3.2	18	1
	3	□	MMS1780X3DB	53.4	93.0	93.0	152.2	149.0	3.2	18	1
	5	□	MMS1780X5DB	89.0	129.0	129.0	188.2	185.0	3.2	18	1
17.9	3	□	MMS1790S-DIN	53.7	73.0	75.0	123.0	119.7	3.3	18	2
	3	□	MMS1790S-DIN-C	53.7	73.0	75.0	123.0	119.7	3.3	18	1
	5	□	MMS1790L-DIN	89.5	93.0	95.0	143.0	139.7	3.3	18	2
	5	□	MMS1790L-DIN-C	89.5	93.0	95.0	143.0	139.7	3.3	18	1
	3	□	MMS1790X3DB	53.7	93.0	93.0	152.3	149.0	3.3	18	1
	5	□	MMS1790X5DB	89.5	129.0	129.0	188.3	185.0	3.3	18	1
18.0	3	●	MMS1800S-DIN	54.0	73.0	75.0	123.0	119.7	3.3	18	2
	3	□	MMS1800S-DIN-C	54.0	73.0	75.0	123.0	119.7	3.3	18	1
	5	●	MMS1800L-DIN	90.0	93.0	95.0	143.0	139.7	3.3	18	2
	5	□	MMS1800L-DIN-C	90.0	93.0	95.0	143.0	139.7	3.3	18	1
	3	★	MMS1800X3DB	54.0	93.0	93.0	152.3	149.0	3.3	18	1
	5	★	MMS1800X5DB	90.0	129.0	129.0	188.3	185.0	3.3	18	1
18.1	3	□	MMS1810S-DIN	54.3	79.0	81.0	131.0	127.7	3.3	20	2
	3	□	MMS1810S-DIN-C	54.3	79.0	81.0	131.0	127.7	3.3	20	1
	5	□	MMS1810L-DIN	90.5	101.0	103.0	153.0	149.7	3.3	20	2
	5	□	MMS1810L-DIN-C	90.5	101.0	103.0	153.0	149.7	3.3	20	1
	3	□	MMS1810X3DB	54.3	96.0	99.0	160.3	157.0	3.3	20	1
	5	□	MMS1810X5DB	90.5	133.0	137.0	198.3	195.0	3.3	20	1
18.2	3	□	MMS1820S-DIN	54.6	79.0	81.0	131.0	127.7	3.3	20	2
	3	□	MMS1820S-DIN-C	54.6	79.0	81.0	131.0	127.7	3.3	20	1
	5	□	MMS1820L-DIN	91.0	101.0	103.0	153.0	149.7	3.3	20	2
	5	□	MMS1820L-DIN-C	91.0	101.0	103.0	153.0	149.7	3.3	20	1
	3	□	MMS1820X3DB	54.6	96.0	99.0	160.3	157.0	3.3	20	1
	5	□	MMS1820X5DB	91.0	133.0	137.0	198.3	195.0	3.3	20	1
18.3	3	□	MMS1830S-DIN	54.9	79.0	81.0	131.0	127.7	3.3	20	2
	3	□	MMS1830S-DIN-C	54.9	79.0	81.0	131.0	127.7	3.3	20	1
	5	□	MMS1830L-DIN	91.5	101.0	103.0	153.0	149.7	3.3	20	2
	5	□	MMS1830L-DIN-C	91.5	101.0	103.0	153.0	149.7	3.3	20	1
	3	□	MMS1830X3DB	54.9	96.0	99.0	160.3	157.0	3.3	20	1
	5	□	MMS1830X5DB	91.5	133.0	137.0	198.3	195.0	3.3	20	1
18.4	3	□	MMS1840S-DIN	55.2	79.0	81.0	131.0	127.7	3.3	20	2
	3	□	MMS1840S-DIN-C	55.2	79.0	81.0	131.0	127.7	3.3	20	1
	5	□	MMS1840L-DIN	92.0	101.0	103.0	153.0	149.7	3.3	20	2
	5	□	MMS1840L-DIN-C	92.0	101.0	103.0	153.0	149.7	3.3	20	1
	3	□	MMS1840X3DB	55.2	96.0	99.0	160.3	157.0	3.3	20	1
	5	□	MMS1840X5DB	92.0	133.0	137.0	198.3	195.0	3.3	20	1
18.5	3	●	MMS1850S-DIN	55.5	79.0	81.0	131.0	127.6	3.4	20	2
	3	□	MMS1850S-DIN-C	55.5	79.0	81.0	131.0	127.6	3.4	20	1
	5	●	MMS1850L-DIN	92.5	101.0	103.0	153.0	149.6	3.4	20	2
	5	□	MMS1850L-DIN-C	92.5	101.0	103.0	153.0	149.6	3.4	20	1
	3	★	MMS1850X3DB	55.5	96.0	99.0	160.4	157.0	3.4	20	1
	5	★	MMS1850X5DB	92.5	133.0	137.0	198.4	195.0	3.4	20	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
18.6	3	□	MMS1860S-DIN	55.8	79.0	81.0	123.0	119.6	3.4	20	2
	3	□	MMS1860S-DIN-C	55.8	79.0	81.0	123.0	119.6	3.4	20	1
	5	□	MMS1860L-DIN	93.0	101.0	103.0	143.0	139.6	3.4	20	2
	5	□	MMS1860L-DIN-C	93.0	101.0	103.0	143.0	139.6	3.4	20	1
	3	□	MMS1860X3DB	55.8	98.0	99.0	160.4	157.0	3.4	20	1
	5	□	MMS1860X5DB	93.0	136.0	137.0	198.4	195.0	3.4	20	1
18.7	3	□	MMS1870S-DIN	56.1	79.0	81.0	123.0	119.6	3.4	20	2
	3	□	MMS1870S-DIN-C	56.1	79.0	81.0	123.0	119.6	3.4	20	1
	5	□	MMS1870L-DIN	93.5	101.0	103.0	143.0	139.6	3.4	20	2
	5	□	MMS1870L-DIN-C	93.5	101.0	103.0	143.0	139.6	3.4	20	1
	3	□	MMS1870X3DB	56.1	98.0	99.0	160.4	157.0	3.4	20	1
	5	□	MMS1870X5DB	93.5	136.0	137.0	198.4	195.0	3.4	20	1
18.8	3	□	MMS1880S-DIN	56.4	79.0	81.0	123.0	119.6	3.4	20	2
	3	□	MMS1880S-DIN-C	56.4	79.0	81.0	123.0	119.6	3.4	20	1
	5	□	MMS1880L-DIN	94.0	101.0	103.0	143.0	139.6	3.4	20	2
	5	□	MMS1880L-DIN-C	94.0	101.0	103.0	143.0	139.6	3.4	20	1
	3	□	MMS1880X3DB	56.4	98.0	99.0	160.4	157.0	3.4	20	1
	5	□	MMS1880X5DB	94.0	136.0	137.0	198.4	195.0	3.4	20	1
18.9	3	□	MMS1890S-DIN	56.7	79.0	81.0	131.0	127.6	3.4	20	2
	3	□	MMS1890S-DIN-C	56.7	79.0	81.0	131.0	127.6	3.4	20	1
	5	□	MMS1890L-DIN	94.5	101.0	103.0	153.0	149.6	3.4	20	2
	5	□	MMS1890L-DIN-C	94.5	101.0	103.0	153.0	149.6	3.4	20	1
	3	□	MMS1890X3DB	56.7	98.0	99.0	160.4	157.0	3.4	20	1
	5	□	MMS1890X5DB	94.5	136.0	137.0	198.4	195.0	3.4	20	1
19.0	3	●	MMS1900S-DIN	57.0	79.0	81.0	131.0	127.5	3.5	20	2
	3	□	MMS1900S-DIN-C	57.0	79.0	81.0	131.0	127.5	3.5	20	1
	5	●	MMS1900L-DIN	95.0	101.0	103.0	153.0	149.5	3.5	20	2
	5	□	MMS1900L-DIN-C	95.0	101.0	103.0	153.0	149.5	3.5	20	1
	3	★	MMS1900X3DB	57.0	98.0	99.0	160.5	157.0	3.5	20	1
	5	★	MMS1900X5DB	95.0	136.0	137.0	198.5	195.0	3.5	20	1
19.1	3	□	MMS1910S-DIN	57.3	79.0	81.0	131.0	127.5	3.5	20	2
	3	□	MMS1910S-DIN-C	57.3	79.0	81.0	131.0	127.5	3.5	20	1
	5	□	MMS1910L-DIN	95.5	101.0	103.0	153.0	149.5	3.5	20	2
	5	□	MMS1910L-DIN-C	95.5	101.0	103.0	153.0	149.5	3.5	20	1
	3	□	MMS1910X3DB	57.3	101.0	103.0	164.5	161.0	3.5	20	1
	5	□	MMS1910X5DB	95.5	140.0	143.0	204.5	201.0	3.5	20	1
19.2	3	□	MMS1920S-DIN	57.6	79.0	81.0	131.0	127.5	3.5	20	2
	3	□	MMS1920S-DIN-C	57.6	79.0	81.0	131.0	127.5	3.5	20	1
	5	□	MMS1920L-DIN	96.0	101.0	103.0	153.0	149.5	3.5	20	2
	5	□	MMS1920L-DIN-C	96.0	101.0	103.0	153.0	149.5	3.5	20	1
	3	□	MMS1920X3DB	57.6	101.0	103.0	164.5	161.0	3.5	20	1
	5	□	MMS1920X5DB	96.0	140.0	143.0	204.5	201.0	3.5	20	1
19.3	3	□	MMS1930S-DIN	57.9	79.0	81.0	131.0	127.5	3.5	20	2
	3	□	MMS1930S-DIN-C	57.9	79.0	81.0	131.0	127.5	3.5	20	1
	5	□	MMS1930L-DIN	96.5	101.0	103.0	153.0	149.5	3.5	20	2
	5	□	MMS1930L-DIN-C	96.5	101.0	103.0	153.0	149.5	3.5	20	1
	3	□	MMS1930X3DB	57.9	101.0	103.0	164.5	161.0	3.5	20	1
	5	□	MMS1930X5DB	96.5	140.0	143.0	204.5	201.0	3.5	20	1

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

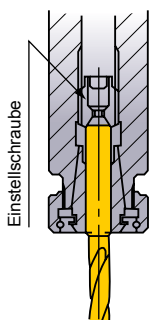
DC	Bohrtiefe (mm)	Lager DP7020	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
19.4	3	□	MMS1940S-DIN	58.2	79.0	81.0	131.0	127.5	3.5	20	2
	3	□	MMS1940S-DIN-C	58.2	79.0	81.0	131.0	127.5	3.5	20	1
	5	□	MMS1940L-DIN	97.0	101.0	103.0	153.0	149.5	3.5	20	2
	5	□	MMS1940L-DIN-C	97.0	101.0	103.0	153.0	149.5	3.5	20	1
	3	□	MMS1940X3DB	58.2	101.0	103.0	164.5	161.0	3.5	20	1
	5	□	MMS1940X5DB	97.0	140.0	143.0	204.5	201.0	3.5	20	1
19.5	3	●	MMS1950S-DIN	58.5	79.0	81.0	131.0	127.5	3.5	20	2
	3	□	MMS1950S-DIN-C	58.5	79.0	81.0	131.0	127.5	3.5	20	1
	5	●	MMS1950L-DIN	97.5	101.0	103.0	153.0	149.5	3.5	20	2
	5	□	MMS1950L-DIN-C	97.5	101.0	103.0	153.0	149.5	3.5	20	1
	3	★	MMS1950X3DB	58.5	101.0	103.0	164.5	161.0	3.5	20	1
	5	★	MMS1950X5DB	97.5	140.0	143.0	204.5	201.0	3.5	20	1
19.6	3	□	MMS1960S-DIN	58.8	79.0	81.0	131.0	127.4	3.6	20	2
	3	□	MMS1960S-DIN-C	58.8	79.0	81.0	131.0	127.4	3.6	20	1
	5	□	MMS1960L-DIN	98.0	101.0	103.0	153.0	149.4	3.6	20	2
	5	□	MMS1960L-DIN-C	98.0	101.0	103.0	153.0	149.4	3.6	20	1
	3	□	MMS1960X3DB	58.8	104.0	104.0	164.6	161.0	3.6	20	1
	5	□	MMS1960X5DB	98.0	144.0	144.0	204.6	201.0	3.6	20	1
19.7	3	□	MMS1970S-DIN	59.1	79.0	81.0	131.0	127.4	3.6	20	2
	3	□	MMS1970S-DIN-C	59.1	79.0	81.0	131.0	127.4	3.6	20	1
	5	□	MMS1970L-DIN	98.5	101.0	103.0	153.0	149.4	3.6	20	2

Interne Kühlung

DC	Bohrtiefe (mm)	Lager DP7020	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
19.7	5	□	MMS1970L-DIN-C	98.5	101.0	103.0	153.0	149.4	3.6	20	1
	3	□	MMS1970X3DB	59.1	104.0	104.0	164.6	161.0	3.6	20	1
	5	□	MMS1970X5DB	98.5	144.0	144.0	204.6	201.0	3.6	20	1
	3	□	MMS1980S-DIN	59.4	79.0	81.0	131.0	127.4	3.6	20	2
19.8	3	□	MMS1980S-DIN-C	59.4	79.0	81.0	131.0	127.4	3.6	20	1
	5	□	MMS1980L-DIN	99.0	101.0	103.0	153.0	149.4	3.6	20	2
	5	□	MMS1980L-DIN-C	99.0	101.0	103.0	153.0	149.4	3.6	20	1
	3	□	MMS1980X3DB	59.4	104.0	104.0	164.6	161.0	3.6	20	1
	5	□	MMS1980X5DB	99.0	144.0	144.0	204.6	201.0	3.6	20	1
	3	□	MMS1990S-DIN	59.7	79.0	81.0	131.0	127.4	3.6	20	2
19.9	3	□	MMS1990S-DIN-C	59.7	79.0	81.0	131.0	127.4	3.6	20	1
	5	□	MMS1990L-DIN	99.5	101.0	103.0	153.0	149.4	3.6	20	2
	5	□	MMS1990L-DIN-C	99.5	101.0	103.0	153.0	149.4	3.6	20	1
	3	□	MMS1990X3DB	59.7	104.0	104.0	164.6	161.0	3.6	20	1
	5	□	MMS1990X5DB	99.5	144.0	144.0	204.6	201.0	3.6	20	1
	3	●	MMS2000S-DIN	60.0	79.0	81.0	131.0	127.4	3.6	20	2
20.0	3	□	MMS2000S-DIN-C	60.0	79.0	81.0	131.0	127.4	3.6	20	1
	5	●	MMS2000L-DIN	100.0	101.0	103.0	153.0	149.4	3.6	20	2
	5	□	MMS2000L-DIN-C	100.0	101.0	103.0	153.0	149.4	3.6	20	1
	3	★	MMS2000X3DB	60.0	104.0	104.0	164.6	161.0	3.6	20	1
	5	★	MMS2000X5DB	100.0	144.0	144.0	204.6	201.0	3.6	20	1

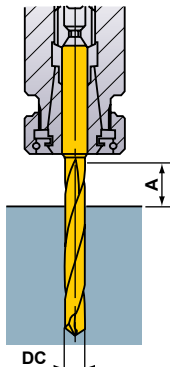
EINSATZ HINWEISE

Bohrer Aufnahme



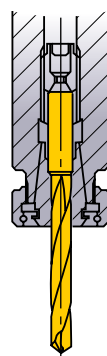
Präzisionsspannzangen
können verwendet werden.

Max. Bohrtiefe



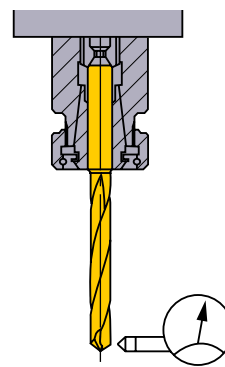
$$A \geq DC \times 1.5$$

Bohrer Einstellung



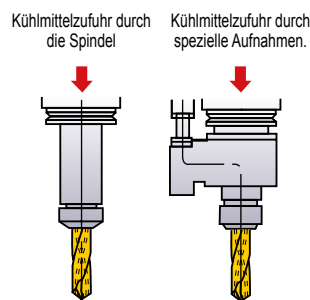
Nicht auf den Nuten Spannen.

Rundlauftoleranz



Rundlaufabweichung $\leq 0.03\text{mm}$

Interne Kühlmittelzufuhr

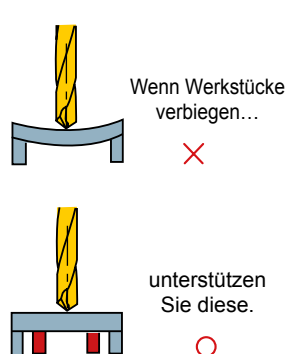


Der Kühlmitteldruck beträgt ca.
0.5MPa—7MPa

Handling mit Kühlmittel

- 1) Schmutz und Staubpartikel in altem Kühlmittel können die Kanäle verstopfen und den Kühlmittelfluss behindern. Es wird empfohlen, dass Kühlmittel regelmäßig zu wechseln.
- 2) Feine Metallspäne können das Ölloch verstopfen. Zur Vorbeugung einen Filter verwenden. Bei Bohrern mit kleinem Durchmesser einen Filter mit feinem Sieb verwenden.

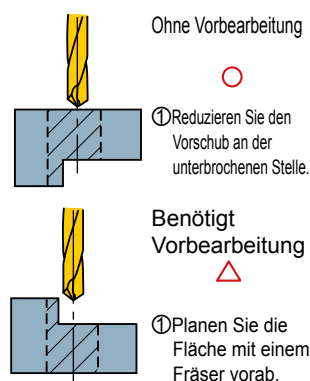
Dünne Werkstücke



Wenn Werkstücke
verbiegen...

unterstützen
Sie diese.

Unterbrochene Bearbeitung



Ohne Vorbearbeitung

① Reduzieren Sie den
Vorschub an der
unterbrochenen Stelle.

Benötigt
Vorbearbeitung

① Planen Sie die
Fläche mit einem
Fräser vorab.

SCNITTDATENEMPFEHLUNGEN

Werkstoff	Rostfreier Stahl (austenitisch) ($\leq 180\text{HB}$)					Rostfreier Stahl (austenitisch) ($180-280\text{HB}$)				
	X5CrNi1810, X5CrNiMo17-12-2					X2CrNi1810, X2CrNiMo17-12-2				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)		Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)		Tischvorschub (mm/min)
3.2	80	7900	0.13	(0.08—0.18)	1025	60	5900	0.1	(0.05—0.15)	590
4.0	80	6300	0.15	(0.10—0.20)	945	60	4700	0.12	(0.08—0.18)	560
5.0	80	5000	0.15	(0.10—0.20)	750	60	3800	0.12	(0.08—0.18)	455
6.3	80	4000	0.17	(0.12—0.22)	680	60	3000	0.15	(0.1—0.2)	450
8.0	80	3100	0.19	(0.14—0.24)	585	60	2300	0.17	(0.12—0.22)	390
10.0	60	1900	0.2	(0.15—0.25)	380	50	1500	0.18	(0.13—0.23)	270
12.0	60	1500	0.21	(0.16—0.26)	315	50	1300	0.19	(0.14—0.24)	245
16.0	60	1100	0.22	(0.17—0.27)	240	50	900	0.2	(0.15—0.25)	180
20.0	60	900	0.23	(0.18—0.28)	205	50	700	0.21	(0.16—0.26)	145

Werkstoff	Duplex, rostfreier Stahl ($\leq 280\text{HB}$)					Rostfreie Stähle, austenitisch und martensitisch ($\leq 200\text{HB}$)				
	X3CrNiMoN27-5-2					X10Cr13, X6Cr17				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)		Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)		Tischvorschub (mm/min)
3.2	50	4900	0.1	(0.05—0.15)	490	80	7900	0.13	(0.08—0.18)	1025
4.0	50	3900	0.12	(0.08—0.18)	465	80	6300	0.15	(0.10—0.20)	945
5.0	50	3100	0.12	(0.08—0.18)	370	80	5000	0.15	(0.10—0.20)	750
6.3	50	2500	0.15	(0.1—0.2)	375	80	4000	0.17	(0.12—0.22)	680
8.0	50	1900	0.17	(0.12—0.22)	320	80	3100	0.19	(0.14—0.24)	585
10.0	40	1200	0.18	(0.13—0.23)	215	60	1900	0.2	(0.15—0.25)	380
12.0	40	1000	0.19	(0.14—0.24)	190	60	1500	0.21	(0.16—0.26)	315
16.0	40	700	0.2	(0.15—0.25)	140	60	1100	0.22	(0.17—0.27)	240
20.0	40	600	0.21	(0.16—0.26)	125	60	900	0.23	(0.18—0.28)	205

Werkstoff	Rostfreie Stähle, austenitisch und martensitisch ($>200\text{HB}$)					Gehärtete rostfreie PH-Stähle ($<450\text{HB}$)				
	X20CrNi17-2, X30Cr13					X5CrNiCuNb164, X7CrNiAl177, 17-4PH, 17-7PH				
Bohrer Durchm. DC (mm)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)		Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min^{-1})	Vorschub (min.—max.) (mm/U.)		Tischvorschub (mm/min)
3.2	60	5900	0.1	(0.05—0.15)	590	50	4900	0.1	(0.05—0.15)	490
4.0	60	4700	0.12	(0.08—0.18)	560	50	3900	0.12	(0.08—0.18)	465
5.0	60	3800	0.12	(0.08—0.18)	455	50	3100	0.12	(0.08—0.18)	370
6.3	60	3000	0.15	(0.1—0.2)	450	50	2500	0.15	(0.1—0.2)	375
8.0	60	2300	0.17	(0.12—0.22)	390	50	1900	0.17	(0.12—0.22)	320
10.0	50	1500	0.18	(0.13—0.23)	270	40	1200	0.18	(0.13—0.23)	215
12.0	50	1300	0.19	(0.14—0.24)	245	40	1000	0.19	(0.14—0.24)	190
16.0	50	900	0.2	(0.15—0.25)	180	40	700	0.2	(0.15—0.25)	140
20.0	50	700	0.21	(0.16—0.26)	145	40	600	0.21	(0.16—0.26)	125

(Bemerkung 1) Für stabiles Bohren empfehlen wir die Zugabe von Kühlmittel unter hohem Druck.

(Bemerkung 2) Als Kühlmittel empfehlen wir Emulsion.

(Bemerkung 3) Bei Einsatz von nicht wasserlöslichem Kühlmittel empfehlen wir die Drehzahl um 10—20% zu reduzieren.

WERKSTOFFVERGLEICHSTABELLE FÜR ROSTFREIE STÄHLE

Werkstoff	No	Deutschland		USA	Japan
		W-no.	DIN	AISI/SAE	JIS
Rostfreie Stähle austenitisch und martensitisch	1	1.4005	X12CrS3	416	SUS416
		1.4006	X10Cr13	410	SUS410
		1.4016	X6Cr17	430	SUS430
		1.4113	X6CrMo17	434	SUS434
		1.4510	X6CrTi17	430Ti	SUS430LX
		1.4512	X6CrTi12	409	
	2	1.4021	X20Cr13	420	SUS420J1
		1.4057	X20CrNi17-2	431	SUS431
		1.4028	X30Cr13	420	SUS420J2
		1.4125	X10CrMo17	440C	SUS440C
PH Rostfreier Stahl	3	1.4542	X5CrNiCuNb16 4	630 (17-4PH)	SUS630
		1.4545		S15500 (15-5PH)	
		1.4568	X7CrNiAl17 7	631 (17-7PH)	SUS631
Rostfreier Stahl (austenitisch)	4	1.4301	X5CrNi18 10	304	SUS304
		1.4303	X5CrNi8-12	305	SUS305
		1.4305	X12CrNiS18-9	303	SUS303
		1.4307	X2CrNi19-11	304L	SUS304L
		1.4401	X5CrNiMo17 12 2	316	SUS316
		1.4311	X2CrNiN18 10	304LN	SUS304LN
	5	1.4404	X2CrNiMo17 12 2	316L	SUS316L
		1.4406	X2CrNiMoN17 12 2	316LN	SUS316LN
		1.4435	X2CrNiMo18 14 3		SUS316L
		1.4438	X2CrNiMo18 15 4	317L	SUS317L
		1.4529	X1NiCrMoCuN25 20 7	N08926	
		1.4541	X6CrNiTi18-10	321	SUS321
		1.4550	X6CrNiNb18-10	347	SUS347
		1.4571	X6CrNiMoTi17 12 2	316Ti	SUS316Ti
Duplexstahl	6	1.4362	X2CrNiN23 4		
		1.4410	X2CrNiMoN25 7 4	S32750	SCS14A
		1.4460	X3CrNiMoN27 5 2	329	SUS329J1
		1.4462	X2CrNiMoN22 5 3	S31803	SUS329J3L

BOHREN (VOLLHARTMETALL)

MNS

P

M

K

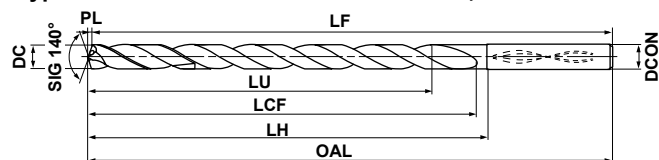
N

S

H



● **Typ 1** MNS---DIN-C, MNS-C, MNS---LB, MNS---DB (Zylind. Schaft)



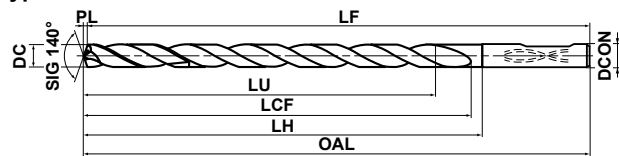
(Bemerkung) MNS Bohrer eignen sich für die Verwendung mit Schrumpfaufnahmen.



	DC=3	3<DC≤6	6<DC≤10	10<DC≤18	18<DC≤20
DIN-Typ	+0.016 +0.004	+0.016 +0.004	+0.021 +0.006	+0.025 +0.007	+0.029 +0.008
Andere	0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.013
h6	0 -0.006	0 -0.008	0 -0.009	0 -0.011	0 -0.013

● Bohrer mit einem Durchmesser von 4.5 mm oder weniger sind mit 2 Kühlmittelbohrungen versehen.

● **Typ 2** MNS---S/L-DIN (Schaft mit Whistle Notch)



Interne Kühlung

DC	Bohrtiefe (mm)	Bohrtiefe (l/d)	Lager	Bestellbezeichnung	Abmessungen (mm)						Typ	
			TF15		LU	LCF	LH	OAL	LF	PL		DCON
3.0	3	□		MNS0300S-DIN	9	20	26	62	61.5	0.5	6	2
	3	□		MNS0300S-DIN-C	9	20	26	62	61.5	0.5	6	1
	5	□		MNS0300L-DIN	15	28	30	66	65.5	0.5	6	2
	5	●		MNS0300L-DIN-C	15	28	30	66	65.5	0.5	6	1
	8	□		MNS0300-L8C	24	34	38	74	73.5	0.5	6	1
	10	□		MNS0300-L10C	30	40	44	80	79.5	0.5	6	1
	12	●		MNS0300-L12C	36	46	50	86	85.5	0.5	6	1
	15	□		MNS0300-L15C	45	55	59	95	94.5	0.5	6	1
	20	●		MNS0300-L20C	60	70	74	110	109.5	0.5	6	1
	25	□		MNS0300-L25C	75	85	89	125	124.5	0.5	6	1
	30	●		MNS0300-L30C	90	100	104	140	139.5	0.5	6	1
	5	★		MNS0300LB	15.0	33.5	33.5	81.5	81.0	0.5	3	1
10	★		MNS0300X10DB	30.0	39.5	42.5	90.5	90.0	0.5	3	1	
20	★		MNS0300X20DB	60.0	69.5	72.5	120.5	120.0	0.5	3	1	
30	★		MNS0300X30DB	90.0	99.5	102.5	150.5	150.0	0.5	3	1	
3.1	3	□		MNS0310S-DIN	9	20	26	62	61.4	0.6	6	2
	3	□		MNS0310S-DIN-C	9	20	26	62	61.4	0.6	6	1
	5	□		MNS0310L-DIN	16	28	30	66	65.4	0.6	6	2
	5	□		MNS0310L-DIN-C	16	28	30	66	65.4	0.6	6	1
	8	□		MNS0310-L8C	25	40	44	80	79.4	0.6	6	1
	10	□		MNS0310-L10C	31	47	51	87	86.4	0.6	6	1
	12	□		MNS0310-L12C	37	54	58	94	93.4	0.6	6	1
	15	□		MNS0310-L15C	47	64	68	104	103.4	0.6	6	1
	20	□		MNS0310-L20C	62	82	86	122	121.4	0.6	6	1
	25	□		MNS0310-L25C	78	99	103	139	138.4	0.6	6	1
	30	□		MNS0310-L30C	93	117	121	157	156.4	0.6	6	1
	5	★		MNS0310LB	15.5	39.6	39.6	87.6	87.0	0.6	4	1
10	□		MNS0310X10DB	31.0	46.6	49.6	97.6	97.0	0.6	4	1	
20	□		MNS0310X20DB	62.0	81.6	84.6	132.6	132.0	0.6	4	1	
30	□		MNS0310X30DB	93.0	116.6	119.6	167.6	167.0	0.6	4	1	
3.2	3	□		MNS0320S-DIN	10	20	26	62	61.4	0.6	6	2
	3	□		MNS0320S-DIN-C	10	20	26	62	61.4	0.6	6	1
	5	□		MNS0320L-DIN	16	28	30	66	65.4	0.6	6	2
	5	●		MNS0320L-DIN-C	16	28	30	66	65.4	0.6	6	1
	8	□		MNS0320-L8C	26	40	44	80	79.4	0.6	6	1
	10	□		MNS0320-L10C	32	47	51	87	86.4	0.6	6	1
	12	●		MNS0320-L12C	38	54	58	94	93.4	0.6	6	1
	15	□		MNS0320-L15C	48	64	68	104	103.4	0.6	6	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung. (Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
3.5	3	□	MNS0350S-DIN	11	20	26	62	61.4	0.6	6	2
	3	□	MNS0350S-DIN-C	11	20	26	62	61.4	0.6	6	1
	5	□	MNS0350L-DIN	18	28	30	66	65.4	0.6	6	2
	5	●	MNS0350L-DIN-C	18	28	30	66	65.4	0.6	6	1
	8	□	MNS0350-L8C	28	40	44	80	79.4	0.6	6	1
	10	□	MNS0350-L10C	35	47	51	87	86.4	0.6	6	1
	12	●	MNS0350-L12C	42	54	58	94	93.4	0.6	6	1
	15	□	MNS0350-L15C	53	64	68	104	103.4	0.6	6	1
	20	●	MNS0350-L20C	70	82	86	122	121.4	0.6	6	1
	25	□	MNS0350-L25C	88	99	103	139	138.4	0.6	6	1
	30	●	MNS0350-L30C	105	117	121	157	156.4	0.6	6	1
	5	★	MNS0350LB	17.5	39.6	39.6	87.6	87.0	0.6	4	1
	10	□	MNS0350X10DB	35.0	46.6	49.6	97.6	97.0	0.6	4	1
	20	□	MNS0350X20DB	70.0	81.6	84.6	132.6	132.0	0.6	4	1
	30	□	MNS0350X30DB	105.0	116.6	119.6	167.6	167.0	0.6	4	1
3.6	3	□	MNS0360S-DIN	11	20	26	62	61.3	0.7	6	2
	3	□	MNS0360S-DIN-C	11	20	26	62	61.3	0.7	6	1
	5	□	MNS0360L-DIN	18	28	30	66	65.3	0.7	6	2
	5	□	MNS0360L-DIN-C	18	28	30	66	65.3	0.7	6	1
	8	□	MNS0360-L8C	29	45	49	85	84.3	0.7	6	1
	10	□	MNS0360-L10C	36	53	57	93	92.3	0.7	6	1
	12	□	MNS0360-L12C	43	61	65	101	100.3	0.7	6	1
	15	□	MNS0360-L15C	54	73	77	113	112.3	0.7	6	1
	20	□	MNS0360-L20C	72	93	97	133	132.3	0.7	6	1
	25	□	MNS0360-L25C	90	113	117	153	152.3	0.7	6	1
	30	□	MNS0360-L30C	108	133	137	173	172.3	0.7	6	1
	5	★	MNS0360LB	18.0	44.7	44.7	92.7	92.0	0.7	4	1
	10	★	MNS0360X10DB	36.0	52.7	55.7	103.7	103.0	0.7	4	1
	20	★	MNS0360X20DB	72.0	92.7	95.7	143.7	143.0	0.7	4	1
	30	★	MNS0360X30DB	108.0	132.7	135.7	183.7	183.0	0.7	4	1
3.7	3	□	MNS0370S-DIN	11	20	26	62	61.3	0.7	6	2
	3	□	MNS0370S-DIN-C	11	20	26	62	61.3	0.7	6	1
	5	□	MNS0370L-DIN	19	28	30	66	65.3	0.7	6	2
	5	□	MNS0370L-DIN-C	19	28	30	66	65.3	0.7	6	1
	8	□	MNS0370-L8C	30	45	49	85	84.3	0.7	6	1
	10	□	MNS0370-L10C	37	53	57	93	92.3	0.7	6	1
	12	□	MNS0370-L12C	44	61	65	101	100.3	0.7	6	1
	15	□	MNS0370-L15C	56	73	77	113	112.3	0.7	6	1
	20	□	MNS0370-L20C	74	93	97	133	132.3	0.7	6	1
	25	□	MNS0370-L25C	93	113	117	153	152.3	0.7	6	1
	30	□	MNS0370-L30C	111	133	137	173	172.3	0.7	6	1
	5	★	MNS0370LB	18.5	44.7	44.7	92.7	92.0	0.7	4	1
	10	□	MNS0370X10DB	37.0	52.7	55.7	103.7	103.0	0.7	4	1
	20	□	MNS0370X20DB	74.0	92.7	95.7	143.7	143.0	0.7	4	1
	30	□	MNS0370X30DB	111.0	132.7	135.7	183.7	183.0	0.7	4	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
3.8	3	□	MNS0380S-DIN	11	24	30	66	65.3	0.7	6	2
	3	□	MNS0380S-DIN-C	11	24	30	66	65.3	0.7	6	1
	5	□	MNS0380L-DIN	19	36	38	74	73.3	0.7	6	2
	5	□	MNS0380L-DIN-C	19	36	38	74	73.3	0.7	6	1
	8	□	MNS0380-L8C	30	45	49	85	84.3	0.7	6	1
	10	□	MNS0380-L10C	38	53	57	93	92.3	0.7	6	1
	12	□	MNS0380-L12C	46	61	65	101	100.3	0.7	6	1
	15	□	MNS0380-L15C	57	73	77	113	112.3	0.7	6	1
	20	□	MNS0380-L20C	76	93	97	133	132.3	0.7	6	1
	25	□	MNS0380-L25C	95	113	117	153	152.3	0.7	6	1
	30	□	MNS0380-L30C	114	133	137	173	172.3	0.7	6	1
	5	★	MNS0380LB	19.0	44.7	44.7	92.7	92.0	0.7	4	1
	10	□	MNS0380X10DB	38.0	52.7	55.7	103.7	103.0	0.7	4	1
	20	□	MNS0380X20DB	76.0	92.7	95.7	143.7	143.0	0.7	4	1
	30	□	MNS0380X30DB	114.0	132.7	135.7	183.7	183.0	0.7	4	1
3.9	3	□	MNS0390S-DIN	12	24	30	66	65.3	0.7	6	2
	3	□	MNS0390S-DIN-C	12	24	30	66	65.3	0.7	6	1
	5	□	MNS0390L-DIN	20	36	38	74	73.3	0.7	6	2
	5	□	MNS0390L-DIN-C	20	36	38	74	73.3	0.7	6	1
	8	□	MNS0390-L8C	31	45	49	85	84.3	0.7	6	1
	10	□	MNS0390-L10C	39	53	57	93	92.3	0.7	6	1
	12	□	MNS0390-L12C	47	61	65	101	100.3	0.7	6	1
	15	□	MNS0390-L15C	59	73	77	113	112.3	0.7	6	1
	20	□	MNS0390-L20C	78	93	97	133	132.3	0.7	6	1
	25	□	MNS0390-L25C	98	113	117	153	152.3	0.7	6	1
	30	□	MNS0390-L30C	117	133	137	173	172.3	0.7	6	1
	5	★	MNS0390LB	19.5	44.7	44.7	92.7	92.0	0.7	4	1
	10	★	MNS0390X10DB	39.0	52.7	55.7	103.7	103.0	0.7	4	1
	20	★	MNS0390X20DB	78.0	92.7	95.7	143.7	143.0	0.7	4	1
	30	★	MNS0390X30DB	117.0	132.7	135.7	183.7	183.0	0.7	4	1
4.0	3	□	MNS0400S-DIN	12	24	30	66	65.3	0.7	6	2
	3	□	MNS0400S-DIN-C	12	24	30	66	65.3	0.7	6	1
	5	□	MNS0400L-DIN	20	36	38	74	73.3	0.7	6	2
	5	●	MNS0400L-DIN-C	20	36	38	74	73.3	0.7	6	1
	8	□	MNS0400-L8C	32	45	49	85	84.3	0.7	6	1
	10	□	MNS0400-L10C	40	53	57	93	92.3	0.7	6	1
	12	●	MNS0400-L12C	48	61	65	101	100.3	0.7	6	1
	15	□	MNS0400-L15C	60	73	77	113	112.3	0.7	6	1
	20	●	MNS0400-L20C	80	93	97	133	132.3	0.7	6	1
	25	●	MNS0400-L25C	100	113	117	153	152.3	0.7	6	1
	30	●	MNS0400-L30C	120	133	137	173	172.3	0.7	6	1
	5	★	MNS0400LB	20.0	44.7	44.7	92.7	92.0	0.7	4	1
	10	★	MNS0400X10DB	40.0	52.7	55.7	103.7	103.0	0.7	4	1
	20	★	MNS0400X20DB	80.0	92.7	95.7	143.7	143.0	0.7	4	1
	30	★	MNS0400X30DB	120.0	132.7	135.7	183.7	183.0	0.7	4	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
4.1	3	□	MNS0410S-DIN	12	24	30	66	65.3	0.7	6	2
	3	□	MNS0410S-DIN-C	12	24	30	66	65.3	0.7	6	1
	5	□	MNS0410L-DIN	21	36	38	74	73.3	0.7	6	2
	5	□	MNS0410L-DIN-C	21	36	38	74	73.3	0.7	6	1
	8	□	MNS0410-L8C	33	51	55	91	90.3	0.7	6	1
	10	□	MNS0410-L10C	41	60	64	100	99.3	0.7	6	1
	12	□	MNS0410-L12C	49	69	73	109	108.3	0.7	6	1
	15	□	MNS0410-L15C	62	82	86	122	121.3	0.7	6	1
	20	□	MNS0410-L20C	82	105	109	145	144.3	0.7	6	1
	25	□	MNS0410-L25C	103	127	131	167	166.3	0.7	6	1
	30	□	MNS0410-L30C	123	150	154	190	189.3	0.7	6	1
	5	★	MNS0410LB	20.5	50.7	50.7	100.7	100.0	0.7	5	1
	10	□	MNS0410X10DB	41.0	59.7	62.7	112.7	112.0	0.7	5	1
	20	□	MNS0410X20DB	82.0	104.7	107.7	157.7	157.0	0.7	5	1
	30	□	MNS0410X30DB	123.0	149.7	152.7	202.7	202.0	0.7	5	1
4.2	3	□	MNS0420S-DIN	13	24	30	66	65.2	0.8	6	2
	3	□	MNS0420S-DIN-C	13	24	30	66	65.2	0.8	6	1
	5	□	MNS0420L-DIN	21	36	38	74	73.2	0.8	6	2
	5	●	MNS0420L-DIN-C	21	36	38	74	73.2	0.8	6	1
	8	□	MNS0420-L8C	34	51	55	91	90.2	0.8	6	1
	10	□	MNS0420-L10C	42	60	64	100	99.2	0.8	6	1
	12	●	MNS0420-L12C	50	69	73	109	108.2	0.8	6	1
	15	□	MNS0420-L15C	63	82	86	122	121.2	0.8	6	1
	20	●	MNS0420-L20C	84	105	109	145	144.2	0.8	6	1
	25	□	MNS0420-L25C	105	127	131	167	166.2	0.8	6	1
	30	●	MNS0420-L30C	126	150	154	190	189.2	0.8	6	1
	5	★	MNS0420LB	21.0	50.8	50.8	100.8	100.0	0.8	5	1
	10	□	MNS0420X10DB	42.0	59.8	62.8	112.8	112.0	0.8	5	1
	20	□	MNS0420X20DB	84.0	104.8	107.8	157.8	157.0	0.8	5	1
	30	□	MNS0420X30DB	126.0	149.8	152.8	202.8	202.0	0.8	5	1
4.3	3	□	MNS0430S-DIN	13	24	30	66	65.2	0.8	6	2
	3	□	MNS0430S-DIN-C	13	24	30	66	65.2	0.8	6	1
	5	□	MNS0430L-DIN	22	36	38	74	73.2	0.8	6	2
	5	□	MNS0430L-DIN-C	22	36	38	74	73.2	0.8	6	1
	8	□	MNS0430-L8C	34	51	55	91	90.2	0.8	6	1
	10	□	MNS0430-L10C	43	60	64	100	99.2	0.8	6	1
	12	□	MNS0430-L12C	52	69	73	109	108.2	0.8	6	1
	15	□	MNS0430-L15C	65	82	86	122	121.2	0.8	6	1
	20	□	MNS0430-L20C	86	105	109	145	144.2	0.8	6	1
	25	□	MNS0430-L25C	108	127	131	167	166.2	0.8	6	1
	30	□	MNS0430-L30C	129	150	154	190	189.2	0.8	6	1
	5	★	MNS0430LB	21.5	50.8	50.8	100.8	100.0	0.8	5	1
	10	□	MNS0430X10DB	43.0	59.8	62.8	112.8	112.0	0.8	5	1
	20	□	MNS0430X20DB	86.0	104.8	107.8	157.8	157.0	0.8	5	1
	30	□	MNS0430X30DB	129.0	149.8	152.8	202.8	202.0	0.8	5	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
4.4	3	□	MNS0440S-DIN	13	24	30	66	65.2	0.8	6	2
	3	□	MNS0440S-DIN-C	13	24	30	66	65.2	0.8	6	1
	5	□	MNS0440L-DIN	22	36	38	74	73.2	0.8	6	2
	5	□	MNS0440L-DIN-C	22	36	38	74	73.2	0.8	6	1
	8	□	MNS0440-L8C	35	51	55	91	90.2	0.8	6	1
	10	□	MNS0440-L10C	44	60	64	100	99.2	0.8	6	1
	12	□	MNS0440-L12C	53	69	73	109	108.2	0.8	6	1
	15	□	MNS0440-L15C	66	82	86	122	121.2	0.8	6	1
	20	□	MNS0440-L20C	88	105	109	145	144.2	0.8	6	1
	25	□	MNS0440-L25C	110	127	131	167	166.2	0.8	6	1
	30	□	MNS0440-L30C	132	150	154	190	189.2	0.8	6	1
	5	★	MNS0440LB	22.0	50.8	50.8	100.8	100.0	0.8	5	1
	10	□	MNS0440X10DB	44.0	59.8	62.8	112.8	112.0	0.8	5	1
	20	□	MNS0440X20DB	88.0	104.8	107.8	157.8	157.0	0.8	5	1
	30	□	MNS0440X30DB	132.0	149.8	152.8	202.8	202.0	0.8	5	1
4.5	3	□	MNS0450S-DIN	14	24	30	66	65.2	0.8	6	2
	3	□	MNS0450S-DIN-C	14	24	30	66	65.2	0.8	6	1
	5	□	MNS0450L-DIN	23	36	38	74	73.2	0.8	6	2
	5	●	MNS0450L-DIN-C	23	36	38	74	73.2	0.8	6	1
	8	□	MNS0450-L8C	36	51	55	91	90.2	0.8	6	1
	10	□	MNS0450-L10C	45	60	64	100	99.2	0.8	6	1
	12	●	MNS0450-L12C	54	69	73	109	108.2	0.8	6	1
	15	□	MNS0450-L15C	68	82	86	122	121.2	0.8	6	1
	20	●	MNS0450-L20C	90	105	109	145	144.2	0.8	6	1
	25	□	MNS0450-L25C	113	127	131	167	166.2	0.8	6	1
	30	●	MNS0450-L30C	135	150	154	190	189.2	0.8	6	1
	5	★	MNS0450LB	22.5	50.8	50.8	100.8	100.0	0.8	5	1
	10	□	MNS0450X10DB	45.0	59.8	62.8	112.8	112.0	0.8	5	1
	20	□	MNS0450X20DB	90.0	104.8	107.8	157.8	157.0	0.8	5	1
	30	□	MNS0450X30DB	135.0	149.8	152.8	202.8	202.0	0.8	5	1

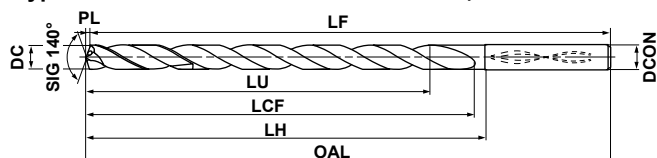
(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.



● Typ 1 MNS----DIN-C, MNS-C, MNS----LB, MNS----DB (Zylind. Schaft)

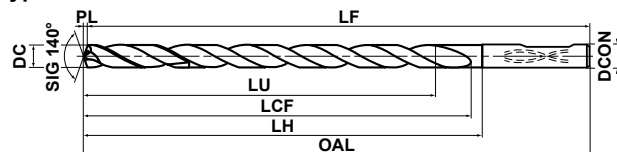


Interne Kühlung

DC (mm)	Bohrtiefe (l/d)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
4.6	3	□	MNS0460S-DIN	14	24	30	66	65.2	0.8	6	2
	3	□	MNS0460S-DIN-C	14	24	30	66	65.2	0.8	6	1
	5	□	MNS0460L-DIN	23	36	38	74	73.2	0.8	6	2
	5	□	MNS0460L-DIN-C	23	36	38	74	73.2	0.8	6	1
	8	□	MNS0460-L8C	37	55	60	96	95.2	0.8	6	1
	10	□	MNS0460-L10C	46	66	70	106	105.2	0.8	6	1
	12	□	MNS0460-L12C	55	76	80	116	115.2	0.8	6	1
	15	□	MNS0460-L15C	69	91	95	131	130.2	0.8	6	1
	20	□	MNS0460-L20C	92	116	120	156	155.2	0.8	6	1
	25	□	MNS0460-L25C	115	141	145	181	180.2	0.8	6	1
	30	□	MNS0460-L30C	138	166	170	206	205.2	0.8	6	1
	5	★	MNS0460LB	23.0	55.8	55.8	105.8	105.0	0.8	5	1
4.65	10	□	MNS0460X10DB	46.0	65.8	68.8	118.8	118.0	0.8	5	1
	20	□	MNS0460X20DB	92.0	115.8	118.8	168.8	168.0	0.8	5	1
	30	□	MNS0460X30DB	138.0	165.8	168.8	218.8	218.0	0.8	5	1
	30	□	MNS0460X30DB	138.0	165.8	168.8	218.8	218.0	0.8	5	1
4.7	3	□	MNS0470S-DIN	14	24	30	66	65.1	0.9	6	2
	3	□	MNS0470S-DIN-C	14	24	30	66	65.1	0.9	6	1
	5	□	MNS0470L-DIN	24	36	38	74	73.1	0.9	6	2
	5	□	MNS0470L-DIN-C	24	36	38	74	73.1	0.9	6	1
4.7	8	□	MNS0470-L8C	38	55	60	96	95.1	0.9	6	1
	10	□	MNS0470-L10C	47	66	70	106	105.1	0.9	6	1
	12	□	MNS0470-L12C	56	76	80	116	115.1	0.9	6	1
	15	□	MNS0470-L15C	71	91	95	131	130.1	0.9	6	1
	20	□	MNS0470-L20C	94	116	120	156	155.1	0.9	6	1
	25	□	MNS0470-L25C	118	141	145	181	180.1	0.9	6	1
	30	□	MNS0470-L30C	141	166	170	206	205.1	0.9	6	1
	5	★	MNS0470LB	23.5	55.9	55.9	105.9	105.0	0.9	5	1
	10	□	MNS0470X10DB	47.0	65.9	68.9	118.9	118.0	0.9	5	1
	20	□	MNS0470X20DB	94.0	115.9	118.9	168.9	168.0	0.9	5	1
	30	□	MNS0470X30DB	141.0	165.9	168.9	218.9	218.0	0.9	5	1
	30	□	MNS0470X30DB	141.0	165.9	168.9	218.9	218.0	0.9	5	1

	DC=3	3<DC≤6	6<DC≤10	10<DC≤18	18<DC≤20
DIN-Typ	+0.016 +0.004	+0.016 +0.004	+0.021 +0.006	+0.025 +0.007	+0.029 +0.008
Andere	0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.013
h6	0 -0.006	0 -0.008	0 -0.009	0 -0.011	0 -0.013

● Typ 2 MNS----S/L-DIN (Schaft mit Whistle Notch)



Interne Kühlung

DC (mm)	Bohrtiefe (l/d)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
4.8	3	□	MNS0480S-DIN	14	28	30	66	65.1	0.9	6	2
	3	□	MNS0480S-DIN-C	14	28	30	66	65.1	0.9	6	1
	5	□	MNS0480L-DIN	24	44	46	82	81.1	0.9	6	2
	5	□	MNS0480L-DIN-C	24	44	46	82	81.1	0.9	6	1
	8	□	MNS0480-L8C	38	55	60	96	95.1	0.9	6	1
	10	□	MNS0480-L10C	48	66	70	106	105.1	0.9	6	1
	12	□	MNS0480-L12C	58	76	80	116	115.1	0.9	6	1
	15	□	MNS0480-L15C	72	91	95	131	130.1	0.9	6	1
	20	□	MNS0480-L20C	96	116	120	156	155.1	0.9	6	1
	25	□	MNS0480-L25C	120	141	145	181	180.1	0.9	6	1
	30	□	MNS0480-L30C	144	166	170	206	205.1	0.9	6	1
	5	★	MNS0480LB	24.0	55.9	55.9	105.9	105.0	0.9	5	1
4.8	10	□	MNS0480X10DB	48.0	65.9	68.9	118.9	118.0	0.9	5	1
	20	□	MNS0480X20DB	96.0	115.9	118.9	168.9	168.0	0.9	5	1
	30	□	MNS0480X30DB	144.0	165.9	168.9	218.9	218.0	0.9	5	1
	30	□	MNS0480X30DB	144.0	165.9	168.9	218.9	218.0	0.9	5	1
4.9	3	□	MNS0490S-DIN	15	28	30	66	65.1	0.9	6	2
	3	□	MNS0490S-DIN-C	15	28	30	66	65.1	0.9	6	1
	5	□	MNS0490L-DIN	25	44	46	82	81.1	0.9	6	2
	5	□	MNS0490L-DIN-C	25	44	46	82	81.1	0.9	6	1
	8	□	MNS0490-L8C	39	55	60	96	95.1	0.9	6	1
	10	□	MNS0490-L10C	49	66	70	106	105.1	0.9	6	1
	12	□	MNS0490-L12C	59	76	80	116	115.1	0.9	6	1
	15	□	MNS0490-L15C	74	91	95	131	130.1	0.9	6	1
	20	□	MNS0490-L20C	98	116	120	156	155.1	0.9	6	1
	25	□	MNS0490-L25C	123	141	145	181	180.1	0.9	6	1
	30	□	MNS0490-L30C	147	166	170	206	205.1	0.9	6	1
	5	★	MNS0490LB	24.5	55.9	55.9	105.9	105.0	0.9	5	1
4.9	10	★	MNS0490X10DB	49.0	65.9	68.9	118.9	118.0	0.9	5	1
	20	★	MNS0490X20DB	98.0	115.9	118.9	168.9	168.0	0.9	5	1
	30	★	MNS0490X30DB	147.0	165.9	168.9	218.9	218.0	0.9	5	1
	30	★	MNS0490X30DB	147.0	165.9	168.9	218.9	218.0	0.9	5	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
5.0	3	□	MNS0500S-DIN	15	28	30	66	65.1	0.9	6	2
	3	□	MNS0500S-DIN-C	15	28	30	66	65.1	0.9	6	1
	5	□	MNS0500L-DIN	25	44	46	82	81.1	0.9	6	2
	5	●	MNS0500L-DIN-C	25	44	46	82	81.1	0.9	6	1
	8	□	MNS0500-L8C	40	55	60	96	95.1	0.9	6	1
	10	□	MNS0500-L10C	50	66	70	106	105.1	0.9	6	1
	12	●	MNS0500-L12C	60	76	80	116	115.1	0.9	6	1
	15	□	MNS0500-L15C	75	91	95	131	130.1	0.9	6	1
	20	●	MNS0500-L20C	100	116	120	156	155.1	0.9	6	1
	25	□	MNS0500-L25C	125	141	145	181	180.1	0.9	6	1
	30	●	MNS0500-L30C	150	166	170	206	205.1	0.9	6	1
	5	★	MNS0500LB	25.0	44.9	44.9	100.9	100.0	0.9	6	1
	10	★	MNS0500X10DB	50.0	65.9	68.9	118.9	118.0	0.9	5	1
	20	★	MNS0500X20DB	100.0	115.9	118.9	168.9	168.0	0.9	5	1
	30	★	MNS0500X30DB	150.0	165.9	168.9	218.9	218.0	0.9	5	1
5.1	3	□	MNS0510S-DIN	15	28	30	66	65.1	0.9	6	2
	3	□	MNS0510S-DIN-C	15	28	30	66	65.1	0.9	6	1
	5	□	MNS0510L-DIN	26	44	46	82	81.1	0.9	6	2
	5	●	MNS0510L-DIN-C	26	44	46	82	81.1	0.9	6	1
	8	□	MNS0510-L8C	41	62	66	102	101.1	0.9	6	1
	10	□	MNS0510-L10C	51	73	77	113	112.1	0.9	6	1
	12	□	MNS0510-L12C	61	84	88	124	123.1	0.9	6	1
	15	□	MNS0510-L15C	77	100	104	140	139.1	0.9	6	1
	20	□	MNS0510-L20C	102	128	132	168	167.1	0.9	6	1
	25	□	MNS0510-L25C	128	155	159	195	194.1	0.9	6	1
	30	□	MNS0510-L30C	153	183	187	223	222.1	0.9	6	1
	5	★	MNS0510LB	25.5	44.9	44.9	100.9	100.0	0.9	6	1
	10	★	MNS0510X10DB	51.0	72.9	75.9	127.9	127.0	0.9	6	1
	20	★	MNS0510X20DB	102.0	127.9	130.9	182.9	182.0	0.9	6	1
	30	★	MNS0510X30DB	153.0	182.9	185.9	237.9	237.0	0.9	6	1
5.2	3	□	MNS0520S-DIN	16	28	30	66	65.1	0.9	6	2
	3	□	MNS0520S-DIN-C	16	28	30	66	65.1	0.9	6	1
	5	□	MNS0520L-DIN	26	44	46	82	81.1	0.9	6	2
	5	□	MNS0520L-DIN-C	26	44	46	82	81.1	0.9	6	1
	8	□	MNS0520-L8C	42	62	66	102	101.1	0.9	6	1
	10	□	MNS0520-L10C	52	73	77	113	112.1	0.9	6	1
	12	□	MNS0520-L12C	62	84	88	124	123.1	0.9	6	1
	15	□	MNS0520-L15C	78	100	104	140	139.1	0.9	6	1
	20	□	MNS0520-L20C	104	128	132	168	167.1	0.9	6	1
	25	□	MNS0520-L25C	130	155	159	195	194.1	0.9	6	1
	30	□	MNS0520-L30C	156	183	187	223	222.1	0.9	6	1
	5	★	MNS0520LB	26.0	44.9	44.9	100.9	100.0	0.9	6	1
	10	□	MNS0520X10DB	52.0	72.9	75.9	127.9	127.0	0.9	6	1
	20	□	MNS0520X20DB	104.0	127.9	130.9	182.9	182.0	0.9	6	1
	30	□	MNS0520X30DB	156.0	182.9	185.9	237.9	237.0	0.9	6	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
5.3	3	□	MNS0530S-DIN	16	28	30	66	65.0	1.0	6	2
	3	□	MNS0530S-DIN-C	16	28	30	66	65.0	1.0	6	1
	5	□	MNS0530L-DIN	27	44	46	82	81.0	1.0	6	2
	5	□	MNS0530L-DIN-C	27	44	46	82	81.0	1.0	6	1
	8	□	MNS0530-L8C	42	62	66	102	101.0	1.0	6	1
	10	□	MNS0530-L10C	53	73	77	113	112.0	1.0	6	1
	12	□	MNS0530-L12C	64	84	88	124	123.0	1.0	6	1
	15	□	MNS0530-L15C	80	100	104	140	139.0	1.0	6	1
	20	□	MNS0530-L20C	106	128	132	168	167.0	1.0	6	1
	25	□	MNS0530-L25C	133	155	159	195	194.0	1.0	6	1
	30	□	MNS0530-L30C	159	183	187	223	222.0	1.0	6	1
	5	★	MNS0530LB	26.5	45.0	45.0	101.0	100.0	1.0	6	1
	10	□	MNS0530X10DB	53.0	73.0	76.0	128.0	127.0	1.0	6	1
	20	□	MNS0530X20DB	106.0	128.0	131.0	183.0	182.0	1.0	6	1
	30	□	MNS0530X30DB	159.0	183.0	186.0	238.0	237.0	1.0	6	1
5.4	3	□	MNS0540S-DIN	16	28	30	66	65.0	1.0	6	2
	3	□	MNS0540S-DIN-C	16	28	30	66	65.0	1.0	6	1
	5	□	MNS0540L-DIN	27	44	46	82	81.0	1.0	6	2
	5	□	MNS0540L-DIN-C	27	44	46	82	81.0	1.0	6	1
	8	□	MNS0540-L8C	43	62	66	102	101.0	1.0	6	1
	10	□	MNS0540-L10C	54	73	77	113	112.0	1.0	6	1
	12	□	MNS0540-L12C	65	84	88	124	123.0	1.0	6	1
	15	□	MNS0540-L15C	81	100	104	140	139.0	1.0	6	1
	20	□	MNS0540-L20C	108	128	132	168	167.0	1.0	6	1
	25	□	MNS0540-L25C	135	155	159	195	194.0	1.0	6	1
	30	□	MNS0540-L30C	162	183	187	223	222.0	1.0	6	1
	5	★	MNS0540LB	27.0	45.0	45.0	101.0	100.0	1.0	6	1
	10	□	MNS0540X10DB	54.0	73.0	76.0	128.0	127.0	1.0	6	1
	20	□	MNS0540X20DB	108.0	128.0	131.0	183.0	182.0	1.0	6	1
	30	□	MNS0540X30DB	162.0	183.0	186.0	238.0	237.0	1.0	6	1
5.5	3	□	MNS0550S-DIN	17	28	30	66	65.0	1.0	6	2
	3	□	MNS0550S-DIN-C	17	28	30	66	65.0	1.0	6	1
	5	□	MNS0550L-DIN	28	44	46	82	81.0	1.0	6	2
	5	●	MNS0550L-DIN-C	28	44	46	82	81.0	1.0	6	1
	8	□	MNS0550-L8C	44	62	66	102	101.0	1.0	6	1
	10	□	MNS0550-L10C	55	73	77	113	112.0	1.0	6	1
	12	●	MNS0550-L12C	66	84	88	124	123.0	1.0	6	1
	15	□	MNS0550-L15C	83	100	104	140	139.0	1.0	6	1
	20	●	MNS0550-L20C	110	128	132	168	167.0	1.0	6	1
	25	□	MNS0550-L25C	138	155	159	195	194.0	1.0	6	1
	30	●	MNS0550-L30C	165	183	187	223	222.0	1.0	6	1
	5	★	MNS0550LB	27.5	45.0	45.0	101.0	100.0	1.0	6	1
	10	★	MNS0550X10DB	55.0	73.0	76.0	128.0	127.0	1.0	6	1
	20	★	MNS0550X20DB	110.0	128.0	131.0	183.0	182.0	1.0	6	1
	30	★	MNS0550X30DB	165.0	183.0	186.0	238.0	237.0	1.0	6	1
5.55	3	□	MNS0555S-DIN	17	28	30	66	65.0	1.0	6	2
	3	□	MNS0555S-DIN-C	17	28	30	66	65.0	1.0	6	1
	5	□	MNS0555L-DIN	28	44	46	82	81.0	1.0	6	2
	5	●	MNS0555L-DIN-C	28	44	46	82	81.0	1.0	6	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
5.6	3	□	MNS0560S-DIN	17	28	30	66	65.0	1.0	6	2
	3	□	MNS0560S-DIN-C	17	28	30	66	65.0	1.0	6	1
	5	□	MNS0560L-DIN	28	44	46	82	81.0	1.0	6	2
	5	□	MNS0560L-DIN-C	28	44	46	82	81.0	1.0	6	1
	8	□	MNS0560-L8C	45	67	71	107	106.0	1.0	6	1
	10	□	MNS0560-L10C	56	79	83	119	118.0	1.0	6	1
	12	□	MNS0560-L12C	67	91	95	131	130.0	1.0	6	1
	15	□	MNS0560-L15C	84	109	113	149	148.0	1.0	6	1
	20	□	MNS0560-L20C	112	139	143	179	178.0	1.0	6	1
	25	□	MNS0560-L25C	140	169	173	209	208.0	1.0	6	1
	30	□	MNS0560-L30C	168	199	203	239	238.0	1.0	6	1
	5	★	MNS0560LB	28.0	49.0	49.0	101.0	100.0	1.0	6	1
	10	□	MNS0560X10DB	56.0	79.0	82.0	134.0	133.0	1.0	6	1
	20	□	MNS0560X20DB	112.0	139.0	142.0	194.0	193.0	1.0	6	1
	30	□	MNS0560X30DB	168.0	199.0	202.0	254.0	253.0	1.0	6	1
5.7	3	□	MNS0570S-DIN	17	28	30	66	65.0	1.0	6	2
	3	□	MNS0570S-DIN-C	17	28	30	66	65.0	1.0	6	1
	5	□	MNS0570L-DIN	29	44	46	82	81.0	1.0	6	2
	5	□	MNS0570L-DIN-C	29	44	46	82	81.0	1.0	6	1
	8	□	MNS0570-L8C	46	67	71	107	106.0	1.0	6	1
	10	□	MNS0570-L10C	57	79	83	119	118.0	1.0	6	1
	12	□	MNS0570-L12C	68	91	95	131	130.0	1.0	6	1
	15	□	MNS0570-L15C	86	109	113	149	148.0	1.0	6	1
	20	□	MNS0570-L20C	114	139	143	179	178.0	1.0	6	1
	25	□	MNS0570-L25C	143	169	173	209	208.0	1.0	6	1
	30	□	MNS0570-L30C	171	199	203	239	238.0	1.0	6	1
	5	★	MNS0570LB	28.5	49.0	49.0	101.0	100.0	1.0	6	1
	10	□	MNS0570X10DB	57.0	79.0	82.0	134.0	133.0	1.0	6	1
	20	□	MNS0570X20DB	114.0	139.0	142.0	194.0	193.0	1.0	6	1
	30	□	MNS0570X30DB	171.0	199.0	202.0	254.0	253.0	1.0	6	1
5.8	3	□	MNS0580S-DIN	17	28	30	66	64.9	1.1	6	2
	3	□	MNS0580S-DIN-C	17	28	30	66	64.9	1.1	6	1
	5	□	MNS0580L-DIN	29	44	46	82	80.9	1.1	6	2
	5	□	MNS0580L-DIN-C	29	44	46	82	80.9	1.1	6	1
	8	□	MNS0580-L8C	46	67	71	107	105.9	1.1	6	1
	10	□	MNS0580-L10C	58	79	83	119	117.9	1.1	6	1
	12	□	MNS0580-L12C	70	91	95	131	129.9	1.1	6	1
	15	□	MNS0580-L15C	87	109	113	149	147.9	1.1	6	1
	20	□	MNS0580-L20C	116	139	143	179	177.9	1.1	6	1
	25	□	MNS0580-L25C	145	169	173	209	207.9	1.1	6	1
	30	□	MNS0580-L30C	174	199	203	239	237.9	1.1	6	1
	5	★	MNS0580LB	29.0	49.1	49.1	101.1	100.0	1.1	6	1
	10	□	MNS0580X10DB	58.0	79.1	82.1	134.1	133.0	1.1	6	1
	20	□	MNS0580X20DB	116.0	139.1	142.1	194.1	193.0	1.1	6	1
	30	□	MNS0580X30DB	174.0	199.1	202.1	254.1	253.0	1.1	6	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
5.9	3	□	MNS0590S-DIN	18	28	30	66	64.9	1.1	6	2
	3	□	MNS0590S-DIN-C	18	28	30	66	64.9	1.1	6	1
	5	□	MNS0590L-DIN	30	44	46	82	80.9	1.1	6	2
	5	□	MNS0590L-DIN-C	30	44	46	82	80.9	1.1	6	1
	8	□	MNS0590-L8C	47	67	71	107	105.9	1.1	6	1
	10	□	MNS0590-L10C	59	79	83	119	117.9	1.1	6	1
	12	□	MNS0590-L12C	71	91	95	131	129.9	1.1	6	1
	15	□	MNS0590-L15C	89	109	113	149	147.9	1.1	6	1
	20	□	MNS0590-L20C	118	139	143	179	177.9	1.1	6	1
	25	□	MNS0590-L25C	148	169	173	209	207.9	1.1	6	1
	30	□	MNS0590-L30C	177	199	203	239	237.9	1.1	6	1
	5	★	MNS0590LB	29.5	49.1	49.1	101.1	100.0	1.1	6	1
	10	□	MNS0590X10DB	59.0	79.1	82.1	134.1	133.0	1.1	6	1
	20	□	MNS0590X20DB	118.0	139.1	142.1	194.1	193.0	1.1	6	1
	30	□	MNS0590X30DB	177.0	199.1	202.1	254.1	253.0	1.1	6	1
6.0	3	□	MNS0600S-DIN	18	28	30	66	64.9	1.1	6	2
	3	□	MNS0600S-DIN-C	18	28	30	66	64.9	1.1	6	1
	5	□	MNS0600L-DIN	30	44	46	82	80.9	1.1	6	2
	5	●	MNS0600L-DIN-C	30	44	46	82	80.9	1.1	6	1
	8	□	MNS0600-L8C	48	67	71	107	105.9	1.1	6	1
	10	□	MNS0600-L10C	60	79	83	119	117.9	1.1	6	1
	12	●	MNS0600-L12C	72	91	95	131	129.9	1.1	6	1
	15	□	MNS0600-L15C	90	109	113	149	147.9	1.1	6	1
	20	●	MNS0600-L20C	120	139	143	179	177.9	1.1	6	1
	25	□	MNS0600-L25C	150	169	173	209	207.9	1.1	6	1
	30	●	MNS0600-L30C	180	199	203	239	237.9	1.1	6	1
	5	★	MNS0600LB	30.0	49.1	49.1	101.1	100.0	1.1	6	1
	10	★	MNS0600X10DB	60.0	79.1	82.1	134.1	133.0	1.1	6	1
	20	★	MNS0600X20DB	120.0	139.1	142.1	194.1	193.0	1.1	6	1
	30	★	MNS0600X30DB	180.0	199.1	202.1	254.1	253.0	1.1	6	1
6.1	3	□	MNS0610S-DIN	18	34	43	79	77.9	1.1	8	2
	3	□	MNS0610S-DIN-C	18	34	43	79	77.9	1.1	8	1
	5	□	MNS0610L-DIN	31	53	55	91	89.9	1.1	8	2
	5	□	MNS0610L-DIN-C	31	53	55	91	89.9	1.1	8	1
	8	□	MNS0610-L8C	49	73	77	113	111.9	1.1	8	1
	10	□	MNS0610-L10C	61	86	90	126	124.9	1.1	8	1
	12	□	MNS0610-L12C	73	99	103	139	137.9	1.1	8	1
	15	□	MNS0610-L15C	92	118	122	158	156.9	1.1	8	1
	20	□	MNS0610-L20C	122	151	155	191	189.9	1.1	8	1
	25	□	MNS0610-L25C	153	183	187	223	221.9	1.1	8	1
	30	□	MNS0610-L30C	183	216	220	256	254.9	1.1	8	1
	5	★	MNS0610LB	30.5	53.1	53.1	110.1	109.0	1.1	7	1
	10	★	MNS0610X10DB	61.0	86.1	89.1	142.1	141.0	1.1	7	1
	20	★	MNS0610X20DB	122.0	151.1	154.1	207.1	206.0	1.1	7	1
	30	★	MNS0610X30DB	183.0	216.1	219.1	272.1	271.0	1.1	7	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
6.2	3	□	MNS0620S-DIN	19	34	43	79	77.9	1.1	8	2
	3	□	MNS0620S-DIN-C	19	34	43	79	77.9	1.1	8	1
	5	□	MNS0620L-DIN	31	53	55	91	89.9	1.1	8	2
	5	□	MNS0620L-DIN-C	31	53	55	91	89.9	1.1	8	1
	8	□	MNS0620-L8C	50	73	77	113	111.9	1.1	8	1
	10	□	MNS0620-L10C	62	86	90	126	124.9	1.1	8	1
	12	□	MNS0620-L12C	74	99	103	139	137.9	1.1	8	1
	15	□	MNS0620-L15C	93	118	122	158	156.9	1.1	8	1
	20	□	MNS0620-L20C	124	151	155	191	189.9	1.1	8	1
	25	□	MNS0620-L25C	155	183	187	223	221.9	1.1	8	1
	30	□	MNS0620-L30C	186	216	220	256	254.9	1.1	8	1
	5	★	MNS0620LB	31.0	53.1	53.1	110.1	109.0	1.1	7	1
	10	□	MNS0620X10DB	62.0	86.1	89.1	142.1	141.0	1.1	7	1
	20	□	MNS0620X20DB	124.0	151.1	154.1	207.1	206.0	1.1	7	1
	30	□	MNS0620X30DB	186.0	216.1	219.1	272.1	271.0	1.1	7	1
6.3	3	□	MNS0630S-DIN	19	34	43	79	77.9	1.1	8	2
	3	□	MNS0630S-DIN-C	19	34	43	79	77.9	1.1	8	1
	5	□	MNS0630L-DIN	32	53	55	91	89.9	1.1	8	2
	5	□	MNS0630L-DIN-C	32	53	55	91	89.9	1.1	8	1
	8	□	MNS0630-L8C	50	73	77	113	111.9	1.1	8	1
	10	□	MNS0630-L10C	63	86	90	126	124.9	1.1	8	1
	12	□	MNS0630-L12C	76	99	103	139	137.9	1.1	8	1
	15	□	MNS0630-L15C	95	118	122	158	156.9	1.1	8	1
	20	□	MNS0630-L20C	126	151	155	191	189.9	1.1	8	1
	25	□	MNS0630-L25C	158	183	187	223	221.9	1.1	8	1
	30	□	MNS0630-L30C	189	216	220	256	254.9	1.1	8	1
	5	★	MNS0630LB	31.5	53.1	53.1	110.1	109.0	1.1	7	1
	10	□	MNS0630X10DB	63.0	86.1	89.1	142.1	141.0	1.1	7	1
	20	□	MNS0630X20DB	126.0	151.1	154.1	207.1	206.0	1.1	7	1
	30	□	MNS0630X30DB	189.0	216.1	219.1	272.1	271.0	1.1	7	1
6.4	3	□	MNS0640S-DIN	19	34	43	79	77.8	1.2	8	2
	3	□	MNS0640S-DIN-C	19	34	43	79	77.8	1.2	8	1
	5	□	MNS0640L-DIN	32	53	55	91	89.8	1.2	8	2
	5	□	MNS0640L-DIN-C	32	53	55	91	89.8	1.2	8	1
	8	□	MNS0640-L8C	51	73	77	113	111.8	1.2	8	1
	10	□	MNS0640-L10C	64	86	90	126	124.8	1.2	8	1
	12	□	MNS0640-L12C	77	99	103	139	137.8	1.2	8	1
	15	□	MNS0640-L15C	96	118	122	158	156.8	1.2	8	1
	20	□	MNS0640-L20C	128	151	155	191	189.8	1.2	8	1
	25	□	MNS0640-L25C	160	183	187	223	221.8	1.2	8	1
	30	□	MNS0640-L30C	192	216	220	256	254.8	1.2	8	1
	5	★	MNS0640LB	32.0	53.2	53.2	110.2	109.0	1.2	7	1
	10	□	MNS0640X10DB	64.0	86.2	89.2	142.2	141.0	1.2	7	1
	20	□	MNS0640X20DB	128.0	151.2	154.2	207.2	206.0	1.2	7	1
	30	□	MNS0640X30DB	192.0	216.2	219.2	272.2	271.0	1.2	7	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
6.5	3	□	MNS0650S-DIN	20	34	43	79	77.8	1.2	8	2
	3	□	MNS0650S-DIN-C	20	34	43	79	77.8	1.2	8	1
	5	□	MNS0650L-DIN	33	53	55	91	89.8	1.2	8	2
	5	●	MNS0650L-DIN-C	33	53	55	91	89.8	1.2	8	1
	8	□	MNS0650-L8C	52	73	77	113	111.8	1.2	8	1
	10	□	MNS0650-L10C	65	86	90	126	124.8	1.2	8	1
	12	●	MNS0650-L12C	78	99	103	139	137.8	1.2	8	1
	15	□	MNS0650-L15C	98	118	122	158	156.8	1.2	8	1
	20	●	MNS0650-L20C	130	151	155	191	189.8	1.2	8	1
	25	□	MNS0650-L25C	163	183	187	223	221.8	1.2	8	1
	30	●	MNS0650-L30C	195	216	220	256	254.8	1.2	8	1
	5	★	MNS0650LB	32.5	53.2	53.2	110.2	109.0	1.2	7	1
	10	★	MNS0650X10DB	65.0	86.2	89.2	142.2	141.0	1.2	7	1
	20	★	MNS0650X20DB	130.0	151.2	154.2	207.2	206.0	1.2	7	1
	30	★	MNS0650X30DB	195.0	216.2	219.2	272.2	271.0	1.2	7	1
6.6	3	□	MNS0660S-DIN	20	34	43	79	77.8	1.2	8	2
	3	□	MNS0660S-DIN-C	20	34	43	79	77.8	1.2	8	1
	5	□	MNS0660L-DIN	33	53	55	91	89.8	1.2	8	2
	5	□	MNS0660L-DIN-C	33	53	55	91	89.8	1.2	8	1
	8	□	MNS0660-L8C	53	78	82	118	116.8	1.2	8	1
	10	□	MNS0660-L10C	66	92	96	132	130.8	1.2	8	1
	12	□	MNS0660-L12C	79	106	110	146	144.8	1.2	8	1
	15	□	MNS0660-L15C	99	127	131	167	165.8	1.2	8	1
	20	□	MNS0660-L20C	132	162	166	202	200.8	1.2	8	1
	25	□	MNS0660-L25C	165	197	201	237	235.8	1.2	8	1
	30	□	MNS0660-L30C	198	232	236	272	270.8	1.2	8	1
	5	★	MNS0660LB	33.0	57.2	57.2	110.2	109.0	1.2	7	1
	10	□	MNS0660X10DB	66.0	92.2	95.2	148.2	147.0	1.2	7	1
	20	□	MNS0660X20DB	132.0	162.2	165.2	218.2	217.0	1.2	7	1
	30	□	MNS0660X30DB	198.0	232.2	235.2	288.2	287.0	1.2	7	1
6.7	3	□	MNS0670S-DIN	20	34	43	79	77.8	1.2	8	2
	3	□	MNS0670S-DIN-C	20	34	43	79	77.8	1.2	8	1
	5	□	MNS0670L-DIN	34	53	55	91	89.8	1.2	8	2
	5	□	MNS0670L-DIN-C	34	53	55	91	89.8	1.2	8	1
	8	□	MNS0670-L8C	54	78	82	118	116.8	1.2	8	1
	10	□	MNS0670-L10C	67	92	96	132	130.8	1.2	8	1
	12	□	MNS0670-L12C	80	106	110	146	144.8	1.2	8	1
	15	□	MNS0670-L15C	101	127	131	167	165.8	1.2	8	1
	20	□	MNS0670-L20C	134	162	166	202	200.8	1.2	8	1
	25	□	MNS0670-L25C	168	197	201	237	235.8	1.2	8	1
	30	□	MNS0670-L30C	201	232	236	272	270.8	1.2	8	1
	5	★	MNS0670LB	33.5	57.2	57.2	110.2	109.0	1.2	7	1
	10	★	MNS0670X10DB	67.0	92.2	95.2	148.2	147.0	1.2	7	1
	20	★	MNS0670X20DB	134.0	162.2	165.2	218.2	217.0	1.2	7	1
	30	★	MNS0670X30DB	201.0	232.2	235.2	288.2	287.0	1.2	7	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
6.8	3	□	MNS0680S-DIN	20	34	43	79	77.8	1.2	8	2
	3	□	MNS0680S-DIN-C	20	34	43	79	77.8	1.2	8	1
	5	□	MNS0680L-DIN	34	34	43	79	77.8	1.2	8	2
	5	●	MNS0680L-DIN-C	34	53	55	91	89.8	1.2	8	1
	8	□	MNS0680-L8C	54	78	82	118	116.8	1.2	8	1
	10	□	MNS0680-L10C	68	92	96	132	130.8	1.2	8	1
	12	●	MNS0680-L12C	82	106	110	146	144.8	1.2	8	1
	15	□	MNS0680-L15C	102	127	131	167	165.8	1.2	8	1
	20	●	MNS0680-L20C	136	162	166	202	200.8	1.2	8	1
	25	□	MNS0680-L25C	170	197	201	237	235.8	1.2	8	1
	30	●	MNS0680-L30C	204	232	236	272	270.8	1.2	8	1
	5	★	MNS0680LB	34.0	57.2	57.2	110.2	109.0	1.2	7	1
	10	□	MNS0680X10DB	68.0	92.2	95.2	148.2	147.0	1.2	7	1
	20	□	MNS0680X20DB	136.0	162.2	165.2	218.2	217.0	1.2	7	1
	30	□	MNS0680X30DB	204.0	232.2	235.2	288.2	287.0	1.2	7	1
6.9	3	□	MNS0690S-DIN	21	34	43	79	77.7	1.3	8	2
	3	□	MNS0690S-DIN-C	21	34	43	79	77.7	1.3	8	1
	5	□	MNS0690L-DIN	35	53	55	91	89.7	1.3	8	2
	5	□	MNS0690L-DIN-C	35	53	55	91	89.7	1.3	8	1
	8	□	MNS0690-L8C	55	78	82	118	116.7	1.3	8	1
	10	□	MNS0690-L10C	69	92	96	132	130.7	1.3	8	1
	12	□	MNS0690-L12C	83	106	110	146	144.7	1.3	8	1
	15	□	MNS0690-L15C	104	127	131	167	165.7	1.3	8	1
	20	□	MNS0690-L20C	138	162	166	202	200.7	1.3	8	1
	25	□	MNS0690-L25C	173	197	201	237	235.7	1.3	8	1
	30	□	MNS0690-L30C	207	232	236	272	270.7	1.3	8	1
	5	★	MNS0690LB	34.5	57.3	57.3	110.3	109.0	1.3	7	1
	10	□	MNS0690X10DB	69.0	92.3	95.3	148.3	147.0	1.3	7	1
	20	□	MNS0690X20DB	138.0	162.3	165.3	218.3	217.0	1.3	7	1
	30	□	MNS0690X30DB	207.0	232.3	235.3	288.3	287.0	1.3	7	1
7.0	3	□	MNS0700S-DIN	21	34	43	79	77.7	1.3	8	2
	3	□	MNS0700S-DIN-C	21	34	43	79	77.7	1.3	8	1
	5	□	MNS0700L-DIN	35	53	55	91	89.7	1.3	8	2
	5	●	MNS0700L-DIN-C	35	53	55	91	89.7	1.3	8	1
	8	□	MNS0700-L8C	56	78	82	118	116.7	1.3	8	1
	10	□	MNS0700-L10C	70	92	96	132	130.7	1.3	8	1
	12	●	MNS0700-L12C	84	106	110	146	144.7	1.3	8	1
	15	□	MNS0700-L15C	105	127	131	167	165.7	1.3	8	1
	20	●	MNS0700-L20C	140	162	166	202	200.7	1.3	8	1
	25	□	MNS0700-L25C	175	197	201	237	235.7	1.3	8	1
	30	●	MNS0700-L30C	210	232	236	272	270.7	1.3	8	1
	5	★	MNS0700LB	35.0	57.3	57.3	110.3	109.0	1.3	7	1
	10	★	MNS0700X10DB	70.0	92.3	95.3	148.3	147.0	1.3	7	1
	20	★	MNS0700X20DB	140.0	162.3	165.3	218.3	217.0	1.3	7	1
	30	★	MNS0700X30DB	210.0	232.3	235.3	288.3	287.0	1.3	7	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
7.1	3	□	MNS0710S-DIN	21	41	43	79	77.7	1.3	8	2
	3	□	MNS0710S-DIN-C	21	41	43	79	77.7	1.3	8	1
	5	□	MNS0710L-DIN	36	53	55	91	89.7	1.3	8	2
	5	□	MNS0710L-DIN-C	36	53	55	91	89.7	1.3	8	1
	8	□	MNS0710-L8C	57	84	88	124	122.7	1.3	8	1
	10	□	MNS0710-L10C	71	99	103	139	137.7	1.3	8	1
	12	□	MNS0710-L12C	85	114	118	154	152.7	1.3	8	1
	15	□	MNS0710-L15C	107	136	140	176	174.7	1.3	8	1
	20	□	MNS0710-L20C	142	174	178	214	212.7	1.3	8	1
	25	□	MNS0710-L25C	178	211	215	251	249.7	1.3	8	1
	30	□	MNS0710-L30C	213	249	253	289	287.7	1.3	8	1
	5	★	MNS0710LB	35.5	61.3	65.3	119.3	118.0	1.3	8	1
	10	□	MNS0710X10DB	71.0	99.3	102.3	156.3	155.0	1.3	8	1
	20	□	MNS0710X20DB	142.0	174.3	177.3	231.3	230.0	1.3	8	1
	30	□	MNS0710X30DB	213.0	249.3	252.3	306.3	305.0	1.3	8	1
7.2	3	□	MNS0720S-DIN	22	41	43	79	77.7	1.3	8	2
	3	□	MNS0720S-DIN-C	22	41	43	79	77.7	1.3	8	1
	5	□	MNS0720L-DIN	36	53	55	91	89.7	1.3	8	2
	5	□	MNS0720L-DIN-C	36	53	55	91	89.7	1.3	8	1
	8	□	MNS0720-L8C	58	84	88	124	122.7	1.3	8	1
	10	□	MNS0720-L10C	72	99	103	139	137.7	1.3	8	1
	12	□	MNS0720-L12C	86	114	118	154	152.7	1.3	8	1
	15	□	MNS0720-L15C	108	136	140	176	174.7	1.3	8	1
	20	□	MNS0720-L20C	144	174	178	214	212.7	1.3	8	1
	25	□	MNS0720-L25C	180	211	215	251	249.7	1.3	8	1
	30	□	MNS0720-L30C	216	249	253	289	287.7	1.3	8	1
	5	★	MNS0720LB	36.0	61.3	65.3	119.3	118.0	1.3	8	1
	10	★	MNS0720X10DB	72.0	99.3	102.3	156.3	155.0	1.3	8	1
	20	★	MNS0720X20DB	144.0	174.3	177.3	231.3	230.0	1.3	8	1
	30	★	MNS0720X30DB	216.0	249.3	252.3	306.3	305.0	1.3	8	1
7.3	3	□	MNS0730S-DIN	22	41	43	79	77.7	1.3	8	2
	3	□	MNS0730S-DIN-C	22	41	43	79	77.7	1.3	8	1
	5	□	MNS0730L-DIN	37	53	55	91	89.7	1.3	8	2
	5	□	MNS0730L-DIN-C	37	53	55	91	89.7	1.3	8	1
	8	□	MNS0730-L8C	58	84	88	124	122.7	1.3	8	1
	10	□	MNS0730-L10C	73	99	103	139	137.7	1.3	8	1
	12	□	MNS0730-L12C	88	114	118	154	152.7	1.3	8	1
	15	□	MNS0730-L15C	110	136	140	176	174.7	1.3	8	1
	20	□	MNS0730-L20C	146	174	178	214	212.7	1.3	8	1
	25	□	MNS0730-L25C	183	211	215	251	249.7	1.3	8	1
	30	□	MNS0730-L30C	219	249	253	289	287.7	1.3	8	1
	5	★	MNS0730LB	36.5	61.3	65.3	119.3	118.0	1.3	8	1
	10	□	MNS0730X10DB	73.0	99.3	102.3	156.3	155.0	1.3	8	1
	20	□	MNS0730X20DB	146.0	174.3	177.3	231.3	230.0	1.3	8	1
	30	□	MNS0730X30DB	219.0	249.3	252.3	306.3	305.0	1.3	8	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
7.4	3	□	MNS0740S-DIN	22	41	43	79	77.7	1.3	8	2
	3	□	MNS0740S-DIN-C	22	41	43	79	77.7	1.3	8	1
	5	□	MNS0740L-DIN	37	53	55	91	89.7	1.3	8	2
	5	□	MNS0740L-DIN-C	37	53	55	91	89.7	1.3	8	1
	8	□	MNS0740-L8C	59	84	88	124	122.7	1.3	8	1
	10	□	MNS0740-L10C	74	99	103	139	137.7	1.3	8	1
	12	□	MNS0740-L12C	89	114	118	154	152.7	1.3	8	1
	15	□	MNS0740-L15C	111	136	140	176	174.7	1.3	8	1
	20	□	MNS0740-L20C	148	174	178	214	212.7	1.3	8	1
	25	□	MNS0740-L25C	185	211	215	251	249.7	1.3	8	1
	30	□	MNS0740-L30C	222	249	253	289	287.7	1.3	8	1
	5	★	MNS0740LB	37.0	61.3	65.3	119.3	118.0	1.3	8	1
	10	□	MNS0740X10DB	74.0	99.3	102.3	156.3	155.0	1.3	8	1
	20	□	MNS0740X20DB	148.0	174.3	177.3	231.3	230.0	1.3	8	1
	30	□	MNS0740X30DB	222.0	249.3	252.3	306.3	305.0	1.3	8	1
7.5	3	□	MNS0750S-DIN	23	41	43	79	77.6	1.4	8	2
	3	□	MNS0750S-DIN-C	23	41	43	79	77.6	1.4	8	1
	5	□	MNS0750L-DIN	38	53	55	91	89.6	1.4	8	2
	5	●	MNS0750L-DIN-C	38	53	55	91	89.6	1.4	8	1
	8	□	MNS0750-L8C	60	84	88	124	122.6	1.4	8	1
	10	□	MNS0750-L10C	75	99	103	139	137.6	1.4	8	1
	12	●	MNS0750-L12C	90	114	118	154	152.6	1.4	8	1
	15	□	MNS0750-L15C	113	136	140	176	174.6	1.4	8	1
	20	●	MNS0750-L20C	150	174	178	214	212.6	1.4	8	1
	25	□	MNS0750-L25C	188	211	215	251	249.6	1.4	8	1
	30	●	MNS0750-L30C	225	249	253	289	287.6	1.4	8	1
	5	★	MNS0750LB	37.5	61.4	65.4	119.4	118.0	1.4	8	1
	10	□	MNS0750X10DB	75.0	99.4	102.4	156.4	155.0	1.4	8	1
	20	□	MNS0750X20DB	150.0	174.4	177.4	231.4	230.0	1.4	8	1
	30	□	MNS0750X30DB	225.0	249.4	252.4	306.4	305.0	1.4	8	1
7.6	3	□	MNS0760S-DIN	23	41	43	79	77.6	1.4	8	2
	3	□	MNS0760S-DIN-C	23	41	43	79	77.6	1.4	8	1
	5	□	MNS0760L-DIN	38	53	55	91	89.6	1.4	8	2
	5	□	MNS0760L-DIN-C	38	53	55	91	89.6	1.4	8	1
	8	□	MNS0760-L8C	61	89	93	129	127.6	1.4	8	1
	10	□	MNS0760-L10C	76	105	109	145	143.6	1.4	8	1
	12	□	MNS0760-L12C	91	121	125	161	159.6	1.4	8	1
	15	□	MNS0760-L15C	114	145	149	185	183.6	1.4	8	1
	20	□	MNS0760-L20C	152	185	189	225	223.6	1.4	8	1
	25	□	MNS0760-L25C	190	225	229	265	263.6	1.4	8	1
	30	□	MNS0760-L30C	228	265	269	305	303.6	1.4	8	1
	5	★	MNS0760LB	38.0	65.4	65.4	119.4	118.0	1.4	8	1
	10	□	MNS0760X10DB	76.0	105.4	108.4	162.4	161.0	1.4	8	1
	20	□	MNS0760X20DB	152.0	185.4	188.4	242.4	241.0	1.4	8	1
	30	□	MNS0760X30DB	228.0	265.4	268.4	322.4	321.0	1.4	8	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
7.7	3	□	MNS0770S-DIN	23	41	43	79	77.6	1.4	8	2
	3	□	MNS0770S-DIN-C	23	41	43	79	77.6	1.4	8	1
	5	□	MNS0770L-DIN	39	53	55	91	89.6	1.4	8	2
	5	□	MNS0770L-DIN-C	39	53	55	91	89.6	1.4	8	1
	8	□	MNS0770-L8C	62	89	93	129	127.6	1.4	8	1
	10	□	MNS0770-L10C	77	105	109	145	143.6	1.4	8	1
	12	□	MNS0770-L12C	92	121	125	161	159.6	1.4	8	1
	15	□	MNS0770-L15C	116	145	149	185	183.6	1.4	8	1
	20	□	MNS0770-L20C	154	185	189	225	223.6	1.4	8	1
	25	□	MNS0770-L25C	193	225	229	265	263.6	1.4	8	1
	30	□	MNS0770-L30C	231	265	269	305	303.6	1.4	8	1
	5	★	MNS0770LB	38.5	65.4	65.4	119.4	118.0	1.4	8	1
	10	□	MNS0770X10DB	77.0	105.4	108.4	162.4	161.0	1.4	8	1
	20	□	MNS0770X20DB	154.0	185.4	188.4	242.4	241.0	1.4	8	1
	30	□	MNS0770X30DB	231.0	265.4	268.4	322.4	321.0	1.4	8	1
7.8	3	□	MNS0780S-DIN	23	41	43	79	77.6	1.4	8	2
	3	□	MNS0780S-DIN-C	23	41	43	79	77.6	1.4	8	1
	5	□	MNS0780L-DIN	39	53	55	91	89.6	1.4	8	2
	5	□	MNS0780L-DIN-C	39	53	55	91	89.6	1.4	8	1
	8	□	MNS0780-L8C	62	89	93	129	127.6	1.4	8	1
	10	□	MNS0780-L10C	78	105	109	145	143.6	1.4	8	1
	12	□	MNS0780-L12C	94	121	125	161	159.6	1.4	8	1
	15	□	MNS0780-L15C	117	145	149	185	183.6	1.4	8	1
	20	□	MNS0780-L20C	156	185	189	225	223.6	1.4	8	1
	25	□	MNS0780-L25C	195	225	229	265	263.6	1.4	8	1
	30	□	MNS0780-L30C	234	265	269	305	303.6	1.4	8	1
	5	★	MNS0780LB	39.0	65.4	65.4	119.4	118.0	1.4	8	1
	10	★	MNS0780X10DB	78.0	105.4	108.4	162.4	161.0	1.4	8	1
	20	★	MNS0780X20DB	156.0	185.4	188.4	242.4	241.0	1.4	8	1
	30	★	MNS0780X30DB	234.0	265.4	268.4	322.4	321.0	1.4	8	1
7.9	3	□	MNS0790S-DIN	24	41	43	79	77.6	1.4	8	2
	3	□	MNS0790S-DIN-C	24	41	43	79	77.6	1.4	8	1
	5	□	MNS0790L-DIN	40	53	55	91	89.6	1.4	8	2
	5	□	MNS0790L-DIN-C	40	53	55	91	89.6	1.4	8	1
	8	□	MNS0790-L8C	63	89	93	129	127.6	1.4	8	1
	10	□	MNS0790-L10C	79	105	109	145	143.6	1.4	8	1
	12	□	MNS0790-L12C	95	121	125	161	159.6	1.4	8	1
	15	□	MNS0790-L15C	119	145	149	185	183.6	1.4	8	1
	20	□	MNS0790-L20C	158	185	189	225	223.6	1.4	8	1
	25	□	MNS0790-L25C	198	225	229	265	263.6	1.4	8	1
	30	□	MNS0790-L30C	237	265	269	305	303.6	1.4	8	1
	5	★	MNS0790LB	39.5	65.4	65.4	119.4	118.0	1.4	8	1
	10	□	MNS0790X10DB	79.0	105.4	108.4	162.4	161.0	1.4	8	1
	20	□	MNS0790X20DB	158.0	185.4	188.4	242.4	241.0	1.4	8	1
	30	□	MNS0790X30DB	237.0	265.4	268.4	322.4	321.0	1.4	8	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.0	3	□	MNS0800S-DIN	24	41	43	79	77.5	1.5	8	2
	3	□	MNS0800S-DIN-C	24	41	43	79	77.5	1.5	8	1
	5	□	MNS0800L-DIN	40	53	55	91	89.5	1.5	8	2
	5	●	MNS0800L-DIN-C	40	53	55	91	89.5	1.5	8	1
	8	□	MNS0800-L8C	64	89	93	129	127.5	1.5	8	1
	10	□	MNS0800-L10C	80	105	109	145	143.5	1.5	8	1
	12	●	MNS0800-L12C	96	121	125	161	159.5	1.5	8	1
	15	□	MNS0800-L15C	120	145	149	185	183.5	1.5	8	1
	20	●	MNS0800-L20C	160	185	189	225	223.5	1.5	8	1
	25	□	MNS0800-L25C	200	225	229	265	263.5	1.5	8	1
	30	●	MNS0800-L30C	240	265	269	305	303.5	1.5	8	1
	5	★	MNS0800LB	40.0	65.5	65.5	119.5	118.0	1.5	8	1
	10	★	MNS0800X10DB	80.0	105.5	108.5	162.5	161.0	1.5	8	1
	20	★	MNS0800X20DB	160.0	185.5	188.5	242.5	241.0	1.5	8	1
	30	★	MNS0800X30DB	240.0	265.5	268.5	322.5	321.0	1.5	8	1
8.1	3	□	MNS0810S-DIN	24	46	48	88	86.5	1.5	10	2
	3	□	MNS0810S-DIN-C	24	46	48	88	86.5	1.5	10	1
	5	□	MNS0810L-DIN	41	60	62	102	100.5	1.5	10	2
	5	□	MNS0810L-DIN-C	41	60	62	102	100.5	1.5	10	1
	8	□	MNS0810-L8C	65	95	99	139	137.5	1.5	10	1
	10	□	MNS0810-L10C	81	112	116	156	154.5	1.5	10	1
	12	□	MNS0810-L12C	97	129	133	173	171.5	1.5	10	1
	15	□	MNS0810-L15C	122	154	158	198	196.5	1.5	10	1
	20	□	MNS0810-L20C	162	197	201	241	239.5	1.5	10	1
	25	□	MNS0810-L25C	203	239	243	283	281.5	1.5	10	1
	30	□	MNS0810-L30C	243	282	286	326	324.5	1.5	10	1
	5	★	MNS0810LB	40.5	69.5	73.5	128.5	127.0	1.5	9	1
	10	□	MNS0810X10DB	81.0	112.5	115.5	170.5	169.0	1.5	9	1
	20	□	MNS0810X20DB	162.0	197.5	200.5	255.5	254.0	1.5	9	1
	30	□	MNS0810X30DB	243.0	282.5	285.5	340.5	339.0	1.5	9	1
8.2	3	□	MNS0820S-DIN	25	46	48	88	86.5	1.5	10	2
	3	□	MNS0820S-DIN-C	25	46	48	88	86.5	1.5	10	1
	5	□	MNS0820L-DIN	41	60	62	102	100.5	1.5	10	2
	5	□	MNS0820L-DIN-C	41	60	62	102	100.5	1.5	10	1
	8	□	MNS0820-L8C	66	95	99	139	137.5	1.5	10	1
	10	□	MNS0820-L10C	82	112	116	156	154.5	1.5	10	1
	12	□	MNS0820-L12C	98	129	133	173	171.5	1.5	10	1
	15	□	MNS0820-L15C	123	154	158	198	196.5	1.5	10	1
	20	□	MNS0820-L20C	164	197	201	241	239.5	1.5	10	1
	25	□	MNS0820-L25C	205	239	243	283	281.5	1.5	10	1
	30	□	MNS0820-L30C	246	282	286	326	324.5	1.5	10	1
	5	★	MNS0820LB	41.0	69.5	73.5	128.5	127.0	1.5	9	1
	10	□	MNS0820X10DB	82.0	112.5	115.5	170.5	169.0	1.5	9	1
	20	□	MNS0820X20DB	164.0	197.5	200.5	255.5	254.0	1.5	9	1
	30	□	MNS0820X30DB	246.0	282.5	285.5	340.5	339.0	1.5	9	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.3	3	□	MNS0830S-DIN	25	46	48	88	86.5	1.5	10	2
	3	□	MNS0830S-DIN-C	25	46	48	88	86.5	1.5	10	1
	5	□	MNS0830L-DIN	42	60	62	102	100.5	1.5	10	2
	5	□	MNS0830L-DIN-C	42	60	62	102	100.5	1.5	10	1
	8	□	MNS0830-L8C	66	95	99	139	137.5	1.5	10	1
	10	□	MNS0830-L10C	83	112	116	156	154.5	1.5	10	1
	12	□	MNS0830-L12C	100	129	133	173	171.5	1.5	10	1
	15	□	MNS0830-L15C	125	154	158	198	196.5	1.5	10	1
	20	□	MNS0830-L20C	166	197	201	241	239.5	1.5	10	1
	25	□	MNS0830-L25C	208	239	243	283	281.5	1.5	10	1
	30	□	MNS0830-L30C	249	282	286	326	324.5	1.5	10	1
	5	★	MNS0830LB	41.5	69.5	73.5	128.5	127.0	1.5	9	1
	10	□	MNS0830X10DB	83.0	112.5	115.5	170.5	169.0	1.5	9	1
	20	□	MNS0830X20DB	166.0	197.5	200.5	255.5	254.0	1.5	9	1
	30	□	MNS0830X30DB	249.0	282.5	285.5	340.5	339.0	1.5	9	1
8.4	3	□	MNS0840S-DIN	25	46	48	88	86.5	1.5	10	2
	3	□	MNS0840S-DIN-C	25	46	48	88	86.5	1.5	10	1
	5	□	MNS0840L-DIN	42	60	62	102	100.5	1.5	10	2
	5	□	MNS0840L-DIN-C	42	60	62	102	100.5	1.5	10	1
	8	□	MNS0840-L8C	67	95	99	139	137.5	1.5	10	1
	10	□	MNS0840-L10C	84	112	116	156	154.5	1.5	10	1
	12	□	MNS0840-L12C	101	129	133	173	171.5	1.5	10	1
	15	□	MNS0840-L15C	126	154	158	198	196.5	1.5	10	1
	20	□	MNS0840-L20C	168	197	201	241	239.5	1.5	10	1
	25	□	MNS0840-L25C	210	239	243	283	281.5	1.5	10	1
	30	□	MNS0840-L30C	252	282	286	326	324.5	1.5	10	1
	5	★	MNS0840LB	42.0	69.5	73.5	128.5	127.0	1.5	9	1
	10	□	MNS0840X10DB	84.0	112.5	115.5	170.5	169.0	1.5	9	1
	20	□	MNS0840X20DB	168.0	197.5	200.5	255.5	254.0	1.5	9	1
	30	□	MNS0840X30DB	252.0	282.5	285.5	340.5	339.0	1.5	9	1
8.5	3	□	MNS0850S-DIN	26	46	48	88	86.5	1.5	10	2
	3	□	MNS0850S-DIN-C	26	46	48	88	86.5	1.5	10	1
	5	□	MNS0850L-DIN	43	60	62	102	100.5	1.5	10	2
	5	●	MNS0850L-DIN-C	43	60	62	102	100.5	1.5	10	1
	8	□	MNS0850-L8C	68	95	99	139	137.5	1.5	10	1
	10	□	MNS0850-L10C	85	112	116	156	154.5	1.5	10	1
	12	●	MNS0850-L12C	102	129	133	173	171.5	1.5	10	1
	15	□	MNS0850-L15C	128	154	158	198	196.5	1.5	10	1
	20	●	MNS0850-L20C	170	197	201	241	239.5	1.5	10	1
	25	□	MNS0850-L25C	213	239	243	283	281.5	1.5	10	1
	30	●	MNS0850-L30C	255	282	286	326	324.5	1.5	10	1
	5	★	MNS0850LB	42.5	69.5	73.5	128.5	127.0	1.5	9	1
	10	□	MNS0850X10DB	85.0	112.5	115.5	170.5	169.0	1.5	9	1
	20	□	MNS0850X20DB	170.0	197.5	200.5	255.5	254.0	1.5	9	1
	30	□	MNS0850X30DB	255.0	282.5	285.5	340.5	339.0	1.5	9	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.6	3	□	MNS0860S-DIN	26	46	48	88	86.4	1.6	10	2
	3	□	MNS0860S-DIN-C	26	46	48	88	86.4	1.6	10	1
	5	□	MNS0860L-DIN	43	60	62	102	100.4	1.6	10	2
	5	□	MNS0860L-DIN-C	43	60	62	102	100.4	1.6	10	1
	8	□	MNS0860-L8C	69	100	104	144	142.4	1.6	10	1
	10	□	MNS0860-L10C	86	118	122	162	160.4	1.6	10	1
	12	□	MNS0860-L12C	103	136	140	180	178.4	1.6	10	1
	15	□	MNS0860-L15C	129	163	167	207	205.4	1.6	10	1
	20	□	MNS0860-L20C	172	208	212	252	250.4	1.6	10	1
	25	□	MNS0860-L25C	215	253	257	297	295.4	1.6	10	1
	30	□	MNS0860-L30C	258	298	302	342	340.4	1.6	10	1
	5	★	MNS0860LB	43.0	73.6	73.6	128.6	127.0	1.6	9	1
	10	□	MNS0860X10DB	86.0	118.6	121.6	176.6	175.0	1.6	9	1
	20	□	MNS0860X20DB	172.0	208.6	211.6	266.6	265.0	1.6	9	1
	30	□	MNS0860X30DB	258.0	298.6	301.6	356.6	355.0	1.6	9	1
8.7	3	□	MNS0870S-DIN	26	46	48	88	86.4	1.6	10	2
	3	□	MNS0870S-DIN-C	26	46	48	88	86.4	1.6	10	1
	5	□	MNS0870L-DIN	44	60	62	102	100.4	1.6	10	2
	5	□	MNS0870L-DIN-C	44	60	62	102	100.4	1.6	10	1
	8	□	MNS0870-L8C	70	100	104	144	142.4	1.6	10	1
	10	□	MNS0870-L10C	87	118	122	162	160.4	1.6	10	1
	12	□	MNS0870-L12C	104	136	140	180	178.4	1.6	10	1
	15	□	MNS0870-L15C	131	163	167	207	205.4	1.6	10	1
	20	□	MNS0870-L20C	174	208	212	252	250.4	1.6	10	1
	25	□	MNS0870-L25C	218	253	257	297	295.4	1.6	10	1
	30	□	MNS0870-L30C	261	298	302	342	340.4	1.6	10	1
	5	★	MNS0870LB	43.5	73.6	73.6	128.6	127.0	1.6	9	1
	10	□	MNS0870X10DB	87.0	118.6	121.6	176.6	175.0	1.6	9	1
	20	□	MNS0870X20DB	174.0	208.6	211.6	266.6	265.0	1.6	9	1
	30	□	MNS0870X30DB	261.0	298.6	301.6	356.6	355.0	1.6	9	1
8.8	3	□	MNS0880S-DIN	26	46	48	88	86.4	1.6	10	2
	3	□	MNS0880S-DIN-C	26	46	48	88	86.4	1.6	10	1
	5	□	MNS0880L-DIN	44	60	62	102	100.4	1.6	10	2
	5	□	MNS0880L-DIN-C	44	60	62	102	100.4	1.6	10	1
	8	□	MNS0880-L8C	70	100	104	144	142.4	1.6	10	1
	10	□	MNS0880-L10C	88	118	122	162	160.4	1.6	10	1
	12	□	MNS0880-L12C	106	136	140	180	178.4	1.6	10	1
	15	□	MNS0880-L15C	132	163	167	207	205.4	1.6	10	1
	20	□	MNS0880-L20C	176	208	212	252	250.4	1.6	10	1
	25	□	MNS0880-L25C	220	253	257	297	295.4	1.6	10	1
	30	□	MNS0880-L30C	264	298	302	342	340.4	1.6	10	1
	5	★	MNS0880LB	44.0	73.6	73.6	128.6	127.0	1.6	9	1
	10	□	MNS0880X10DB	88.0	118.6	121.6	176.6	175.0	1.6	9	1
	20	□	MNS0880X20DB	176.0	208.6	211.6	266.6	265.0	1.6	9	1
	30	□	MNS0880X30DB	264.0	298.6	301.6	356.6	355.0	1.6	9	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.9	3	□	MNS0890S-DIN	27	46	48	88	86.4	1.6	10	2
	3	□	MNS0890S-DIN-C	27	46	48	88	86.4	1.6	10	1
	5	□	MNS0890L-DIN	45	60	62	102	100.4	1.6	10	2
	5	□	MNS0890L-DIN-C	45	60	62	102	100.4	1.6	10	1
	8	□	MNS0890-L8C	71	100	104	144	142.4	1.6	10	1
	10	□	MNS0890-L10C	89	118	122	162	160.4	1.6	10	1
	12	□	MNS0890-L12C	107	136	140	180	178.4	1.6	10	1
	15	□	MNS0890-L15C	134	163	167	207	205.4	1.6	10	1
	20	□	MNS0890-L20C	178	208	212	252	250.4	1.6	10	1
	25	□	MNS0890-L25C	223	253	257	297	295.4	1.6	10	1
	30	□	MNS0890-L30C	267	298	302	342	340.4	1.6	10	1
	5	★	MNS0890LB	44.5	73.6	73.6	128.6	127.0	1.6	9	1
	10	□	MNS0890X10DB	89.0	118.6	121.6	176.6	175.0	1.6	9	1
	20	□	MNS0890X20DB	178.0	208.6	211.6	266.6	265.0	1.6	9	1
	30	□	MNS0890X30DB	267.0	298.6	301.6	356.6	355.0	1.6	9	1
9.0	3	□	MNS0900S-DIN	27	46	48	88	86.4	1.6	10	2
	3	□	MNS0900S-DIN-C	27	46	48	88	86.4	1.6	10	1
	5	□	MNS0900L-DIN	45	60	62	102	100.4	1.6	10	2
	5	●	MNS0900L-DIN-C	45	60	62	102	100.4	1.6	10	1
	8	□	MNS0900-L8C	72	100	104	144	142.4	1.6	10	1
	10	□	MNS0900-L10C	90	118	122	162	160.4	1.6	10	1
	12	●	MNS0900-L12C	108	136	140	180	178.4	1.6	10	1
	15	□	MNS0900-L15C	135	163	167	207	205.4	1.6	10	1
	20	●	MNS0900-L20C	180	208	212	252	250.4	1.6	10	1
	25	□	MNS0900-L25C	225	253	257	297	295.4	1.6	10	1
	30	●	MNS0900-L30C	270	298	302	342	340.4	1.6	10	1
	5	★	MNS0900LB	45.0	73.6	73.6	128.6	127.0	1.6	9	1
	10	★	MNS0900X10DB	90.0	118.6	121.6	176.6	175.0	1.6	9	1
	20	★	MNS0900X20DB	180.0	208.6	211.6	266.6	265.0	1.6	9	1
	30	★	MNS0900X30DB	270.0	298.6	301.6	356.6	355.0	1.6	9	1
9.1	3	□	MNS0910S-DIN	27	47	49	89	87.3	1.7	10	2
	3	□	MNS0910S-DIN-C	27	47	49	89	87.3	1.7	10	1
	5	□	MNS0910L-DIN	46	62	63	103	101.3	1.7	10	2
	5	□	MNS0910L-DIN-C	46	62	63	103	101.3	1.7	10	1
	8	□	MNS0910-L8C	73	107	111	151	149.3	1.7	10	1
	10	□	MNS0910-L10C	91	126	130	170	168.3	1.7	10	1
	12	□	MNS0910-L12C	109	145	149	189	187.3	1.7	10	1
	15	□	MNS0910-L15C	137	173	177	217	215.3	1.7	10	1
	20	□	MNS0910-L20C	182	221	225	265	263.3	1.7	10	1
	25	□	MNS0910-L25C	228	268	272	312	310.3	1.7	10	1
	30	□	MNS0910-L30C	273	316	320	360	358.3	1.7	10	1
	5	★	MNS0910LB	45.5	77.7	81.7	137.7	136.0	1.7	10	1
	10	□	MNS0910X10DB	91.0	125.7	128.7	183.7	182.0	1.7	10	1
	20	□	MNS0910X20DB	182.0	220.7	223.7	278.7	277.0	1.7	10	1
	30	□	MNS0910X30DB	273.0	315.7	318.7	373.7	372.0	1.7	10	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
9.2	3	□	MNS0920S-DIN	28	47	49	89	87.3	1.7	10	2
	3	□	MNS0920S-DIN-C	28	47	49	89	87.3	1.7	10	1
	5	□	MNS0920L-DIN	46	62	63	103	101.3	1.7	10	2
	5	□	MNS0920L-DIN-C	46	62	63	103	101.3	1.7	10	1
	8	□	MNS0920-L8C	74	107	111	151	149.3	1.7	10	1
	10	□	MNS0920-L10C	92	126	130	170	168.3	1.7	10	1
	12	□	MNS0920-L12C	110	145	149	189	187.3	1.7	10	1
	15	□	MNS0920-L15C	138	173	177	217	215.3	1.7	10	1
	20	□	MNS0920-L20C	184	221	225	265	263.3	1.7	10	1
	25	□	MNS0920-L25C	230	268	272	312	310.3	1.7	10	1
	30	□	MNS0920-L30C	276	316	320	360	358.3	1.7	10	1
	5	★	MNS0920LB	46.0	77.7	81.7	137.7	136.0	1.7	10	1
	10	□	MNS0920X10DB	92.0	125.7	128.7	183.7	182.0	1.7	10	1
	20	□	MNS0920X20DB	184.0	220.7	223.7	278.7	277.0	1.7	10	1
	30	□	MNS0920X30DB	276.0	315.7	318.7	373.7	372.0	1.7	10	1
9.3	3	□	MNS0930S-DIN	28	47	49	89	87.3	1.7	10	2
	3	□	MNS0930S-DIN-C	28	47	49	89	87.3	1.7	10	1
	5	□	MNS0930L-DIN	47	62	63	103	101.3	1.7	10	2
	5	□	MNS0930L-DIN-C	47	62	63	103	101.3	1.7	10	1
	8	□	MNS0930-L8C	74	107	111	151	149.3	1.7	10	1
	10	□	MNS0930-L10C	93	126	130	170	168.3	1.7	10	1
	12	□	MNS0930-L12C	112	145	149	189	187.3	1.7	10	1
	15	□	MNS0930-L15C	140	173	177	217	215.3	1.7	10	1
	20	□	MNS0930-L20C	186	221	225	265	263.3	1.7	10	1
	25	□	MNS0930-L25C	233	268	272	312	310.3	1.7	10	1
	30	□	MNS0930-L30C	279	316	320	360	358.3	1.7	10	1
	5	★	MNS0930LB	46.5	77.7	81.7	137.7	136.0	1.7	10	1
	10	□	MNS0930X10DB	93.0	125.7	128.7	183.7	182.0	1.7	10	1
	20	□	MNS0930X20DB	186.0	220.7	223.7	278.7	277.0	1.7	10	1
	30	□	MNS0930X30DB	279.0	315.7	318.7	373.7	372.0	1.7	10	1
9.4	3	□	MNS0940S-DIN	28	47	49	89	87.3	1.7	10	2
	3	□	MNS0940S-DIN-C	28	47	49	89	87.3	1.7	10	1
	5	□	MNS0940L-DIN	47	62	63	103	101.3	1.7	10	2
	5	□	MNS0940L-DIN-C	47	62	63	103	101.3	1.7	10	1
	8	□	MNS0940-L8C	75	107	111	151	149.3	1.7	10	1
	10	□	MNS0940-L10C	94	126	130	170	168.3	1.7	10	1
	12	□	MNS0940-L12C	113	145	149	189	187.3	1.7	10	1
	15	□	MNS0940-L15C	141	173	177	217	215.3	1.7	10	1
	20	□	MNS0940-L20C	188	221	225	265	263.3	1.7	10	1
	25	□	MNS0940-L25C	235	268	272	312	310.3	1.7	10	1
	30	□	MNS0940-L30C	282	316	320	360	358.3	1.7	10	1
	5	★	MNS0940LB	47.0	77.7	81.7	137.7	136.0	1.7	10	1
	10	□	MNS0940X10DB	94.0	125.7	128.7	183.7	182.0	1.7	10	1
	20	□	MNS0940X20DB	188.0	220.7	223.7	278.7	277.0	1.7	10	1
	30	□	MNS0940X30DB	282.0	315.7	318.7	373.7	372.0	1.7	10	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
9.5	3	□	MNS0950S-DIN	29	47	49	89	87.3	1.7	10	2
	3	□	MNS0950S-DIN-C	29	47	49	89	87.3	1.7	10	1
	5	□	MNS0950L-DIN	48	62	63	103	101.3	1.7	10	2
	5	●	MNS0950L-DIN-C	48	62	63	103	101.3	1.7	10	1
	8	□	MNS0950-L8C	76	107	111	151	149.3	1.7	10	1
	10	□	MNS0950-L10C	95	126	130	170	168.3	1.7	10	1
	12	●	MNS0950-L12C	114	145	149	189	187.3	1.7	10	1
	15	□	MNS0950-L15C	143	173	177	217	215.3	1.7	10	1
	20	●	MNS0950-L20C	190	221	225	265	263.3	1.7	10	1
	25	□	MNS0950-L25C	238	268	272	312	310.3	1.7	10	1
	30	●	MNS0950-L30C	285	316	320	360	358.3	1.7	10	1
	5	★	MNS0950LB	47.5	77.7	81.7	137.7	136.0	1.7	10	1
	10	□	MNS0950X10DB	95.0	125.7	128.7	183.7	182.0	1.7	10	1
	20	□	MNS0950X20DB	190.0	220.7	223.7	278.7	277.0	1.7	10	1
	30	□	MNS0950X30DB	285.0	315.7	318.7	373.7	372.0	1.7	10	1
9.6	3	□	MNS0960S-DIN	29	47	49	89	87.3	1.7	10	2
	3	□	MNS0960S-DIN-C	29	47	49	89	87.3	1.7	10	1
	5	□	MNS0960L-DIN	48	62	63	103	101.3	1.7	10	2
	5	□	MNS0960L-DIN-C	48	62	63	103	101.3	1.7	10	1
	8	□	MNS0960-L8C	77	112	116	156	154.3	1.7	10	1
	10	□	MNS0960-L10C	96	132	136	176	174.3	1.7	10	1
	12	□	MNS0960-L12C	115	152	156	196	194.3	1.7	10	1
	15	□	MNS0960-L15C	144	182	186	226	224.3	1.7	10	1
	20	□	MNS0960-L20C	192	232	236	276	274.3	1.7	10	1
	25	□	MNS0960-L25C	240	282	286	326	324.3	1.7	10	1
	30	□	MNS0960-L30C	288	332	336	376	374.3	1.7	10	1
	5	★	MNS0960LB	48.0	81.7	81.7	137.7	136.0	1.7	10	1
	10	□	MNS0960X10DB	96.0	131.7	134.7	189.7	188.0	1.7	10	1
	20	□	MNS0960X20DB	192.0	231.7	234.7	289.7	288.0	1.7	10	1
	30	□	MNS0960X30DB	288.0	331.7	334.7	389.7	388.0	1.7	10	1
9.7	3	□	MNS0970S-DIN	29	47	49	89	87.2	1.8	10	2
	3	□	MNS0970S-DIN-C	29	47	49	89	87.2	1.8	10	1
	5	□	MNS0970L-DIN	49	62	63	103	101.2	1.8	10	2
	5	□	MNS0970L-DIN-C	49	62	63	103	101.2	1.8	10	1
	8	□	MNS0970-L8C	78	112	116	156	154.2	1.8	10	1
	10	□	MNS0970-L10C	97	132	136	176	174.2	1.8	10	1
	12	□	MNS0970-L12C	116	152	156	196	194.2	1.8	10	1
	15	□	MNS0970-L15C	146	182	186	226	224.2	1.8	10	1
	20	□	MNS0970-L20C	194	232	236	276	274.2	1.8	10	1
	25	□	MNS0970-L25C	243	282	286	326	324.2	1.8	10	1
	30	□	MNS0970-L30C	291	332	336	376	374.2	1.8	10	1
	5	★	MNS0970LB	48.5	81.8	81.8	137.8	136.0	1.8	10	1
	10	□	MNS0970X10DB	97.0	131.8	134.8	189.8	188.0	1.8	10	1
	20	□	MNS0970X20DB	194.0	231.8	234.8	289.8	288.0	1.8	10	1
	30	□	MNS0970X30DB	291.0	331.8	334.8	389.8	388.0	1.8	10	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
9.8	3	□	MNS0980S-DIN	29	47	49	89	87.2	1.8	10	2
	3	□	MNS0980S-DIN-C	29	47	49	89	87.2	1.8	10	1
	5	□	MNS0980L-DIN	49	62	63	103	101.2	1.8	10	2
	5	□	MNS0980L-DIN-C	49	62	63	103	101.2	1.8	10	1
	8	□	MNS0980-L8C	78	112	116	156	154.2	1.8	10	1
	10	□	MNS0980-L10C	98	132	136	176	174.2	1.8	10	1
	12	□	MNS0980-L12C	118	152	156	196	194.2	1.8	10	1
	15	□	MNS0980-L15C	147	182	186	226	224.2	1.8	10	1
	20	□	MNS0980-L20C	196	232	236	276	274.2	1.8	10	1
	25	□	MNS0980-L25C	245	282	286	326	324.2	1.8	10	1
	30	□	MNS0980-L30C	294	332	336	376	374.2	1.8	10	1
	5	★	MNS0980LB	49.0	81.8	81.8	137.8	136.0	1.8	10	1
	10	★	MNS0980X10DB	98.0	131.8	134.8	189.8	188.0	1.8	10	1
	20	★	MNS0980X20DB	196.0	231.8	234.8	289.8	288.0	1.8	10	1
	30	★	MNS0980X30DB	294.0	331.8	334.8	389.8	388.0	1.8	10	1
9.9	3	□	MNS0990S-DIN	30	47	49	89	87.2	1.8	10	2
	3	□	MNS0990S-DIN-C	30	47	49	89	87.2	1.8	10	1
	5	□	MNS0990L-DIN	50	62	63	103	101.2	1.8	10	2
	5	□	MNS0990L-DIN-C	50	62	63	103	101.2	1.8	10	1
	8	□	MNS0990-L8C	79	112	116	156	154.2	1.8	10	1
	10	□	MNS0990-L10C	99	132	136	176	174.2	1.8	10	1
	12	□	MNS0990-L12C	119	152	156	196	194.2	1.8	10	1
	15	□	MNS0990-L15C	149	182	186	226	224.2	1.8	10	1
	20	□	MNS0990-L20C	198	232	236	276	274.2	1.8	10	1
	25	□	MNS0990-L25C	248	282	286	326	324.2	1.8	10	1
	30	□	MNS0990-L30C	297	332	336	376	374.2	1.8	10	1
	5	★	MNS0990LB	49.5	81.8	81.8	137.8	136.0	1.8	10	1
	10	□	MNS0990X10DB	99.0	131.8	134.8	189.8	188.0	1.8	10	1
	20	□	MNS0990X20DB	198.0	231.8	234.8	289.8	288.0	1.8	10	1
	30	□	MNS0990X30DB	297.0	331.8	334.8	389.8	388.0	1.8	10	1
10.0	3	□	MNS1000S-DIN	30	47	49	89	87.2	1.8	10	2
	3	□	MNS1000S-DIN-C	30	47	49	89	87.2	1.8	10	1
	5	□	MNS1000L-DIN	50	62	63	103	101.2	1.8	10	2
	5	●	MNS1000L-DIN-C	50	62	63	103	101.2	1.8	10	1
	8	□	MNS1000-L8C	80	112	116	156	154.2	1.8	10	1
	10	□	MNS1000-L10C	100	132	136	176	174.2	1.8	10	1
	12	●	MNS1000-L12C	120	152	156	196	194.2	1.8	10	1
	15	□	MNS1000-L15C	150	182	186	226	224.2	1.8	10	1
	20	●	MNS1000-L20C	200	232	236	276	274.2	1.8	10	1
	25	□	MNS1000-L25C	250	282	286	326	324.2	1.8	10	1
	30	●	MNS1000-L30C	300	332	336	376	374.2	1.8	10	1
	5	★	MNS1000LB	50.0	81.8	81.8	137.8	136.0	1.8	10	1
	10	★	MNS1000X10DB	100.0	131.8	134.8	189.8	188.0	1.8	10	1
	20	★	MNS1000X20DB	200.0	231.8	234.8	289.8	288.0	1.8	10	1
	30	★	MNS1000X30DB	300.0	331.8	334.8	389.8	388.0	1.8	10	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.1	3	□	MNS1010S-DIN	30	55	57	102	100.2	1.8	12	2
	3	□	MNS1010S-DIN-C	30	55	57	102	100.2	1.8	12	1
	5	□	MNS1010L-DIN	51	71	73	118	116.2	1.8	12	2
	5	□	MNS1010L-DIN-C	51	71	73	118	116.2	1.8	12	1
	8	□	MNS1010-L8C	81	118	122	167	165.2	1.8	12	1
	10	□	MNS1010-L10C	101	139	143	188	186.2	1.8	12	1
	12	□	MNS1010-L12C	121	160	164	209	207.2	1.8	12	1
	15	□	MNS1010-L15C	152	191	195	240	238.2	1.8	12	1
	20	□	MNS1010-L20C	202	244	248	293	291.2	1.8	12	1
	25	□	MNS1010-L25C	253	296	300	345	343.2	1.8	12	1
	5	★	MNS1010LB	50.5	85.8	89.8	150.8	149.0	1.8	11	1
	10	□	MNS1010X10DB	101.0	138.8	141.8	202.8	201.0	1.8	11	1
	20	□	MNS1010X20DB	202.0	243.8	246.8	307.8	306.0	1.8	11	1
	3	□	MNS1020S-DIN	31	55	57	102	100.1	1.9	12	2
10.2	3	□	MNS1020S-DIN-C	31	55	57	102	100.1	1.9	12	1
	5	□	MNS1020L-DIN	51	71	73	118	116.1	1.9	12	2
	5	□	MNS1020L-DIN-C	51	71	73	118	116.1	1.9	12	1
	8	□	MNS1020-L8C	82	118	122	167	165.1	1.9	12	1
	10	□	MNS1020-L10C	102	139	143	188	186.1	1.9	12	1
	12	□	MNS1020-L12C	122	160	164	209	207.1	1.9	12	1
	15	□	MNS1020-L15C	153	191	195	240	238.1	1.9	12	1
	20	□	MNS1020-L20C	204	244	248	293	291.1	1.9	12	1
	25	□	MNS1020-L25C	255	296	300	345	343.1	1.9	12	1
	5	★	MNS1020LB	51.0	85.9	89.9	150.9	149.0	1.9	11	1
	10	□	MNS1020X10DB	102.0	138.9	141.9	202.9	201.0	1.9	11	1
	20	□	MNS1020X20DB	204.0	243.9	246.9	307.9	306.0	1.9	11	1
	3	□	MNS1030S-DIN	31	55	57	102	100.1	1.9	12	2
	3	□	MNS1030S-DIN-C	31	55	57	102	100.1	1.9	12	1
10.3	5	□	MNS1030L-DIN	52	71	73	118	116.1	1.9	12	2
	5	□	MNS1030L-DIN-C	52	71	73	118	116.1	1.9	12	1
	8	□	MNS1030-L8C	82	118	122	167	165.1	1.9	12	1
	10	□	MNS1030-L10C	103	139	143	188	186.1	1.9	12	1
	12	□	MNS1030-L12C	124	160	164	209	207.1	1.9	12	1
	15	□	MNS1030-L15C	155	191	195	240	238.1	1.9	12	1
	20	□	MNS1030-L20C	206	244	248	293	291.1	1.9	12	1
	25	□	MNS1030-L25C	258	296	300	345	343.1	1.9	12	1
	5	★	MNS1030LB	51.5	85.9	89.9	150.9	149.0	1.9	11	1
	10	□	MNS1030X10DB	103.0	138.9	141.9	202.9	201.0	1.9	11	1
	20	□	MNS1030X20DB	206.0	243.9	246.9	307.9	306.0	1.9	11	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.4	3	□	MNS1040S-DIN	31	55	57	102	100.1	1.9	12	2
	3	□	MNS1040S-DIN-C	31	55	57	102	100.1	1.9	12	1
	5	□	MNS1040L-DIN	52	71	73	118	116.1	1.9	12	2
	5	□	MNS1040L-DIN-C	52	71	73	118	116.1	1.9	12	1
	8	□	MNS1040-L8C	83	118	122	167	165.1	1.9	12	1
	10	□	MNS1040-L10C	104	139	143	188	186.1	1.9	12	1
	12	□	MNS1040-L12C	125	160	164	209	207.1	1.9	12	1
	15	□	MNS1040-L15C	156	191	195	240	238.1	1.9	12	1
	20	□	MNS1040-L20C	208	244	248	293	291.1	1.9	12	1
	25	□	MNS1040-L25C	260	296	300	345	343.1	1.9	12	1
	5	★	MNS1040LB	52.0	85.9	89.9	150.9	149.0	1.9	11	1
	10	□	MNS1040X10DB	104.0	138.9	141.9	202.9	201.0	1.9	11	1
	20	□	MNS1040X20DB	208.0	243.9	246.9	307.9	306.0	1.9	11	1
10.5	3	□	MNS1050S-DIN	32	55	57	102	100.1	1.9	12	2
	3	□	MNS1050S-DIN-C	32	55	57	102	100.1	1.9	12	1
	5	□	MNS1050L-DIN	53	71	73	118	116.1	1.9	12	2
	5	●	MNS1050L-DIN-C	53	71	73	118	116.1	1.9	12	1
	8	□	MNS1050-L8C	84	118	122	167	165.1	1.9	12	1
	10	□	MNS1050-L10C	105	139	143	188	186.1	1.9	12	1
	12	●	MNS1050-L12C	126	160	164	209	207.1	1.9	12	1
	15	□	MNS1050-L15C	158	191	195	240	238.1	1.9	12	1
	20	●	MNS1050-L20C	210	244	248	293	291.1	1.9	12	1
	25	□	MNS1050-L25C	263	296	300	345	343.1	1.9	12	1
	5	★	MNS1050LB	52.5	85.9	89.9	150.9	149.0	1.9	11	1
	10	★	MNS1050X10DB	105.0	138.9	141.9	202.9	201.0	1.9	11	1
	20	★	MNS1050X20DB	210.0	243.9	246.9	307.9	306.0	1.9	11	1
10.6	3	□	MNS1060S-DIN	32	55	57	102	100.1	1.9	12	2
	3	□	MNS1060S-DIN-C	32	55	57	102	100.1	1.9	12	1
	5	□	MNS1060L-DIN	53	71	73	118	116.1	1.9	12	2
	5	□	MNS1060L-DIN-C	53	71	73	118	116.1	1.9	12	1
	8	□	MNS1060-L8C	85	123	127	172	170.1	1.9	12	1
	10	□	MNS1060-L10C	106	145	149	194	192.1	1.9	12	1
	12	□	MNS1060-L12C	127	167	171	216	214.1	1.9	12	1
	15	□	MNS1060-L15C	159	200	204	249	247.1	1.9	12	1
	20	□	MNS1060-L20C	212	255	259	304	302.1	1.9	12	1
	25	□	MNS1060-L25C	265	310	314	359	357.1	1.9	12	1
	5	★	MNS1060LB	53.0	89.9	89.9	150.9	149.0	1.9	11	1
	10	□	MNS1060X10DB	106.0	144.9	147.9	208.9	207.0	1.9	11	1
	20	□	MNS1060X20DB	212.0	254.9	257.9	318.9	317.0	1.9	11	1
10.7	3	□	MNS1070S-DIN	32	55	57	102	100.1	1.9	12	2
	3	□	MNS1070S-DIN-C	32	55	57	102	100.1	1.9	12	1
	5	□	MNS1070L-DIN	54	71	73	118	116.1	1.9	12	2
	5	□	MNS1070L-DIN-C	54	71	73	118	116.1	1.9	12	1
	8	□	MNS1070-L8C	86	123	127	172	170.1	1.9	12	1
	10	□	MNS1070-L10C	107	145	149	194	192.1	1.9	12	1
	12	□	MNS1070-L12C	128	167	171	216	214.1	1.9	12	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.7	15	□	MNS1070-L15C	161	200	204	249	247.1	1.9	12	1
	20	□	MNS1070-L20C	214	255	259	304	302.1	1.9	12	1
	25	□	MNS1070-L25C	268	310	314	359	357.1	1.9	12	1
	5	★	MNS1070LB	53.5	89.9	89.9	150.9	149.0	1.9	11	1
	10	□	MNS1070X10DB	107.0	144.9	147.9	208.9	207.0	1.9	11	1
	20	□	MNS1070X20DB	214.0	254.9	257.9	318.9	317.0	1.9	11	1
10.8	3	□	MNS1080S-DIN	32	55	57	102	100.0	2.0	12	2
	3	□	MNS1080S-DIN-C	32	55	57	102	100.0	2.0	12	1
	5	□	MNS1080L-DIN	54	71	73	118	116.0	2.0	12	2
	5	□	MNS1080L-DIN-C	54	71	73	118	116.0	2.0	12	1
	8	□	MNS1080-L8C	86	123	127	172	170.0	2.0	12	1
	10	□	MNS1080-L10C	108	145	149	194	192.0	2.0	12	1
	12	□	MNS1080-L12C	130	167	171	216	214.0	2.0	12	1
	15	□	MNS1080-L15C	162	200	204	249	247.0	2.0	12	1
	20	□	MNS1080-L20C	216	255	259	304	302.0	2.0	12	1
	25	□	MNS1080-L25C	270	310	314	359	357.0	2.0	12	1
10.9	5	★	MNS1080LB	54.0	90.0	90.0	151.0	149.0	2.0	11	1
	10	□	MNS1080X10DB	108.0	145.0	148.0	209.0	207.0	2.0	11	1
	20	□	MNS1080X20DB	216.0	255.0	258.0	319.0	317.0	2.0	11	1
	3	□	MNS1090S-DIN	33	55	57	102	100.0	2.0	12	2
	3	□	MNS1090S-DIN-C	33	55	57	102	100.0	2.0	12	1
	5	□	MNS1090L-DIN	55	71	73	118	116.0	2.0	12	2
	5	□	MNS1090L-DIN-C	55	71	73	118	116.0	2.0	12	1
	8	□	MNS1090-L8C	87	123	127	172	170.0	2.0	12	1
	10	□	MNS1090-L10C	109	145	149	194	192.0	2.0	12	1
	12	□	MNS1090-L12C	131	167	171	216	214.0	2.0	12	1
11.0	15	□	MNS1090-L15C	164	200	204	249	247.0	2.0	12	1
	20	□	MNS1090-L20C	218	255	259	304	302.0	2.0	12	1
	25	□	MNS1090-L25C	273	310	314	359	357.0	2.0	12	1
	5	★	MNS1090LB	54.5	90.0	90.0	151.0	149.0	2.0	11	1
	10	□	MNS1090X10DB	109.0	145.0	148.0	209.0	207.0	2.0	11	1
	20	□	MNS1090X20DB	218.0	255.0	258.0	319.0	317.0	2.0	11	1
	3	□	MNS1100S-DIN	33	55	57	102	100.0	2.0	12	2
	3	□	MNS1100S-DIN-C	33	55	57	102	100.0	2.0	12	1
	5	□	MNS1100L-DIN	55	71	73	118	116.0	2.0	12	2
	5	●	MNS1100L-DIN-C	55	71	73	118	116.0	2.0	12	1
11.0	8	□	MNS1100-L8C	88	123	127	172	170.0	2.0	12	1
	10	□	MNS1100-L10C	110	145	149	194	192.0	2.0	12	1
	12	●	MNS1100-L12C	132	167	171	216	214.0	2.0	12	1
	15	□	MNS1100-L15C	165	200	204	249	247.0	2.0	12	1
	20	●	MNS1100-L20C	220	255	259	304	302.0	2.0	12	1
	25	□	MNS1100-L25C	275	310	314	359	357.0	2.0	12	1
	5	★	MNS1100LB	55.0	90.0	90.0	151.0	149.0	2.0	11	1
	10	★	MNS1100X10DB	110.0	145.0	148.0	209.0	207.0	2.0	11	1
	20	★	MNS1100X20DB	220.0	255.0	258.0	319.0	317.0	2.0	11	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
11.1	3	□	MNS1110S-DIN	33	55	57	102	100.0	2.0	12	2
	3	□	MNS1110S-DIN-C	33	55	57	102	100.0	2.0	12	1
	5	□	MNS1110L-DIN	56	71	73	118	116.0	2.0	12	2
	5	□	MNS1110L-DIN-C	56	71	73	118	116.0	2.0	12	1
	8	□	MNS1110-L8C	89	129	133	178	176.0	2.0	12	1
	10	□	MNS1110-L10C	111	152	156	201	199.0	2.0	12	1
	12	□	MNS1110-L12C	133	175	179	224	222.0	2.0	12	1
	15	□	MNS1110-L15C	167	209	213	258	256.0	2.0	12	1
	20	□	MNS1110-L20C	222	267	271	316	314.0	2.0	12	1
	25	□	MNS1110-L25C	278	324	328	373	371.0	2.0	12	1
	5	★	MNS1110LB	55.5	94.0	98.0	160.0	158.0	2.0	12	1
	10	□	MNS1110X10DB	111.0	152.0	155.0	217.0	215.0	2.0	12	1
	20	□	MNS1110X20DB	222.0	267.0	270.0	332.0	330.0	2.0	12	1
11.2	3	□	MNS1120S-DIN	34	55	57	102	100.0	2.0	12	2
	3	□	MNS1120S-DIN-C	34	55	57	102	100.0	2.0	12	1
	5	□	MNS1120L-DIN	56	71	73	118	116.0	2.0	12	2
	5	□	MNS1120L-DIN-C	56	71	73	118	116.0	2.0	12	1
	8	□	MNS1120-L8C	90	129	133	178	176.0	2.0	12	1
	10	□	MNS1120-L10C	112	152	156	201	199.0	2.0	12	1
	12	□	MNS1120-L12C	134	175	179	224	222.0	2.0	12	1
	15	□	MNS1120-L15C	168	209	213	258	256.0	2.0	12	1
	20	□	MNS1120-L20C	224	267	271	316	314.0	2.0	12	1
	25	□	MNS1120-L25C	280	324	328	373	371.0	2.0	12	1
	5	★	MNS1120LB	56.0	94.0	98.0	160.0	158.0	2.0	12	1
	10	□	MNS1120X10DB	112.0	152.0	155.0	217.0	215.0	2.0	12	1
	20	□	MNS1120X20DB	224.0	267.0	270.0	332.0	330.0	2.0	12	1
11.3	3	□	MNS1130S-DIN	34	55	57	102	99.9	2.1	12	2
	3	□	MNS1130S-DIN-C	34	55	57	102	99.9	2.1	12	1
	5	□	MNS1130L-DIN	57	71	73	118	115.9	2.1	12	2
	5	□	MNS1130L-DIN-C	57	71	73	118	115.9	2.1	12	1
	8	□	MNS1130-L8C	90	129	133	178	175.9	2.1	12	1
	10	□	MNS1130-L10C	113	152	156	201	198.9	2.1	12	1
	12	□	MNS1130-L12C	136	175	179	224	221.9	2.1	12	1
	15	□	MNS1130-L15C	170	209	213	258	255.9	2.1	12	1
	20	□	MNS1130-L20C	226	267	271	316	313.9	2.1	12	1
	25	□	MNS1130-L25C	283	324	328	373	370.9	2.1	12	1
	5	★	MNS1130LB	56.5	94.1	98.1	160.1	158.0	2.1	12	1
	10	□	MNS1130X10DB	113.0	152.1	155.1	217.1	215.0	2.1	12	1
	20	□	MNS1130X20DB	226.0	267.1	270.1	332.1	330.0	2.1	12	1
11.4	3	□	MNS1140S-DIN	34	55	57	102	99.9	2.1	12	2
	3	□	MNS1140S-DIN-C	34	55	57	102	99.9	2.1	12	1
	5	□	MNS1140L-DIN	57	71	73	118	115.9	2.1	12	2
	5	□	MNS1140L-DIN-C	57	71	73	118	115.9	2.1	12	1
	8	□	MNS1140-L8C	91	129	133	178	175.9	2.1	12	1
	10	□	MNS1140-L10C	114	152	156	201	198.9	2.1	12	1
	12	□	MNS1140-L12C	137	175	179	224	221.9	2.1	12	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
11.4	15	□	MNS1140-L15C	171	209	213	258	255.9	2.1	12	1
	20	□	MNS1140-L20C	228	267	271	316	313.9	2.1	12	1
	25	□	MNS1140-L25C	285	324	328	373	370.9	2.1	12	1
	5	★	MNS1140LB	57.0	94.1	98.1	160.1	158.0	2.1	12	1
	10	□	MNS1140X10DB	114.0	152.1	155.1	217.1	215.0	2.1	12	1
	20	□	MNS1140X20DB	228.0	267.1	270.1	332.1	330.0	2.1	12	1
11.5	3	□	MNS1150S-DIN	35	55	57	102	99.9	2.1	12	2
	3	□	MNS1150S-DIN-C	35	55	57	102	99.9	2.1	12	1
	5	□	MNS1150L-DIN	58	71	73	118	115.9	2.1	12	2
	5	●	MNS1150L-DIN-C	58	71	73	118	115.9	2.1	12	1
	8	□	MNS1150-L8C	92	129	133	178	175.9	2.1	12	1
	10	□	MNS1150-L10C	115	152	156	201	198.9	2.1	12	1
	12	●	MNS1150-L12C	138	175	179	224	221.9	2.1	12	1
	15	□	MNS1150-L15C	173	209	213	258	255.9	2.1	12	1
	20	●	MNS1150-L20C	230	267	271	316	313.9	2.1	12	1
	25	□	MNS1150-L25C	288	324	328	373	370.9	2.1	12	1
	5	★	MNS1150LB	57.5	94.1	98.1	160.1	158.0	2.1	12	1
	10	□	MNS1150X10DB	115.0	152.1	155.1	217.1	215.0	2.1	12	1
	20	□	MNS1150X20DB	230.0	267.1	270.1	332.1	330.0	2.1	12	1
11.6	3	□	MNS1160S-DIN	35	55	57	102	99.9	2.1	12	2
	3	□	MNS1160S-DIN-C	35	55	57	102	99.9	2.1	12	1
	5	□	MNS1160L-DIN	58	71	73	118	115.9	2.1	12	2
	5	□	MNS1160L-DIN-C	58	71	73	118	115.9	2.1	12	1
	8	□	MNS1160-L8C	93	134	138	183	180.9	2.1	12	1
	10	□	MNS1160-L10C	116	158	162	207	204.9	2.1	12	1
	12	□	MNS1160-L12C	139	182	186	231	228.9	2.1	12	1
	15	□	MNS1160-L15C	174	218	222	267	264.9	2.1	12	1
	20	□	MNS1160-L20C	232	278	282	327	324.9	2.1	12	1
	25	□	MNS1160-L25C	290	338	342	387	384.9	2.1	12	1
	5	★	MNS1160LB	58.0	98.1	98.1	160.1	158.0	2.1	12	1
	10	□	MNS1160X10DB	116.0	158.1	161.1	223.1	221.0	2.1	12	1
	20	□	MNS1160X20DB	232.0	278.1	281.1	343.1	341.0	2.1	12	1
11.7	3	□	MNS1170S-DIN	35	55	57	102	99.9	2.1	12	2
	3	□	MNS1170S-DIN-C	35	55	57	102	99.9	2.1	12	1
	5	□	MNS1170L-DIN	59	71	73	118	115.9	2.1	12	2
	5	□	MNS1170L-DIN-C	59	71	73	118	115.9	2.1	12	1
	8	□	MNS1170-L8C	94	134	138	183	180.9	2.1	12	1
	10	□	MNS1170-L10C	117	158	162	207	204.9	2.1	12	1
	12	□	MNS1170-L12C	140	182	186	231	228.9	2.1	12	1
	15	□	MNS1170-L15C	176	218	222	267	264.9	2.1	12	1
	20	□	MNS1170-L20C	234	278	282	327	324.9	2.1	12	1
	25	□	MNS1170-L25C	293	338	342	387	384.9	2.1	12	1
	5	★	MNS1170LB	58.5	98.1	98.1	160.1	158.0	2.1	12	1
	10	□	MNS1170X10DB	117.0	158.1	161.1	223.1	221.0	2.1	12	1
	20	□	MNS1170X20DB	234.0	278.1	281.1	343.1	341.0	2.1	12	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
11.8	3	□	MNS1180S-DIN	35	55	57	102	99.9	2.1	12	2
	3	□	MNS1180S-DIN-C	35	55	57	102	99.9	2.1	12	1
	5	□	MNS1180L-DIN	59	71	73	118	115.9	2.1	12	2
	5	□	MNS1180L-DIN-C	59	71	73	118	115.9	2.1	12	1
	8	□	MNS1180-L8C	94	134	138	183	180.9	2.1	12	1
	10	□	MNS1180-L10C	118	158	162	207	204.9	2.1	12	1
	12	□	MNS1180-L12C	142	182	186	231	228.9	2.1	12	1
	15	□	MNS1180-L15C	177	218	222	267	264.9	2.1	12	1
	20	□	MNS1180-L20C	236	278	282	327	324.9	2.1	12	1
	25	□	MNS1180-L25C	295	338	342	387	384.9	2.1	12	1
11.9	5	★	MNS1180LB	59.0	98.1	98.1	160.1	158.0	2.1	12	1
	10	□	MNS1180X10DB	118.0	158.1	161.1	223.1	221.0	2.1	12	1
	20	□	MNS1180X20DB	236.0	278.1	281.1	343.1	341.0	2.1	12	1
	3	□	MNS1190S-DIN	36	55	57	102	99.8	2.2	12	2
	3	□	MNS1190S-DIN-C	36	55	57	102	99.8	2.2	12	1
	5	□	MNS1190L-DIN	60	71	73	118	115.8	2.2	12	2
	5	□	MNS1190L-DIN-C	60	71	73	118	115.8	2.2	12	1
	8	□	MNS1190-L8C	95	134	138	183	180.8	2.2	12	1
	10	□	MNS1190-L10C	119	158	162	207	204.8	2.2	12	1
	12	□	MNS1190-L12C	143	182	186	231	228.8	2.2	12	1
12.0	15	□	MNS1190-L15C	179	218	222	267	264.8	2.2	12	1
	20	□	MNS1190-L20C	238	278	282	327	324.8	2.2	12	1
	25	□	MNS1190-L25C	298	338	342	387	384.8	2.2	12	1
	5	★	MNS1190LB	59.5	98.2	98.2	160.2	158.0	2.2	12	1
	10	□	MNS1190X10DB	119.0	158.2	161.2	223.2	221.0	2.2	12	1
	20	□	MNS1190X20DB	238.0	278.2	281.2	343.2	341.0	2.2	12	1
	3	□	MNS1200S-DIN	36	55	57	102	99.8	2.2	12	2
	3	□	MNS1200S-DIN-C	36	55	57	102	99.8	2.2	12	1
	5	□	MNS1200L-DIN	60	71	73	118	115.8	2.2	12	2
	5	●	MNS1200L-DIN-C	60	71	73	118	115.8	2.2	12	1
12.1	8	□	MNS1200-L8C	96	134	138	183	180.8	2.2	12	1
	10	□	MNS1200-L10C	120	158	162	207	204.8	2.2	12	1
	12	●	MNS1200-L12C	144	182	186	231	228.8	2.2	12	1
	15	□	MNS1200-L15C	180	218	222	267	264.8	2.2	12	1
	20	●	MNS1200-L20C	240	278	282	327	324.8	2.2	12	1
	25	□	MNS1200-L25C	300	338	342	387	384.8	2.2	12	1
	5	★	MNS1200LB	60.0	98.2	98.2	160.2	158.0	2.2	12	1
	10	★	MNS1200X10DB	120.0	158.2	161.2	223.2	221.0	2.2	12	1
	20	★	MNS1200X20DB	240.0	278.2	281.2	343.2	341.0	2.2	12	1
	3	□	MNS1210S-DIN	36	60	62	107	104.8	2.2	14	2
12.2	3	□	MNS1210S-DIN-C	36	60	62	107	104.8	2.2	14	1
	5	□	MNS1210L-DIN	61	77	79	124	121.8	2.2	14	2
	5	□	MNS1210L-DIN-C	61	77	79	124	121.8	2.2	14	1
	8	□	MNS1210-L8C	97	140	144	189	186.8	2.2	14	1
	10	□	MNS1210-L10C	121	165	169	214	211.8	2.2	14	1
	12	□	MNS1210-L12C	145	190	194	239	236.8	2.2	14	1
	15	□	MNS1210-L15C	182	227	231	276	273.8	2.2	14	1
	20	□	MNS1210-L20C	242	290	294	339	336.8	2.2	14	1
	5	★	MNS1210LB	60.5	102.2	106.2	169.2	167.0	2.2	13	1
	10	□	MNS1210X10DB	121.0	165.2	168.2	231.2	229.0	2.2	13	1
12.3	20	□	MNS1210X20DB	242.0	290.2	293.2	356.2	354.0	2.2	13	1
	3	□	MNS1220S-DIN	37	60	62	107	104.8	2.2	14	2
	3	□	MNS1220S-DIN-C	37	60	62	107	104.8	2.2	14	1
	5	□	MNS1220L-DIN	61	77	79	124	121.8	2.2	14	2
	5	□	MNS1220L-DIN-C	61	77	79	124	121.8	2.2	14	1
	8	□	MNS1220-L8C	98	140	144	189	186.8	2.2	14	1
	10	□	MNS1220-L10C	122	165	169	214	211.8	2.2	14	1
	12	□	MNS1220-L12C	146	190	194	239	236.8	2.2	14	1
	15	□	MNS1220-L15C	183	227	231	276	273.8	2.2	14	1
	20	□	MNS1220-L20C	244	290	294	339	336.8	2.2	14	1
12.4	5	★	MNS1220LB	61.0	102.2	106.2	169.2	167.0	2.2	13	1
	10	□	MNS1220X10DB	122.0	165.2	168.2	231.2	229.0	2.2	13	1
	20	□	MNS1220X20DB	244.0	290.2	293.2	356.2	354.0	2.2	13	1
	3	□	MNS1230S-DIN	37	60	62	107	104.8	2.2	14	2
	3	□	MNS1230S-DIN-C	37	60	62	107	104.8	2.2	14	1
	5	□	MNS1230L-DIN	62	77	79	124	121.8	2.2	14	2
	5	□	MNS1230L-DIN-C	62	77	79	124	121.8	2.2	14	1
	8	□	MNS1230-L8C	98	140	144	189	186.8	2.2	14	1
	10	□	MNS1230-L10C	123	165	169	214	211.8	2.2	14	1
	12	□	MNS1230-L12C	148	190	194	239	236.8	2.2	14	1
12.5	15	□	MNS1230-L15C	185	227	231	276	273.8	2.2	14	1
	20	□	MNS1230-L20C	246	290	294	339	336.8	2.2	14	1
	5	★	MNS1230LB	61.5	102.2	106.2	169.2	167.0	2.2	13	1
	10	□	MNS1230X10DB	123.0	165.2	168.2	231.2	229.0	2.2	13	1
	20	□	MNS1230X20DB	246.0	290.2	293.2	356.2	354.0	2.2	13	1
	3	□	MNS1240S-DIN	37	60	62	107	104.7	2.3	14	2
	3	□	MNS1240S-DIN-C	37	60	62	107	104.7	2.3	14	1
	5	□	MNS1240L-DIN	62	77	79	124	121.7	2.3	14	2
	5	□	MNS1240L-DIN-C	62	77	79	124	121.7	2.3	14	1
	8	□	MNS1240-L8C	99	140	144	189	186.7	2.3	14	1
12.6	10	□	MNS1240-L10C	124	165	169	214	211.7	2.3	14	1
	12	□	MNS1240-L12C	149	190	194	239	236.7	2.3	14	1
	15	□	MNS1240-L15C	186	227	231	276	273.7	2.3	14	1
	20	□	MNS1240-L20C	248	290	294	339	336.7	2.3	14	1
	5	★	MNS1240LB	62.0	102.3	106.3	169.3	167.0	2.3	13	1
	10	□	MNS1240X10DB	124.0	165.3	168.3	231.3	229.0	2.3	13	1
	20	□	MNS1240X20DB	248.0	290.3	293.3	356.3	354.0	2.3	13	1
	3	□	MNS1250S-DIN	38	60	62	107	104.7	2.3	14	2
	3	□	MNS1250S-DIN-C	38	60	62	107	104.7	2.3	14	1
	5	□	MNS1250L-DIN	63	77	79	124	121.7	2.3	14	2
12.7	5	●	MNS1250L-DIN-C	63	77	79	124	121.7	2.3	14	1
	8	□	MNS1250-L8C	100	140	144	189	186.7	2.3	14	1
	10	□	MNS1250-L10C	125	165	169	214	211.7	2.3	14	1
	12	●	MNS1250-L12C	150	190	194	239	236.7	2.3	14	1
	15	□	MNS1250-L15C	188	227	231	276	273.7	2.3	14	1
	20	●	MNS1250-L20C	250	290	294	339	336.7	2.3	14	1
	5	★	MNS1250LB	62.5	102.3	106.3	169.3	167.0	2.3	13	1
	10	□	MNS1250X10DB	125.0	165.3	168.3	231.3	229.0	2.3	13	1
	20	□	MNS1250X20DB	250.0	290.3	293.3	356.3	354.0	2.3	13	1
	3	□	MNS1260S-DIN	38	60	62	107	104.7	2.3	14	2

Interne Kühlung

DC	Bohrtiefe (mm)	Bohrtiefe (l/d)	Lager	Bestellbezeichnung	Abmessungen (mm)							Typ
			TF15		LU	LCF	LH	OAL	LF	PL	DCON	
12.2	3	□	MNS1220S-DIN	37	60	62	107	104.8	2.2	14	2	
	3	□	MNS1220S-DIN-C	37	60	62	107	104.8	2.2	14	1	
	5	□	MNS1220L-DIN	61	77	79	124	121.8	2.2	14	2	
	5	□	MNS1220L-DIN-C	61	77	79	124	121.8	2.2	14	1	
	8	□	MNS1220-L8C	98	140	144	189	186.8	2.2	14	1	
	10	□	MNS1220-L10C	122	165	169	214	211.8	2.2	14	1	
	12	□	MNS1220-L12C	146	190	194	239	236.8	2.2	14	1	
	15	□	MNS1220-L15C	183	227	231	276	273.8	2.2	14	1	
	20	□	MNS1220-L20C	244	290	294	339	336.8	2.2	14	1	
	5	★	MNS1220LB	61.0	102.2	106.2	169.2	167.0	2.2	13	1	
	10	□	MNS1220X10DB	122.0	165.2	168.2	231.2	229.0	2.2	13	1	
	20	□	MNS1220X20DB	244.0	290.2	293.2	356.2	354.0	2.2	13	1	
12.3	3	□	MNS1230S-DIN	37	60	62	107	104.8	2.2	14	2	
	3	□	MNS1230S-DIN-C	37	60	62	107	104.8	2.2	14	1	
	5	□	MNS1230L-DIN	62	77	79	124	121.8	2.2	14	2	
	5	□	MNS1230L-DIN-C	62	77	79	124	121.8	2.2	14	1	
	8	□	MNS1230-L8C	98	140	144	189	186.8	2.2	14	1	
	10	□	MNS1230-L10C	123	165	169	214	211.8	2.2	14	1	
	12	□	MNS1230-L12C	148	190	194	239	236.8	2.2	14	1	
	15	□	MNS1230-L15C	185	227	231	276	273.8	2.2	14	1	
	20	□	MNS1230-L20C	246	290	294	339	336.8	2.2	14	1	
	5	★	MNS1230LB	61.5	102.2	106.2	169.2	167.0	2.2	13	1	
	10	□	MNS1230X10DB	123.0	165.2	168.2	231.2	229.0	2.2	13	1	
	20	□	MNS1230X20DB	246.0	290.2	293.2	356.2	354.0	2.2	13	1	
12.4	3	□	MNS1240S-DIN	37	60	62	107	104.7	2.3	14	2	
	3	□	MNS1240S-DIN-C	37	60	62	107	104.7	2.3	14	1	
	5	□	MNS1240L-DIN	62	77	79	124	121.7	2.3	14	2	
	5	□	MNS1240L-DIN-C	62	77	79	124	121.7	2.3	14	1	
	8	□	MNS1240-L8C	99	140	144	189	186.7	2.3	14	1	
	10	□	MNS1240-L10C	124	165	169	214	211.7	2.3	14	1	
	12	□	MNS1240-L12C	149	190	194	239	236.7	2.3	14	1	
	15	□	MNS1240-L15C	186	227	231	276	273.7	2.3	14	1	
	20	□	MNS1240-L20C	248	290	294	339	336.7	2.3	14	1	
	5	★	MNS1240LB	62.0	102.3	106.3	169.3	167.0	2.3	13	1	
	10	□	MNS1240X10DB	124.0	165.3	168.3	231.3	229.0	2.3	13	1	
	20	□	MNS1240X20DB	248.0	290.3	293.3	356.3	354.0	2.3	13	1	
12.5	3	□	MNS1250S-DIN	38	60	62	107	104.7	2.3	14	2	
	3	□	MNS1250S-DIN-C	38	60	62	107	104.7	2.3	14	1	
	5	□	MNS1250L-DIN	63	77	79	124	121.7	2.3	14	2	
	5	●	MNS1250L-DIN-C	63	77	79	124	121.7	2.3	14	1	
	8	□	MNS1250-L8C	100	140	144	189	186.7	2.3	14	1	
	10	□	MNS1250-L10C	125	165	169	214	211.7	2.3	14	1	
	12	●	MNS1250-L12C	150	190	194	239	236.7	2.3	14	1	
	15	□	MNS1250-L15C	188	227	231	276	273.7	2.3	14	1	
	20	●	MNS1250-L20C	250	290	294	339	336.7	2.3	14	1	
	5	★	MNS1250LB	62.5	102.3	106.3	169.3	167.0	2.3	13	1	
	10	□	MNS1250X10DB	125.0	165.3	168.3	231.3	229.0	2.3	13	1	
	20	□	MNS1250X20DB	250.0	290.3	293.3	356.3	354.0	2.3	13	1	

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DON	
12.6	3	□	MNS1260S-DIN	38	60	62	107	104.7	2.3	14	2
	3	□	MNS1260S-DIN-C	38	60	62	107	104.7	2.3	14	1
	5	□	MNS1260L-DIN	63	77	79	124	121.7	2.3	14	2
	5	□	MNS1260L-DIN-C	63	77	79	124	121.7	2.3	14	1
	8	□	MNS1260-L8C	101	145	149	194	191.7	2.3	14	1
	10	□	MNS1260-L10C	126	171	175	220	217.7	2.3	14	1
	12	□	MNS1260-L12C	151	197	201	246	243.7	2.3	14	1
	15	□	MNS1260-L15C	189	236	240	285	282.7	2.3	14	1
	20	□	MNS1260-L20C	252	301	305	350	347.7	2.3	14	1
	5	★	MNS1260LB	63.0	106.3	106.3	169.3	167.0	2.3	13	1
12.7	10	□	MNS1260X10DB	126.0	171.3	174.3	237.3	235.0	2.3	13	1
	20	□	MNS1260X20DB	252.0	301.3	304.3	367.3	365.0	2.3	13	1
	3	□	MNS1270S-DIN	38	60	62	107	104.7	2.3	14	2
	3	□	MNS1270S-DIN-C	38	60	62	107	104.7	2.3	14	1
	5	□	MNS1270L-DIN	64	77	79	124	121.7	2.3	14	2
	5	□	MNS1270L-DIN-C	64	77	79	124	121.7	2.3	14	1
	8	□	MNS1270-L8C	102	145	149	194	191.7	2.3	14	1
	10	□	MNS1270-L10C	127	171	175	220	217.7	2.3	14	1
	12	□	MNS1270-L12C	152	197	201	246	243.7	2.3	14	1
	15	□	MNS1270-L15C	191	236	240	285	282.7	2.3	14	1
12.8	20	□	MNS1270-L20C	254	301	305	350	347.7	2.3	14	1
	5	★	MNS1270LB	63.5	106.3	106.3	169.3	167.0	2.3	13	1
	10	□	MNS1270X10DB	127.0	171.3	174.3	237.3	235.0	2.3	13	1
	20	□	MNS1270X20DB	254.0	301.3	304.3	367.3	365.0	2.3	13	1
	3	□	MNS1280S-DIN	38	60	62	107	104.7	2.3	14	2
	3	□	MNS1280S-DIN-C	38	60	62	107	104.7	2.3	14	1
	5	□	MNS1280L-DIN	64	77	79	124	121.7	2.3	14	2
	5	□	MNS1280L-DIN-C	64	77	79	124	121.7	2.3	14	1
	8	□	MNS1280-L8C	102	145	149	194	191.7	2.3	14	1
	10	□	MNS1280-L10C	128	171	175	220	217.7	2.3	14	1
12.9	12	□	MNS1280-L12C	154	197	201	246	243.7	2.3	14	1
	15	□	MNS1280-L15C	192	236	240	285	282.7	2.3	14	1
	20	□	MNS1280-L20C	256	301	305	350	347.7	2.3	14	1
	5	★	MNS1280LB	64.0	106.3	106.3	169.3	167.0	2.3	13	1
	10	□	MNS1280X10DB	128.0	171.3	174.3	237.3	235.0	2.3	13	1
	20	□	MNS1280X20DB	256.0	301.3	304.3	367.3	365.0	2.3	13	1
	3	□	MNS1290S-DIN	39	60	62	107	104.7	2.3	14	2
	3	□	MNS1290S-DIN-C	39	60	62	107	104.7	2.3	14	1
	5	□	MNS1290L-DIN	65	77	79	124	121.7	2.3	14	2
	5	□	MNS1290L-DIN-C	65	77	79	124	121.7	2.3	14	1
13.0	8	□	MNS1290-L8C	103	145	149	194	191.7	2.3	14	1
	10	□	MNS1290-L10C	129	171	175	220	217.7	2.3	14	1
	12	□	MNS1290-L12C	155	197	201	246	243.7	2.3	14	1
	15	□	MNS1290-L15C	194	236	240	285	282.7	2.3	14	1
	20	□	MNS1290-L20C	258	301	305	350	347.7	2.3	14	1
	5	★	MNS1290LB	64.5	106.3	106.3	169.3	167.0	2.3	13	1
	10	□	MNS1290X10DB	129.0	171.3	174.3	237.3	235.0	2.3	13	1
	20	□	MNS1290X20DB	258.0	301.3	304.3	367.3	365.0	2.3	13	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DON	
13.0	3	□	MNS1300S-DIN	39	60	62	107	104.6	2.4	14	2
	3	□	MNS1300S-DIN-C	39	60	62	107	104.6	2.4	14	1
	5	□	MNS1300L-DIN	65	77	79	124	121.6	2.4	14	2
	5	●	MNS1300L-DIN-C	65	77	79	124	121.6	2.4	14	1
	8	□	MNS1300-L8C	104	145	149	194	191.6	2.4	14	1
	10	□	MNS1300-L10C	130	171	175	220	217.6	2.4	14	1
	12	●	MNS1300-L12C	156	197	201	246	243.6	2.4	14	1
	15	□	MNS1300-L15C	195	236	240	285	282.6	2.4	14	1
	20	●	MNS1300-L20C	260	301	305	350	347.6	2.4	14	1
	5	★	MNS1300LB	65.0	106.4	106.4	169.4	167.0	2.4	13	1
13.1	10	★	MNS1300X10DB	130.0	171.4	174.4	237.4	235.0	2.4	13	1
	20	★	MNS1300X20DB	260.0	301.4	304.4	367.4	365.0	2.4	13	1
	3	□	MNS1310S-DIN	39	60	62	107	104.6	2.4	14	2
	3	□	MNS1310S-DIN-C	39	60	62	107	104.6	2.4	14	1
	5	□	MNS1310L-DIN	66	77	79	124	121.6	2.4	14	2
	5	□	MNS1310L-DIN-C	66	77	79	124	121.6	2.4	14	1
	8	□	MNS1310-L8C	105	151	155	200	197.6	2.4	14	1
	10	□	MNS1310-L10C	131	178	182	227	224.6	2.4	14	1
	12	□	MNS1310-L12C	157	205	209	254	251.6	2.4	14	1
	15	□	MNS1310-L15C	197	245	249	294	291.6	2.4	14	1
13.2	20	□	MNS1310-L20C	262	313	317	362	359.6	2.4	14	1
	5	★	MNS1310LB	65.5	110.4	114.4	178.4	176.0	2.4	14	1
	10	□	MNS1310X10DB	131.0	178.4	181.4	245.4	243.0	2.4	14	1
	20	□	MNS1310X20DB	262.0	313.4	316.4	380.4	378.0	2.4	14	1
	3	□	MNS1320S-DIN	40	60	62	107	104.6	2.4	14	2
	3	□	MNS1320S-DIN-C	40	60	62	107	104.6	2.4	14	1
	5	□	MNS1320L-DIN	66	77	79	124	121.6	2.4	14	2
	5	□	MNS1320L-DIN-C	66	77	79	124	121.6	2.4	14	1
	8	□	MNS1320-L8C	106	151	155	200	197.6	2.4	14	1
	10	□	MNS1320-L10C	132	178	182	227	224.6	2.4	14	1
13.3	12	□	MNS1320-L12C	158	205	209	254	251.6	2.4	14	1
	15	□	MNS1320-L15C	198	245	249	294	291.6	2.4	14	1
	20	□	MNS1320-L20C	264	313	317	362	359.6	2.4	14	1
	5	★	MNS1320LB	66.0	110.4	114.4	178.4	176.0	2.4	14	1
	10	□	MNS1320X10DB	132.0	178.4	181.4	245.4	243.0	2.4	14	1
	20	□	MNS1320X20DB	264.0	313.4	316.4	380.4	378.0	2.4	14	1
	3	□	MNS1330S-DIN	40	60	62	107	104.6	2.4	14	2
	3	□	MNS1330S-DIN-C	40	60	62	107	104.6	2.4	14	1
	5	□	MNS1330L-DIN	67	77	79	124	121.6	2.4	14	2
	5	□	MNS1330L-DIN-C	67	77	79	124	121.6	2.4	14	1
13.3	8	□	MNS1330-L8C	106	151	155	200	197.6	2.4	14	1
	10	□	MNS1330-L10C	133	178	182	227	224.6	2.4	14	1
	12	□	MNS1330-L12C	160	205	209	254	251.6	2.4	14	1
	15	□	MNS1330-L15C	200	245	249	294	291.6	2.4	14	1
	20	□	MNS1330-L20C	266	313	317	362	359.6	2.4	14	1
	5	★	MNS1330LB	66.5	110.4	114.4	178.4	176.0	2.4	14	1
	10	□	MNS1330X10DB	133.0	178.4	181.4	245.4	243.0	2.4	14	1
	20	□	MNS1330X20DB	266.0	313.4	316.4	380.4	378.0	2.4	14	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
13.4	3	□	MNS1340S-DIN	40	60	62	107	104.6	2.4	14	2
	3	□	MNS1340S-DIN-C	40	60	62	107	104.6	2.4	14	1
	5	□	MNS1340L-DIN	67	77	79	124	121.6	2.4	14	2
	5	□	MNS1340L-DIN-C	67	77	79	124	121.6	2.4	14	1
	8	□	MNS1340-L8C	107	151	155	200	197.6	2.4	14	1
	10	□	MNS1340-L10C	134	178	182	227	224.6	2.4	14	1
	12	□	MNS1340-L12C	161	205	209	254	251.6	2.4	14	1
	15	□	MNS1340-L15C	201	245	249	294	291.6	2.4	14	1
	20	□	MNS1340-L20C	268	313	317	362	359.6	2.4	14	1
	5	★	MNS1340LB	67.0	110.4	114.4	178.4	176.0	2.4	14	1
13.5	10	□	MNS1340X10DB	134.0	178.4	181.4	245.4	243.0	2.4	14	1
	20	□	MNS1340X20DB	268.0	313.4	316.4	380.4	378.0	2.4	14	1
	3	□	MNS1350S-DIN	41	60	62	107	104.5	2.5	14	2
	3	□	MNS1350S-DIN-C	41	60	62	107	104.5	2.5	14	1
	5	□	MNS1350L-DIN	68	77	79	124	121.5	2.5	14	2
	5	●	MNS1350L-DIN-C	68	77	79	124	121.5	2.5	14	1
	8	□	MNS1350-L8C	108	151	155	200	197.5	2.5	14	1
	10	□	MNS1350-L10C	135	178	182	227	224.5	2.5	14	1
	12	●	MNS1350-L12C	162	205	209	254	251.5	2.5	14	1
	15	□	MNS1350-L15C	203	245	249	294	291.5	2.5	14	1
13.6	20	●	MNS1350-L20C	270	313	317	362	359.5	2.5	14	1
	5	★	MNS1350LB	67.5	110.5	114.5	178.5	176.0	2.5	14	1
	10	□	MNS1350X10DB	135.0	178.5	181.5	245.5	243.0	2.5	14	1
	20	□	MNS1350X20DB	270.0	313.5	316.5	380.5	378.0	2.5	14	1
	3	□	MNS1360S-DIN	41	60	62	107	104.5	2.5	14	2
	3	□	MNS1360S-DIN-C	41	60	62	107	104.5	2.5	14	1
	5	□	MNS1360L-DIN	68	77	79	124	121.5	2.5	14	2
	5	□	MNS1360L-DIN-C	68	77	79	124	121.5	2.5	14	1
	8	□	MNS1360-L8C	109	156	160	205	202.5	2.5	14	1
	10	□	MNS1360-L10C	136	184	188	233	230.5	2.5	14	1
13.7	12	□	MNS1360-L12C	163	212	216	261	258.5	2.5	14	1
	15	□	MNS1360-L15C	204	254	258	303	300.5	2.5	14	1
	20	□	MNS1360-L20C	272	324	328	373	370.5	2.5	14	1
	5	★	MNS1360LB	68.0	114.5	114.5	178.5	176.0	2.5	14	1
	10	□	MNS1360X10DB	136.0	184.5	187.5	251.5	249.0	2.5	14	1
	20	□	MNS1360X20DB	272.0	324.5	327.5	391.5	389.0	2.5	14	1
	3	□	MNS1370S-DIN	41	60	62	107	104.5	2.5	14	2
	3	□	MNS1370S-DIN-C	41	60	62	107	104.5	2.5	14	1
	5	□	MNS1370L-DIN	69	77	79	124	121.5	2.5	14	2
	5	□	MNS1370L-DIN-C	69	77	79	124	121.5	2.5	14	1
13.8	8	□	MNS1370-L8C	110	156	160	205	202.5	2.5	14	1
	10	□	MNS1370-L10C	137	184	188	233	230.5	2.5	14	1
	12	□	MNS1370-L12C	164	212	216	261	258.5	2.5	14	1
	15	□	MNS1370-L15C	206	254	258	303	300.5	2.5	14	1
	20	□	MNS1370-L20C	274	324	328	373	370.5	2.5	14	1
	5	★	MNS1370LB	68.5	114.5	114.5	178.5	176.0	2.5	14	1
	10	□	MNS1370X10DB	137.0	184.5	187.5	251.5	249.0	2.5	14	1
	20	□	MNS1370X20DB	274.0	324.5	327.5	391.5	389.0	2.5	14	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
13.8	3	□	MNS1380S-DIN	41	60	62	107	104.5	2.5	14	2
	3	□	MNS1380S-DIN-C	41	60	62	107	104.5	2.5	14	1
	5	□	MNS1380L-DIN	69	77	79	124	121.5	2.5	14	2
	5	□	MNS1380L-DIN-C	69	77	79	124	121.5	2.5	14	1
	8	□	MNS1380-L8C	110	156	160	205	202.5	2.5	14	1
	10	□	MNS1380-L10C	138	184	188	233	230.5	2.5	14	1
	12	□	MNS1380-L12C	166	212	216	261	258.5	2.5	14	1
	15	□	MNS1380-L15C	207	254	258	303	300.5	2.5	14	1
	20	□	MNS1380-L20C	276	324	328	373	370.5	2.5	14	1
	5	★	MNS1380LB	69.0	114.5	114.5	178.5	176.0	2.5	14	1
13.9	10	□	MNS1380X10DB	138.0	184.5	187.5	251.5	249.0	2.5	14	1
	20	□	MNS1380X20DB	276.0	324.5	327.5	391.5	389.0	2.5	14	1
	3	□	MNS1390S-DIN	42	60	62	107	104.5	2.5	14	2
	3	□	MNS1390S-DIN-C	42	60	62	107	104.5	2.5	14	1
	5	□	MNS1390L-DIN	70	77	79	124	121.5	2.5	14	2
	5	□	MNS1390L-DIN-C	70	77	79	124	121.5	2.5	14	1
	8	□	MNS1390-L8C	111	156	160	205	202.5	2.5	14	1
	10	□	MNS1390-L10C	139	184	188	233	230.5	2.5	14	1
	12	□	MNS1390-L12C	167	212	216	261	258.5	2.5	14	1
	15	□	MNS1390-L15C	209	254	258	303	300.5	2.5	14	1
14.0	20	□	MNS1390-L20C	278	324	328	373	370.5	2.5	14	1
	5	★	MNS1390LB	69.5	114.5	114.5	178.5	176.0	2.5	14	1
	10	□	MNS1390X10DB	139.0	184.5	187.5	251.5	249.0	2.5	14	1
	20	□	MNS1390X20DB	278.0	324.5	327.5	391.5	389.0	2.5	14	1
	3	□	MNS1400S-DIN	42	60	62	107	104.5	2.5	14	2
	3	□	MNS1400S-DIN-C	42	60	62	107	104.5	2.5	14	1
	5	□	MNS1400L-DIN	70	77	79	124	121.5	2.5	14	2
	5	●	MNS1400L-DIN-C	70	77	79	124	121.5	2.5	14	1
	8	□	MNS1400-L8C	112	156	160	205	202.5	2.5	14	1
	10	□	MNS1400-L10C	140	184	188	233	230.5	2.5	14	1
14.1	12	●	MNS1400-L12C	168	212	216	261	258.5	2.5	14	1
	15	□	MNS1400-L15C	210	254	258	303	300.5	2.5	14	1
	20	●	MNS1400-L20C	280	324	328	373	370.5	2.5	14	1
	5	★	MNS1400LB	70.0	114.5	114.5	178.5	176.0	2.5	14	1
	10	★	MNS1400X10DB	140.0	184.5	187.5	251.5	249.0	2.5	14	1
	20	★	MNS1400X20DB	280.0	324.5	327.5	391.5	389.0	2.5	14	1
	3	□	MNS1410S-DIN	42	64	66	114	111.4	2.6	16	2
	3	□	MNS1410S-DIN-C	42	64	66	114	111.4	2.6	16	1
	5	□	MNS1410L-DIN	71	82	84	132	129.4	2.6	16	2
	5	□	MNS1410L-DIN-C	71	82	84	132	129.4	2.6	16	1
14.2	8	□	MNS1420S-DIN	43	64	66	114	111.4	2.6	16	2
	3	□	MNS1420S-DIN-C	43	64	66	114	111.4	2.6	16	1
	5	□	MNS1420L-DIN	71	82	84	132	129.4	2.6	16	2
	5	●	MNS1420L-DIN-C	71	82	84	132	129.4	2.6	16	1
	3	□	MNS1430S-DIN	43	64	66	114	111.4	2.6	16	2
	3	□	MNS1430S-DIN-C	43	64	66	114	111.4	2.6	16	1
	5	□	MNS1430L-DIN	72	82	84	132	129.4	2.6	16	2
	5	□	MNS1430L-DIN-C	72	82	84	132	129.4	2.6	16	1

BOHREN (VOLLHARTMETALL)

MNS

HARTMETALL

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
14.4	3	□	MNS1440S-DIN	43	64	66	114	111.4	2.6	16	2
	3	□	MNS1440S-DIN-C	43	64	66	114	111.4	2.6	16	1
	5	□	MNS1440L-DIN	72	82	84	132	129.4	2.6	16	2
	5	□	MNS1440L-DIN-C	72	82	84	132	129.4	2.6	16	1
14.5	3	□	MNS1450S-DIN	44	64	66	114	111.4	2.6	16	2
	3	□	MNS1450S-DIN-C	44	64	66	114	111.4	2.6	16	1
	5	□	MNS1450L-DIN	73	82	84	132	129.4	2.6	16	2
	5	●	MNS1450L-DIN-C	73	82	84	132	129.4	2.6	16	1
14.6	3	□	MNS1460S-DIN	44	64	66	114	111.3	2.7	16	2
	3	□	MNS1460S-DIN-C	44	64	66	114	111.3	2.7	16	1
	5	□	MNS1460L-DIN	73	82	84	132	129.3	2.7	16	2
	5	□	MNS1460L-DIN-C	73	82	84	132	129.3	2.7	16	1
14.7	3	□	MNS1470S-DIN	44	64	66	114	111.3	2.7	16	2
	3	□	MNS1470S-DIN-C	44	64	66	114	111.3	2.7	16	1
	5	□	MNS1470L-DIN	74	82	84	132	129.3	2.7	16	2
	5	□	MNS1470L-DIN-C	74	82	84	132	129.3	2.7	16	1
14.8	3	□	MNS1480S-DIN	44	64	66	114	111.3	2.7	16	2
	3	□	MNS1480S-DIN-C	44	64	66	114	111.3	2.7	16	1
	5	□	MNS1480L-DIN	74	82	84	132	129.3	2.7	16	2
	5	□	MNS1480L-DIN-C	74	82	84	132	129.3	2.7	16	1
14.9	3	□	MNS1490S-DIN	45	64	66	114	111.3	2.7	16	2
	3	□	MNS1490S-DIN-C	45	64	66	114	111.3	2.7	16	1
	5	□	MNS1490L-DIN	75	82	84	132	129.3	2.7	16	2
	5	□	MNS1490L-DIN-C	75	82	84	132	129.3	2.7	16	1
15.0	3	□	MNS1500S-DIN	45	64	66	114	111.3	2.7	16	2
	3	□	MNS1500S-DIN-C	45	64	66	114	111.3	2.7	16	1
	5	□	MNS1500L-DIN	75	82	84	132	129.3	2.7	16	2
	5	●	MNS1500L-DIN-C	75	82	84	132	129.3	2.7	16	1
15.1	3	□	MNS1510S-DIN	45	65	67	115	112.3	2.7	16	2
	3	□	MNS1510S-DIN-C	45	65	67	115	112.3	2.7	16	1
	5	□	MNS1510L-DIN	76	83	85	133	130.3	2.7	16	2
	5	□	MNS1510L-DIN-C	76	83	85	133	130.3	2.7	16	1
15.2	3	□	MNS1520S-DIN	46	65	67	115	112.2	2.8	16	2
	3	□	MNS1520S-DIN-C	46	65	67	115	112.2	2.8	16	1
	5	□	MNS1520L-DIN	76	83	85	133	130.2	2.8	16	2
	5	□	MNS1520L-DIN-C	76	83	85	133	130.2	2.8	16	1
15.3	3	□	MNS1530S-DIN	46	65	67	115	112.2	2.8	16	2
	3	□	MNS1530S-DIN-C	46	65	67	115	112.2	2.8	16	1
	5	□	MNS1530L-DIN	77	83	85	133	130.2	2.8	16	2
	5	□	MNS1530L-DIN-C	77	83	85	133	130.2	2.8	16	1
15.4	3	□	MNS1540S-DIN	46	65	67	115	112.2	2.8	16	2
	3	□	MNS1540S-DIN-C	46	65	67	115	112.2	2.8	16	1
	5	□	MNS1540L-DIN	77	83	85	133	130.2	2.8	16	2
	5	□	MNS1540L-DIN-C	77	83	85	133	130.2	2.8	16	1
15.5	3	□	MNS1550S-DIN	47	65	67	115	112.2	2.8	16	2
	3	□	MNS1550S-DIN-C	47	65	67	115	112.2	2.8	16	1
	5	□	MNS1550L-DIN	78	83	85	133	130.2	2.8	16	2
	5	●	MNS1550L-DIN-C	78	83	85	133	130.2	2.8	16	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
15.6	3	□	MNS1560S-DIN	47	65	67	115	112.2	2.8	16	2
	3	□	MNS1560S-DIN-C	47	65	67	115	112.2	2.8	16	1
	5	□	MNS1560L-DIN	78	83	85	133	130.2	2.8	16	2
	5	□	MNS1560L-DIN-C	78	83	85	133	130.2	2.8	16	1
15.7	3	□	MNS1570S-DIN	47	65	67	115	112.1	2.9	16	2
	3	□	MNS1570S-DIN-C	47	65	67	115	112.1	2.9	16	1
	5	□	MNS1570L-DIN	79	83	85	133	130.1	2.9	16	2
	5	□	MNS1570L-DIN-C	79	83	85	133	130.1	2.9	16	1
15.8	3	□	MNS1580S-DIN	47	65	67	115	112.1	2.9	16	2
	3	□	MNS1580S-DIN-C	47	65	67	115	112.1	2.9	16	1
	5	□	MNS1580L-DIN	79	83	85	133	130.1	2.9	16	2
	5	□	MNS1580L-DIN-C	79	83	85	133	130.1	2.9	16	1
15.9	3	□	MNS1590S-DIN	48	65	67	115	112.1	2.9	16	2
	3	□	MNS1590S-DIN-C	48	65	67	115	112.1	2.9	16	1
	5	□	MNS1590L-DIN	80	83	85	133	130.1	2.9	16	2
	5	□	MNS1590L-DIN-C	80	83	85	133	130.1	2.9	16	1
16.0	3	□	MNS1600S-DIN	48	65	67	115	112.1	2.9	16	2
	3	□	MNS1600S-DIN-C	48	65	67	115	112.1	2.9	16	1
	5	□	MNS1600L-DIN	80	83	85	133	130.1	2.9	16	2
	5	●	MNS1600L-DIN-C	80	83	85	133	130.1	2.9	16	1
16.1	3	□	MNS1610S-DIN	48	73	75	123	120.1	2.9	18	2
	3	□	MNS1610S-DIN-C	48	73	75	123	120.1	2.9	18	1
	5	□	MNS1610L-DIN	81	93	95	143	140.1	2.9	18	2
	5	□	MNS1610L-DIN-C	81	93	95	143	140.1	2.9	18	1
16.2	3	□	MNS1620S-DIN	49	73	75	123	120.1	2.9	18	2
	3	□	MNS1620S-DIN-C	49	73	75	123	120.1	2.9	18	1
	5	□	MNS1620L-DIN	81	93	95	143	140.1	2.9	18	2
	5	□	MNS1620L-DIN-C	81	93	95	143	140.1	2.9	18	1
16.3	3	□	MNS1630S-DIN	49	73	75	123	120.0	3.0	18	2
	3	□	MNS1630S-DIN-C	49	73	75	123	120.0	3.0	18	1
	5	□	MNS1630L-DIN	82	93	95	143	140.0	3.0	18	2
	5	□	MNS1630L-DIN-C	82	93	95	143	140.0	3.0	18	1
16.4	3	□	MNS1640S-DIN	49	73	75	123	120.0	3.0	18	2
	3	□	MNS1640S-DIN-C	49	73	75	123	120.0	3.0	18	1
	5	□	MNS1640L-DIN	82	93	95	143	140.0	3.0	18	2
	5	□	MNS1640L-DIN-C	82	93	95	143	140.0	3.0	18	1
16.5	3	□	MNS1650S-DIN	50	73	75	123	120.0	3.0	18	2
	3	□	MNS1650S-DIN-C	50	73	75	123	120.0	3.0	18	1
	5	□	MNS1650L-DIN	83	93	95	143	140.0	3.0	18	2
	5	●	MNS1650L-DIN-C	83	93	95	143	140.0	3.0	18	1
16.6	3	□	MNS1660S-DIN	50	73	75	123	120.0	3.0	18	2
	3	□	MNS1660S-DIN-C	50	73	75	123	120.0	3.0	18	1
	5	□	MNS1660L-DIN	83	93	95	143	140.0	3.0	18	2
	5	□	MNS1660L-DIN-C	83	93	95	143	140.0	3.0	18	1
16.7	3	□	MNS1670S-DIN	50	73	75	123	120.0	3.0	18	2
	3	□	MNS1670S-DIN-C	50	73	75	123	120.0	3.0	18	1
	5	□	MNS1670L-DIN	84	93	95	143	140.0	3.0	18	2
	5	□	MNS1670L-DIN-C	84	93	95	143	140.0	3.0	18	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
16.8	3	□	MNS1680S-DIN	50	73	75	123	119.9	3.1	18	2
	3	□	MNS1680S-DIN-C	50	73	75	123	119.9	3.1	18	1
	5	□	MNS1680L-DIN	84	93	95	143	139.9	3.1	18	2
	5	□	MNS1680L-DIN-C	84	93	95	143	139.9	3.1	18	1
16.9	3	□	MNS1690S-DIN	51	73	75	123	119.9	3.1	18	2
	3	□	MNS1690S-DIN-C	51	73	75	123	119.9	3.1	18	1
	5	□	MNS1690L-DIN	85	93	95	143	139.9	3.1	18	2
	5	□	MNS1690L-DIN-C	85	93	95	143	139.9	3.1	18	1
17.0	3	□	MNS1700S-DIN	51	73	75	123	119.9	3.1	18	2
	3	□	MNS1700S-DIN-C	51	73	75	123	119.9	3.1	18	1
	5	□	MNS1700L-DIN	85	93	95	143	139.9	3.1	18	2
	5	●	MNS1700L-DIN-C	85	93	95	143	139.9	3.1	18	1
17.1	3	□	MNS1710S-DIN	51	73	75	123	119.9	3.1	18	2
	3	□	MNS1710S-DIN-C	51	73	75	123	119.9	3.1	18	1
	5	□	MNS1710L-DIN	86	93	95	143	139.9	3.1	18	2
	5	□	MNS1710L-DIN-C	86	93	95	143	139.9	3.1	18	1
17.2	3	□	MNS1720S-DIN	52	73	75	123	119.9	3.1	18	2
	3	□	MNS1720S-DIN-C	52	73	75	123	119.9	3.1	18	1
	5	□	MNS1720L-DIN	86	93	95	143	139.9	3.1	18	2
	5	□	MNS1720L-DIN-C	86	93	95	143	139.9	3.1	18	1
17.3	3	□	MNS1730S-DIN	52	73	75	123	119.9	3.1	18	2
	3	□	MNS1730S-DIN-C	52	73	75	123	119.9	3.1	18	1
	5	□	MNS1730L-DIN	87	93	95	143	139.9	3.1	18	2
	5	□	MNS1730L-DIN-C	87	93	95	143	139.9	3.1	18	1
17.4	3	□	MNS1740S-DIN	52	73	75	123	119.8	3.2	18	2
	3	□	MNS1740S-DIN-C	52	73	75	123	119.8	3.2	18	1
	5	□	MNS1740L-DIN	87	93	95	143	139.8	3.2	18	2
	5	□	MNS1740L-DIN-C	87	93	95	143	139.8	3.2	18	1
17.5	3	□	MNS1750S-DIN	53	73	75	123	119.8	3.2	18	2
	3	□	MNS1750S-DIN-C	53	73	75	123	119.8	3.2	18	1
	5	□	MNS1750L-DIN	88	93	95	143	139.8	3.2	18	2
	5	●	MNS1750L-DIN-C	88	93	95	143	139.8	3.2	18	1
17.6	3	□	MNS1760S-DIN	53	73	75	123	119.8	3.2	18	2
	3	□	MNS1760S-DIN-C	53	73	75	123	119.8	3.2	18	1
	5	□	MNS1760L-DIN	88	93	95	143	139.8	3.2	18	2
	5	□	MNS1760L-DIN-C	88	93	95	143	139.8	3.2	18	1
17.7	3	□	MNS1770S-DIN	53	73	75	123	119.8	3.2	18	2
	3	□	MNS1770S-DIN-C	53	73	75	123	119.8	3.2	18	1
	5	□	MNS1770L-DIN	89	93	95	143	139.8	3.2	18	2
	5	□	MNS1770L-DIN-C	89	93	95	143	139.8	3.2	18	1
17.8	3	□	MNS1780S-DIN	53	73	75	123	119.8	3.2	18	2
	3	□	MNS1780S-DIN-C	53	73	75	123	119.8	3.2	18	1
	5	□	MNS1780L-DIN	89	93	95	143	139.8	3.2	18	2
	5	□	MNS1780L-DIN-C	89	93	95	143	139.8	3.2	18	1
17.9	3	□	MNS1790S-DIN	54	73	75	123	119.7	3.3	18	2
	3	□	MNS1790S-DIN-C	54	73	75	123	119.7	3.3	18	1
	5	□	MNS1790L-DIN	90	93	95	143	139.7	3.3	18	2
	5	□	MNS1790L-DIN-C	90	93	95	143	139.7	3.3	18	1

Interne Kühlung

DC	Bohrtiefe (mm)	Lager TF15 (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
18.0	3	□	MNS1800S-DIN	54	73	75	123	119.7	3.3	18	2
	3	□	MNS1800S-DIN-C	54	73	75	123	119.7	3.3	18	1
	5	□	MNS1800L-DIN	90	93	95	143	139.7	3.3	18	2
	5	●	MNS1800L-DIN-C	90	93	95	143	139.7	3.3	18	1
18.1	3	□	MNS1810S-DIN	54	79	81	131	127.7	3.3	20	2
	3	□	MNS1810S-DIN-C	54	79	81	131	127.7	3.3	20	1
	5	□	MNS1810L-DIN	91	101	103	153	149.7	3.3	20	2
	5	□	MNS1810L-DIN-C	91	101	103	153	149.7	3.3	20	1
18.2	3	□	MNS1820S-DIN	55	79	81	131	127.7	3.3	20	2
	3	□	MNS1820S-DIN-C	55	79	81	131	127.7	3.3	20	1
	5	□	MNS1820L-DIN	91	101	103	153	149.7	3.3	20	2
	5	□	MNS1820L-DIN-C	91	101	103	153	149.7	3.3	20	1
18.3	3	□	MNS1830S-DIN	55	79	81	131	127.7	3.3	20	2
	3	□	MNS1830S-DIN-C	55	79	81	131	127.7	3.3	20	1
	5	□	MNS1830L-DIN	92	101	103	153	149.7	3.3	20	2
	5	□	MNS1830L-DIN-C	92	101	103	153	149.7	3.3	20	1
18.4	3	□	MNS1840S-DIN	55	79	81	131	127.7	3.3	20	2
	3	□	MNS1840S-DIN-C	55	79	81	131	127.7	3.3	20	1
	5	□	MNS1840L-DIN	92	101	103	153	149.7	3.3	20	2
	5	□	MNS1840L-DIN-C	92	101	103	153	149.7	3.3	20	1
18.5	3	□	MNS1850S-DIN	56	79	81	131	127.6	3.4	20	2
	3	□	MNS1850S-DIN-C	56	79	81	131	127.6	3.4	20	1
	5	□	MNS1850L-DIN	93	101	103	153	149.6	3.4	20	2
	5	●	MNS1850L-DIN-C	93	101	103	153	149.6	3.4	20	1
18.6	3	□	MNS1860S-DIN	56	79	81	131	127.6	3.4	20	2
	3	□	MNS1860S-DIN-C	56	79	81	131	127.6	3.4	20	1
	5	□	MNS1860L-DIN	93	101	103	153	149.6	3.4	20	2
	5	□	MNS1860L-DIN-C	93	101	103	153	149.6	3.4	20	1
18.7	3	□	MNS1870S-DIN	56	79	81	131	127.6	3.4	20	2
	3	□	MNS1870S-DIN-C	56	79	81	131	127.6	3.4	20	1
	5	□	MNS1870L-DIN	94	101	103	153	149.6	3.4	20	2
	5	□	MNS1870L-DIN-C	94	101	103	153	149.6	3.4	20	1
18.8	3	□	MNS1880S-DIN	56	79	81	131	127.6	3.4	20	2
	3	□	MNS1880S-DIN-C	56	79	81	131	127.6	3.4	20	1
	5	□	MNS1880L-DIN	94	101	103	153	149.6	3.4	20	2
	5	□	MNS1880L-DIN-C	94	101	103	153	149.6	3.4	20	1
18.9	3	□	MNS1890S-DIN	57	79	81	131	127.6	3.4	20	2
	3	□	MNS1890S-DIN-C	57	79	81	131	127.6	3.4	20	1
	5	□	MNS1890L-DIN	95	101	103	153	149.6	3.4	20	2
	5	□	MNS1890L-DIN-C	95	101	103	153	149.6	3.4	20	1
19.0	3	□	MNS1900S-DIN	57	79	81	131	127.5	3.5	20	2
	3	□	MNS1900S-DIN-C	57	79	81	131	127.5	3.5	20	1
	5	□	MNS1900L-DIN	95	101	103	153	149.5	3.5	20	2
	5	□	MNS1900L-DIN-C	95	101	103	153	149.5	3.5	20	1
19.1	3	□	MNS1910S-DIN	57	79	81	131	127.5	3.5	20	2
	3	□	MNS1910S-DIN-C	57	79	81	131	127.5	3.5	20	1
	5	□	MNS1910L-DIN	96	101	103	153	149.5	3.5	20	2
	5	□	MNS1910L-DIN-C	96	101	103	153	149.5	3.5	20	1

BOHREN (VOLLHARTMETALL)

MNS

Interne Kühlung

DC (mm)	Bohrtiefe (l/d)	Lager TF15	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
19.2	3	☐	MNS1920S-DIN	58	79	81	131	127.5	3.5	20	2
	3	☐	MNS1920S-DIN-C	58	79	81	131	127.5	3.5	20	1
	5	☐	MNS1920L-DIN	96	101	103	153	149.5	3.5	20	2
	5	☐	MNS1920L-DIN-C	96	101	103	153	149.5	3.5	20	1
19.3	3	☐	MNS1930S-DIN	58	79	81	131	127.5	3.5	20	2
	3	☐	MNS1930S-DIN-C	58	79	81	131	127.5	3.5	20	1
	5	☐	MNS1930L-DIN	97	101	103	153	149.5	3.5	20	2
	5	☐	MNS1930L-DIN-C	97	101	103	153	149.5	3.5	20	1
19.4	3	☐	MNS1940S-DIN	58	79	81	131	127.5	3.5	20	2
	3	☐	MNS1940S-DIN-C	58	79	81	131	127.5	3.5	20	1
	5	☐	MNS1940L-DIN	97	101	103	153	149.5	3.5	20	2
	5	☐	MNS1940L-DIN-C	97	101	103	153	149.5	3.5	20	1
19.5	3	☐	MNS1950S-DIN	59	79	81	131	127.5	3.5	20	2
	3	☐	MNS1950S-DIN-C	59	79	81	131	127.5	3.5	20	1
	5	☐	MNS1950L-DIN	98	101	103	153	149.5	3.5	20	2
	5	☒	MNS1950L-DIN-C	98	101	103	153	149.5	3.5	20	1
19.6	3	☐	MNS1960S-DIN	59	79	81	131	127.4	3.6	20	2
	3	☐	MNS1960S-DIN-C	59	79	81	131	127.4	3.6	20	1
	5	☐	MNS1960L-DIN	98	101	103	153	149.4	3.6	20	2
	5	☐	MNS1960L-DIN-C	98	101	103	153	149.4	3.6	20	1
19.7	3	☐	MNS1970S-DIN	59	79	81	131	127.4	3.6	20	2
	3	☐	MNS1970S-DIN-C	59	79	81	131	127.4	3.6	20	1
	5	☐	MNS1970L-DIN	99	101	103	153	149.4	3.6	20	2
	5	☐	MNS1970L-DIN-C	99	101	103	153	149.4	3.6	20	1
19.8	3	☐	MNS1980S-DIN	59	79	81	131	127.4	3.6	20	2
	3	☐	MNS1980S-DIN-C	59	79	81	131	127.4	3.6	20	1
	5	☐	MNS1980L-DIN	99	101	103	153	149.4	3.6	20	2
	5	☐	MNS1980L-DIN-C	99	101	103	153	149.4	3.6	20	1
19.9	3	☐	MNS1990S-DIN	60	79	81	131	127.4	3.6	20	2
	3	☐	MNS1990S-DIN-C	60	79	81	131	127.4	3.6	20	1
	5	☐	MNS1990L-DIN	100	101	103	153	149.4	3.6	20	2
	5	☐	MNS1990L-DIN-C	100	101	103	153	149.4	3.6	20	1
20.0	3	☐	MNS2000S-DIN	60	79	81	131	127.4	3.6	20	2
	3	☐	MNS2000S-DIN-C	60	79	81	131	127.4	3.6	20	1
	5	☐	MNS2000L-DIN	100	101	103	153	149.4	3.6	20	2
	5	☒	MNS2000L-DIN-C	100	101	103	153	149.4	3.6	20	1

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

SCHNITTDATENEMPFEHLUNGEN

LB-Bohrer

Werkstoff	Aluminium Leg. (Si<5%)		Aluminium Leg. (5%≤Si≤10%)		Aluminium Leg. (Si>10%)	
Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)
3.2	11900	0.1 (0.11—0.16)	11900	0.15 (0.16—0.21)	11900	0.15 (0.16—0.21)
4.0	9500	0.15 (0.13—0.20)	9500	0.2 (0.20—0.27)	9500	0.2 (0.20—0.27)
5.0	7600	0.2 (0.17—0.25)	7600	0.25 (0.25—0.33)	7600	0.25 (0.25—0.33)
6.3	7500	0.25 (0.21—0.32)	7500	0.35 (0.32—0.42)	7500	0.35 (0.32—0.42)
8.0	5900	0.3 (0.27—0.40)	5900	0.45 (0.40—0.53)	5900	0.45 (0.40—0.53)
10.0	4700	0.4 (0.33—0.50)	4700	0.55 (0.50—0.67)	4700	0.55 (0.50—0.67)
12.0	5300	0.5 (0.40—0.60)	5300	0.7 (0.60—0.80)	5300	0.7 (0.60—0.80)
14.0	4500	0.5 (0.40—0.60)	4500	0.7 (0.60—0.80)	4500	0.7 (0.60—0.80)

(Bemerkung 1) Wenn der Bohrer mit einer Länge über l/d 10 verwendet wird, müssen Pilotbohrungen als Führung zum Einsatz kommen.
(Ohne Pilotbohrung kann der Bohrer brechen.)

(Bemerkung 2) Für die Pilotbohrung empfehlen wir MPS Bohrer oder alternativ MNS, MAE-MB oder MAS-MB Bohrer.

DB-Bohrer

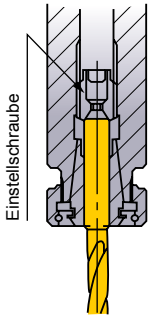
Werkstoff	Aluminium Leg. (Si<5%)		Aluminium Leg. (5%≤Si≤10%)		Aluminium Leg. (Si>10%)	
Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)
3.2	8900	0.1 (0.11—0.16)	8900	0.15 (0.16—0.21)	8900	0.15 (0.16—0.21)
4.0	7100	0.15 (0.13—0.20)	7100	0.2 (0.20—0.27)	7100	0.2 (0.20—0.27)
5.0	5700	0.2 (0.17—0.25)	5700	0.25 (0.25—0.33)	5700	0.25 (0.25—0.33)
6.3	6000	0.25 (0.21—0.32)	6000	0.35 (0.32—0.42)	6000	0.35 (0.32—0.42)
8.0	4700	0.3 (0.27—0.40)	4700	0.45 (0.40—0.53)	4700	0.45 (0.40—0.53)
10.0	3800	0.4 (0.33—0.50)	3800	0.55 (0.50—0.67)	3800	0.55 (0.50—0.67)
12.0	4200	0.5 (0.40—0.60)	4200	0.7 (0.60—0.80)	4200	0.7 (0.60—0.80)
14.0	3600	0.5 (0.40—0.60)	3600	0.7 (0.60—0.80)	3600	0.7 (0.60—0.80)

(Bemerkung 1) Wenn der Bohrer mit einer Länge über l/d 10 verwendet wird, müssen Pilotbohrungen als Führung zum Einsatz kommen.
(Ohne Pilotbohrung kann der Bohrer brechen.)

(Bemerkung 2) Für die Pilotbohrung empfehlen wir MPS Bohrer oder alternativ MNS, MAE-MB oder MAS-MB Bohrer.

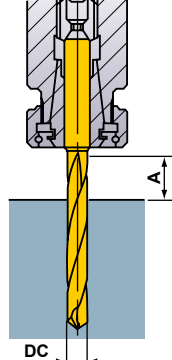
HINWEISE ZUR VERWENDUNG DES MNS-BOHRERS (L/D 3, 5, 8)

Bohrer Aufnahme



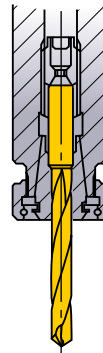
Präzisionsspannzangen können verwendet werden.

Max. Bohrtiefe



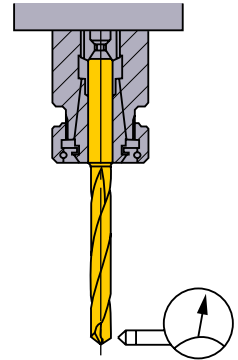
$$A : \geq DC \times 1.5$$

Bohrer Einstellung



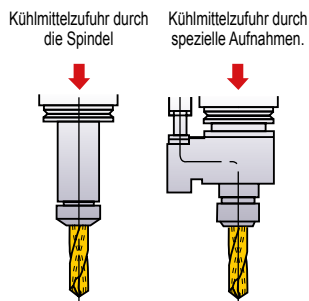
Nicht auf den Nuten spannen.

Rundlauftoleranz



Rundlaufabweichung $\leq 0.03\text{mm}$

Kühlmittelzufuhr (MNS)



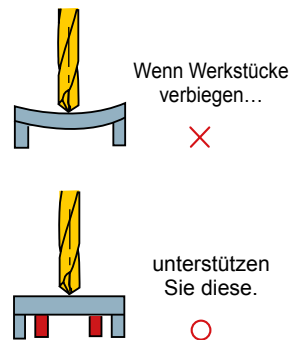
Kühlmitteldruck liegt bei etwa: 0.5—7MPa

Handling mit Kühlmittel

<Typ MNS>

- 1) Schmutz- und Staubpartikel in altem Kühlmittel können die Ölbohrung blockieren und einen effektiven Durchfluss verhindern. Der regelmäßige Austausch des Kühlmittels wird empfohlen.
- 2) Kleine Späne könnten sich in der Ölbohrung verkanten. Verwenden Sie daher einen Filter, um dies zu verhindern. Beim Einsatz von Bohrern mit kleinem Durchmesser empfiehlt sich ein feinmaschiger Filter.

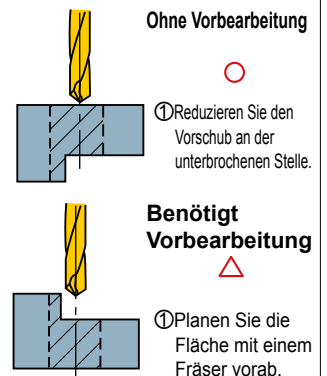
Dünne Werkstücke



Wenn Werkstücke verbiegen...

unterstützen Sie diese.

Unterbrochene Bearbeitung



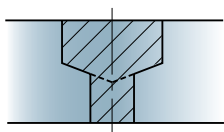
Ohne Vorbearbeitung

- ① Reduzieren Sie den Vorschub an der unterbrochenen Stelle.

Benötigt Vorbearbeitung

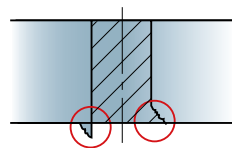
- ① Planen Sie die Fläche mit einem Fräser vorab.

Stufenbohrungen



- ① Unterteilen Sie die Bearbeitung in zwei Prozesse.
 - ② Bohren Sie das größere Loch zuerst.
- *Werkzeuge zum Anfasen und Plansenken können auf Anfrage hergestellt werden.

Gratbildung oder Ausbrüche am Werkstück



- ① Verringern Sie den Vorschub, wenn Sie den Durchbruch erreichen.
- ② Eine Fase einbeziehen.
- ③ Tauschen Sie den Bohrer durch einen anderen mit größerem Spitzenwinkel.

HINWEISE ZUR VERWENDUNG DES SUPER LANGEN MNS-BOHRERS (L/D 10, 12, 15, 20, 25, 30)

BOHREN AUF GLATTEN FLÄCHEN ● Sacklochbohrung setzen

1. Pilotbohrung setzen



- ① Für die Pilotbohrungen empfehlen wir den Einsatz von Mitsubishi Bohrern Typ MNS, MAE-MB oder MAS-MB.
- ② Verwenden Sie bitte einen Bohrer mit gleichem Durchmesser.
- ③ Pilotbohrung : Min. 1DC oder tiefer.
(Passen Sie die Tiefe der Pilotbohrung der Länge Ihres SuperLong Bohrers an)

2. Einfahren in die Pilotbohrung



- ① Eintritt in Führungsbohrung mit geringer Drehzahl.
(Schnittgeschwindigkeit 20–30m/min, Vorschub 0.2–0.3mm/U)
- ② Tieflochbohrer 1–3mm vor Unterseite der Führungsbohrung stoppen.

3. Tieflochbohren



- ① Erhöhen Sie die Drehzahl und den Vorschub auf einen Zyklus und bohren Sie bis zur gewünschten Bohrtiefe.

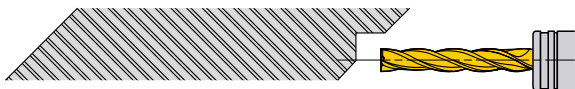
4. Herausfahren des Bohrers



- ① Nach dem Bohren Schnittgeschwindigkeit etwa 1–2mm vom Bohrungsende entfernt reduzieren (Schnittgeschwindigkeit 20–30 m/min.)
- ② Fahren Sie den Bohrer bis zur Tiefe der Pilotbohrung heraus
(Vf=3000mm/min.)
- ③ Fahren Sie den Bohrer aus der Pilotbohrung mit geringer Drehzahl
(n=300, Vf=3000mm/min)

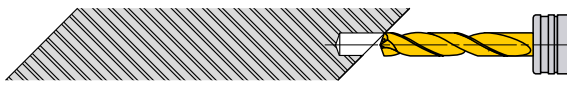
UNTERBROCHENE BOHRUNG ● Bohrungen in angewinkelten Werkstücken

1. Planfräsen



- ① Fräsen Sie eine ebene Fläche in das Werkstück und setzen Sie einen Fräser mit gleichem Durchmesser wie die gewünschte Bohrung ein.

2. Pilotbohrung setzen



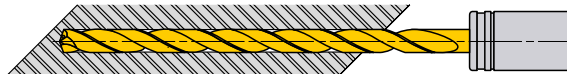
- ① Für die Pilotbohrungen empfehlen wir den Einsatz von Mitsubishi Bohrern Typ MNS, MAE-MB oder MAS-MB.
- ② Verwenden Sie bitte einen Bohrer mit gleichem Durchmesser.
- ③ Pilotbohrung : Min. 1DC oder tiefer.
(Passen Sie die Tiefe der Pilotbohrung der Länge Ihres SuperLong Bohrers an)

3. Einfahren in die Pilotbohrung



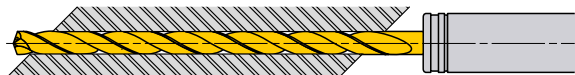
- ① Eintritt in Führungsbohrung mit geringer Drehzahl.
(Schnittgeschwindigkeit 20–30m/min, Vorschub 0.2–0.3mm/U)
- ② Tieflochbohrer 1–3mm vor Unterseite der Führungsbohrung stoppen.

4. Tieflochbohren



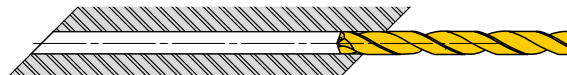
- ① Erhöhen Sie die Drehzahl und den Vorschub auf einen Zyklus und bohren Sie bis zur gewünschten Bohrtiefe.

5. Durchgangsbohren



- ① Beim Austritt aus dem Werkstück kann die Schneidkante des Bohrers ausbrechen.
- ② Reduzieren Sie den Vorschub auf Vf=0.05mm–0.1mm/U

6. Herausfahren des Bohrers



- ① Bohrer auf Pilotbohrung-Startpunkttiefe herausziehen bei einem Vorschub von 3000mm/min.
- ② Dann Bohrung mit einer Schnittgeschwindigkeit von 20–30m/min und einem Vorschub von 0.2–0.3mm/U bearbeiten.

BOHREN (VOLLHARTMETALL)

MAE, MAS

- Entwickelt für die Bearbeitung von Aluminium und Guß.
- Hohe Bohrgenauigkeit.
- Bohrungen für Gewindeformer.
- Gedrallte Kühlmittelbohrungen lassen hohe Drehzahlen zu (MAS Bohrer).

P

M

K

N

S

H

MAE (Externe Kühlung)

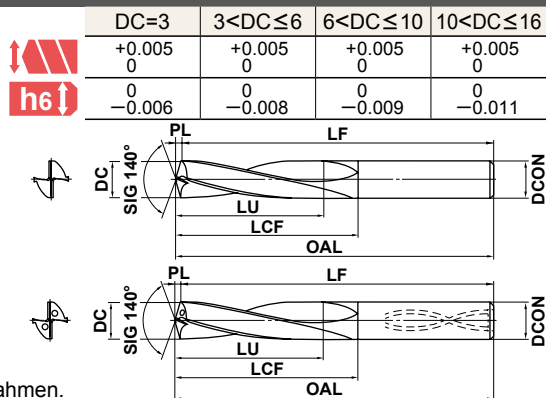


MAS (Interne Kühlung)



(Bemerkung 1) MAS Bohrer größer als $\phi 5.0$ haben einen Absatz am Bohrerauslauf.

(Bemerkung 2) MAE/MAS Bohrer eignen sich für die Verwendung mit Schrupfaufnahmen.



DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT10	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DCON
3.0	3	Ext.	★	MAE0300MB	9.0	21.5	61.5	61	0.5	3
	3	Int.	□	MAS0300MB	9.0	21.5	61.5	61	0.5	3
	6	Int.	●	MAS0300LB	18.0	30.5	70.5	70	0.5	3
3.1	3	Ext.	★	MAE0310MB	9.3	24.6	64.6	64	0.6	4
	3	Int.	□	MAS0310MB	9.3	24.6	64.6	64	0.6	4
	6	Int.	★	MAS0310LB	18.6	34.6	74.6	74	0.6	4
3.2	3	Ext.	★	MAE0320MB	9.6	24.6	64.6	64	0.6	4
	3	Int.	□	MAS0320MB	9.6	24.6	64.6	64	0.6	4
	6	Int.	★	MAS0320LB	19.2	34.6	74.6	74	0.6	4
3.3	3	Ext.	★	MAE0330MB	9.9	24.6	64.6	64	0.6	4
	3	Int.	□	MAS0330MB	9.9	24.6	64.6	64	0.6	4
	6	Int.	●	MAS0330LB	19.8	34.6	74.6	74	0.6	4
3.4	3	Ext.	★	MAE0340MB	10.2	24.6	64.6	64	0.6	4
	3	Int.	□	MAS0340MB	10.2	24.6	64.6	64	0.6	4
	6	Int.	★	MAS0340LB	20.4	34.6	74.6	74	0.6	4
3.5	3	Ext.	★	MAE0350MB	10.5	24.6	64.6	64	0.6	4
	3	Int.	□	MAS0350MB	10.5	24.6	64.6	64	0.6	4
	6	Int.	●	MAS0350LB	21.0	34.6	74.6	74	0.6	4
3.6	3	Ext.	★	MAE0360MB	10.8	28.7	68.7	68	0.7	4
	3	Int.	□	MAS0360MB	10.8	28.7	68.7	68	0.7	4
	6	Int.	★	MAS0360LB	21.6	40.7	80.7	80	0.7	4
3.65	3	Ext.	★	* MAE0365MB	11.0	28.7	68.7	68	0.7	4
	3	Int.	□	* MAS0365MB	11.0	28.7	68.7	68	0.7	4
	6	Int.	●	* MAS0365LB	21.9	40.7	80.7	80	0.7	4
3.7	3	Ext.	★	MAE0370MB	11.1	28.7	68.7	68	0.7	4
	3	Int.	□	MAS0370MB	11.1	28.7	68.7	68	0.7	4
	6	Int.	★	MAS0370LB	22.2	40.7	80.7	80	0.7	4
3.8	3	Ext.	★	MAE0380MB	11.4	28.7	68.7	68	0.7	4
	3	Int.	□	MAS0380MB	11.4	28.7	68.7	68	0.7	4
	6	Int.	★	MAS0380LB	22.8	40.7	80.7	80	0.7	4
3.9	3	Ext.	★	MAE0390MB	11.7	28.7	68.7	68	0.7	4
	3	Int.	□	MAS0390MB	11.7	28.7	68.7	68	0.7	4
	6	Int.	★	MAS0390LB	23.4	40.7	80.7	80	0.7	4
4.0	3	Ext.	★	MAE0400MB	12.0	28.7	68.7	68	0.7	4
	3	Int.	□	MAS0400MB	12.0	28.7	68.7	68	0.7	4
	6	Int.	●	MAS0400LB	24.0	40.7	80.7	80	0.7	4
4.1	3	Ext.	★	MAE0410MB	12.3	31.7	71.7	71	0.7	5
	3	Int.	□	MAS0410MB	12.3	31.7	71.7	71	0.7	5
	6	Int.	★	MAS0410LB	24.6	44.7	84.7	84	0.7	5

DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT10	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DCON
4.2	3	Ext.	★	MAE0420MB	12.6	31.8	71.8	71	0.8	5
	3	Int.	□	MAS0420MB	12.6	31.8	71.8	71	0.8	5
	6	Int.	●	MAS0420LB	25.2	44.8	84.8	84	0.8	5
4.3	3	Ext.	★	MAE0430MB	12.9	31.8	71.8	71	0.8	5
	3	Int.	□	MAS0430MB	12.9	31.8	71.8	71	0.8	5
	6	Int.	★	MAS0430LB	25.8	44.8	84.8	84	0.8	5
4.4	3	Ext.	★	MAE0440MB	13.2	31.8	71.8	71	0.8	5
	3	Int.	□	MAS0440MB	13.2	31.8	71.8	71	0.8	5
	6	Int.	★	MAS0440LB	26.4	44.8	84.8	84	0.8	5
4.5	3	Ext.	★	MAE0450MB	13.5	31.8	71.8	71	0.8	5
	3	Int.	□	MAS0450MB	13.5	31.8	71.8	71	0.8	5
	6	Int.	★	MAS0450LB	27.0	44.8	84.8	84	0.8	5
4.6	3	Ext.	★	* MAE0460MB	13.8	33.8	73.8	73	0.8	5
	3	Int.	□	* MAS0460MB	13.8	33.8	73.8	73	0.8	5
	6	Int.	●	* MAS0460LB	27.6	48.8	88.8	88	0.8	5
4.7	3	Ext.	★	MAE0470MB	14.1	33.9	73.9	73	0.9	5
	3	Int.	□	MAS0470MB	14.1	33.9	73.9	73	0.9	5
	6	Int.	★	MAS0470LB	28.2	48.9	88.9	88	0.9	5
4.8	3	Ext.	★	MAE0480MB	14.4	33.9	73.9	73	0.9	5
	3	Int.	□	MAS0480MB	14.4	33.9	73.9	73	0.9	5
	6	Int.	★	MAS0480LB	28.8	48.9	88.9	88	0.9	5
4.9	3	Ext.	★	MAE0490MB	14.7	33.9	73.9	73	0.9	5
	3	Int.	□	MAS0490MB	14.7	33.9	73.9	73	0.9	5
	6	Int.	★	MAS0490LB	29.4	48.9	88.9	88	0.9	5
5.0	3	Ext.	★	MAE0500MB	15.0	33.9	73.9	73	0.9	5
	3	Int.	●	MAS0500MB	15.0	33.9	73.9	73	0.9	5
	6	Int.	●	MAS0500LB	30.0	48.9	88.9	88	0.9	5
5.1	3	Ext.	★	MAE0510MB	15.3	36.9	76.9	76	0.9	6
	3	Int.	□	MAS0510MB	15.3	36.9	76.9	76	0.9	6
	6	Int.	★	MAS0510LB	30.6	52.9	92.9	92	0.9	6
5.2	3	Ext.	★	MAE0520MB	15.6	36.9	76.9	76	0.9	6
	3	Int.	□	MAS0520MB	15.6	36.9	76.9	76	0.9	6
	6	Int.	●	MAS0520LB	31.2	52.9	92.9	92	0.9	6
5.3	3	Ext.	★	MAE0530MB	15.9	37.0	77.0	76	1.0	6
	3	Int.	□	MAS0530MB	15.9	37.0	77.0	76	1.0	6
	6	Int.	★	MAS0530LB	31.8	53.0	93.0	92	1.0	6
5.4	3	Ext.	★	MAE0540MB	16.2	37.0	77.0	76	1.0	6
	3	Int.	□	MAS0540MB	16.2	37.0	77.0	76	1.0	6
	6	Int.	★	MAS0540LB	32.4	53.0	93.0	92	1.0	6

* : Standardbohrung für Gewindeformer.

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT110	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
5.5	3	Ext.	★	* MAE0550MB	16.5	37.0	77.0	76	1.0	6
	3	Int.	★	* MAS0550MB	16.5	37.0	77.0	76	1.0	6
	6	Int.	●	* MAS0550LB	33.0	53.0	93.0	92	1.0	6
5.6	3	Ext.	★	MAE0560MB	16.8	40.0	80.0	79	1.0	6
	3	Int.	□	MAS0560MB	16.8	40.0	80.0	79	1.0	6
	6	Int.	★	MAS0560LB	33.6	58.0	98.0	97	1.0	6
5.7	3	Ext.	★	MAE0570MB	17.1	40.0	80.0	79	1.0	6
	3	Int.	□	MAS0570MB	17.1	40.0	80.0	79	1.0	6
	6	Int.	★	MAS0570LB	34.2	58.0	98.0	97	1.0	6
5.8	3	Ext.	★	MAE0580MB	17.4	40.1	80.1	79	1.1	6
	3	Int.	□	MAS0580MB	17.4	40.1	80.1	79	1.1	6
	6	Int.	★	MAS0580LB	34.8	58.1	98.1	97	1.1	6
5.9	3	Ext.	★	MAE0590MB	17.7	40.1	80.1	79	1.1	6
	3	Int.	□	MAS0590MB	17.7	40.1	80.1	79	1.1	6
	6	Int.	★	MAS0590LB	35.4	58.1	98.1	97	1.1	6
6.0	3	Ext.	★	MAE0600MB	18.0	40.1	80.1	79	1.1	6
	3	Int.	●	MAS0600MB	18.0	40.1	80.1	79	1.1	6
	6	Int.	●	MAS0600LB	36.0	58.1	98.1	97	1.1	6
6.1	3	Ext.	★	MAE0610MB	18.3	43.1	85.1	84	1.1	7
	3	Int.	□	MAS0610MB	18.3	43.1	85.1	84	1.1	7
	6	Int.	★	MAS0610LB	36.6	63.1	105.1	104	1.1	7
6.2	3	Ext.	★	MAE0620MB	18.6	43.1	85.1	84	1.1	7
	3	Int.	□	MAS0620MB	18.6	43.1	85.1	84	1.1	7
	6	Int.	★	MAS0620LB	37.2	63.1	105.1	104	1.1	7
6.3	3	Ext.	★	MAE0630MB	18.9	43.1	85.1	84	1.1	7
	3	Int.	□	MAS0630MB	18.9	43.1	85.1	84	1.1	7
	6	Int.	★	MAS0630LB	37.8	63.1	105.1	104	1.1	7
6.4	3	Ext.	★	MAE0640MB	19.2	43.2	85.2	84	1.2	7
	3	Int.	□	MAS0640MB	19.2	43.2	85.2	84	1.2	7
	6	Int.	★	MAS0640LB	38.4	63.2	105.2	104	1.2	7
6.5	3	Ext.	★	MAE0650MB	19.5	43.2	85.2	84	1.2	7
	3	Int.	★	MAS0650MB	19.5	43.2	85.2	84	1.2	7
	6	Int.	●	MAS0650LB	39.0	63.2	105.2	104	1.2	7
6.6	3	Ext.	★	MAE0660MB	19.8	43.2	85.2	84	1.2	7
	3	Int.	□	MAS0660MB	19.8	43.2	85.2	84	1.2	7
	6	Int.	★	MAS0660LB	39.6	66.2	108.2	107	1.2	7
6.7	3	Ext.	★	MAE0670MB	20.1	43.2	85.2	84	1.2	7
	3	Int.	□	MAS0670MB	20.1	43.2	85.2	84	1.2	7
	6	Int.	●	MAS0670LB	40.2	66.2	108.2	107	1.2	7
6.8	3	Ext.	★	MAE0680MB	20.4	43.2	85.2	84	1.2	7
	3	Int.	★	MAS0680MB	20.4	43.2	85.2	84	1.2	7
	6	Int.	●	MAS0680LB	40.8	66.2	108.2	107	1.2	7
6.9	3	Ext.	★	MAE0690MB	20.7	43.3	85.3	84	1.3	7
	3	Int.	□	MAS0690MB	20.7	43.3	85.3	84	1.3	7
	6	Int.	★	MAS0690LB	41.4	66.3	108.3	107	1.3	7
7.0	3	Ext.	★	MAE0700MB	21.0	43.3	85.3	84	1.3	7
	3	Int.	★	MAS0700MB	21.0	43.3	85.3	84	1.3	7
	6	Int.	●	MAS0700LB	42.0	66.3	108.3	107	1.3	7

* : Standardbohrung für Gewindeformen.

DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT110	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
7.1	3	Ext.	★	MAE0710MB	21.3	49.3	91.3	90	1.3	8
	3	Int.	□	MAS0710MB	21.3	49.3	91.3	90	1.3	8
	6	Int.	★	MAS0710LB	42.6	69.3	111.3	110	1.3	8
7.2	3	Ext.	★	MAE0720MB	21.6	49.3	91.3	90	1.3	8
	3	Int.	□	MAS0720MB	21.6	49.3	91.3	90	1.3	8
	6	Int.	★	MAS0720LB	43.2	69.3	111.3	110	1.3	8
7.3	3	Ext.	★	MAE0730MB	21.9	49.3	91.3	90	1.3	8
	3	Int.	□	MAS0730MB	21.9	49.3	91.3	90	1.3	8
	6	Int.	★	MAS0730LB	43.8	69.3	111.3	110	1.3	8
7.35	3	Ext.	★	* MAE0735MB	22.1	49.3	91.3	90	1.3	8
	3	Int.	★	* MAS0735MB	22.1	49.3	91.3	90	1.3	8
	6	Int.	●	* MAS0735LB	44.1	69.3	111.3	110	1.3	8
7.4	3	Ext.	★	MAE0740MB	22.2	49.3	91.3	90	1.3	8
	3	Int.	□	MAS0740MB	22.2	49.3	91.3	90	1.3	8
	6	Int.	★	MAS0740LB	44.4	69.3	111.3	110	1.3	8
7.5	3	Ext.	★	MAE0750MB	22.5	49.4	91.4	90	1.4	8
	3	Int.	□	MAS0750MB	22.5	49.4	91.4	90	1.4	8
	6	Int.	★	MAS0750LB	45.0	69.4	111.4	110	1.4	8
7.6	3	Ext.	★	MAE0760MB	22.8	49.4	91.4	90	1.4	8
	3	Int.	□	MAS0760MB	22.8	49.4	91.4	90	1.4	8
	6	Int.	★	MAS0760LB	45.6	73.4	115.4	114	1.4	8
7.7	3	Ext.	★	MAE0770MB	23.1	49.4	91.4	90	1.4	8
	3	Int.	□	MAS0770MB	23.1	49.4	91.4	90	1.4	8
	6	Int.	★	MAS0770LB	46.2	73.4	115.4	114	1.4	8
7.8	3	Ext.	★	MAE0780MB	23.4	49.4	91.4	90	1.4	8
	3	Int.	□	MAS0780MB	23.4	49.4	91.4	90	1.4	8
	6	Int.	★	MAS0780LB	46.8	73.4	115.4	114	1.4	8
7.9	3	Ext.	★	MAE0790MB	23.7	49.4	91.4	90	1.4	8
	3	Int.	□	MAS0790MB	23.7	49.4	91.4	90	1.4	8
	6	Int.	★	MAS0790LB	47.4	73.4	115.4	114	1.4	8
8.0	3	Ext.	★	MAE0800MB	24.0	49.5	91.5	90	1.5	8
	3	Int.	●	MAS0800MB	24.0	49.5	91.5	90	1.5	8
	6	Int.	●	MAS0800LB	48.0	73.5	115.5	114	1.5	8
8.1	3	Ext.	★	MAE0810MB	24.3	51.5	95.5	94	1.5	9
	3	Int.	□	MAS0810MB	24.3	51.5	95.5	94	1.5	9
	6	Int.	★	MAS0810LB	48.6	76.5	120.5	119	1.5	9
8.2	3	Ext.	★	MAE0820MB	24.6	51.5	95.5	94	1.5	9
	3	Int.	□	MAS0820MB	24.6	51.5	95.5	94	1.5	9
	6	Int.	★	MAS0820LB	49.2	76.5	120.5	119	1.5	9
8.3	3	Ext.	★	MAE0830MB	24.9	51.5	95.5	94	1.5	9
	3	Int.	□	MAS0830MB	24.9	51.5	95.5	94	1.5	9
	6	Int.	★	MAS0830LB	49.8	76.5	120.5	119	1.5	9
8.4	3	Ext.	★	MAE0840MB	25.2	51.5	95.5	94	1.5	9
	3	Int.	□	MAS0840MB	25.2	51.5	95.5	94	1.5	9
	6	Int.	★	MAS0840LB	50.4	76.5	120.5	119	1.5	9
8.5	3	Ext.	★	MAE0850MB	25.5	51.5	95.5	94	1.5	9
	3	Int.	●	MAS0850MB	25.5	51.5	95.5	94	1.5	9
	6	Int.	★	MAS0850LB	51.0	76.5	120.5	119	1.5	9

DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT10	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
8.6	3	Ext.	★	MAE0860MB	25.8	51.6	95.6	94	1.6	9
	3	Int.	□	MAS0860MB	25.8	51.6	95.6	94	1.6	9
	6	Int.	★	MAS0860LB	51.6	78.6	122.6	121	1.6	9
8.7	3	Ext.	★	MAE0870MB	26.1	51.6	95.6	94	1.6	9
	3	Int.	□	MAS0870MB	26.1	51.6	95.6	94	1.6	9
	6	Int.	★	MAS0870LB	52.2	78.6	122.6	121	1.6	9
8.8	3	Ext.	★	MAE0880MB	26.4	51.6	95.6	94	1.6	9
	3	Int.	□	MAS0880MB	26.4	51.6	95.6	94	1.6	9
	6	Int.	★	MAS0880LB	52.8	78.6	122.6	121	1.6	9
8.9	3	Ext.	★	MAE0890MB	26.7	51.6	95.6	94	1.6	9
	3	Int.	□	MAS0890MB	26.7	51.6	95.6	94	1.6	9
	6	Int.	★	MAS0890LB	53.4	78.6	122.6	121	1.6	9
9.0	3	Ext.	★	MAE0900MB	27.0	51.6	95.6	94	1.6	9
	3	Int.	★	MAS0900MB	27.0	51.6	95.6	94	1.6	9
	6	Int.	●	MAS0900LB	54.0	78.6	122.6	121	1.6	9
9.1	3	Ext.	★	MAE0910MB	27.3	54.7	98.7	97	1.7	10
	3	Int.	□	MAS0910MB	27.3	54.7	98.7	97	1.7	10
	6	Int.	★	MAS0910LB	54.6	82.7	126.7	125	1.7	10
9.2	3	Ext.	★	MAE0920MB	27.6	54.7	98.7	97	1.7	10
	3	Int.	□	MAS0920MB	27.6	54.7	98.7	97	1.7	10
	6	Int.	★	MAS0920LB	55.2	82.7	126.7	125	1.7	10
9.21	3	Ext.	★	* MAE0921MB	27.6	54.7	98.7	97	1.7	10
	3	Int.	★	* MAS0921MB	27.6	54.7	98.7	97	1.7	10
	6	Int.	★	* MAS0921LB	55.3	82.7	126.7	125	1.7	10
9.3	3	Ext.	★	MAE0930MB	27.9	54.7	98.7	97	1.7	10
	3	Int.	□	MAS0930MB	27.9	54.7	98.7	97	1.7	10
	6	Int.	★	MAS0930LB	55.8	82.7	126.7	125	1.7	10
9.4	3	Ext.	★	MAE0940MB	28.2	54.7	98.7	97	1.7	10
	3	Int.	□	MAS0940MB	28.2	54.7	98.7	97	1.7	10
	6	Int.	★	MAS0940LB	56.4	82.7	126.7	125	1.7	10
9.5	3	Ext.	★	MAE0950MB	28.5	54.7	98.7	97	1.7	10
	3	Int.	★	MAS0950MB	28.5	54.7	98.7	97	1.7	10
	6	Int.	●	MAS0950LB	57.0	82.7	126.7	125	1.7	10
9.6	3	Ext.	★	MAE0960MB	28.8	54.7	98.7	97	1.7	10
	3	Int.	□	MAS0960MB	28.8	54.7	98.7	97	1.7	10
	6	Int.	★	MAS0960LB	57.6	82.7	126.7	125	1.7	10
9.7	3	Ext.	★	MAE0970MB	29.1	54.8	98.8	97	1.8	10
	3	Int.	□	MAS0970MB	29.1	54.8	98.8	97	1.8	10
	6	Int.	★	MAS0970LB	58.2	82.8	126.8	125	1.8	10
9.8	3	Ext.	★	MAE0980MB	29.4	54.8	98.8	97	1.8	10
	3	Int.	□	MAS0980MB	29.4	54.8	98.8	97	1.8	10
	6	Int.	★	MAS0980LB	58.8	82.8	126.8	125	1.8	10
9.9	3	Ext.	★	MAE0990MB	29.7	54.8	98.8	97	1.8	10
	3	Int.	□	MAS0990MB	29.7	54.8	98.8	97	1.8	10
	6	Int.	★	MAS0990LB	59.4	82.8	126.8	125	1.8	10
10.0	3	Ext.	★	MAE1000MB	30.0	54.8	98.8	97	1.8	10
	3	Int.	●	MAS1000MB	30.0	54.8	98.8	97	1.8	10
	6	Int.	●	MAS1000LB	60.0	82.8	126.8	125	1.8	10

* : Standardbohrung für Gewindeformen.

DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT10	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
10.1	3	Ext.	□	MAE1010MB	30.3	56.8	102.8	101	1.8	11
	3	Int.	□	MAS1010MB	30.3	56.8	102.8	101	1.8	11
	6	Int.	□	MAS1010LB	60.6	90.8	136.8	135	1.8	11
10.2	3	Ext.	□	MAE1020MB	30.6	56.9	102.9	101	1.9	11
	3	Int.	□	MAS1020MB	30.6	56.9	102.9	101	1.9	11
	6	Int.	□	MAS1020LB	61.2	90.9	136.9	135	1.9	11
10.3	3	Ext.	★	MAE1030MB	30.9	56.9	102.9	101	1.9	11
	3	Int.	★	MAS1030MB	30.9	56.9	102.9	101	1.9	11
	6	Int.	●	MAS1030LB	61.8	90.9	136.9	135	1.9	11
10.4	3	Ext.	□	MAE1040MB	31.2	56.9	102.9	101	1.9	11
	3	Int.	□	MAS1040MB	31.2	56.9	102.9	101	1.9	11
	6	Int.	□	MAS1040LB	62.4	90.9	136.9	135	1.9	11
10.5	3	Ext.	★	MAE1050MB	31.5	56.9	102.9	101	1.9	11
	3	Int.	★	MAS1050MB	31.5	56.9	102.9	101	1.9	11
	6	Int.	●	MAS1050LB	63.0	90.9	136.9	135	1.9	11
10.6	3	Ext.	□	MAE1060MB	31.8	56.9	102.9	101	1.9	11
	3	Int.	□	MAS1060MB	31.8	56.9	102.9	101	1.9	11
	6	Int.	□	MAS1060LB	63.6	90.9	136.9	135	1.9	11
10.7	3	Ext.	□	MAE1070MB	32.1	56.9	102.9	101	1.9	11
	3	Int.	□	MAS1070MB	32.1	56.9	102.9	101	1.9	11
	6	Int.	□	MAS1070LB	64.2	90.9	136.9	135	1.9	11
10.8	3	Ext.	□	MAE1080MB	32.4	57.0	103.0	101	2.0	11
	3	Int.	□	MAS1080MB	32.4	57.0	103.0	101	2.0	11
	6	Int.	□	MAS1080LB	64.8	91.0	137.0	135	2.0	11
10.9	3	Ext.	□	MAE1090MB	32.7	57.0	103.0	101	2.0	11
	3	Int.	□	MAS1090MB	32.7	57.0	103.0	101	2.0	11
	6	Int.	□	MAS1090LB	65.4	91.0	137.0	135	2.0	11
11.0	3	Ext.	★	MAE1100MB	33.0	57.0	103.0	101	2.0	11
	3	Int.	★	MAS1100MB	33.0	57.0	103.0	101	2.0	11
	6	Int.	●	MAS1100LB	66.0	91.0	137.0	135	2.0	11
11.08	3	Ext.	★	* MAE1108MB	33.2	62.0	108.0	106	2.0	12
	3	Int.	★	* MAS1108MB	33.2	62.0	108.0	106	2.0	12
	6	Int.	●	* MAS1108LB	66.5	96.0	142.0	140	2.0	12
11.1	3	Ext.	□	MAE1110MB	33.3	62.0	108.0	106	2.0	12
	3	Int.	□	MAS1110MB	33.3	62.0	108.0	106	2.0	12
	6	Int.	□	MAS1110LB	66.6	96.0	142.0	140	2.0	12
11.2	3	Ext.	□	MAE1120MB	33.6	62.0	108.0	106	2.0	12
	3	Int.	□	MAS1120MB	33.6	62.0	108.0	106	2.0	12
	6	Int.	□	MAS1120LB	67.2	96.0	142.0	140	2.0	12
11.3	3	Ext.	□	MAE1130MB	33.9	62.1	108.1	106	2.1	12
	3	Int.	□	MAS1130MB	33.9	62.1	108.1	106	2.1	12
	6	Int.	□	MAS1130LB	67.8	96.1	142.1	140	2.1	12
11.4	3	Ext.	□	MAE1140MB	34.2	62.1	108.1	106	2.1	12
	3	Int.	□	MAS1140MB	34.2	62.1	108.1	106	2.1	12
	6	Int.	□	MAS1140LB	68.4	96.1	142.1	140	2.1	12
11.5	3	Ext.	□	MAE1150MB	34.5	62.1	108.1	106	2.1	12
	3	Int.	□	MAS1150MB	34.5	62.1	108.1	106	2.1	12
	6	Int.	□	MAS1150LB	69.0	96.1	142.1	140	2.1	12

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

DC	Bohr- tiefe (mm)	Kühlung (Int./Ext.)	Lager HT110	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
11.6	3	Ext.	□	MAE1160MB	34.8	62.1	108.1	106	2.1	12
	3	Int.	□	MAS1160MB	34.8	62.1	108.1	106	2.1	12
	6	Int.	□	MAS1160LB	69.6	96.1	142.1	140	2.1	12
11.7	3	Ext.	□	MAE1170MB	35.1	62.1	108.1	106	2.1	12
	3	Int.	□	MAS1170MB	35.1	62.1	108.1	106	2.1	12
	6	Int.	□	MAS1170LB	70.2	96.1	142.1	140	2.1	12
11.8	3	Ext.	□	MAE1180MB	35.4	62.1	108.1	106	2.1	12
	3	Int.	□	MAS1180MB	35.4	62.1	108.1	106	2.1	12
	6	Int.	□	MAS1180LB	70.8	96.1	142.1	140	2.1	12
11.9	3	Ext.	□	MAE1190MB	35.7	62.2	108.2	106	2.2	12
	3	Int.	□	MAS1190MB	35.7	62.2	108.2	106	2.2	12
	6	Int.	□	MAS1190LB	71.4	96.2	142.2	140	2.2	12
12.0	3	Ext.	★	MAE1200MB	36.0	62.2	108.2	106	2.2	12
	3	Int.	●	MAS1200MB	36.0	62.2	108.2	106	2.2	12
	6	Int.	●	MAS1200LB	72.0	96.2	142.2	140	2.2	12
12.1	3	Ext.	□	MAE1210MB	36.3	67.2	117.2	115	2.2	13
	3	Int.	□	MAS1210MB	36.3	67.2	117.2	115	2.2	13
	6	Int.	□	MAS1210LB	72.6	102.2	152.2	150	2.2	13
12.2	3	Ext.	□	MAE1220MB	36.6	67.2	117.2	115	2.2	13
	3	Int.	□	MAS1220MB	36.6	67.2	117.2	115	2.2	13
	6	Int.	□	MAS1220LB	73.2	102.2	152.2	150	2.2	13
12.3	3	Ext.	□	MAE1230MB	36.9	67.2	117.2	115	2.2	13
	3	Int.	□	MAS1230MB	36.9	67.2	117.2	115	2.2	13
	6	Int.	□	MAS1230LB	73.8	102.2	152.2	150	2.2	13
12.4	3	Ext.	□	MAE1240MB	37.2	67.3	117.3	115	2.3	13
	3	Int.	□	MAS1240MB	37.2	67.3	117.3	115	2.3	13
	6	Int.	□	MAS1240LB	74.4	102.3	152.3	150	2.3	13
12.5	3	Ext.	★	MAE1250MB	37.5	67.3	117.3	115	2.3	13
	3	Int.	●	MAS1250MB	37.5	67.3	117.3	115	2.3	13
	6	Int.	●	MAS1250LB	75.0	102.3	152.3	150	2.3	13
12.6	3	Ext.	□	MAE1260MB	37.8	67.3	117.3	115	2.3	13
	3	Int.	□	MAS1260MB	37.8	67.3	117.3	115	2.3	13
	6	Int.	□	MAS1260LB	75.6	102.3	152.3	150	2.3	13
12.7	3	Ext.	□	MAE1270MB	38.1	67.3	117.3	115	2.3	13
	3	Int.	□	MAS1270MB	38.1	67.3	117.3	115	2.3	13
	6	Int.	□	MAS1270LB	76.2	102.3	152.3	150	2.3	13
12.8	3	Ext.	□	MAE1280MB	38.4	67.3	117.3	115	2.3	13
	3	Int.	□	MAS1280MB	38.4	67.3	117.3	115	2.3	13
	6	Int.	□	MAS1280LB	76.8	102.3	152.3	150	2.3	13
12.9	3	Ext.	□	MAE1290MB	38.7	67.3	117.3	115	2.3	13
	3	Int.	□	MAS1290MB	38.7	67.3	117.3	115	2.3	13
	6	Int.	□	MAS1290LB	77.4	102.3	152.3	150	2.3	13
12.96	3	Ext.	★	*MAE1296MB	38.9	67.4	117.4	115	2.4	13
	3	Int.	★	*MAS1296MB	38.9	67.4	117.4	115	2.4	13
	6	Int.	★	*MAS1296LB	77.8	102.4	152.4	150	2.4	13
13.0	3	Ext.	★	MAE1300MB	39.0	67.4	117.4	115	2.4	13
	3	Int.	★	MAS1300MB	39.0	67.4	117.4	115	2.4	13
	6	Int.	●	MAS1300LB	78.0	102.4	152.4	150	2.4	13

* : Standardbohrung für Gewindeformen.

DC	Bohr- tiefe (mm)	Kühlung (Int./Ext.)	Lager HT110	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
13.1	3	Ext.	□	MAE1310MB	39.3	72.4	122.4	120	2.4	14
	3	Int.	□	MAS1310MB	39.3	72.4	122.4	120	2.4	14
	6	Int.	□	MAS1310LB	78.6	112.4	162.4	160	2.4	14
13.2	3	Ext.	□	MAE1320MB	39.6	72.4	122.4	120	2.4	14
	3	Int.	□	MAS1320MB	39.6	72.4	122.4	120	2.4	14
	6	Int.	□	MAS1320LB	79.2	112.4	162.4	160	2.4	14
13.3	3	Ext.	□	MAE1330MB	39.9	72.4	122.4	120	2.4	14
	3	Int.	□	MAS1330MB	39.9	72.4	122.4	120	2.4	14
	6	Int.	□	MAS1330LB	79.8	112.4	162.4	160	2.4	14
13.4	3	Ext.	□	MAE1340MB	40.2	72.4	122.4	120	2.4	14
	3	Int.	□	MAS1340MB	40.2	72.4	122.4	120	2.4	14
	6	Int.	□	MAS1340LB	80.4	112.4	162.4	160	2.4	14
13.5	3	Ext.	★	MAE1350MB	40.5	72.5	122.5	120	2.5	14
	3	Int.	★	MAS1350MB	40.5	72.5	122.5	120	2.5	14
	6	Int.	★	MAS1350LB	81.0	112.5	162.5	160	2.5	14
13.6	3	Ext.	□	MAE1360MB	40.8	72.5	122.5	120	2.5	14
	3	Int.	□	MAS1360MB	40.8	72.5	122.5	120	2.5	14
	6	Int.	□	MAS1360LB	81.6	112.5	162.5	160	2.5	14
13.7	3	Ext.	□	MAE1370MB	41.1	72.5	122.5	120	2.5	14
	3	Int.	□	MAS1370MB	41.1	72.5	122.5	120	2.5	14
	6	Int.	□	MAS1370LB	82.2	112.5	162.5	160	2.5	14
13.8	3	Ext.	□	MAE1380MB	41.4	72.5	122.5	120	2.5	14
	3	Int.	□	MAS1380MB	41.4	72.5	122.5	120	2.5	14
	6	Int.	□	MAS1380LB	82.8	112.5	162.5	160	2.5	14
13.9	3	Ext.	□	MAE1390MB	41.7	72.5	122.5	120	2.5	14
	3	Int.	□	MAS1390MB	41.7	72.5	122.5	120	2.5	14
	6	Int.	□	MAS1390LB	83.4	112.5	162.5	160	2.5	14
14.0	3	Ext.	★	MAE1400MB	42.0	72.5	122.5	120	2.5	14
	3	Int.	●	MAS1400MB	42.0	72.5	122.5	120	2.5	14
	6	Int.	●	MAS1400LB	84.0	112.5	162.5	160	2.5	14
14.1	3	Ext.	□	MAE1410MB	42.3	74.6	132.6	130	2.6	15
	3	Int.	□	MAS1410MB	42.3	74.6	132.6	130	2.6	15
	6	Int.	□	MAS1410LB	84.6	117.6	175.6	173	2.6	15
14.2	3	Ext.	□	MAE1420MB	42.6	74.6	132.6	130	2.6	15
	3	Int.	□	MAS1420MB	42.6	74.6	132.6	130	2.6	15
	6	Int.	□	MAS1420LB	85.2	117.6	175.6	173	2.6	15
14.3	3	Ext.	□	MAE1430MB	42.9	74.6	132.6	130	2.6	15
	3	Int.	□	MAS1430MB	42.9	74.6	132.6	130	2.6	15
	6	Int.	□	MAS1430LB	85.8	117.6	175.6	173	2.6	15
14.4	3	Ext.	□	MAE1440MB	43.2	74.6	132.6	130	2.6	15
	3	Int.	□	MAS1440MB	43.2	74.6	132.6	130	2.6	15
	6	Int.	□	MAS1440LB	86.4	117.6	175.6	173	2.6	15
14.5	3	Ext.	□	MAE1450MB	43.5	74.6	132.6	130	2.6	15
	3	Int.	□	MAS1450MB	43.5	74.6	132.6	130	2.6	15
	6	Int.	□	MAS1450LB	87.0	117.6	175.6	173	2.6	15
14.6	3	Ext.	□	MAE1460MB	43.8	74.7	132.7	130	2.7	15
	3	Int.	□	MAS1460MB	43.8	74.7	132.7	130	2.7	15
	6	Int.	□	MAS1460LB	87.6	117.7	175.7	173	2.7	15

DC (mm)	Bohr- tiefe (l/d)	Kühlung (Int./Ext.)	Lager HT110	Bestellbezeichnung	Abmessungen (mm)					
					LU	LCF	OAL	LF	PL	DON
14.7	3	Ext.	□	MAE1470MB	44.1	74.7	132.7	130	2.7	15
	3	Int.	□	MAS1470MB	44.1	74.7	132.7	130	2.7	15
	6	Int.	□	MAS1470LB	88.2	117.7	175.7	173	2.7	15
14.8	3	Ext.	□	MAE1480MB	44.4	74.7	132.7	130	2.7	15
	3	Int.	□	MAS1480MB	44.4	74.7	132.7	130	2.7	15
	6	Int.	□	MAS1480LB	88.8	117.7	175.7	173	2.7	15
14.9	3	Ext.	□	MAE1490MB	44.7	74.7	132.7	130	2.7	15
	3	Int.	□	MAS1490MB	44.7	74.7	132.7	130	2.7	15
	6	Int.	□	MAS1490LB	89.4	117.7	175.7	173	2.7	15
14.96	3	Ext.	★	*MAE1496MB	44.9	74.7	132.7	130	2.7	15
	3	Int.	★	*MAS1496MB	44.9	74.7	132.7	130	2.7	15
	6	Int.	★	*MAS1496LB	89.8	117.7	175.7	173	2.7	15
15.0	3	Ext.	★	MAE1500MB	45.0	74.7	132.7	130	2.7	15
	3	Int.	★	MAS1500MB	45.0	74.7	132.7	130	2.7	15
	6	Int.	●	MAS1500LB	90.0	117.7	175.7	173	2.7	15
15.1	3	Ext.	□	MAE1510MB	45.3	78.7	136.7	134	2.7	16
	3	Int.	□	MAS1510MB	45.3	78.7	136.7	134	2.7	16
	6	Int.	□	MAS1510LB	90.6	122.7	180.7	178	2.7	16
15.2	3	Ext.	□	MAE1520MB	45.6	78.8	136.8	134	2.8	16
	3	Int.	□	MAS1520MB	45.6	78.8	136.8	134	2.8	16
	6	Int.	□	MAS1520LB	91.2	122.8	180.8	178	2.8	16
15.3	3	Ext.	□	MAE1530MB	45.9	78.8	136.8	134	2.8	16
	3	Int.	□	MAS1530MB	45.9	78.8	136.8	134	2.8	16
	6	Int.	□	MAS1530LB	91.8	122.8	180.8	178	2.8	16
15.4	3	Ext.	□	MAE1540MB	46.2	78.8	136.8	134	2.8	16
	3	Int.	□	MAS1540MB	46.2	78.8	136.8	134	2.8	16
	6	Int.	□	MAS1540LB	92.4	122.8	180.8	178	2.8	16
15.5	3	Ext.	□	MAE1550MB	46.5	78.8	136.8	134	2.8	16
	3	Int.	□	MAS1550MB	46.5	78.8	136.8	134	2.8	16
	6	Int.	□	MAS1550LB	93.0	122.8	180.8	178	2.8	16
15.6	3	Ext.	□	MAE1560MB	46.8	78.8	136.8	134	2.8	16
	3	Int.	□	MAS1560MB	46.8	78.8	136.8	134	2.8	16
	6	Int.	□	MAS1560LB	93.6	122.8	180.8	178	2.8	16
15.7	3	Ext.	□	MAE1570MB	47.1	78.9	136.9	134	2.9	16
	3	Int.	□	MAS1570MB	47.1	78.9	136.9	134	2.9	16
	6	Int.	□	MAS1570LB	94.2	122.9	180.9	178	2.9	16
15.8	3	Ext.	□	MAE1580MB	47.4	78.9	136.9	134	2.9	16
	3	Int.	□	MAS1580MB	47.4	78.9	136.9	134	2.9	16
	6	Int.	□	MAS1580LB	94.8	122.9	180.9	178	2.9	16
15.9	3	Ext.	□	MAE1590MB	47.7	78.9	136.9	134	2.9	16
	3	Int.	□	MAS1590MB	47.7	78.9	136.9	134	2.9	16
	6	Int.	□	MAS1590LB	95.4	122.9	180.9	178	2.9	16
16.0	3	Ext.	★	MAE1600MB	48.0	78.9	136.9	134	2.9	16
	3	Int.	★	MAS1600MB	48.0	78.9	136.9	134	2.9	16
	6	Int.	●	MAS1600LB	96.0	122.9	180.9	178	2.9	16

★ : Standardbohrung für Gewindeformen.

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

SCNITTDATENEMPFEHLUNGEN

Typ	Werkstoff	Bohrer Durchm. $\phi 3.0 - \phi 6.0$		Bohrer Durchm. $\phi 6.1 - \phi 10.0$		Bohrer Durchm. $\phi 10.1 - \phi 16.0$	
		Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
M A E	N Aluminium Leg.	90 (40–140)	0.15 (0.05–0.3)	100 (50–150)	0.2 (0.1–0.3)	120 (60–170)	0.25 (0.1–0.4)
	Aluminiumgusslegierung	100 (60–150)	0.12 (0.05–0.25)	110 (70–160)	0.15 (0.05–0.25)	130 (80–180)	0.2 (0.1–0.3)
	K Grauguß	40 (20–60)	0.15 (0.1–0.2)	60 (40–80)	0.2 (0.1–0.3)	80 (60–100)	0.3 (0.2–0.4)
	Duktiler Guss	30 (20–40)	0.1 (0.05–0.15)	40 (20–60)	0.12 (0.05–0.2)	60 (40–80)	0.2 (0.1–0.3)
M A S	N Aluminium Leg.	100 (60–150)	0.15 (0.05–0.3)	120 (80–170)	0.2 (0.1–0.3)	150 (100–200)	0.25 (0.1–0.4)
	Aluminiumgusslegierung	120 (80–170)	0.12 (0.05–0.25)	150 (100–180)	0.15 (0.05–0.25)	160 (120–200)	0.2 (0.1–0.3)
	K Grauguß	60 (40–80)	0.15 (0.1–0.2)	80 (60–110)	0.2 (0.1–0.3)	100 (70–130)	0.3 (0.2–0.4)
	Duktiler Guss	45 (30–60)	0.1 (0.05–0.15)	60 (40–80)	0.12 (0.05–0.2)	80 (60–100)	0.2 (0.1–0.3)

LOCH- UND BOHRDURCHMESSER FÜR GEWINDEBOHREN

Gewindegröße	Gewindebohren			Gewalzt Gewindebohren		
	Bohrer Durchm. (DC)	Toleranz der Lochdurchmesser		Bohrer Durchm. (DC)	Toleranz der Lochdurchmesser	
		min	max		min	max
M4x0.7	3.3	3.242	3.422	3.65	3.65	3.70
M5x0.8	4.2	4.134	4.334	4.60	4.59	4.66
M6x1.0	5.0	4.917	5.153	5.50	5.48	5.57
M8x1.25	6.8	6.647	6.912	7.35	7.34	7.41
M10x1.5	8.5	8.376	8.676	9.21	9.18	9.28
M12x1.75	10.3	10.106	10.441	11.08	11.05	11.15
M14x2	12.0	11.835	12.210	12.96	12.92	13.04
M16x2	14.0	13.835	14.210	14.96	14.92	15.04

BOHREN (VOLLHARTMETALL)

MHS

- Verstärkte Geometrie mit 4 Führungsfasen für eine prozesssichere Bearbeitung.
- Für das Tieflochbohren ohne Lüften in gehärteten Werkstoffen.

P

M

K

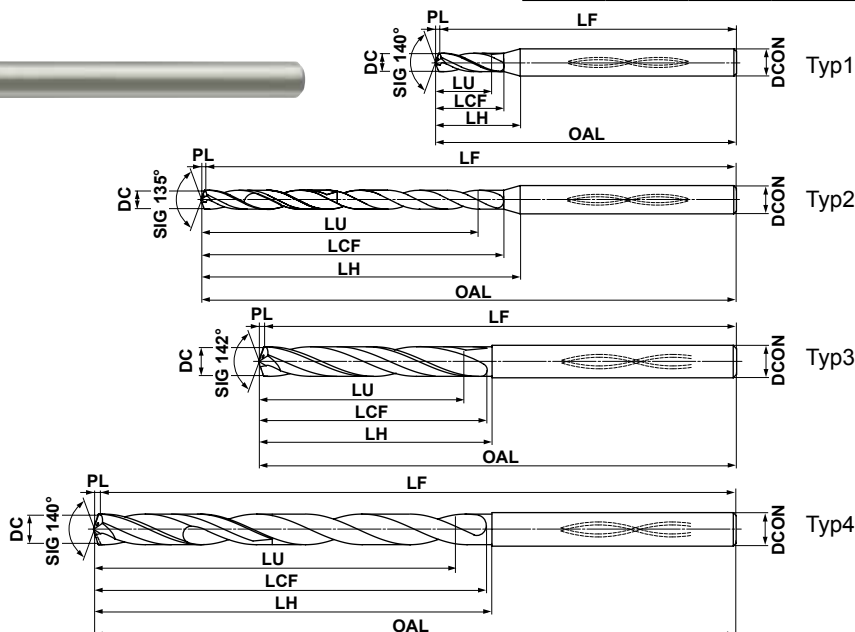
N

S

H

DC ≤ 3	3 < DC ≤ 6	6 < DC ≤ 10	10 < DC ≤ 12
+0.010 -0.002	+0.010 -0.002	+0.010 -0.005	+0.010 -0.008
0 -0.006	0 -0.008	0 -0.009	0 -0.011

h6



(Bemerkung 1) MHS Bohrer eignen sich für die Verwendung mit Schrumpfaufnahmen.

(Bemerkung 2) Verwenden Sie den kürzesten Bohrer im gleichen Durchmesser als Pilotbohrer.

Interne Kühlung

DC (mm)	Bohr- tiefe (l/d)	Lager VP-15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
0.95	3	★	MHS0095L006B	2.85	6.17	9.97	60.17	60	0.17	3	1
	6	★	MHS0095L009B	5.70	9.17	12.97	60.17	60	0.17	3	2
	13	★	MHS0095L015B	12.35	15.17	18.97	60.17	60	0.17	3	2
	23	★	MHS0095L025B	21.85	25.17	28.97	60.17	60	0.17	3	2
	30	★	MHS0095L035B	28.50	35.17	38.97	80.17	80	0.17	3	2
1.00	3	●	MHS0100L006B	3.0	6.2	9.9	60.2	60	0.2	3	1
	6	●	MHS0100L009B	6.0	9.2	12.9	60.2	60	0.2	3	2
	12	★	MHS0100L015B	12.0	15.2	18.9	60.2	60	0.2	3	2
	22	●	MHS0100L025B	22.0	25.2	28.9	60.2	60	0.2	3	2
	30	●	MHS0100L035B	30.0	35.2	38.9	80.2	80	0.2	3	2
1.10	2	●	MHS0110L006B	2.2	6.2	9.7	60.2	60	0.2	3	1
	5	★	MHS0110L009B	5.5	9.2	12.7	60.2	60	0.2	3	2
	11	●	MHS0110L015B	12.1	15.2	18.7	60.2	60	0.2	3	2
	20	●	MHS0110L025B	22.0	25.2	28.7	60.2	60	0.2	3	2
	29	●	MHS0110L035B	31.9	35.2	38.7	80.2	80	0.2	3	2
1.20	2	●	MHS0120L006B	2.4	6.2	9.6	60.2	60	0.2	3	1
	5	★	MHS0120L009B	6.0	9.2	12.6	60.2	60	0.2	3	2
	10	●	MHS0120L015B	12.0	15.2	18.6	60.2	60	0.2	3	2
	18	●	MHS0120L025B	21.6	25.2	28.6	60.2	60	0.2	3	2
	26	●	MHS0120L035B	31.2	35.2	38.6	80.2	80	0.2	3	2
1.30	2	●	MHS0130L007B	2.6	7.2	10.4	60.2	60	0.2	3	1
	5	★	MHS0130L011B	6.5	11.3	14.5	60.3	60	0.3	3	2
	12	●	MHS0130L020B	15.6	20.3	23.5	60.3	60	0.3	3	2
	20	●	MHS0130L030B	26.0	30.3	33.5	80.3	80	0.3	3	2
	30	●	MHS0130L045B	39.0	45.3	48.5	80.3	80	0.3	3	2

Interne Kühlung

DC (mm)	Bohr- tiefe (l/d)	Lager VP-15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
1.40	2	●	MHS0140L007B	2.8	7.3	10.3	60.3	60	0.3	3	1
	5	★	MHS0140L011B	7.0	11.3	14.3	60.3	60	0.3	3	2
	11	●	MHS0140L020B	15.4	20.3	23.3	60.3	60	0.3	3	2
	18	★	MHS0140L030B	25.2	30.3	33.3	80.3	80	0.3	3	2
	29	★	MHS0140L045B	40.6	45.3	48.3	80.3	80	0.3	3	2
1.45	3	●	MHS0145L008B	4.4	8.3	11.2	60.3	60	0.3	3	1
	6	★	MHS0145L013B	8.7	13.3	16.2	60.3	60	0.3	3	2
	11	★	MHS0145L020B	16.0	20.3	23.2	60.3	60	0.3	3	2
	21	●	MHS0145L035B	30.5	35.3	38.2	80.3	80	0.3	3	2
	30	★	MHS0145L055B	43.5	55.3	58.2	100.3	100	0.3	3	2
1.50	2	●	MHS0150L008B	3.0	8.3	11.1	60.3	60	0.3	3	1
	6	★	MHS0150L013B	9.0	13.3	16.1	60.3	60	0.3	3	2
	10	●	MHS0150L020B	15.0	20.3	23.1	60.3	60	0.3	3	2
	20	●	MHS0150L035B	30.0	35.3	38.1	80.3	80	0.3	3	2
	30	●	MHS0150L055B	45.0	55.3	58.1	100.3	100	0.3	3	2
1.60	2	●	MHS0160L008B	3.2	8.3	10.9	60.3	60	0.3	3	1
	5	★	MHS0160L013B	8.0	13.3	15.9	60.3	60	0.3	3	2
	10	●	MHS0160L020B	16.0	20.3	22.9	60.3	60	0.3	3	2
	19	●	MHS0160L035B	30.4	35.3	37.9	80.3	80	0.3	3	2
	30	●	MHS0160L055B	48.0	55.3	57.9	100.3	100	0.3	3	2
1.70	2	●	MHS0170L008B	3.4	8.3	10.7	60.3	60	0.3	3	1
	5	★	MHS0170L013B	8.5	13.4	15.8	60.4	60	0.4	3	2
	9	●	MHS0170L020B	15.3	20.4	22.8	60.4	60	0.4	3	2
	18	●	MHS0170L035B	30.6	35.4	37.8	80.4	80	0.4	3	2
	29	●	MHS0170L055B	49.3	55.4	57.8	100.4	100	0.4	3	2

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
1.80	3	●	MHS0180L010B	5.4	10.3	12.5	60.3	60	0.3	3	1
	5	★	MHS0180L015B	9.0	15.4	17.6	60.4	60	0.4	3	2
	11	●	MHS0180L025B	19.8	25.4	27.6	60.4	60	0.4	3	2
	22	●	MHS0180L045B	39.6	45.4	47.6	80.4	80	0.4	3	2
	30	●	MHS0180L065B	54.0	65.4	67.6	100.4	100	0.4	3	2
1.90	2	●	MHS0190L010B	3.8	10.3	12.4	60.3	60	0.3	3	1
	5	★	MHS0190L015B	9.5	15.4	17.5	60.4	60	0.4	3	2
	10	●	MHS0190L025B	19.0	25.4	27.5	60.4	60	0.4	3	2
	21	●	MHS0190L045B	39.9	45.4	47.5	80.4	80	0.4	3	2
	30	●	MHS0190L065B	57.0	65.4	67.5	100.4	100	0.4	3	2
1.95	2	●	MHS0195L010B	3.9	10.4	12.4	60.4	60	0.4	3	1
	5	★	MHS0195L015B	9.8	15.4	17.4	60.4	60	0.4	3	2
	10	★	MHS0195L025B	19.5	25.4	27.4	60.4	60	0.4	3	2
	20	●	MHS0195L045B	39.0	45.4	47.4	80.4	80	0.4	3	2
	30	★	MHS0195L065B	58.5	65.4	67.4	100.4	100	0.4	3	2
2.00	2	●	MHS0200L010B	4.0	10.4	12.3	60.4	60	0.4	3	1
	5	★	MHS0200L015B	10.0	15.4	17.3	60.4	60	0.4	3	2
	9	●	MHS0200L025B	18.0	25.4	27.3	60.4	60	0.4	3	2
	20	●	MHS0200L045B	40.0	45.4	47.3	80.4	80	0.4	3	2
	30	●	MHS0200L065B	60.0	65.4	67.3	100.4	100	0.4	3	2
2.10	3	●	MHS0210L012B	6.3	12.4	14.1	60.4	60	0.4	3	1
	7	★	MHS0210L020B	14.7	20.4	22.1	60.4	60	0.4	3	2
	11	●	MHS0210L030B	23.1	30.4	32.1	80.4	80	0.4	3	2
	23	●	MHS0210L055B	48.3	55.4	57.1	100.4	100	0.4	3	2
	30	●	MHS0210L075B	63.0	75.4	77.1	120.4	120	0.4	3	2
2.20	2	●	MHS0220L012B	4.4	12.4	13.9	60.4	60	0.4	3	1
	6	★	MHS0220L020B	13.2	20.5	22.0	60.5	60	0.5	3	2
	11	●	MHS0220L030B	24.2	30.5	32.0	80.5	80	0.5	3	2
	22	●	MHS0220L055B	48.4	55.5	57.0	100.5	100	0.5	3	2
	30	●	MHS0220L075B	66.0	75.5	77.0	120.5	120	0.5	3	2
2.30	2	●	MHS0230L012B	4.6	12.4	13.7	60.4	60	0.4	3	1
	6	★	MHS0230L020B	13.8	20.5	21.8	60.5	60	0.5	3	2
	10	●	MHS0230L030B	23.0	30.5	31.8	80.5	80	0.5	3	2
	21	●	MHS0230L055B	48.3	55.5	56.8	100.5	100	0.5	3	2
	30	●	MHS0230L075B	69.0	75.5	76.8	120.5	120	0.5	3	2
2.40	2	●	MHS0240L012B	4.8	12.4	13.5	60.4	60	0.4	3	1
	5	★	MHS0240L020B	12.0	20.5	21.6	60.5	60	0.5	3	2
	9	●	MHS0240L030B	21.6	30.5	31.6	80.5	80	0.5	3	2
	20	●	MHS0240L055B	48.0	55.5	56.6	100.5	100	0.5	3	2
	28	●	MHS0240L075B	67.2	75.5	76.6	120.5	120	0.5	3	2
2.45	2	★	MHS0245L013B	4.9	13.4	14.4	70.4	70	0.4	4	1
	5	★	MHS0245L020B	12.3	20.5	21.5	70.5	70	0.5	4	2
	11	★	MHS0245L035B	27.0	35.5	36.5	90.5	90	0.5	4	2
	24	★	MHS0245L065B	58.8	65.5	66.5	110.5	110	0.5	4	2
	30	★	MHS0245L090B	73.5	90.5	91.5	140.5	140	0.5	4	2
2.50	2	●	MHS0250L013B	5.0	13.5	16.3	70.5	70	0.5	4	1
	5	★	MHS0250L020B	12.5	20.5	23.3	70.5	70	0.5	4	2
	11	●	MHS0250L035B	27.5	35.5	38.3	90.5	90	0.5	4	2
	23	●	MHS0250L065B	57.5	65.5	68.3	110.5	110	0.5	4	2
	30	●	MHS0250L090B	75.0	90.5	93.3	140.5	140	0.5	4	2

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
2.60	2	●	MHS0260L013B	5.2	13.5	16.1	70.5	70	0.5	4	1
	5	★	MHS0260L020B	13.0	20.5	23.1	70.5	70	0.5	4	2
	10	●	MHS0260L035B	26.0	35.5	38.1	90.5	90	0.5	4	2
	22	●	MHS0260L065B	57.2	65.5	68.1	110.5	110	0.5	4	2
	30	●	MHS0260L090B	78.0	90.5	93.1	140.5	140	0.5	4	2
2.70	2	●	MHS0270L013B	5.4	13.5	15.9	70.5	70	0.5	4	1
	4	★	MHS0270L020B	10.8	20.6	23.0	70.6	70	0.6	4	2
	10	●	MHS0270L035B	27.0	35.6	38.0	90.6	90	0.6	4	2
	21	●	MHS0270L065B	56.7	65.6	68.0	110.6	110	0.6	4	2
	30	●	MHS0270L090B	81.0	90.6	93.0	140.6	140	0.6	4	2
2.80	2	●	MHS0280L014B	5.6	14.5	16.7	70.5	70	0.5	4	1
	4	★	MHS0280L020B	11.2	20.6	22.8	70.6	70	0.6	4	2
	9	●	MHS0280L035B	25.2	35.6	37.8	90.6	90	0.6	4	2
	20	●	MHS0280L065B	56.0	65.6	67.8	110.6	110	0.6	4	2
	29	●	MHS0280L090B	81.2	90.6	92.8	140.6	140	0.6	4	2
2.90	2	●	MHS0290L014B	5.8	14.5	16.6	70.5	70	0.5	4	1
	4	★	MHS0290L020B	11.6	20.6	22.7	70.6	70	0.6	4	2
	9	●	MHS0290L035B	26.1	35.6	37.7	90.6	90	0.6	4	2
	19	●	MHS0290L065B	55.1	65.6	67.7	110.6	110	0.6	4	2
	28	●	MHS0290L090B	81.2	90.6	92.7	140.6	140	0.6	4	2
2.95	2	★	MHS0295L014B	5.9	14.5	16.5	70.5	70	0.5	4	1
	4	★	MHS0295L020B	11.8	20.6	22.6	70.6	70	0.6	4	2
	9	★	MHS0295L035B	26.6	35.6	37.6	90.6	90	0.6	4	2
	19	●	MHS0295L065B	56.1	65.6	67.6	110.6	110	0.6	4	2
	28	★	MHS0295L090B	82.6	90.6	92.6	140.6	140	0.6	4	2
3.0	4	●	MHS0300L020B	12.0	19.5	20.5	70.5	70	0.5	4	3
	10	●	MHS0300L040B	30.0	39.5	40.5	90.5	90	0.5	4	4
	17	●	MHS0300L060B	51.0	59.5	60.5	110.5	110	0.5	4	4
	27	●	MHS0300L090B	81.0	89.5	90.5	140.5	140	0.5	4	4
	4	□	MHS0310L020B	12.4	20.0	20.5	70.5	70	0.5	4	3
3.1	10	□	MHS0310L040B	31.0	40.1	40.6	90.6	90	0.6	4	4
	17	□	MHS0310L060B	52.7	60.1	60.6	110.6	110	0.6	4	4
	26	□	MHS0310L090B	80.6	90.1	90.6	140.6	140	0.6	4	4
3.2	4	□	MHS0320L020B	12.8	20.1	20.6	70.6	70	0.6	4	3
	10	□	MHS0320L040B	32.0	40.1	40.6	90.6	90	0.6	4	4
	16	□	MHS0320L060B	51.2	60.1	60.6	110.6	110	0.6	4	4
3.3	25	□	MHS0330L090B	82.5	90.1	90.6	140.6	140	0.6	4	4
	3	□	MHS0330L020B	9.9	20.1	20.6	70.6	70	0.6	4	3
	9	□	MHS0330L040B	29.7	40.1	40.6	90.6	90	0.6	4	4
3.4	15	□	MHS0340L060B	51.0	60.1	60.6	110.6	110	0.6	4	4
	24	□	MHS0340L090B	81.6	90.1	90.6	140.6	140	0.6	4	4
	3	●	MHS0350L020B	10.5	20.1	20.6	70.6	70	0.6	4	3
3.5	9	●	MHS0350L040B	31.5	40.1	40.6	90.6	90	0.6	4	4
	14	●	MHS0350L060B	49.0	60.1	60.6	110.6	110	0.6	4	4
	23	●	MHS0350L090B	80.5	90.1	90.6	140.6	140	0.6	4	4

BOHREN (VOLLHARTMETALL)

MHS

HARTMETALL

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
3.6	3	□	MHS0360L020B	10.8	20.6	20.6	70.6	70	0.6	4	3
	9	□	MHS0360L040B	32.4	40.7	40.7	90.7	90	0.7	4	4
	14	□	MHS0360L060B	50.4	60.7	60.7	110.7	110	0.7	4	4
	22	□	MHS0360L090B	79.2	90.7	90.7	140.7	140	0.7	4	4
	30	□	MHS0360L120B	108.0	120.7	120.7	170.7	170	0.7	4	4
3.7	3	□	MHS0370L020B	11.1	20.6	20.6	70.6	70	0.6	4	3
	8	□	MHS0370L040B	29.6	40.7	40.7	90.7	90	0.7	4	4
	14	□	MHS0370L060B	51.8	60.7	60.7	110.7	110	0.7	4	4
	22	□	MHS0370L090B	81.4	90.7	90.7	140.7	140	0.7	4	4
	30	□	MHS0370L120B	111.0	120.7	120.7	170.7	170	0.7	4	4
3.8	3	★	MHS0380L020B	11.4	20.7	20.7	70.7	70	0.7	4	3
	8	★	MHS0380L040B	30.4	40.7	40.7	90.7	90	0.7	4	4
	13	★	MHS0380L060B	49.4	60.7	60.7	110.7	110	0.7	4	4
	21	★	MHS0380L090B	79.8	90.7	90.7	140.7	140	0.7	4	4
	29	★	MHS0380L120B	110.2	120.7	120.7	170.7	170	0.7	4	4
3.9	3	□	MHS0390L020B	11.7	20.7	20.7	70.7	70	0.7	4	3
	8	□	MHS0390L040B	31.2	40.7	40.7	90.7	90	0.7	4	4
	13	□	MHS0390L060B	50.7	60.7	60.7	110.7	110	0.7	4	4
	21	□	MHS0390L090B	81.9	90.7	90.7	140.7	140	0.7	4	4
	28	□	MHS0390L120B	109.2	120.7	120.7	170.7	170	0.7	4	4
4.0	2	●	MHS0400L020B	8.0	20.7	20.7	70.7	70	0.7	4	3
	7	●	MHS0400L040B	28.0	40.7	40.7	90.7	90	0.7	4	4
	12	●	MHS0400L060B	48.0	60.7	60.7	110.7	110	0.7	4	4
	20	●	MHS0400L090B	80.0	90.7	90.7	140.7	140	0.7	4	4
	27	●	MHS0400L120B	108.0	120.7	120.7	170.7	170	0.7	4	4
4.1	2	□	MHS0410L020B	8.2	19.2	20.7	70.7	70	0.7	6	3
	7	□	MHS0410L040B	28.7	39.2	40.7	90.7	90	0.7	6	4
	12	□	MHS0410L060B	49.2	59.2	60.7	110.7	110	0.7	6	4
	19	□	MHS0410L090B	77.9	89.2	90.7	140.7	140	0.7	6	4
	26	□	MHS0410L120B	106.6	119.2	120.7	170.7	170	0.7	6	4
4.2	2	□	MHS0420L020B	8.4	19.2	20.7	70.7	70	0.7	6	3
	7	□	MHS0420L040B	29.4	39.3	40.8	90.8	90	0.8	6	4
	11	□	MHS0420L060B	46.2	59.3	60.8	110.8	110	0.8	6	4
	19	□	MHS0420L090B	79.8	89.3	90.8	140.8	140	0.8	6	4
	26	□	MHS0420L120B	109.2	119.3	120.8	170.8	170	0.8	6	4
4.3	2	□	MHS0430L020B	8.6	19.2	20.7	70.7	70	0.7	6	3
	6	□	MHS0430L040B	25.8	39.3	40.8	90.8	90	0.8	6	4
	11	□	MHS0430L060B	47.3	59.3	60.8	110.8	110	0.8	6	4
	18	□	MHS0430L090B	77.4	89.3	90.8	140.8	140	0.8	6	4
	25	□	MHS0430L120B	107.5	119.3	120.8	170.8	170	0.8	6	4
4.4	2	□	MHS0440L020B	8.8	19.3	20.8	70.8	70	0.8	6	3
	6	□	MHS0440L040B	26.4	39.3	40.8	90.8	90	0.8	6	4
	11	□	MHS0440L060B	48.4	59.3	60.8	110.8	110	0.8	6	4
	18	□	MHS0440L090B	79.2	89.3	90.8	140.8	140	0.8	6	4
	24	□	MHS0440L120B	105.6	119.3	120.8	170.8	170	0.8	6	4
4.5	2	●	MHS0450L020B	9.0	19.3	20.8	70.8	70	0.8	6	3
	6	●	MHS0450L040B	27.0	39.3	40.8	90.8	90	0.8	6	4
	10	●	MHS0450L060B	45.0	59.3	60.8	110.8	110	0.8	6	4
	17	●	MHS0450L090B	76.5	89.3	90.8	140.8	140	0.8	6	4
	24	●	MHS0450L120B	108.0	119.3	120.8	170.8	170	0.8	6	4

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
4.6	2	□	MHS0460L020B	9.2	19.8	20.8	70.8	70	0.8	6	3
	6	□	MHS0460L040B	27.6	39.8	40.8	90.8	90	0.8	6	4
	10	□	MHS0460L060B	46.0	59.8	60.8	110.8	110	0.8	6	4
	17	□	MHS0460L090B	78.2	89.8	90.8	140.8	140	0.8	6	4
	23	□	MHS0460L120B	105.8	119.8	120.8	170.8	170	0.8	6	4
4.7	30	□	MHS0460L150B	138.0	149.8	150.8	200.8	200	0.8	6	4
	2	□	MHS0470L020B	9.4	19.8	20.8	70.8	70	0.8	6	3
	6	□	MHS0470L040B	28.2	39.9	40.9	90.9	90	0.9	6	4
	10	□	MHS0470L060B	47.0	59.9	60.9	110.9	110	0.9	6	4
	16	□	MHS0470L090B	75.2	89.9	90.9	140.9	140	0.9	6	4
4.8	23	□	MHS0470L120B	108.1	119.9	120.9	170.9	170	0.9	6	4
	29	□	MHS0470L150B	136.3	149.9	150.9	200.9	200	0.9	6	4
	1	★	MHS0480L020B	4.8	19.8	20.8	70.8	70	0.8	6	3
	6	★	MHS0480L040B	28.8	39.9	40.9	90.9	90	0.9	6	4
	10	★	MHS0480L060B	48.0	59.9	60.9	110.9	110	0.9	6	4
4.9	16	★	MHS0480L090B	76.8	89.9	90.9	140.9	140	0.9	6	4
	22	★	MHS0480L120B	105.6	119.9	120.9	170.9	170	0.9	6	4
	29	★	MHS0480L150B	139.2	149.9	150.9	200.9	200	0.9	6	4
	1	□	MHS0490L020B	4.9	19.8	20.8	70.8	70	0.8	6	3
	5	□	MHS0490L040B	24.5	39.9	40.9	90.9	90	0.9	6	4
5.0	10	□	MHS0490L060B	49.0	59.9	60.9	110.9	110	0.9	6	4
	16	□	MHS0490L090B	78.4	89.9	90.9	140.9	140	0.9	6	4
	22	□	MHS0490L120B	107.8	119.9	120.9	170.9	170	0.9	6	4
	28	□	MHS0490L150B	137.2	149.9	150.9	200.9	200	0.9	6	4
	1	●	MHS0500L020B	5.0	19.9	20.9	70.9	70	0.9	6	3
5.1	5	●	MHS0500L040B	25.0	39.9	40.9	90.9	90	0.9	6	4
	9	●	MHS0500L060B	45.0	59.9	60.9	110.9	110	0.9	6	4
	15	●	MHS0500L090B	75.0	89.9	90.9	140.9	140	0.9	6	4
	21	●	MHS0500L120B	105.0	119.9	120.9	170.9	170	0.9	6	4
	27	●	MHS0500L150B	135.0	149.9	150.9	200.9	200	0.9	6	4
5.2	3	□	MHS0510L030B	15.3	30.4	30.9	80.9	80	0.9	6	3
	9	□	MHS0510L060B	45.9	60.4	60.9	110.9	110	0.9	6	4
	15	□	MHS0510L090B	76.5	90.4	90.9	140.9	140	0.9	6	4
	21	□	MHS0510L120B	107.1	120.4	120.9	170.9	170	0.9	6	4
	27	□	MHS0510L150B	137.7	150.4	150.9	200.9	200	0.9	6	4
5.3	3	□	MHS0520L030B	15.6	30.4	30.9	80.9	80	0.9	6	3
	9	□	MHS0520L060B	46.8	60.4	60.9	110.9	110	0.9	6	4
	15	□	MHS0520L090B	78.0	90.4	90.9	140.9	140	0.9	6	4
	20	□	MHS0520L120B	104.0	120.4	120.9	170.9	170	0.9	6	4
	26	□	MHS0520L150B	135.2	150.4	150.9	200.9	200	0.9	6	4
5.4	3	□	MHS0530L030B	15.9	30.4	30.9	80.9	80	0.9	6	3
	9	□	MHS0530L060B	47.7	60.5	61.0	111.0	110	1.0	6	4
	14	□	MHS0530L090B	74.2	90.5	91.0	141.0	140	1.0	6	4
	20	□	MHS0530L120B	106.0	120.5	121.0	171.0	170	1.0	6	4
	26	□	MHS0530L150B	137.8	150.5	151.0	201.0	200	1.0	6	4
5.5	3	□	MHS0540L030B	16.2	30.4	30.9	80.9	80	0.9	6	3
	9	□	MHS0540L060B	48.6	60.5	61.0	111.0	110	1.0	6	4
	14	□	MHS0540L090B	75.6	90.5	91.0	141.0	140	1.0	6	4
	20	□	MHS0540L120B	108.0	120.5	121.0	171.0	170	1.0	6	4
	25	□	MHS0540L150B	135.0	150.5	151.0	201.0	200	1.0	6	4

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
5.5	3	●	MHS0550L030B	16.5	30.4	30.9	80.9	80	0.9	6	3
	8	●	MHS0550L060B	44.0	60.5	61.0	111.0	110	1.0	6	4
	14	●	MHS0550L090B	77.0	90.5	91.0	141.0	140	1.0	6	4
	19	●	MHS0550L120B	104.5	120.5	121.0	171.0	170	1.0	6	4
	25	●	MHS0550L150B	137.5	150.5	151.0	201.0	200	1.0	6	4
5.6	3	□	MHS0560L030B	16.8	31.0	31.0	81.0	80	1.0	6	3
	8	□	MHS0560L060B	44.8	61.0	61.0	111.0	110	1.0	6	4
	14	□	MHS0560L090B	78.4	91.0	91.0	141.0	140	1.0	6	4
	19	□	MHS0560L120B	106.4	121.0	121.0	171.0	170	1.0	6	4
	24	□	MHS0560L150B	134.4	151.0	151.0	201.0	200	1.0	6	4
5.7	3	□	MHS0570L030B	17.1	31.0	31.0	81.0	80	1.0	6	3
	8	□	MHS0570L060B	45.6	61.0	61.0	111.0	110	1.0	6	4
	13	□	MHS0570L090B	74.1	91.0	91.0	141.0	140	1.0	6	4
	19	□	MHS0570L120B	108.3	121.0	121.0	171.0	170	1.0	6	4
	24	□	MHS0570L150B	136.8	151.0	151.0	201.0	200	1.0	6	4
5.8	3	★	MHS0580L030B	17.4	31.0	31.0	81.0	80	1.0	6	3
	8	★	MHS0580L060B	46.4	61.1	61.1	111.1	110	1.1	6	4
	13	★	MHS0580L090B	75.4	91.1	91.1	141.1	140	1.1	6	4
	18	★	MHS0580L120B	104.4	121.1	121.1	171.1	170	1.1	6	4
	23	★	MHS0580L150B	133.4	151.1	151.1	201.1	200	1.1	6	4
5.9	3	□	MHS0590L030B	17.7	31.0	31.0	81.0	80	1.0	6	3
	8	□	MHS0590L060B	47.2	61.1	61.1	111.1	110	1.1	6	4
	13	□	MHS0590L090B	76.7	91.1	91.1	141.1	140	1.1	6	4
	18	□	MHS0590L120B	106.2	121.1	121.1	171.1	170	1.1	6	4
	23	□	MHS0590L150B	135.7	151.1	151.1	201.1	200	1.1	6	4
6.0	2	●	MHS0600L030B	12.0	31.0	31.0	81.0	80	1.0	6	3
	7	●	MHS0600L060B	42.0	61.1	61.1	111.1	110	1.1	6	4
	12	●	MHS0600L090B	72.0	91.1	91.1	141.1	140	1.1	6	4
	17	●	MHS0600L120B	102.0	121.1	121.1	171.1	170	1.1	6	4
	22	●	MHS0600L150B	132.0	151.1	151.1	201.1	200	1.1	6	4
6.1	2	□	MHS0610L030B	12.2	29.6	31.1	81.1	80	1.1	8	3
	7	□	MHS0610L060B	42.7	59.6	61.1	111.1	110	1.1	8	4
	12	□	MHS0610L090B	73.2	89.6	91.1	141.1	140	1.1	8	4
	17	□	MHS0610L120B	103.7	119.6	121.1	171.1	170	1.1	8	4
	22	□	MHS0610L150B	134.2	149.6	151.1	201.1	200	1.1	8	4
6.2	2	□	MHS0620L030B	12.4	29.6	31.1	81.1	80	1.1	8	3
	7	□	MHS0620L060B	43.4	59.6	61.1	111.1	110	1.1	8	4
	12	□	MHS0620L090B	74.4	89.6	91.1	141.1	140	1.1	8	4
	17	□	MHS0620L120B	105.4	119.6	121.1	171.1	170	1.1	8	4
	21	□	MHS0620L150B	130.2	149.6	151.1	201.1	200	1.1	8	4
6.3	2	□	MHS0630L030B	12.6	29.6	31.1	81.1	80	1.1	8	3
	7	□	MHS0630L060B	44.1	59.6	61.1	111.1	110	1.1	8	4
	12	□	MHS0630L090B	75.6	89.6	91.1	141.1	140	1.1	8	4
	16	□	MHS0630L120B	100.8	119.6	121.1	171.1	170	1.1	8	4
	21	□	MHS0630L150B	132.3	149.6	151.1	201.1	200	1.1	8	4
6.4	2	□	MHS0640L030B	12.8	29.6	31.1	81.1	80	1.1	8	3
	7	□	MHS0640L060B	44.8	59.7	61.2	111.2	110	1.2	8	4
	11	□	MHS0640L090B	70.4	89.7	91.2	141.2	140	1.2	8	4
	16	□	MHS0640L120B	102.4	119.7	121.2	171.2	170	1.2	8	4
	21	□	MHS0640L150B	134.4	149.7	151.2	201.2	200	1.2	8	4

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
6.5	2	●	MHS0650L030B	13.0	29.6	31.1	81.1	80	1.1	8	3
	6	●	MHS0650L060B	39.0	59.7	61.2	111.2	110	1.2	8	4
	11	●	MHS0650L090B	71.5	89.7	91.2	141.2	140	1.2	8	4
	16	●	MHS0650L120B	104.0	119.7	121.2	171.2	170	1.2	8	4
	20	●	MHS0650L150B	130.0	149.7	151.2	201.2	200	1.2	8	4
6.6	2	□	MHS0660L030B	13.2	30.1	31.1	81.1	80	1.1	8	3
	6	□	MHS0660L060B	39.6	60.2	61.2	111.2	110	1.2	8	4
	11	□	MHS0660L090B	72.6	90.2	91.2	141.2	140	1.2	8	4
	16	□	MHS0660L120B	105.6	120.2	121.2	171.2	170	1.2	8	4
	20	□	MHS0660L150B	132.0	150.2	151.2	201.2	200	1.2	8	4
6.7	2	□	MHS0670L030B	13.4	30.2	31.2	81.2	80	1.2	8	3
	6	□	MHS0670L060B	40.2	60.2	61.2	111.2	110	1.2	8	4
	11	□	MHS0670L090B	73.7	90.2	91.2	141.2	140	1.2	8	4
	15	□	MHS0670L120B	100.5	120.2	121.2	171.2	170	1.2	8	4
	20	□	MHS0670L150B	134.0	150.2	151.2	201.2	200	1.2	8	4
6.8	2	★	MHS0680L030B	13.6	30.2	31.2	81.2	80	1.2	8	3
	6	★	MHS0680L060B	40.8	60.2	61.2	111.2	110	1.2	8	4
	11	★	MHS0680L090B	74.8	90.2	91.2	141.2	140	1.2	8	4
	15	★	MHS0680L120B	102.0	120.2	121.2	171.2	170	1.2	8	4
	19	★	MHS0680L150B	129.2	150.2	151.2	201.2	200	1.2	8	4
6.9	2	□	MHS0690L030B	13.8	30.2	31.2	81.2	80	1.2	8	3
	6	□	MHS0690L060B	41.4	60.3	61.3	111.3	110	1.3	8	4
	10	□	MHS0690L090B	69.0	90.3	91.3	141.3	140	1.3	8	4
	15	□	MHS0690L120B	103.5	120.3	121.3	171.3	170	1.3	8	4
	19	□	MHS0690L150B	131.1	150.3	151.3	201.3	200	1.3	8	4
7.0	2	●	MHS0700L030B	14.0	30.2	31.2	81.2	80	1.2	8	3
	6	●	MHS0700L060B	42.0	60.3	61.3	111.3	110	1.3	8	4
	10	●	MHS0700L090B	70.0	90.3	91.3	141.3	140	1.3	8	4
	14	●	MHS0700L120B	98.0	120.3	121.3	171.3	170	1.3	8	4
	19	●	MHS0700L150B	133.0	150.3	151.3	201.3	200	1.3	8	4
7.1	2	□	MHS0710L030B	14.2	30.7	31.2	81.2	80	1.2	8	3
	6	□	MHS0710L060B	42.6	60.8	61.3	111.3	110	1.3	8	4
	10	□	MHS0710L090B	71.0	90.8	91.3	141.3	140	1.3	8	4
	14	□	MHS0710L120B	99.4	120.8	121.3	171.3	170	1.3	8	4
	19	□	MHS0710L150B	134.9	150.8	151.3	201.3	200	1.3	8	4
7.2	2	□	MHS0720L030B	14.4	30.7	31.2	81.2	80	1.2	8	3
	6	□	MHS0720L060B	43.2	60.8	61.3	111.3	110	1.3	8	4
	10	□	MHS0720L090B	72.0	90.8	91.3	141.3	140	1.3	8	4
	14	□	MHS0720L120B	100.8	120.8	121.3	171.3	170	1.3	8	4
	18	□	MHS0720L150B	129.6	150.8	151.3	201.3	200	1.3	8	4
	25	□	MHS0720L200B	180.0	200.8	201.3	251.3	250	1.3	8	4

BOHREN (VOLLHARTMETALL)

MHS

HARTMETALL

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
7.3	2	□	MHS0730L030B	14.6	30.8	31.3	81.3	80	1.3	8	3
	6	□	MHS0730L060B	43.8	60.8	61.3	111.3	110	1.3	8	4
	10	□	MHS0730L090B	73.0	90.8	91.3	141.3	140	1.3	8	4
	14	□	MHS0730L120B	102.2	120.8	121.3	171.3	170	1.3	8	4
	18	□	MHS0730L150B	131.4	150.8	151.3	201.3	200	1.3	8	4
	25	□	MHS0730L200B	182.5	200.8	201.3	251.3	250	1.3	8	4
7.4	1	□	MHS0740L030B	7.4	30.8	31.3	81.3	80	1.3	8	3
	6	□	MHS0740L060B	44.4	60.8	61.3	111.3	110	1.3	8	4
	10	□	MHS0740L090B	74.0	90.8	91.3	141.3	140	1.3	8	4
	14	□	MHS0740L120B	103.6	120.8	121.3	171.3	170	1.3	8	4
	18	□	MHS0740L150B	133.2	150.8	151.3	201.3	200	1.3	8	4
	24	□	MHS0740L200B	177.6	200.8	201.3	251.3	250	1.3	8	4
7.5	1	●	MHS0750L030B	7.5	30.8	31.3	81.3	80	1.3	8	3
	5	●	MHS0750L060B	37.5	60.9	61.4	111.4	110	1.4	8	4
	9	●	MHS0750L090B	67.5	90.9	91.4	141.4	140	1.4	8	4
	13	●	MHS0750L120B	97.5	120.9	121.4	171.4	170	1.4	8	4
	17	●	MHS0750L150B	127.5	150.9	151.4	201.4	200	1.4	8	4
	24	●	MHS0750L200B	180.0	200.9	201.4	251.4	250	1.4	8	4
7.6	1	□	MHS0760L030B	7.6	31.3	31.3	81.3	80	1.3	8	3
	5	□	MHS0760L060B	38.0	61.4	61.4	111.4	110	1.4	8	4
	9	□	MHS0760L090B	68.4	91.4	91.4	141.4	140	1.4	8	4
	13	□	MHS0760L120B	98.8	121.4	121.4	171.4	170	1.4	8	4
	17	□	MHS0760L150B	129.2	151.4	151.4	201.4	200	1.4	8	4
	24	□	MHS0760L200B	182.4	201.4	201.4	251.4	250	1.4	8	4
7.7	1	□	MHS0770L030B	7.7	31.3	31.3	81.3	80	1.3	8	3
	5	□	MHS0770L060B	38.5	61.4	61.4	111.4	110	1.4	8	4
	9	□	MHS0770L090B	69.3	91.4	91.4	141.4	140	1.4	8	4
	13	□	MHS0770L120B	100.1	121.4	121.4	171.4	170	1.4	8	4
	17	□	MHS0770L150B	130.9	151.4	151.4	201.4	200	1.4	8	4
	23	□	MHS0770L200B	177.1	201.4	201.4	251.4	250	1.4	8	4
7.8	1	★	MHS0780L030B	7.8	31.3	31.3	81.3	80	1.3	8	3
	5	★	MHS0780L060B	39.0	61.4	61.4	111.4	110	1.4	8	4
	9	★	MHS0780L090B	70.2	91.4	91.4	141.4	140	1.4	8	4
	13	★	MHS0780L120B	101.4	121.4	121.4	171.4	170	1.4	8	4
	17	★	MHS0780L150B	132.6	151.4	151.4	201.4	200	1.4	8	4
	23	★	MHS0780L200B	179.4	201.4	201.4	251.4	250	1.4	8	4
7.9	1	□	MHS0790L030B	7.9	31.4	31.4	81.4	80	1.4	8	3
	5	□	MHS0790L060B	39.5	61.4	61.4	111.4	110	1.4	8	4
	9	□	MHS0790L090B	71.1	91.4	91.4	141.4	140	1.4	8	4
	13	□	MHS0790L120B	102.7	121.4	121.4	171.4	170	1.4	8	4
	16	□	MHS0790L150B	126.4	151.4	151.4	201.4	200	1.4	8	4
	23	□	MHS0790L200B	181.7	201.4	201.4	251.4	250	1.4	8	4
7.9	29	□	MHS0790L250B	229.1	251.4	251.4	301.4	300	1.4	8	4

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.0	1	●	MHS0800L030B	8.0	31.4	31.4	81.4	80	1.4	8	3
	5	●	MHS0800L060B	40.0	61.5	61.5	111.5	110	1.5	8	4
	9	●	MHS0800L090B	72.0	91.5	91.5	141.5	140	1.5	8	4
	12	●	MHS0800L120B	96.0	121.5	121.5	171.5	170	1.5	8	4
	16	●	MHS0800L150B	128.0	151.5	151.5	201.5	200	1.5	8	4
	22	●	MHS0800L200B	176.0	201.5	201.5	251.5	250	1.5	8	4
8.1	29	●	MHS0800L250B	232.0	251.5	251.5	301.5	300	1.5	8	4
	2	□	MHS0810L040B	16.2	39.9	41.4	101.4	100	1.4	10	3
	8	□	MHS0810L090B	64.8	90.0	91.5	151.5	150	1.5	10	4
	12	□	MHS0810L120B	97.2	120.0	121.5	181.5	180	1.5	10	4
	16	□	MHS0810L150B	129.6	150.0	151.5	211.5	210	1.5	10	4
	22	□	MHS0810L200B	178.2	200.0	201.5	261.5	260	1.5	10	4
8.2	28	□	MHS0810L250B	226.8	250.0	251.5	311.5	310	1.5	10	4
	2	□	MHS0820L040B	16.4	39.9	41.4	101.4	100	1.4	10	3
	8	□	MHS0820L090B	65.6	90.0	91.5	151.5	150	1.5	10	4
	12	□	MHS0820L120B	98.4	120.0	121.5	181.5	180	1.5	10	4
	16	□	MHS0820L150B	131.2	150.0	151.5	211.5	210	1.5	10	4
	22	□	MHS0820L200B	180.4	200.0	201.5	261.5	260	1.5	10	4
8.3	28	□	MHS0820L250B	229.6	250.0	251.5	311.5	310	1.5	10	4
	2	□	MHS0830L040B	16.6	39.9	41.4	101.4	100	1.4	10	3
	8	□	MHS0830L090B	66.4	90.0	91.5	151.5	150	1.5	10	4
	12	□	MHS0830L120B	99.6	120.0	121.5	181.5	180	1.5	10	4
	15	□	MHS0830L150B	124.5	150.0	151.5	211.5	210	1.5	10	4
	21	□	MHS0830L200B	174.3	200.0	201.5	261.5	260	1.5	10	4
8.4	27	□	MHS0830L250B	224.1	250.0	251.5	311.5	310	1.5	10	4
	2	□	MHS0840L040B	16.8	39.9	41.4	101.4	100	1.4	10	3
	8	□	MHS0840L090B	67.2	90.0	91.5	151.5	150	1.5	10	4
	12	□	MHS0840L120B	100.8	120.0	121.5	181.5	180	1.5	10	4
	15	□	MHS0840L150B	126.0	150.0	151.5	211.5	210	1.5	10	4
	21	□	MHS0840L200B	176.4	200.0	201.5	261.5	260	1.5	10	4
8.5	27	□	MHS0840L250B	226.8	250.0	251.5	311.5	310	1.5	10	4
	2	●	MHS0850L040B	17.0	40.0	41.5	101.5	100	1.5	10	3
	8	●	MHS0850L090B	68.0	90.0	91.5	151.5	150	1.5	10	4
	11	●	MHS0850L120B	93.5	120.0	121.5	181.5	180	1.5	10	4
	15	●	MHS0850L150B	127.5	150.0	151.5	211.5	210	1.5	10	4
	21	●	MHS0850L200B	178.5	200.0	201.5	261.5	260	1.5	10	4
8.6	27	●	MHS0850L250B	229.5	250.0	251.5	311.5	310	1.5	10	4
	2	□	MHS0860L040B	17.2	40.5	41.5	101.5	100	1.5	10	3
	8	□	MHS0860L090B	68.8	90.6	91.6	151.6	150	1.6	10	4
	11	□	MHS0860L120B	94.6	120.6	121.6	181.6	180	1.6	10	4
	15	□	MHS0860L150B	129.0	150.6	151.6	211.6	210	1.6	10	4
	21	□	MHS0860L200B	180.6	200.6	201.6	261.6	260	1.6	10	4
8.7	26	□	MHS0860L250B	223.6	250.6	251.6	311.6	310	1.6	10	4
	2	□	MHS0870L040B	17.4	40.5	41.5	101.5	100	1.5	10	3
	8	□	MHS0870L090B	69.6	90.6	91.6	151.6	150	1.6	10	4
	11	□	MHS0870L120B	95.7	120.6	121.6	181.6	180	1.6	10	4
	15	□	MHS0870L150B	130.5	150.6	151.6	211.6	210	1.6	10	4
	20	□	MHS0870L200B	174.0	200.6	201.6	261.6	260	1.6	10	4
8.7	26	□	MHS0870L250B	226.2	250.6	251.6	311.6	310	1.6	10	4

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
8.8	2	★	MHS0880L040B	17.6	40.5	41.5	101.5	100	1.5	10	3
	8	★	MHS0880L090B	70.4	90.6	91.6	151.6	150	1.6	10	4
	11	★	MHS0880L120B	96.8	120.6	121.6	181.6	180	1.6	10	4
	14	★	MHS0880L150B	123.2	150.6	151.6	211.6	210	1.6	10	4
	20	★	MHS0880L200B	176.0	200.6	201.6	261.6	260	1.6	10	4
	26	★	MHS0880L250B	228.8	250.6	251.6	311.6	310	1.6	10	4
8.9	2	□	MHS0890L040B	17.8	40.5	41.5	101.5	100	1.5	10	3
	7	□	MHS0890L090B	62.3	90.6	91.6	151.6	150	1.6	10	4
	11	□	MHS0890L120B	97.9	120.6	121.6	181.6	180	1.6	10	4
	14	□	MHS0890L150B	124.6	150.6	151.6	211.6	210	1.6	10	4
	20	□	MHS0890L200B	178.0	200.6	201.6	261.6	260	1.6	10	4
	25	□	MHS0890L250B	222.5	250.6	251.6	311.6	310	1.6	10	4
9.0	2	●	MHS0900L040B	18.0	40.5	41.5	101.5	100	1.5	10	3
	7	●	MHS0900L090B	63.0	90.6	91.6	151.6	150	1.6	10	4
	11	●	MHS0900L120B	99.0	120.6	121.6	181.6	180	1.6	10	4
	14	●	MHS0900L150B	126.0	150.6	151.6	211.6	210	1.6	10	4
	20	●	MHS0900L200B	180.0	200.6	201.6	261.6	260	1.6	10	4
	25	●	MHS0900L250B	225.0	250.6	251.6	311.6	310	1.6	10	4
9.1	2	□	MHS0910L040B	18.2	41.1	41.6	101.6	100	1.6	10	3
	7	□	MHS0910L090B	63.7	91.2	91.7	151.7	150	1.7	10	4
	11	□	MHS0910L120B	100.1	121.2	121.7	181.7	180	1.7	10	4
	14	□	MHS0910L150B	127.4	151.2	151.7	211.7	210	1.7	10	4
	19	□	MHS0910L200B	172.9	201.2	201.7	261.7	260	1.7	10	4
	25	□	MHS0910L250B	227.5	251.2	251.7	311.7	310	1.7	10	4
9.2	2	□	MHS0920L040B	18.4	41.1	41.6	101.6	100	1.6	10	3
	7	□	MHS0920L090B	64.4	91.2	91.7	151.7	150	1.7	10	4
	10	□	MHS0920L120B	92.0	121.2	121.7	181.7	180	1.7	10	4
	14	□	MHS0920L150B	128.8	151.2	151.7	211.7	210	1.7	10	4
	19	□	MHS0920L200B	174.8	201.2	201.7	261.7	260	1.7	10	4
	25	□	MHS0920L250B	230.0	251.2	251.7	311.7	310	1.7	10	4
9.3	2	□	MHS0930L040B	18.6	41.1	41.6	101.6	100	1.6	10	3
	7	□	MHS0930L090B	65.1	91.2	91.7	151.7	150	1.7	10	4
	10	□	MHS0930L120B	93.0	121.2	121.7	181.7	180	1.7	10	4
	14	□	MHS0930L150B	130.2	151.2	151.7	211.7	210	1.7	10	4
	19	□	MHS0930L200B	176.7	201.2	201.7	261.7	260	1.7	10	4
	24	□	MHS0930L250B	223.2	251.2	251.7	311.7	310	1.7	10	4
9.4	2	□	MHS0940L040B	18.8	41.1	41.6	101.6	100	1.6	10	3
	7	□	MHS0940L090B	65.8	91.2	91.7	151.7	150	1.7	10	4
	10	□	MHS0940L120B	94.0	121.2	121.7	181.7	180	1.7	10	4
	13	□	MHS0940L150B	122.2	151.2	151.7	211.7	210	1.7	10	4
	19	□	MHS0940L200B	178.6	201.2	201.7	261.7	260	1.7	10	4
	24	□	MHS0940L250B	225.6	251.2	251.7	311.7	310	1.7	10	4
9.5	2	●	MHS0950L040B	19.0	41.1	41.6	101.6	100	1.6	10	3
	6	●	MHS0950L090B	66.5	91.2	91.7	151.7	150	1.7	10	4
	9	●	MHS0950L120B	95.0	121.2	121.7	181.7	180	1.7	10	4
	13	●	MHS0950L150B	123.5	151.2	151.7	211.7	210	1.7	10	4
	18	●	MHS0950L200B	171.0	201.2	201.7	261.7	260	1.7	10	4
	24	●	MHS0950L250B	228.0	251.2	251.7	311.7	310	1.7	10	4
9.6	2	□	MHS0960L040B	19.2	41.7	41.7	101.7	100	1.7	10	3
	7	□	MHS0960L090B	67.2	91.7	91.7	151.7	150	1.7	10	4
	10	□	MHS0960L120B	96.0	121.7	121.7	181.7	180	1.7	10	4
	13	□	MHS0960L150B	124.8	151.7	151.7	211.7	210	1.7	10	4
	18	□	MHS0960L200B	172.8	201.7	201.7	261.7	260	1.7	10	4
	24	□	MHS0960L250B	230.4	251.7	251.7	311.7	310	1.7	10	4
9.7	2	★	MHS0980L040B	19.6	41.7	41.7	101.7	100	1.7	10	3
	7	★	MHS0980L090B	68.6	91.8	91.8	151.8	150	1.8	10	4
	10	★	MHS0980L120B	98.0	121.8	121.8	181.8	180	1.8	10	4
	13	★	MHS0980L150B	127.4	151.8	151.8	211.8	210	1.8	10	4
	18	★	MHS0980L200B	176.4	201.8	201.8	261.8	260	1.8	10	4
	23	★	MHS0980L250B	225.4	251.8	251.8	311.8	310	1.8	10	4
9.8	2	□	MHS0990L040B	19.8	41.7	41.7	101.7	100	1.7	10	3
	7	□	MHS0990L090B	69.3	91.8	91.8	151.8	150	1.8	10	4
	10	□	MHS0990L120B	99.0	121.8	121.8	181.8	180	1.8	10	4
	13	□	MHS0990L150B	128.7	151.8	151.8	211.8	210	1.8	10	4
	18	□	MHS0990L200B	178.2	201.8	201.8	261.8	260	1.8	10	4
	23	□	MHS0990L250B	227.7	251.8	251.8	311.8	310	1.8	10	4
10.0	2	●	MHS1000L040B	10.0	41.7	41.7	101.7	100	1.7	10	3
	6	●	MHS1000L090B	60.0	91.8	91.8	151.8	150	1.8	10	4
	9	●	MHS1000L120B	90.0	121.8	121.8	181.8	180	1.8	10	4
	12	●	MHS1000L150B	120.0	151.8	151.8	211.8	210	1.8	10	4
	17	●	MHS1000L200B	170.0	201.8	201.8	261.8	260	1.8	10	4
	22	●	MHS1000L250B	220.0	251.8	251.8	311.8	310	1.8	10	4
10.1	2	□	MHS1010L040B	10.1	40.2	41.7	101.7	100	1.7	12	3
	6	□	MHS1010L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	□	MHS1010L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	□	MHS1010L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	□	MHS1010L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	□	MHS1010L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.2	2	□	MHS1020L040B	10.2	40.2	41.7	101.7	100	1.7	12	3
	6	□	MHS1020L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	□	MHS1020L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	□	MHS1020L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	□	MHS1020L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	□	MHS1020L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.3	2	□	MHS1030L040B	10.3	40.2	41.7	101.7	100	1.7	12	3
	6	□	MHS1030L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	□	MHS1030L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	□	MHS1030L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	□	MHS1030L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	□	MHS1030L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.4	2	□	MHS1040L040B	10.4	40.2	41.7	101.7	100	1.7	12	3
	6	□	MHS1040L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	□	MHS1040L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	□	MHS1040L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	□	MHS1040L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	□	MHS1040L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.5	2	□	MHS1050L040B	10.5	40.2	41.7	101.7	100	1.7	12	3
	6	□	MHS1050L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	□	MHS1050L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	□	MHS1050L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	□	MHS1050L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	□	MHS1050L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.6	2	●	MHS1060L040B	10.6	40.2	41.7	101.7	100	1.7	12	3
	6	●	MHS1060L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	●	MHS1060L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	●	MHS1060L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	●	MHS1060L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	●	MHS1060L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.7	2	□	MHS1070L040B	10.7	40.2	41.7	101.7	100	1.7	12	3
	6	□	MHS1070L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	□	MHS1070L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	□	MHS1070L150B	121.2	150.3	151.8	211.8	210	1.8	12	4
	17	□	MHS1070L200B	171.7	200.3	201.8	261.8	260	1.8	12	4
	22	□	MHS1070L250B	222.2	250.3	251.8	311.8	310	1.8	12	4
10.8	2	★	MHS1080L040B	10.8	40.2	41.7	101.7	100	1.7	12	3
	6	★	MHS1080L090B	60.6	90.3	91.8	151.8	150	1.8	12	4
	9	★	MHS1080L120B	90.9	120.3	121.8	181.8	180	1.8	12	4
	12	★	MHS1080L150B	121.2	150.3	151.8	211.				

BOHREN (VOLLHARTMETALL)

MHS

HARTMETALL

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.2	1	□	MHS1020L040B	10.2	40.3	41.8	101.8	100	1.8	12	3
	6	□	MHS1020L090B	61.2	90.4	91.9	151.9	150	1.9	12	4
	9	□	MHS1020L120B	91.8	120.4	121.9	181.9	180	1.9	12	4
	12	□	MHS1020L150B	122.4	150.4	151.9	211.9	210	1.9	12	4
	17	□	MHS1020L200B	173.4	200.4	201.9	261.9	260	1.9	12	4
	22	□	MHS1020L250B	224.4	250.4	251.9	311.9	310	1.9	12	4
	27	□	MHS1020L300B	275.4	300.4	301.9	361.9	360	1.9	12	4
10.3	1	□	MHS1030L040B	10.3	40.3	41.8	101.8	100	1.8	12	3
	6	□	MHS1030L090B	61.8	90.4	91.9	151.9	150	1.9	12	4
	9	□	MHS1030L120B	92.7	120.4	121.9	181.9	180	1.9	12	4
	12	□	MHS1030L150B	123.6	150.4	151.9	211.9	210	1.9	12	4
	17	□	MHS1030L200B	175.1	200.4	201.9	261.9	260	1.9	12	4
	22	□	MHS1030L250B	226.6	250.4	251.9	311.9	310	1.9	12	4
	26	□	MHS1030L300B	267.8	300.4	301.9	361.9	360	1.9	12	4
10.4	1	□	MHS1040L040B	10.4	40.3	41.8	101.8	100	1.8	12	3
	6	□	MHS1040L090B	62.4	90.4	91.9	151.9	150	1.9	12	4
	9	□	MHS1040L120B	93.6	120.4	121.9	181.9	180	1.9	12	4
	12	□	MHS1040L150B	124.8	150.4	151.9	211.9	210	1.9	12	4
	17	□	MHS1040L200B	176.8	200.4	201.9	261.9	260	1.9	12	4
	21	□	MHS1040L250B	218.4	250.4	251.9	311.9	310	1.9	12	4
	26	□	MHS1040L300B	270.4	300.4	301.9	361.9	360	1.9	12	4
10.5	1	●	MHS1050L040B	10.5	40.3	41.8	101.8	100	1.8	12	3
	6	●	MHS1050L090B	63.0	90.4	91.9	151.9	150	1.9	12	4
	9	●	MHS1050L120B	94.5	120.4	121.9	181.9	180	1.9	12	4
	12	●	MHS1050L150B	126.0	150.4	151.9	211.9	210	1.9	12	4
	16	●	MHS1050L200B	168.0	200.4	201.9	261.9	260	1.9	12	4
	21	●	MHS1050L250B	220.5	250.4	251.9	311.9	310	1.9	12	4
	26	●	MHS1050L300B	273.0	300.4	301.9	361.9	360	1.9	12	4
10.6	1	□	MHS1060L040B	10.6	40.8	41.8	101.8	100	1.8	12	3
	6	□	MHS1060L090B	63.6	90.9	91.9	151.9	150	1.9	12	4
	9	□	MHS1060L120B	95.4	120.9	121.9	181.9	180	1.9	12	4
	12	□	MHS1060L150B	127.2	150.9	151.9	211.9	210	1.9	12	4
	16	□	MHS1060L200B	169.6	200.9	201.9	261.9	260	1.9	12	4
	21	□	MHS1060L250B	222.6	250.9	251.9	311.9	310	1.9	12	4
	26	□	MHS1060L300B	275.6	300.9	301.9	361.9	360	1.9	12	4
10.7	1	□	MHS1070L040B	10.7	40.8	41.8	101.8	100	1.8	12	3
	6	□	MHS1070L090B	64.2	90.9	91.9	151.9	150	1.9	12	4
	9	□	MHS1070L120B	96.3	120.9	121.9	181.9	180	1.9	12	4
	11	□	MHS1070L150B	117.7	150.9	151.9	211.9	210	1.9	12	4
	16	□	MHS1070L200B	171.2	200.9	201.9	261.9	260	1.9	12	4
	21	□	MHS1070L250B	224.7	250.9	251.9	311.9	310	1.9	12	4
	25	□	MHS1070L300B	267.5	300.9	301.9	361.9	360	1.9	12	4
10.8	1	★	MHS1080L040B	10.8	40.9	41.9	101.9	100	1.9	12	3
	6	★	MHS1080L090B	64.8	91.0	92.0	152.0	150	2.0	12	4
	9	★	MHS1080L120B	97.2	121.0	122.0	182.0	180	2.0	12	4
	11	★	MHS1080L150B	118.8	151.0	152.0	212.0	210	2.0	12	4
	16	★	MHS1080L200B	172.8	201.0	202.0	262.0	260	2.0	12	4
	21	★	MHS1080L250B	226.8	251.0	252.0	312.0	310	2.0	12	4
	25	★	MHS1080L300B	270.0	301.0	302.0	362.0	360	2.0	12	4

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF (l/d)	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
10.9	1	□	MHS1090L040B	10.9	40.9	41.9	101.9	100	1.9	12	3
	6	□	MHS1090L090B	65.4	91.0	92.0	152.0	150	2.0	12	4
	8	□	MHS1090L120B	87.2	121.0	122.0	182.0	180	2.0	12	4
	11	□	MHS1090L150B	119.9	151.0	152.0	212.0	210	2.0	12	4
	16	□	MHS1090L200B	174.4	201.0	202.0	262.0	260	2.0	12	4
	20	□	MHS1090L250B	218.0	251.0	252.0	312.0	310	2.0	12	4
	25	□	MHS1090L300B	272.5	301.0	302.0	362.0	360	2.0	12	4
11.0	1	●	MHS1100L040B	11.0	40.9	41.9	101.9	100	1.9	12	3
	6	●	MHS1100L090B	66.0	91.0	92.0	152.0	150	2.0	12	4
	8	●	MHS1100L120B	88.0	121.0	122.0	182.0	180	2.0	12	4
	11	●	MHS1100L150B	121.0	151.0	152.0	212.0	210	2.0	12	4
	16	●	MHS1100L200B	176.0	201.0	202.0	262.0	260	2.0	12	4
	20	●	MHS1100L250B	220.0	251.0	252.0	312.0	310	2.0	12	4
	25	●	MHS1100L300B	275.0	301.0	302.0	362.0	360	2.0	12	4
11.1	1	□	MHS1110L040B	11.1	41.4	41.9	101.9	100	1.9	12	3
	6	□	MHS1110L090B	66.6	91.5	92.0	152.0	150	2.0	12	4
	8	□	MHS1110L120B	88.8	121.5	122.0	182.0	180	2.0	12	4
	11	□	MHS1110L150B	122.1	151.5	152.0	212.0	210	2.0	12	4
	15	□	MHS1110L200B	166.5	201.5	202.0	262.0	260	2.0	12	4
	20	□	MHS1110L250B	222.0	251.5	252.0	312.0	310	2.0	12	4
	24	□	MHS1110L300B	266.4	301.5	302.0	362.0	360	2.0	12	4
11.2	1	□	MHS1120L040B	11.2	41.4	41.9	101.9	100	1.9	12	3
	5	□	MHS1120L090B	56.0	91.5	92.0	152.0	150	2.0	12	4
	8	□	MHS1120L120B	89.6	121.5	122.0	182.0	180	2.0	12	4
	11	□	MHS1120L150B	123.2	151.5	152.0	212.0	210	2.0	12	4
	15	□	MHS1120L200B	168.0	201.5	202.0	262.0	260	2.0	12	4
	20	□	MHS1120L250B	224.0	251.5	252.0	312.0	310	2.0	12	4
	24	□	MHS1120L300B	268.8	301.5	302.0	362.0	360	2.0	12	4
11.3	1	□	MHS1130L040B	11.3	41.4	41.9	101.9	100	1.9	12	3
	5	□	MHS1130L090B	56.5	91.6	92.1	152.1	150	2.1	12	4
	8	□	MHS1130L120B	90.4	121.6	122.1	182.1	180	2.1	12	4
	11	□	MHS1130L150B	124.3	151.6	152.1	212.1	210	2.1	12	4
	15	□	MHS1130L200B	169.5	201.6	202.1	262.1	260	2.1	12	4
	20	□	MHS1130L250B	226.0	251.6	252.1	312.1	310	2.1	12	4
	24	□	MHS1130L300B	271.2	301.6	302.1	362.1	360	2.1	12	4
11.4	1	□	MHS1140L040B	11.4	41.5	42.0	102.0	100	2.0	12	3
	5	□	MHS1140L090B	57.0	91.6	92.1	152.1	150	2.1	12	4
	8	□	MHS1140L120B	91.2	121.6	122.1	182.1	180	2.1	12	4
	11	□	MHS1140L150B	125.4	151.6	152.1	212.1	210	2.1	12	4
	15	□	MHS1140L200B	171.0	201.6	202.1	262.1	260	2.1	12	4
	19	□	MHS1140L250B	216.6	251.6	252.1	312.1	310	2.1	12	4
	24	□	MHS1140L300B	273.6	301.6	302.1	362.1	360	2.1	12	4
11.5	1	●	MHS1150L040B	11.5	41.5	42.0	102.0	100	2.0	12	3
	5	●	MHS1150L090B	57.5	91.6	92.1	152.1	150	2.1	12	4
	8	●	MHS1150L120B	92.0	121.6	122.1	182.1	180	2.1	12	4
	10	●	MHS1150L150B	115.0	151.6	152.1	212.1	210	2.1	12	4
	15	●	MHS1150L200B	172.5	201.6	202.1	262.1	260	2.1	12	4
	19	●	MHS1150L250B	218.5	251.6	252.1	312.1	310	2.1	12	4
	24	●	MHS1150L300B	276.0	301.6	302.1	362.1	360	2.1	12	4

(Bemerkung) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.
(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. ★ : Lagerstandard in Japan.

□ : Nichtstandard, Herstellung nur auf Anfrage.

Interne Kühlung

DC	Bohr- tiefe (mm)	Lager VP15TF	Bestellbezeichnung	Abmessungen (mm)							Typ
				LU	LCF	LH	OAL	LF	PL	DCON	
11.6	1	□	MHS1160L040B	11.6	42.0	42.0	102.0	100	2.0	12	3
	5	□	MHS1160L090B	58.0	92.1	92.1	152.1	150	2.1	12	4
	8	□	MHS1160L120B	92.8	122.1	122.1	182.1	180	2.1	12	4
	10	□	MHS1160L150B	116.0	152.1	152.1	212.1	210	2.1	12	4
	15	□	MHS1160L200B	174.0	202.1	202.1	262.1	260	2.1	12	4
	19	□	MHS1160L250B	220.4	252.1	252.1	312.1	310	2.1	12	4
	23	□	MHS1160L300B	266.8	302.1	302.1	362.1	360	2.1	12	4
11.7	1	□	MHS1170L040B	11.7	42.0	42.0	102.0	100	2.0	12	3
	5	□	MHS1170L090B	58.5	92.1	92.1	152.1	150	2.1	12	4
	8	□	MHS1170L120B	93.6	122.1	122.1	182.1	180	2.1	12	4
	10	□	MHS1170L150B	117.0	152.1	152.1	212.1	210	2.1	12	4
	15	□	MHS1170L200B	175.5	202.1	202.1	262.1	260	2.1	12	4
	19	□	MHS1170L250B	222.3	252.1	252.1	312.1	310	2.1	12	4
	23	□	MHS1170L300B	269.1	302.1	302.1	362.1	360	2.1	12	4
11.8	1	★	MHS1180L040B	11.8	42.0	42.0	102.0	100	2.0	12	3
	5	★	MHS1180L090B	59.0	92.1	92.1	152.1	150	2.1	12	4
	8	★	MHS1180L120B	94.4	122.1	122.1	182.1	180	2.1	12	4
	10	★	MHS1180L150B	118.0	152.1	152.1	212.1	210	2.1	12	4
	14	★	MHS1180L200B	165.2	202.1	202.1	262.1	260	2.1	12	4
	19	★	MHS1180L250B	224.2	252.1	252.1	312.1	310	2.1	12	4
	23	★	MHS1180L300B	271.4	302.1	302.1	362.1	360	2.1	12	4
11.9	1	□	MHS1190L040B	11.9	42.0	42.0	102.0	100	2.0	12	3
	5	□	MHS1190L090B	59.5	92.2	92.2	152.2	150	2.2	12	4
	8	□	MHS1190L120B	95.2	122.2	122.2	182.2	180	2.2	12	4
	10	□	MHS1190L150B	119.0	152.2	152.2	212.2	210	2.2	12	4
	14	□	MHS1190L200B	166.6	202.2	202.2	262.2	260	2.2	12	4
	19	□	MHS1190L250B	226.1	252.2	252.2	312.2	310	2.2	12	4
	23	□	MHS1190L300B	273.7	302.2	302.2	362.2	360	2.2	12	4
12.0	1	●	MHS1200L040B	12.0	42.1	42.1	102.1	100	2.1	12	3
	5	●	MHS1200L090B	60.0	92.2	92.2	152.2	150	2.2	12	4
	7	●	MHS1200L120B	84.0	122.2	122.2	182.2	180	2.2	12	4
	10	●	MHS1200L150B	120.0	152.2	152.2	212.2	210	2.2	12	4
	14	●	MHS1200L200B	168.0	202.2	202.2	262.2	260	2.2	12	4
	18	●	MHS1200L250B	216.0	252.2	252.2	312.2	310	2.2	12	4
	22	●	MHS1200L300B	264.0	302.2	302.2	362.2	360	2.2	12	4

SCNITTTDATENEMPFEHLUNGEN

Bohrer Durchm. DC (mm)	Allg. Baustahl ($\leq 180\text{HB}$), C-Stahl Leg. Stahl ($180-280\text{HB}$) Ck10, Ck45, 42CrMo4				Rostfreie Stähle austenitisch und martensitisch ($>200\text{HB}$) X20CrNi17-2, X30Cr13			
	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
1.0	40	12700	0.030 (0.020—0.040)	380	20	6400	0.030 (0.020—0.040)	190
1.2	50	13300	0.035 (0.025—0.050)	465	30	8000	0.035 (0.025—0.050)	280
1.6	60	11900	0.050 (0.030—0.065)	595	40	8000	0.050 (0.030—0.065)	400
2.0	70	11100	0.060 (0.040—0.080)	665	50	8000	0.060 (0.040—0.080)	480
2.5	80	10200	0.075 (0.050—0.100)	765	60	7600	0.075 (0.050—0.100)	570
3.2	80	8000	0.100 (0.070—0.130)	800	60	6000	0.100 (0.070—0.130)	600
4.0	80	6400	0.100 (0.090—0.110)	640	60	4800	0.090 (0.080—0.090)	430
5.0	80	5100	0.130 (0.110—0.140)	665	60	3800	0.110 (0.100—0.120)	420
6.3	80	4000	0.160 (0.140—0.180)	640	60	3000	0.140 (0.130—0.150)	420
8.0	80	3200	0.200 (0.180—0.230)	640	60	2400	0.170 (0.160—0.190)	410
10.0	80	2600	0.250 (0.220—0.280)	650	60	1900	0.220 (0.200—0.230)	420
12.0	80	2100	0.300 (0.270—0.340)	630	60	1600	0.260 (0.240—0.280)	415

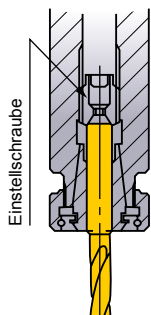
Bohrer Durchm. DC (mm)	Vergüteter Stahl (35—45HRC), Leg. Werkzeugstahl ($\leq 350\text{HB}$) NAK, X36CrMo17, X210Cr12, 55NiCrMoV6				Gehärteter Stahl (40—55HRC), PH Rostfreier Stahl ($<450\text{HB}$) X20CrNi17-2, X30Cr13 X5CrNiCuNb164, X7CrNiAl17-7			
	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
1.0	20	6400	0.025 (0.020—0.030)	160	40	12700	0.020 (0.015—0.025)	255
1.2	30	8000	0.030 (0.020—0.035)	240	40	10600	0.025 (0.020—0.030)	265
1.6	40	8000	0.040 (0.030—0.045)	320	50	10000	0.035 (0.025—0.040)	350
2.0	50	8000	0.045 (0.035—0.060)	360	50	8000	0.040 (0.030—0.050)	320
2.5	60	7600	0.060 (0.045—0.075)	455	60	7600	0.050 (0.040—0.065)	380
3.2	60	6000	0.080 (0.060—0.090)	480	60	6000	0.060 (0.050—0.080)	360
4.0	60	4800	0.080 (0.070—0.100)	385	60	4800	0.080 (0.060—0.100)	385
5.0	60	3800	0.110 (0.090—0.130)	420	60	3800	0.100 (0.080—0.130)	380
6.3	60	3000	0.130 (0.110—0.160)	390	60	3000	0.110 (0.090—0.130)	330
8.0	60	2400	0.170 (0.140—0.200)	410	60	2400	0.140 (0.120—0.160)	335
10.0	60	1900	0.210 (0.170—0.250)	400	60	1900	0.170 (0.140—0.200)	325
12.0	60	1600	0.250 (0.210—0.300)	400	60	1600	0.210 (0.170—0.240)	335

Bohrer Durchm. DC (mm)	Gehärteter Stahl (40—55HRC), Hitzebeständiger Stahl X40CrMoV51, 55NiCrMoV7, Inconel718			
	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min.—max.) (mm/U.)	Tischvorschub (mm/min)
1.0	10	3200	0.015 (0.015—0.020)	50
1.2	10	2700	0.020 (0.015—0.025)	55
1.6	10	2000	0.025 (0.020—0.030)	50
2.0	20	3200	0.035 (0.025—0.040)	110
2.5	20	2600	0.040 (0.030—0.050)	105
3.2	20	2000	0.050 (0.040—0.070)	100
4.0	30	2400	0.070 (0.050—0.080)	170
5.0	30	1900	0.080 (0.060—0.100)	150
6.3	30	1500	0.090 (0.080—0.110)	135
8.0	40	1600	0.120 (0.100—0.130)	190
10.0	40	1300	0.150 (0.130—0.170)	195
12.0	40	1100	0.180 (0.150—0.200)	200

- (Bemerkung 1) Wenn der Bohrer mit einer Länge über l/d 10 verwendet wird, müssen Pilotbohrungen als Führung zum Einsatz kommen.
(Ohne Pilotbohrung kann der Bohrer brechen.)
- (Bemerkung 2) Verwenden Sie den Bohrer mit der kürzesten Schneide in der gleichen Größe als Pilotbohrer.

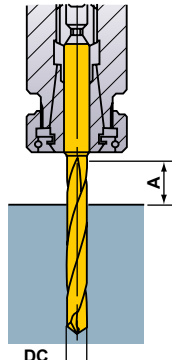
EINSATZ HINWEISE

Bohrer Aufnahme



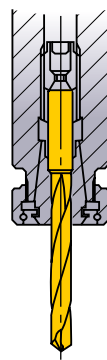
Präzisionsspannzangen können verwendet werden.

Max. Bohrtiefe



$$A \geq DC \times 2$$

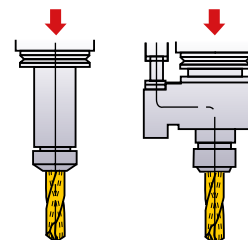
Bohrer Einstellung



Nicht auf den Nuten Spannen.

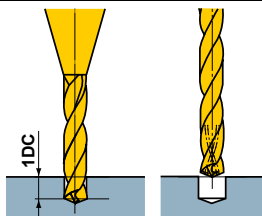
Interne Kühlmittelzufuhr

Kühlmittelzufuhr durch die Spindel Kühlmittelzufuhr durch spezielle Aufnahmen.



Der Kühlmitteldruck beträgt ca. 1.5MPa–7MPa
Empfohlener Kühlmitteldruck: ≥ 3 MPa

Bohrer Einstellung

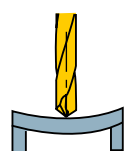


- 1) Pilotbohrung 1xDC oder tiefer (DC= Bohrerdurchmesser) mittels kurzem MHS-Bohrer herstellen.
- 2) Je nach Anwendung kann ein kurzes Lüften beim Tieflochbohren notwendig sein.

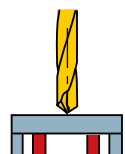
Handling mit Kühlmittel

- 1) Schmutz und Staubpartikel in altem Kühlmittel können die Kanäle verstopfen und den Kühlmittelfluss behindern. Es wird empfohlen, das Kühlmittel regelmäßig zu wechseln.
- 2) Feine Metallspäne können das Ölloch verstopfen. Zur Vorbeugung einen Filter verwenden. Bei Bohren mit kleinem Durchmesser einen Filter mit feinem Sieb verwenden.

Dünne Werkstücke

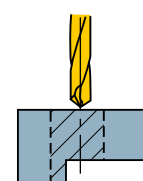


Wenn Werkstücke verbiegen...



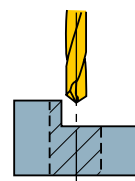
unterstützen Sie diese.

Unterbrochene Bearbeitung



Ohne Vorbearbeitung

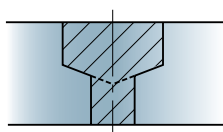
- ① Reduzieren Sie den Vorschub an der unterbrochenen Stelle.



Benötigt Vorbearbeitung

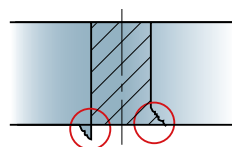
- ② Planen Sie die Fläche mit einem Fräser vorab.

Stufenbohrungen



- ① Vorgang in zwei Prozesse unterteilen.
 - ② Zuerst das größere Loch bohren.
- *Werkzeuge zum Fasen und Anflachen können auf Bestellung gefertigt werden.

Gratbildung oder Ausbrüche am Werkstück



- ① Am Ende des Durchbruchs den Vorschub verringern.
- ② Tauschen Sie den Bohrer durch einen anderen mit größerem Spitzenwinkel.

OPTIONALE BEDIENHINWEISE FÜR MHS-LANGBOHRER (L/D ≥ 10)

BOHREN AUF GLATTEN FLÄCHEN

● Bohren eines Grundgewindes

1. Bohren eines Führungslochs



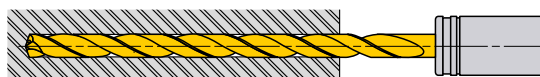
- ① Verwenden Sie einen Bohrer mit einem größeren (flacheren) Spitzenwinkel. Verwenden Sie die kürzeste Länge.
- ② Das Führungsloch muss mit hoher Präzision gebohrt werden.
- ③ Bohrtiefe: ca. 1DC oder tiefer
(Die Führungslochtiefe muss an die Länge des extra langen Bohrers angepasst werden.)

2. Anbohren mit dem Langbohrer



- ① Mit niedriger Drehzahl in das Führungsloch eindringen. (Drehzahl 1000 min⁻¹, Vorschub 0.2–0.3mm/U)
- ② Langbohrer 0.5–1mm vor dem Boden des Führungslochs stoppen.

3. Bohren des Tieflochs



- ① Beginnen Sie mit der empfohlenen Drehzahl und verwenden Sie den Vorschub (kontinuierlich) ohne Ausspannung.

4. Herausziehen des Bohrers

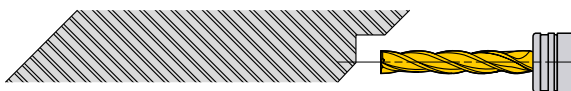


- ① Senken Sie nach dem Bohren 0.5–1mm über dem Lochboden die Drehzahl. (Drehzahl 1000 min⁻¹)
- ② Ziehen Sie den Bohrer bei einem Vorschub von 3000mm/min bis zum Startpunkt des Führungslochs heraus.
- ③ Ziehen Sie schließlich bei einer Schnittgeschwindigkeit von 20–30m/min und einem Vorschub von 0.2–0.3mm/U den Bohrer ganz heraus.

UNTERBROCHENE BOHRUNG

● Bohrungen und Durchbrüche bei ungleichmäßigen Flächen und Winkeln

1. Anflachen



- ① Bearbeiten Sie die flache oder unebene Fläche mit einem Schaft- oder Nutenfräser, der zum Anflachen geeignet ist. Wählen Sie den Durchmesser der Planfläche so groß wie den Durchmesser des Tieflochs.

2. Bohren eines Führungslochs



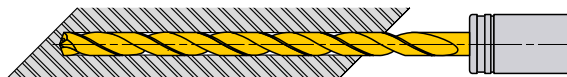
- ① Verwenden Sie einen Bohrer mit einem größeren (flacheren) Spitzenwinkel. Verwenden Sie die kürzeste Länge.
- ② Das Führungsloch muss mit hoher Präzision gebohrt werden.
- ③ Bohrtiefe: ca. 1DC oder tiefer
(Die Führungslochtiefe muss an die Länge des langen Bohrers angepasst werden.)

3. Anbohren mit dem Langbohrer



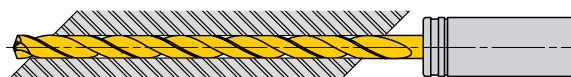
- ① Mit niedriger Drehzahl in das Führungsloch eindringen. (Drehzahl ca. 1000 min⁻¹, Vorschub 0.2–0.3mm/U)
- ② Langbohrer 0.5–1mm vor dem Boden des Führungslochs stoppen.

4. Bohren des Tieflochs



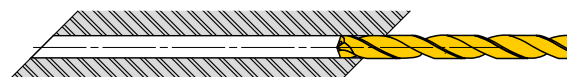
- ① Beginnen Sie mit der empfohlenen Drehzahl und verwenden Sie den Vorschub (kontinuierlich) ohne Ausspannung.

5. Durchbruch



- ① Beim Durchbruch kann die Schneidkante beschädigt werden.
- ② Verringern Sie den Vorschub beim Austritt aus der Bohrung.

6. Herausziehen des Bohrers



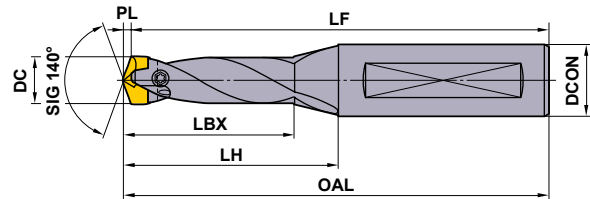
- ① Ziehen Sie schließlich bei einer Schnittgeschwindigkeit von 20–30m/min und einem Vorschub von 0.2–0.3mm/U den Bohrer ganz heraus.
- ② Ziehen Sie den Bohrer bei einem Vorschub von 3000mm/min bis zum Startpunkt des Führungslochs heraus.

BOHREN (WSP AUSFÜHRUNG)

STAW

- Wellenförmige Schneidkante für optimale Spankontrolle.
- Hochstabiles Einspannsystem bietet Stabilität und Zuverlässigkeit beim Bohren kleiner Löcher.

HARTMETALL



S-TAW BOHRER

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)						Schlüssel
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager VP15TF DP5010	LBX	LH	OAL	LF	PL	DCON	
10.0 10.4	1.5	STAWSS1000S16	●	10.0	*STAWN1000TH	●	23.8	33.8	81.8	80	1.8	16	TIP06F
	1.5	STAWSS1000S16	●		STAWK1000TG	●	23.8	33.8	81.8	80	1.8	16	TIP06F
	3	STAWSN1000S16	●		STAWN1000TH	●	38.8	48.8	96.8	95	1.8	16	TIP06F
	5	STAWMN1000S16	●		STAWN1000TH	●	58.8	68.8	116.8	115	1.8	16	TIP06F
	8	STAWLN1000S16	●		STAWN1000TH	●	88.8	98.8	146.8	145	1.8	16	TIP06F
	8	STAWLN1000S16	●		STAWK1000TG	●	88.8	98.8	146.8	145	1.8	16	TIP06F
	1.5	STAWSS1000S16	●	10.1	STAWN1010TH	●	23.8	33.8	81.8	80	1.8	16	TIP06F
	1.5	STAWSS1000S16	●		STAWK1010TG	●	23.8	33.8	81.8	80	1.8	16	TIP06F
	3	STAWSN1000S16	●		STAWN1010TH	●	38.8	48.8	96.8	95	1.8	16	TIP06F
	5	STAWMN1000S16	●		STAWN1010TH	●	58.8	68.8	116.8	115	1.8	16	TIP06F
	8	STAWLN1000S16	●		STAWN1010TH	●	88.8	98.8	146.8	145	1.8	16	TIP06F
	8	STAWLN1000S16	●		STAWK1010TG	●	88.8	98.8	146.8	145	1.8	16	TIP06F
	1.5	STAWSS1000S16	●	10.2	STAWN1020TH	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	1.5	STAWSS1000S16	●		STAWK1020TG	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	3	STAWSN1000S16	●		STAWN1020TH	●	38.9	48.9	96.9	95	1.9	16	TIP06F
	5	STAWMN1000S16	●		STAWN1020TH	●	58.9	68.9	116.9	115	1.9	16	TIP06F
	8	STAWLN1000S16	●		STAWN1020TH	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	8	STAWLN1000S16	●		STAWK1020TG	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	1.5	STAWSS1000S16	●	10.3	STAWN1030TH	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	1.5	STAWSS1000S16	●		STAWK1030TG	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	3	STAWSN1000S16	●		STAWN1030TH	●	38.9	48.9	96.9	95	1.9	16	TIP06F
	5	STAWMN1000S16	●		STAWN1030TH	●	58.9	68.9	116.9	115	1.9	16	TIP06F
	8	STAWLN1000S16	●		STAWN1030TH	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	8	STAWLN1000S16	●		STAWK1030TG	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	1.5	STAWSS1000S16	●	10.4	STAWN1040TH	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	1.5	STAWSS1000S16	●		STAWK1040TG	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	3	STAWSN1000S16	●		STAWN1040TH	●	38.9	48.9	96.9	95	1.9	16	TIP06F
	5	STAWMN1000S16	●		STAWN1040TH	●	58.9	68.9	116.9	115	1.9	16	TIP06F
	8	STAWLN1000S16	●		STAWN1040TH	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	8	STAWLN1000S16	●		STAWK1040TG	●	88.9	98.9	146.9	145	1.9	16	TIP06F
10.5 10.7	1.5	STAWSS1050S16	●	10.5	*STAWN1050TH	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	1.5	STAWSS1050S16	●		STAWK1050TG	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	3	STAWSN1050S16	●		STAWN1050TH	●	38.9	48.9	96.9	95	1.9	16	TIP06F
	5	STAWMN1050S16	●		STAWN1050TH	●	58.9	68.9	116.9	115	1.9	16	TIP06F
	8	STAWLN1050S16	●		STAWN1050TH	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	8	STAWLN1050S16	●		STAWK1050TG	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	1.5	STAWSS1050S16	●	10.6	STAWN1060TH	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	1.5	STAWSS1050S16	●		STAWK1060TG	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	3	STAWSN1050S16	●		STAWN1060TH	●	38.9	48.9	96.9	95	1.9	16	TIP06F
	5	STAWMN1050S16	●		STAWN1060TH	●	58.9	68.9	116.9	115	1.9	16	TIP06F
	8	STAWLN1050S16	●		STAWN1060TH	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	8	STAWLN1050S16	●		STAWK1060TG	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	1.5	STAWSS1050S16	●	10.7	STAWN1070TH	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	1.5	STAWSS1050S16	●		STAWK1070TG	●	23.9	33.9	81.9	80	1.9	16	TIP06F
	3	STAWSN1050S16	●		STAWN1070TH	●	38.9	48.9	96.9	95	1.9	16	TIP06F
	5	STAWMN1050S16	●		STAWN1070TH	●	58.9	68.9	116.9	115	1.9	16	TIP06F
	8	STAWLN1050S16	●		STAWN1070TH	●	88.9	98.9	146.9	145	1.9	16	TIP06F
	8	STAWLN1050S16	●		STAWK1070TG	●	88.9	98.9	146.9	145	1.9	16	TIP06F

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung ★.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

WSP BESCHREIBUNG > L 123
SCHNITTBEDINGUNGEN > L 127
EINSATZ HINWEISE > L 128
TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

STAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	Schlüssel
						VP15TF	DP5010							
10.8 10.9	1.5	STAWSS1050S16	●	10.8	STAWN1080TH	●		24.0	34.0	82.0	80	2.0	16	TIP06F
	1.5	STAWSS1050S16	●		STAWK1080TG		●	24.0	34.0	82.0	80	2.0	16	TIP06F
	3	STAWSN1050S16	●		STAWN1080TH	●		39.0	49.0	97.0	95	2.0	16	TIP06F
	5	STAWMN1050S16	●		STAWN1080TH	●		59.0	69.0	117.0	115	2.0	16	TIP06F
	8	STAWLN1050S16	●		STAWN1080TH	●		89.0	99.0	147.0	145	2.0	16	TIP06F
	8	STAWLN1050S16	●		STAWK1080TG		●	89.0	99.0	147.0	145	2.0	16	TIP06F
	1.5	STAWSS1050S16	●	10.9	STAWN1090TH	●		24.0	34.0	82.0	80	2.0	16	TIP06F
	1.5	STAWSS1050S16	●		STAWK1090TG		●	24.0	34.0	82.0	80	2.0	16	TIP06F
	3	STAWSN1050S16	●		STAWN1090TH	●		39.0	49.0	97.0	95	2.0	16	TIP06F
	5	STAWMN1050S16	●		STAWN1090TH	●		59.0	69.0	117.0	115	2.0	16	TIP06F
	8	STAWLN1050S16	●		STAWN1090TH	●		89.0	99.0	147.0	145	2.0	16	TIP06F
	8	STAWLN1050S16	●		STAWK1090TG		●	89.0	99.0	147.0	145	2.0	16	TIP06F
11.0 11.4	1.5	STAWSS1100S16	●	11.0	*STAWN1100TH	●		27.0	38.0	86.0	84	2.0	16	TIP06F
	1.5	STAWSS1100S16	●		STAWK1100TG		●	27.0	38.0	86.0	84	2.0	16	TIP06F
	3	STAWSN1100S16	●		STAWN1100TH	●		43.0	54.0	102.0	100	2.0	16	TIP06F
	5	STAWMN1100S16	●		STAWN1100TH	●		68.0	79.0	127.0	125	2.0	16	TIP06F
	8	STAWLN1100S16	●		STAWN1100TH	●		98.0	109.0	157.0	155	2.0	16	TIP06F
	8	STAWLN1100S16	●		STAWK1100TG		●	98.0	109.0	157.0	155	2.0	16	TIP06F
	1.5	STAWSS1100S16	●	11.1	STAWN1110TH	●		27.0	38.0	86.0	84	2.0	16	TIP06F
	1.5	STAWSS1100S16	●		STAWK1110TG		●	27.0	38.0	86.0	84	2.0	16	TIP06F
	3	STAWSN1100S16	●		STAWN1110TH	●		43.0	54.0	102.0	100	2.0	16	TIP06F
	5	STAWMN1100S16	●		STAWN1110TH	●		68.0	79.0	127.0	125	2.0	16	TIP06F
	8	STAWLN1100S16	●		STAWN1110TH	●		98.0	109.0	157.0	155	2.0	16	TIP06F
	8	STAWLN1100S16	●		STAWK1110TG		●	98.0	109.0	157.0	155	2.0	16	TIP06F
	1.5	STAWSS1100S16	●	11.2	STAWN1120TH	●		27.0	38.0	86.0	84	2.0	16	TIP06F
	1.5	STAWSS1100S16	●		STAWK1120TG		●	27.0	38.0	86.0	84	2.0	16	TIP06F
	3	STAWSN1100S16	●		STAWN1120TH	●		43.0	54.0	102.0	100	2.0	16	TIP06F
	5	STAWMN1100S16	●		STAWN1120TH	●		68.0	79.0	127.0	125	2.0	16	TIP06F
	8	STAWLN1100S16	●		STAWN1120TH	●		98.0	109.0	157.0	155	2.0	16	TIP06F
	8	STAWLN1100S16	●		STAWK1120TG		●	98.0	109.0	157.0	155	2.0	16	TIP06F
	1.5	STAWSS1100S16	●	11.3	STAWN1130TH	●		27.1	38.1	86.1	84	2.1	16	TIP06F
	1.5	STAWSS1100S16	●		STAWK1130TG		●	27.1	38.1	86.1	84	2.1	16	TIP06F
	3	STAWSN1100S16	●		STAWN1130TH	●		43.1	54.1	102.1	100	2.1	16	TIP06F
	5	STAWMN1100S16	●		STAWN1130TH	●		68.1	79.1	127.1	125	2.1	16	TIP06F
	8	STAWLN1100S16	●		STAWN1130TH	●		98.1	109.1	157.1	155	2.1	16	TIP06F
	8	STAWLN1100S16	●		STAWK1130TG		●	98.1	109.1	157.1	155	2.1	16	TIP06F
	1.5	STAWSS1100S16	●	11.4	STAWN1140TH	●		27.1	38.1	86.1	84	2.1	16	TIP06F
	1.5	STAWSS1100S16	●		STAWK1140TG		●	27.1	38.1	86.1	84	2.1	16	TIP06F
	3	STAWSN1100S16	●		STAWN1140TH	●		43.1	54.1	102.1	100	2.1	16	TIP06F
	5	STAWMN1100S16	●		STAWN1140TH	●		68.1	79.1	127.1	125	2.1	16	TIP06F
	8	STAWLN1100S16	●		STAWN1140TH	●		98.1	109.1	157.1	155	2.1	16	TIP06F
	8	STAWLN1100S16	●		STAWK1140TG		●	98.1	109.1	157.1	155	2.1	16	TIP06F
11.5 11.7	1.5	STAWSS1150S16	●	11.5	*STAWN1150TH	●		27.1	38.1	86.1	84	2.1	16	TIP06F
	1.5	STAWSS1150S16	●		STAWK1150TG		●	27.1	38.1	86.1	84	2.1	16	TIP06F
	3	STAWSN1150S16	●		STAWN1150TH	●		43.1	54.1	102.1	100	2.1	16	TIP06F
	5	STAWMN1150S16	●		STAWN1150TH	●		68.1	79.1	127.1	125	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWN1150TH	●		98.1	109.1	157.1	155	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWK1150TG		●	98.1	109.1	157.1	155	2.1	16	TIP06F
	1.5	STAWSS1150S16	●	11.6	STAWN1160TH	●		27.1	38.1	86.1	84	2.1	16	TIP06F
	1.5	STAWSS1150S16	●		STAWK1160TG		●	27.1	38.1	86.1	84	2.1	16	TIP06F
	3	STAWSN1150S16	●		STAWN1160TH	●		43.1	54.1	102.1	100	2.1	16	TIP06F
	5	STAWMN1150S16	●		STAWN1160TH	●		68.1	79.1	127.1	125	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWN1160TH	●		98.1	109.1	157.1	155	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWK1160TG		●	98.1	109.1	157.1	155	2.1	16	TIP06F
	1.5	STAWSS1150S16	●	11.7	STAWN1170TH	●		27.1	38.1	86.1	84	2.1	16	TIP06F
	1.5	STAWSS1150S16	●		STAWK1170TG		●	27.1	38.1	86.1	84	2.1	16	TIP06F
	3	STAWSN1150S16	●		STAWN1170TH	●		43.1	54.1	102.1	100	2.1	16	TIP06F
	5	STAWMN1150S16	●		STAWN1170TH	●		68.1	79.1	127.1	125	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWN1170TH	●		98.1	109.1	157.1	155	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWK1170TG		●	98.1	109.1	157.1	155	2.1	16	TIP06F

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							Schlüssel
11.8 11.9	1.5	STAWSS1150S16	●	11.8	STAWN1180TH	●		27.1	38.1	86.1	84	2.1	16	TIP06F
	1.5	STAWSS1150S16	●		STAWK1180TG		●	27.1	38.1	86.1	84	2.1	16	TIP06F
	3	STAWSN1150S16	●		STAWN1180TH	●		43.1	54.1	102.1	100	2.1	16	TIP06F
	5	STAWMN1150S16	●		STAWN1180TH	●		68.1	79.1	127.1	125	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWN1180TH	●		98.1	109.1	157.1	155	2.1	16	TIP06F
	8	STAWLN1150S16	●		STAWK1180TG		●	98.1	109.1	157.1	155	2.1	16	TIP06F
	1.5	STAWSS1150S16	●	11.9	STAWN1190TH	●		27.2	38.2	86.2	84	2.2	16	TIP06F
	1.5	STAWSS1150S16	●		STAWK1190TG		●	27.2	38.2	86.2	84	2.2	16	TIP06F
	3	STAWSN1150S16	●		STAWN1190TH	●		43.2	54.2	102.2	100	2.2	16	TIP06F
	5	STAWMN1150S16	●		STAWN1190TH	●		68.2	79.2	127.2	125	2.2	16	TIP06F
	8	STAWLN1150S16	●		STAWN1190TH	●		98.2	109.2	157.2	155	2.2	16	TIP06F
	8	STAWLN1150S16	●		STAWK1190TG		●	98.2	109.2	157.2	155	2.2	16	TIP06F
12.0 12.4	1.5	STAWSS1200S16	●	12.0	*STAWN1200TH	●		29.2	41.2	89.2	87	2.2	16	TIP06F
	1.5	STAWSS1200S16	●		STAWK1200TG		●	29.2	41.2	89.2	87	2.2	16	TIP06F
	3	STAWSN1200S16	●		STAWN1200TH	●		47.2	59.2	107.2	105	2.2	16	TIP06F
	5	STAWMN1200S16	●		STAWN1200TH	●		72.2	84.2	132.2	130	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWN1200TH	●		107.2	119.2	167.2	165	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWK1200TG		●	107.2	119.2	167.2	165	2.2	16	TIP06F
	1.5	STAWSS1200S16	●	12.1	STAWN1210TH	●		29.2	41.2	89.2	87	2.2	16	TIP06F
	1.5	STAWSS1200S16	●		STAWK1210TG		●	29.2	41.2	89.2	87	2.2	16	TIP06F
	3	STAWSN1200S16	●		STAWN1210TH	●		47.2	59.2	107.2	105	2.2	16	TIP06F
	5	STAWMN1200S16	●		STAWN1210TH	●		72.2	84.2	132.2	130	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWN1210TH	●		107.2	119.2	167.2	165	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWK1210TG		●	107.2	119.2	167.2	165	2.2	16	TIP06F
	1.5	STAWSS1200S16	●	12.2	STAWN1220TH	●		29.2	41.2	89.2	87	2.2	16	TIP06F
	1.5	STAWSS1200S16	●		STAWK1220TG		●	29.2	41.2	89.2	87	2.2	16	TIP06F
	3	STAWSN1200S16	●		STAWN1220TH	●		47.2	59.2	107.2	105	2.2	16	TIP06F
	5	STAWMN1200S16	●		STAWN1220TH	●		72.2	84.2	132.2	130	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWN1220TH	●		107.2	119.2	167.2	165	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWK1220TG		●	107.2	119.2	167.2	165	2.2	16	TIP06F
	1.5	STAWSS1200S16	●	12.3	STAWN1230TH	●		29.2	41.2	89.2	87	2.2	16	TIP06F
	1.5	STAWSS1200S16	●		STAWK1230TG		●	29.2	41.2	89.2	87	2.2	16	TIP06F
	3	STAWSN1200S16	●		STAWN1230TH	●		47.2	59.2	107.2	105	2.2	16	TIP06F
	5	STAWMN1200S16	●		STAWN1230TH	●		72.2	84.2	132.2	130	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWN1230TH	●		107.2	119.2	167.2	165	2.2	16	TIP06F
	8	STAWLN1200S16	●		STAWK1230TG		●	107.2	119.2	167.2	165	2.2	16	TIP06F
	1.5	STAWSS1200S16	●	12.4	STAWN1240TH	●		29.3	41.3	89.3	87	2.3	16	TIP06F
	1.5	STAWSS1200S16	●		STAWK1240TG		●	29.3	41.3	89.3	87	2.3	16	TIP06F
	3	STAWSN1200S16	●		STAWN1240TH	●		47.3	59.3	107.3	105	2.3	16	TIP06F
	5	STAWMN1200S16	●		STAWN1240TH	●		72.3	84.3	132.3	130	2.3	16	TIP06F
	8	STAWLN1200S16	●		STAWN1240TH	●		107.3	119.3	167.3	165	2.3	16	TIP06F
	8	STAWLN1200S16	●		STAWK1240TG		●	107.3	119.3	167.3	165	2.3	16	TIP06F
12.5 12.7	1.5	STAWSS1250S16	●	12.5	*STAWN1250TH	●		29.3	41.3	89.3	87	2.3	16	TIP06F
	1.5	STAWSS1250S16	●		STAWK1250TG		●	29.3	41.3	89.3	87	2.3	16	TIP06F
	3	STAWSN1250S16	●		STAWN1250TH	●		47.3	59.3	107.3	105	2.3	16	TIP06F
	5	STAWMN1250S16	●		STAWN1250TH	●		72.3	84.3	132.3	130	2.3	16	TIP06F
	8	STAWLN1250S16	●		STAWN1250TH	●		107.3	119.3	167.3	165	2.3	16	TIP06F
	8	STAWLN1250S16	●		STAWK1250TG		●	107.3	119.3	167.3	165	2.3	16	TIP06F
	1.5	STAWSS1250S16	●	12.6	STAWN1260TH	●		29.3	41.3	89.3	87	2.3	16	TIP06F
	1.5	STAWSS1250S16	●		STAWK1260TG		●	29.3	41.3	89.3	87	2.3	16	TIP06F
	3	STAWSN1250S16	●		STAWN1260TH	●		47.3	59.3	107.3	105	2.3	16	TIP06F
	5	STAWMN1250S16	●		STAWN1260TH	●		72.3	84.3	132.3	130	2.3	16	TIP06F
	8	STAWLN1250S16	●		STAWN1260TH	●		107.3	119.3	167.3	165	2.3	16	TIP06F
	8	STAWLN1250S16	●		STAWK1260TG		●	107.3	119.3	167.3	165	2.3	16	TIP06F
	1.5	STAWSS1250S16	●	12.7	STAWN1270TH	●		29.3	41.3	89.3	87	2.3	16	TIP06F
	1.5	STAWSS1250S16	●		STAWK1270TG		●	29.3	41.3	89.3	87	2.3	16	TIP06F
	3	STAWSN1250S16	●		STAWN1270TH	●		47.3	59.3	107.3	105	2.3	16	TIP06F
	5	STAWMN1250S16	●		STAWN1270TH	●		72.3	84.3	132.3	130	2.3	16	TIP06F
	8	STAWLN1250S16	●		STAWN1270TH	●		107.3	119.3	167.3	165	2.3	16	TIP06F
	8	STAWLN1250S16	●		STAWK1270TG		●	107.3	119.3	167.3	165	2.3	16	TIP06F

BOHREN (WSP AUSFÜHRUNG)

STAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						 
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							
														① Schlüssel
12.8 12.9	1.5	STAWSS1250S16	●	12.8	STAWN1280TH	●		29.3	41.3	89.3	87	2.3	16	①TIP06F
	1.5	STAWSS1250S16	●		STAWK1280TG		●	29.3	41.3	89.3	87	2.3	16	①TIP06F
	3	STAWSN1250S16	●		STAWN1280TH	●		47.3	59.3	107.3	105	2.3	16	①TIP06F
	5	STAWMN1250S16	●		STAWN1280TH	●		72.3	84.3	132.3	130	2.3	16	①TIP06F
	8	STAWLN1250S16	●		STAWN1280TH	●		107.3	119.3	167.3	165	2.3	16	①TIP06F
	8	STAWLN1250S16	●		STAWK1280TG		●	107.3	119.3	167.3	165	2.3	16	①TIP06F
	1.5	STAWSS1250S16	●	12.9	STAWN1290TH	●		29.3	41.3	89.3	87	2.3	16	①TIP06F
	1.5	STAWSS1250S16	●		STAWK1290TG		●	29.3	41.3	89.3	87	2.3	16	①TIP06F
	3	STAWSN1250S16	●		STAWN1290TH	●		47.3	59.3	107.3	105	2.3	16	①TIP06F
	5	STAWMN1250S16	●		STAWN1290TH	●		72.3	84.3	132.3	130	2.3	16	①TIP06F
	8	STAWLN1250S16	●		STAWN1290TH	●		107.3	119.3	167.3	165	2.3	16	①TIP06F
	8	STAWLN1250S16	●		STAWK1290TG		●	107.3	119.3	167.3	165	2.3	16	①TIP06F
13.0 13.4	1.5	STAWSS1300S16	●	13.0	*STAWN1300TH	●		32.4	45.4	93.4	91	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●		STAWK1300TG		●	32.4	45.4	93.4	91	2.4	16	②TIP08W
	3	STAWSN1300S16	●		STAWN1300TH	●		51.4	64.4	112.4	110	2.4	16	②TIP08W
	5	STAWMN1300S16	●		STAWN1300TH	●		76.4	89.4	137.4	135	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWN1300TH	●		116.4	129.4	177.4	175	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWK1300TG		●	116.4	129.4	177.4	175	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●	13.1	STAWN1310TH	●		32.4	45.4	93.4	91	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●		STAWK1310TG		●	32.4	45.4	93.4	91	2.4	16	②TIP08W
	3	STAWSN1300S16	●		STAWN1310TH	●		51.4	64.4	112.4	110	2.4	16	②TIP08W
	5	STAWMN1300S16	●		STAWN1310TH	●		76.4	89.4	137.4	135	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWN1310TH	●		116.4	129.4	177.4	175	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWK1310TG		●	116.4	129.4	177.4	175	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●	13.2	STAWN1320TH	●		32.4	45.4	93.4	91	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●		STAWK1320TG		●	32.4	45.4	93.4	91	2.4	16	②TIP08W
	3	STAWSN1300S16	●		STAWN1320TH	●		51.4	64.4	112.4	110	2.4	16	②TIP08W
	5	STAWMN1300S16	●		STAWN1320TH	●		76.4	89.4	137.4	135	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWN1320TH	●		116.4	129.4	177.4	175	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWK1320TG		●	116.4	129.4	177.4	175	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●	13.3	STAWN1330TH	●		32.4	45.4	93.4	91	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●		STAWK1330TG		●	32.4	45.4	93.4	91	2.4	16	②TIP08W
	3	STAWSN1300S16	●		STAWN1330TH	●		51.4	64.4	112.4	110	2.4	16	②TIP08W
	5	STAWMN1300S16	●		STAWN1330TH	●		76.4	89.4	137.4	135	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWN1330TH	●		116.4	129.4	177.4	175	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWK1330TG		●	116.4	129.4	177.4	175	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●	13.4	STAWN1340TH	●		32.4	45.4	93.4	91	2.4	16	②TIP08W
	1.5	STAWSS1300S16	●		STAWK1340TG		●	32.4	45.4	93.4	91	2.4	16	②TIP08W
	3	STAWSN1300S16	●		STAWN1340TH	●		51.4	64.4	112.4	110	2.4	16	②TIP08W
	5	STAWMN1300S16	●		STAWN1340TH	●		76.4	89.4	137.4	135	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWN1340TH	●		116.4	129.4	177.4	175	2.4	16	②TIP08W
	8	STAWLN1300S16	●		STAWK1340TG		●	116.4	129.4	177.4	175	2.4	16	②TIP08W
13.5 13.7	1.5	STAWSS1350S16	●	13.5	*STAWN1350TH	●		32.5	45.5	93.5	91	2.5	16	②TIP08W
	1.5	STAWSS1350S16	●		STAWK1350TG		●	32.5	45.5	93.5	91	2.5	16	②TIP08W
	3	STAWSN1350S16	●		STAWN1350TH	●		51.5	64.5	112.5	110	2.5	16	②TIP08W
	5	STAWMN1350S16	●		STAWN1350TH	●		76.5	89.5	137.5	135	2.5	16	②TIP08W
	8	STAWLN1350S16	●		STAWN1350TH	●		116.5	129.5	177.5	175	2.5	16	②TIP08W
	8	STAWLN1350S16	●		STAWK1350TG		●	116.5	129.5	177.5	175	2.5	16	②TIP08W
	1.5	STAWSS1350S16	●	13.6	STAWN1360TH	●		32.5	45.5	93.5	91	2.5	16	②TIP08W
	1.5	STAWSS1350S16	●		STAWK1360TG		●	32.5	45.5	93.5	91	2.5	16	②TIP08W
	3	STAWSN1350S16	●		STAWN1360TH	●		51.5	64.5	112.5	110	2.5	16	②TIP08W
	5	STAWMN1350S16	●		STAWN1360TH	●		76.5	89.5	137.5	135	2.5	16	②TIP08W
	8	STAWLN1350S16	●		STAWN1360TH	●		116.5	129.5	177.5	175	2.5	16	②TIP08W
	8	STAWLN1350S16	●		STAWK1360TG		●	116.5	129.5	177.5	175	2.5	16	②TIP08W
	1.5	STAWSS1350S16	●	13.7	STAWN1370TH	●		32.5	45.5	93.5	91	2.5	16	②TIP08W
	1.5	STAWSS1350S16	●		STAWK1370TG		●	32.5	45.5	93.5	91	2.5	16	②TIP08W
	3	STAWSN1350S16	●		STAWN1370TH	●		51.5	64.5	112.5	110	2.5	16	②TIP08W
	5	STAWMN1350S16	●		STAWN1370TH	●		76.5	89.5	137.5	135	2.5	16	②TIP08W
	8	STAWLN1350S16	●		STAWN1370TH	●		116.5	129.5	177.5	175	2.5	16	②TIP08W
	8	STAWLN1350S16	●		STAWK1370TG		●	116.5	129.5	177.5	175	2.5	16	②TIP08W

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							Schlüssel
13.8 13.9	1.5	STAWSS1350S16	●	13.8	STAWN1380TH	●		32.5	45.5	93.5	91	2.5	16	TIP08W
	1.5	STAWSS1350S16	●		STAWK1380TG		●	32.5	45.5	93.5	91	2.5	16	TIP08W
	3	STAWSN1350S16	●		STAWN1380TH	●		51.5	64.5	112.5	110	2.5	16	TIP08W
	5	STAWMN1350S16	●		STAWN1380TH	●		76.5	89.5	137.5	135	2.5	16	TIP08W
	8	STAWLN1350S16	●		STAWN1380TH	●		116.5	129.5	177.5	175	2.5	16	TIP08W
	8	STAWLN1350S16	●		STAWK1380TG		●	116.5	129.5	177.5	175	2.5	16	TIP08W
	1.5	STAWSS1350S16	●	13.9	STAWN1390TH	●		32.5	45.5	93.5	91	2.5	16	TIP08W
	1.5	STAWSS1350S16	●		STAWK1390TG		●	32.5	45.5	93.5	91	2.5	16	TIP08W
	3	STAWSN1350S16	●		STAWN1390TH	●		51.5	64.5	112.5	110	2.5	16	TIP08W
	5	STAWMN1350S16	●		STAWN1390TH	●		76.5	89.5	137.5	135	2.5	16	TIP08W
	8	STAWLN1350S16	●		STAWN1390TH	●		116.5	129.5	177.5	175	2.5	16	TIP08W
	8	STAWLN1350S16	●		STAWK1390TG		●	116.5	129.5	177.5	175	2.5	16	TIP08W
14.0 14.4	1.5	STAWSS1400S16	●	14.0	*STAWN1400TH	●		33.5	47.5	95.5	93	2.5	16	TIP08W
	1.5	STAWSS1400S16	●		STAWK1400TG		●	33.5	47.5	95.5	93	2.5	16	TIP08W
	3	STAWSN1400S16	●		STAWN1400TH	●		55.5	69.5	117.5	115	2.5	16	TIP08W
	5	STAWMN1400S16	●		STAWN1400TH	●		85.5	99.5	147.5	145	2.5	16	TIP08W
	8	STAWLN1400S16	●		STAWN1400TH	●		124.5	139.5	187.5	185	2.5	16	TIP08W
	8	STAWLN1400S16	●		STAWK1400TG		●	124.5	139.5	187.5	185	2.5	16	TIP08W
	1.5	STAWSS1400S16	●	14.1	STAWN1410TH	●		33.6	47.6	95.6	93	2.6	16	TIP08W
	1.5	STAWSS1400S16	●		STAWK1410TG		●	33.6	47.6	95.6	93	2.6	16	TIP08W
	3	STAWSN1400S16	●		STAWN1410TH	●		55.6	69.6	117.6	115	2.6	16	TIP08W
	5	STAWMN1400S16	●		STAWN1410TH	●		85.6	99.6	147.6	145	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWN1410TH	●		124.6	139.6	187.6	185	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWK1410TG		●	124.6	139.6	187.6	185	2.6	16	TIP08W
	1.5	STAWSS1400S16	●	14.2	STAWN1420TH	●		33.6	47.6	95.6	93	2.6	16	TIP08W
	1.5	STAWSS1400S16	●		STAWK1420TG		●	33.6	47.6	95.6	93	2.6	16	TIP08W
	3	STAWSN1400S16	●		STAWN1420TH	●		55.6	69.6	117.6	115	2.6	16	TIP08W
	5	STAWMN1400S16	●		STAWN1420TH	●		85.6	99.6	147.6	145	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWN1420TH	●		124.6	139.6	187.6	185	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWK1420TG		●	124.6	139.6	187.6	185	2.6	16	TIP08W
	1.5	STAWSS1400S16	●	14.3	STAWN1430TH	●		33.6	47.6	95.6	93	2.6	16	TIP08W
	1.5	STAWSS1400S16	●		STAWK1430TG		●	33.6	47.6	95.6	93	2.6	16	TIP08W
	3	STAWSN1400S16	●		STAWN1430TH	●		55.6	69.6	117.6	115	2.6	16	TIP08W
	5	STAWMN1400S16	●		STAWN1430TH	●		85.6	99.6	147.6	145	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWN1430TH	●		124.6	139.6	187.6	185	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWK1430TG		●	124.6	139.6	187.6	185	2.6	16	TIP08W
	1.5	STAWSS1400S16	●	14.4	STAWN1440TH	●		33.6	47.6	95.6	93	2.6	16	TIP08W
	1.5	STAWSS1400S16	●		STAWK1440TG		●	33.6	47.6	95.6	93	2.6	16	TIP08W
	3	STAWSN1400S16	●		STAWN1440TH	●		55.6	69.6	117.6	115	2.6	16	TIP08W
	5	STAWMN1400S16	●		STAWN1440TH	●		85.6	99.6	147.6	145	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWN1440TH	●		124.6	139.6	187.6	185	2.6	16	TIP08W
	8	STAWLN1400S16	●		STAWK1440TG		●	124.6	139.6	187.6	185	2.6	16	TIP08W
14.5 14.7	1.5	STAWSS1450S16	●	14.5	*STAWN1450TH	●		33.6	47.6	95.6	93	2.6	16	TIP08W
	1.5	STAWSS1450S16	●		STAWK1450TG		●	33.6	47.6	95.6	93	2.6	16	TIP08W
	3	STAWSN1450S16	●		STAWN1450TH	●		55.6	69.6	117.6	115	2.6	16	TIP08W
	5	STAWMN1450S16	●		STAWN1450TH	●		85.6	99.6	147.6	145	2.6	16	TIP08W
	8	STAWLN1450S16	●		STAWN1450TH	●		124.6	139.6	187.6	185	2.6	16	TIP08W
	8	STAWLN1450S16	●		STAWK1450TG		●	124.6	139.6	187.6	185	2.6	16	TIP08W
	1.5	STAWSS1450S16	●	14.6	STAWN1460TH	●		33.7	47.7	95.7	93	2.7	16	TIP08W
	1.5	STAWSS1450S16	●		STAWK1460TG		●	33.7	47.7	95.7	93	2.7	16	TIP08W
	3	STAWSN1450S16	●		STAWN1460TH	●		55.7	69.7	117.7	115	2.7	16	TIP08W
	5	STAWMN1450S16	●		STAWN1460TH	●		85.7	99.7	147.7	145	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWN1460TH	●		124.7	139.7	187.7	185	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWK1460TG		●	124.7	139.7	187.7	185	2.7	16	TIP08W
	1.5	STAWSS1450S16	●	14.7	STAWN1470TH	●		33.7	47.7	95.7	93	2.7	16	TIP08W
	1.5	STAWSS1450S16	●		STAWK1470TG		●	33.7	47.7	95.7	93	2.7	16	TIP08W
	3	STAWSN1450S16	●		STAWN1470TH	●		55.7	69.7	117.7	115	2.7	16	TIP08W
	5	STAWMN1450S16	●		STAWN1470TH	●		85.7	99.7	147.7	145	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWN1470TH	●		124.7	139.7	187.7	185	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWK1470TG		●	124.7	139.7	187.7	185	2.7	16	TIP08W

BOHREN (WSP AUSFÜHRUNG)

STAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						 Schlüssel
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							
14.8 14.9	1.5	STAWSS1450S16	●	14.8	STAWN1480TH	●		33.7	47.7	95.7	93	2.7	16	TIP08W
	1.5	STAWSS1450S16	●		STAWK1480TG		●	33.7	47.7	95.7	93	2.7	16	TIP08W
	3	STAWSN1450S16	●		STAWN1480TH	●		55.7	69.7	117.7	115	2.7	16	TIP08W
	5	STAWMN1450S16	●		STAWN1480TH	●		85.7	99.7	147.7	145	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWN1480TH	●		124.7	139.7	187.7	185	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWK1480TG		●	124.7	139.7	187.7	185	2.7	16	TIP08W
	1.5	STAWSS1450S16	●	14.9	STAWN1490TH	●		33.7	47.7	95.7	93	2.7	16	TIP08W
	1.5	STAWSS1450S16	●		STAWK1490TG		●	33.7	47.7	95.7	93	2.7	16	TIP08W
	3	STAWSN1450S16	●		STAWN1490TH	●		55.7	69.7	117.7	115	2.7	16	TIP08W
	5	STAWMN1450S16	●		STAWN1490TH	●		85.7	99.7	147.7	145	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWN1490TH	●		124.7	139.7	187.7	185	2.7	16	TIP08W
	8	STAWLN1450S16	●		STAWK1490TG		●	124.7	139.7	187.7	185	2.7	16	TIP08W
15.0 15.4	1.5	STAWSS1500S20	●	15.0	*STAWN1500TH	●		35.7	50.7	100.7	98	2.7	20	TIP08W
	1.5	STAWSS1500S20	●		STAWK1500TG		●	35.7	50.7	100.7	98	2.7	20	TIP08W
	3	STAWSN1500S20	●		STAWN1500TH	●		62.7	77.7	127.7	125	2.7	20	TIP08W
	5	STAWMN1500S20	●		STAWN1500TH	●		92.7	107.7	157.7	155	2.7	20	TIP08W
	8	STAWLN1500S20	●		STAWN1500TH	●		132.7	150.7	200.7	198	2.7	20	TIP08W
	8	STAWLN1500S20	●		STAWK1500TG		●	132.7	150.7	200.7	198	2.7	20	TIP08W
	1.5	STAWSS1500S20	●	15.1	STAWN1510TH	●		35.7	50.7	100.7	98	2.7	20	TIP08W
	1.5	STAWSS1500S20	●		STAWK1510TG		●	35.7	50.7	100.7	98	2.7	20	TIP08W
	3	STAWSN1500S20	●		STAWN1510TH	●		62.7	77.7	127.7	125	2.7	20	TIP08W
	5	STAWMN1500S20	●		STAWN1510TH	●		92.7	107.7	157.7	155	2.7	20	TIP08W
	8	STAWLN1500S20	●		STAWN1510TH	●		132.7	150.7	200.7	198	2.7	20	TIP08W
	8	STAWLN1500S20	●		STAWK1510TG		●	132.7	150.7	200.7	198	2.7	20	TIP08W
	1.5	STAWSS1500S20	●	15.2	STAWN1520TH	●		35.8	50.8	100.8	98	2.8	20	TIP08W
	1.5	STAWSS1500S20	●		STAWK1520TG		●	35.8	50.8	100.8	98	2.8	20	TIP08W
	3	STAWSN1500S20	●		STAWN1520TH	●		62.8	77.8	127.8	125	2.8	20	TIP08W
	5	STAWMN1500S20	●		STAWN1520TH	●		92.8	107.8	157.8	155	2.8	20	TIP08W
	8	STAWLN1500S20	●		STAWN1520TH	●		132.8	150.8	200.8	198	2.8	20	TIP08W
	8	STAWLN1500S20	●		STAWK1520TG		●	132.8	150.8	200.8	198	2.8	20	TIP08W
	1.5	STAWSS1500S20	●	15.3	STAWN1530TH	●		35.8	50.8	100.8	98	2.8	20	TIP08W
	1.5	STAWSS1500S20	●		STAWK1530TG		●	35.8	50.8	100.8	98	2.8	20	TIP08W
	3	STAWSN1500S20	●		STAWN1530TH	●		62.8	77.8	127.8	125	2.8	20	TIP08W
	5	STAWMN1500S20	●		STAWN1530TH	●		92.8	107.8	157.8	155	2.8	20	TIP08W
	8	STAWLN1500S20	●		STAWN1530TH	●		132.8	150.8	200.8	198	2.8	20	TIP08W
	8	STAWLN1500S20	●		STAWK1530TG		●	132.8	150.8	200.8	198	2.8	20	TIP08W
1.5	STAWSS1500S20	●	15.4	STAWN1540TH	●		35.8	50.8	100.8	98	2.8	20	TIP08W	
1.5	STAWSS1500S20	●		STAWK1540TG		●	35.8	50.8	100.8	98	2.8	20	TIP08W	
3	STAWSN1500S20	●		STAWN1540TH	●		62.8	77.8	127.8	125	2.8	20	TIP08W	
5	STAWMN1500S20	●		STAWN1540TH	●		92.8	107.8	157.8	155	2.8	20	TIP08W	
8	STAWLN1500S20	●		STAWN1540TH	●		132.8	150.8	200.8	198	2.8	20	TIP08W	
8	STAWLN1500S20	●		STAWK1540TG		●	132.8	150.8	200.8	198	2.8	20	TIP08W	
15.5 15.6	1.5	STAWSS1600S20	●	15.5	*STAWN1550T	●		36.8	52.8	102.8	100	2.8	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1550TG		●	36.8	52.8	102.8	100	2.8	20	TIP10W
	3	STAWSN1600S20	●		STAWN1550T	●		62.8	82.8	132.8	130	2.8	20	TIP10W
	3	STAWSN1600S20	●		STAWK1550TG		●	62.8	82.8	132.8	130	2.8	20	TIP10W
	5	STAWMN1600S20	●		STAWN1550T	●		92.8	117.8	167.8	165	2.8	20	TIP10W
	5	STAWMN1600S20	●		STAWK1550TG		●	92.8	117.8	167.8	165	2.8	20	TIP10W
	8	STAWLN1600S20	●		STAWN1550T	●		140.8	160.8	210.8	208	2.8	20	TIP10W
	8	STAWLN1600S20	●		STAWK1550TG		●	140.8	160.8	210.8	208	2.8	20	TIP10W
	1.5	STAWSS1600S20	●	15.6	STAWN1560T	●		36.8	52.8	102.8	100	2.8	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1560TG		●	36.8	52.8	102.8	100	2.8	20	TIP10W
	3	STAWSN1600S20	●		STAWN1560T	●		62.8	82.8	132.8	130	2.8	20	TIP10W
	3	STAWSN1600S20	●		STAWK1560TG		●	62.8	82.8	132.8	130	2.8	20	TIP10W
	5	STAWMN1600S20	●		STAWN1560T	●		92.8	117.8	167.8	165	2.8	20	TIP10W
	5	STAWMN1600S20	●		STAWK1560TG		●	92.8	117.8	167.8	165	2.8	20	TIP10W
	8	STAWLN1600S20	●		STAWN1560T	●		140.8	160.8	210.8	208	2.8	20	TIP10W
	8	STAWLN1600S20	●		STAWK1560TG		●	140.8	160.8	210.8	208	2.8	20	TIP10W

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							
15.7 16.4	1.5	STAWSS1600S20	●	15.7	STAWN1570T	●		36.9	52.9	102.9	100	2.9	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1570TG		●	36.9	52.9	102.9	100	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWN1570T	●		62.9	82.9	132.9	130	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWK1570TG		●	62.9	82.9	132.9	130	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWN1570T	●		92.9	117.9	167.9	165	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWK1570TG		●	92.9	117.9	167.9	165	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWN1570T	●		140.9	160.9	210.9	208	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWK1570TG		●	140.9	160.9	210.9	208	2.9	20	TIP10W
	1.5	STAWSS1600S20	●	15.8	STAWN1580T	●		36.9	52.9	102.9	100	2.9	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1580TG		●	36.9	52.9	102.9	100	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWN1580T	●		62.9	82.9	132.9	130	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWK1580TG		●	62.9	82.9	132.9	130	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWN1580T	●		92.9	117.9	167.9	165	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWK1580TG		●	92.9	117.9	167.9	165	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWN1580T	●		140.9	160.9	210.9	208	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWK1580TG		●	140.9	160.9	210.9	208	2.9	20	TIP10W
	1.5	STAWSS1600S20	●	15.9	STAWN1590T	●		36.9	52.9	102.9	100	2.9	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1590TG		●	36.9	52.9	102.9	100	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWN1590T	●		62.9	82.9	132.9	130	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWK1590TG		●	62.9	82.9	132.9	130	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWN1590T	●		92.9	117.9	167.9	165	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWK1590TG		●	92.9	117.9	167.9	165	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWN1590T	●		140.9	160.9	210.9	208	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWK1590TG		●	140.9	160.9	210.9	208	2.9	20	TIP10W
	1.5	STAWSS1600S20	●	16.0	STAWN1600T	●		36.9	52.9	102.9	100	2.9	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1600TG		●	36.9	52.9	102.9	100	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWN1600T	●		62.9	82.9	132.9	130	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWK1600TG		●	62.9	82.9	132.9	130	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWN1600T	●		92.9	117.9	167.9	165	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWK1600TG		●	92.9	117.9	167.9	165	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWN1600T	●		140.9	160.9	210.9	208	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWK1600TG		●	140.9	160.9	210.9	208	2.9	20	TIP10W
	1.5	STAWSS1600S20	●	16.1	STAWN1610T	●		36.9	52.9	102.9	100	2.9	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1610TG		●	36.9	52.9	102.9	100	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWN1610T	●		62.9	82.9	132.9	130	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWK1610TG		●	62.9	82.9	132.9	130	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWN1610T	●		92.9	117.9	167.9	165	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWK1610TG		●	92.9	117.9	167.9	165	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWN1610T	●		140.9	160.9	210.9	208	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWK1610TG		●	140.9	160.9	210.9	208	2.9	20	TIP10W
	1.5	STAWSS1600S20	●	16.2	STAWN1620T	●		36.9	52.9	102.9	100	2.9	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1620TG		●	36.9	52.9	102.9	100	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWN1620T	●		62.9	82.9	132.9	130	2.9	20	TIP10W
	3	STAWSN1600S20	●		STAWK1620TG		●	62.9	82.9	132.9	130	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWN1620T	●		92.9	117.9	167.9	165	2.9	20	TIP10W
	5	STAWMN1600S20	●		STAWK1620TG		●	92.9	117.9	167.9	165	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWN1620T	●		140.9	160.9	210.9	208	2.9	20	TIP10W
	8	STAWLN1600S20	●		STAWK1620TG		●	140.9	160.9	210.9	208	2.9	20	TIP10W
	1.5	STAWSS1600S20	●	16.3	STAWN1630T	●		37.0	53.0	103.0	100	3.0	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1630TG		●	37.0	53.0	103.0	100	3.0	20	TIP10W
	3	STAWSN1600S20	●		STAWN1630T	●		63.0	83.0	133.0	130	3.0	20	TIP10W
	3	STAWSN1600S20	●		STAWK1630TG		●	63.0	83.0	133.0	130	3.0	20	TIP10W
	5	STAWMN1600S20	●		STAWN1630T	●		93.0	118.0	168.0	165	3.0	20	TIP10W
	5	STAWMN1600S20	●		STAWK1630TG		●	93.0	118.0	168.0	165	3.0	20	TIP10W
	8	STAWLN1600S20	●		STAWN1630T	●		141.0	161.0	211.0	208	3.0	20	TIP10W
	8	STAWLN1600S20	●		STAWK1630TG		●	141.0	161.0	211.0	208	3.0	20	TIP10W
	1.5	STAWSS1600S20	●	16.4	STAWN1640T	●		37.0	53.0	103.0	100	3.0	20	TIP10W
	1.5	STAWSS1600S20	●		STAWK1640TG		●	37.0	53.0	103.0	100	3.0	20	TIP10W
	3	STAWSN1600S20	●		STAWN1640T	●		63.0	83.0	133.0	130	3.0	20	TIP10W
	3	STAWSN1600S20	●		STAWK1640TG		●	63.0	83.0	133.0	130	3.0	20	TIP10W
	5	STAWMN1600S20	●		STAWN1640T	●		93.0	118.0	168.0	165	3.0	20	TIP10W
	5	STAWMN1600S20	●		STAWK1640TG		●	93.0	118.0	168.0	165	3.0	20	TIP10W
	8	STAWLN1600S20	●		STAWN1640T	●		141.0	161.0	211.0	208	3.0	20	TIP10W
	8	STAWLN1600S20	●		STAWK1640TG		●	141.0	161.0	211.0	208	3.0	20	TIP10W

WSP BESCHREIBUNG > L 123

SCHNITTBEDINGUNGEN > L 127

EINSATZ HINWEISE > L 128

TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

STAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VPI5TF	DP5010							
16.5 17.2	1.5	STAWSS1700S20	●	16.5	*STAWN1650T	●		39.0	56.0	106.0	103	3.0	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1650TG		●	39.0	56.0	106.0	103	3.0	20	TIP10W
	3	STAWSN1700S20	●		STAWN1650T	●		64.0	88.0	138.0	135	3.0	20	TIP10W
	3	STAWSN1700S20	●		STAWK1650TG		●	64.0	88.0	138.0	135	3.0	20	TIP10W
	5	STAWMN1700S20	●		STAWN1650T	●		98.0	123.0	173.0	170	3.0	20	TIP10W
	5	STAWMN1700S20	●		STAWK1650TG		●	98.0	123.0	173.0	170	3.0	20	TIP10W
	8	STAWLN1700S20	●		STAWN1650T	●		149.0	169.0	219.0	216	3.0	20	TIP10W
	8	STAWLN1700S20	●		STAWK1650TG		●	149.0	169.0	219.0	216	3.0	20	TIP10W
	1.5	STAWSS1700S20	●	16.6	STAWN1660T	●		39.0	56.0	106.0	103	3.0	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1660TG		●	39.0	56.0	106.0	103	3.0	20	TIP10W
	3	STAWSN1700S20	●		STAWN1660T	●		64.0	88.0	138.0	135	3.0	20	TIP10W
	3	STAWSN1700S20	●		STAWK1660TG		●	64.0	88.0	138.0	135	3.0	20	TIP10W
	5	STAWMN1700S20	●		STAWN1660T	●		98.0	123.0	173.0	170	3.0	20	TIP10W
	5	STAWMN1700S20	●		STAWK1660TG		●	98.0	123.0	173.0	170	3.0	20	TIP10W
	8	STAWLN1700S20	●		STAWN1660T	●		149.0	169.0	219.0	216	3.0	20	TIP10W
	8	STAWLN1700S20	●		STAWK1660TG		●	149.0	169.0	219.0	216	3.0	20	TIP10W
	1.5	STAWSS1700S20	●	16.7	STAWN1670T	●		39.0	56.0	106.0	103	3.0	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1670TG		●	39.0	56.0	106.0	103	3.0	20	TIP10W
	3	STAWSN1700S20	●		STAWN1670T	●		64.0	88.0	138.0	135	3.0	20	TIP10W
	3	STAWSN1700S20	●		STAWK1670TG		●	64.0	88.0	138.0	135	3.0	20	TIP10W
	5	STAWMN1700S20	●		STAWN1670T	●		98.0	123.0	173.0	170	3.0	20	TIP10W
	5	STAWMN1700S20	●		STAWK1670TG		●	98.0	123.0	173.0	170	3.0	20	TIP10W
	8	STAWLN1700S20	●		STAWN1670T	●		149.0	169.0	219.0	216	3.0	20	TIP10W
	8	STAWLN1700S20	●		STAWK1670TG		●	149.0	169.0	219.0	216	3.0	20	TIP10W
	1.5	STAWSS1700S20	●	16.8	STAWN1680T	●		39.1	56.1	106.1	103	3.1	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1680TG		●	39.1	56.1	106.1	103	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWN1680T	●		64.1	88.1	138.1	135	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWK1680TG		●	64.1	88.1	138.1	135	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWN1680T	●		98.1	123.1	173.1	170	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWK1680TG		●	98.1	123.1	173.1	170	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWN1680T	●		149.1	169.1	219.1	216	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWK1680TG		●	149.1	169.1	219.1	216	3.1	20	TIP10W
	1.5	STAWSS1700S20	●	16.9	STAWN1690T	●		39.1	56.1	106.1	103	3.1	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1690TG		●	39.1	56.1	106.1	103	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWN1690T	●		64.1	88.1	138.1	135	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWK1690TG		●	64.1	88.1	138.1	135	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWN1690T	●		98.1	123.1	173.1	170	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWK1690TG		●	98.1	123.1	173.1	170	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWN1690T	●		149.1	169.1	219.1	216	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWK1690TG		●	149.1	169.1	219.1	216	3.1	20	TIP10W
	1.5	STAWSS1700S20	●	17.0	STAWN1700T	●		39.1	56.1	106.1	103	3.1	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1700TG		●	39.1	56.1	106.1	103	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWN1700T	●		64.1	88.1	138.1	135	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWK1700TG		●	64.1	88.1	138.1	135	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWN1700T	●		98.1	123.1	173.1	170	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWK1700TG		●	98.1	123.1	173.1	170	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWN1700T	●		149.1	169.1	219.1	216	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWK1700TG		●	149.1	169.1	219.1	216	3.1	20	TIP10W
	1.5	STAWSS1700S20	●	17.1	STAWN1710T	●		39.1	56.1	106.1	103	3.1	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1710TG		●	39.1	56.1	106.1	103	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWN1710T	●		64.1	88.1	138.1	135	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWK1710TG		●	64.1	88.1	138.1	135	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWN1710T	●		98.1	123.1	173.1	170	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWK1710TG		●	98.1	123.1	173.1	170	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWN1710T	●		149.1	169.1	219.1	216	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWK1710TG		●	149.1	169.1	219.1	216	3.1	20	TIP10W
	1.5	STAWSS1700S20	●	17.2	STAWN1720T	●		39.1	56.1	106.1	103	3.1	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1720TG		●	39.1	56.1	106.1	103	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWN1720T	●		64.1	88.1	138.1	135	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWK1720TG		●	64.1	88.1	138.1	135	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWN1720T	●		98.1	123.1	173.1	170	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWK1720TG		●	98.1	123.1	173.1	170	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWN1720T	●		149.1	169.1	219.1	216	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWK1720TG		●	149.1	169.1	219.1	216	3.1	20	TIP10W

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							Schlüssel
17.3 17.4	1.5	STAWSS1700S20	●	17.3	STAWN1730T	●		39.1	56.1	106.1	103	3.1	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1730TG		●	39.1	56.1	106.1	103	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWN1730T	●		64.1	88.1	138.1	135	3.1	20	TIP10W
	3	STAWSN1700S20	●		STAWK1730TG		●	64.1	88.1	138.1	135	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWN1730T	●		98.1	123.1	173.1	170	3.1	20	TIP10W
	5	STAWMN1700S20	●		STAWK1730TG		●	98.1	123.1	173.1	170	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWN1730T	●		149.1	169.1	219.1	216	3.1	20	TIP10W
	8	STAWLN1700S20	●		STAWK1730TG		●	149.1	169.1	219.1	216	3.1	20	TIP10W
	1.5	STAWSS1700S20	●	17.4	STAWN1740T	●		39.2	56.2	106.2	103	3.2	20	TIP10W
	1.5	STAWSS1700S20	●		STAWK1740TG		●	39.2	56.2	106.2	103	3.2	20	TIP10W
	3	STAWSN1700S20	●		STAWN1740T	●		64.2	88.2	138.2	135	3.2	20	TIP10W
	3	STAWSN1700S20	●		STAWK1740TG		●	64.2	88.2	138.2	135	3.2	20	TIP10W
	5	STAWMN1700S20	●		STAWN1740T	●		98.2	123.2	173.2	170	3.2	20	TIP10W
	5	STAWMN1700S20	●		STAWK1740TG		●	98.2	123.2	173.2	170	3.2	20	TIP10W
	8	STAWLN1700S20	●		STAWN1740T	●		149.2	169.2	219.2	216	3.2	20	TIP10W
	8	STAWLN1700S20	●		STAWK1740TG		●	149.2	169.2	219.2	216	3.2	20	TIP10W
17.5 18.0	1.5	STAWSS1800S20	●	17.5	*STAWN1750T	●		40.2	58.2	108.2	105	3.2	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1750TG		●	40.2	58.2	108.2	105	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWN1750T	●		67.2	93.2	143.2	140	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWK1750TG		●	67.2	93.2	143.2	140	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWN1750T	●		103.2	128.2	178.2	175	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWK1750TG		●	103.2	128.2	178.2	175	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWN1750T	●		157.2	177.2	227.2	224	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWK1750TG		●	157.2	177.2	227.2	224	3.2	20	TIP10W
	1.5	STAWSS1800S20	●	17.6	STAWN1760T	●		40.2	58.2	108.2	105	3.2	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1760TG		●	40.2	58.2	108.2	105	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWN1760T	●		67.2	93.2	143.2	140	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWK1760TG		●	67.2	93.2	143.2	140	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWN1760T	●		103.2	128.2	178.2	175	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWK1760TG		●	103.2	128.2	178.2	175	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWN1760T	●		157.2	177.2	227.2	224	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWK1760TG		●	157.2	177.2	227.2	224	3.2	20	TIP10W
	1.5	STAWSS1800S20	●	17.7	STAWN1770T	●		40.2	58.2	108.2	105	3.2	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1770TG		●	40.2	58.2	108.2	105	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWN1770T	●		67.2	93.2	143.2	140	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWK1770TG		●	67.2	93.2	143.2	140	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWN1770T	●		103.2	128.2	178.2	175	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWK1770TG		●	103.2	128.2	178.2	175	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWN1770T	●		157.2	177.2	227.2	224	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWK1770TG		●	157.2	177.2	227.2	224	3.2	20	TIP10W
	1.5	STAWSS1800S20	●	17.8	STAWN1780T	●		40.2	58.2	108.2	105	3.2	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1780TG		●	40.2	58.2	108.2	105	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWN1780T	●		67.2	93.2	143.2	140	3.2	20	TIP10W
	3	STAWSN1800S20	●		STAWK1780TG		●	67.2	93.2	143.2	140	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWN1780T	●		103.2	128.2	178.2	175	3.2	20	TIP10W
	5	STAWMN1800S20	●		STAWK1780TG		●	103.2	128.2	178.2	175	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWN1780T	●		157.2	177.2	227.2	224	3.2	20	TIP10W
	8	STAWLN1800S20	●		STAWK1780TG		●	157.2	177.2	227.2	224	3.2	20	TIP10W
	1.5	STAWSS1800S20	●	17.9	STAWN1790T	●		40.3	58.3	108.3	105	3.3	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1790TG		●	40.3	58.3	108.3	105	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWN1790T	●		67.3	93.3	143.3	140	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWK1790TG		●	67.3	93.3	143.3	140	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWN1790T	●		103.3	128.3	178.3	175	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWK1790TG		●	103.3	128.3	178.3	175	3.3	20	TIP10W
	8	STAWLN1800S20	●		STAWN1790T	●		157.3	177.3	227.3	224	3.3	20	TIP10W
	8	STAWLN1800S20	●		STAWK1790TG		●	157.3	177.3	227.3	224	3.3	20	TIP10W
	1.5	STAWSS1800S20	●	18.0	STAWN1800T	●		40.3	58.3	108.3	105	3.3	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1800TG		●	40.3	58.3	108.3	105	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWN1800T	●		67.3	93.3	143.3	140	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWK1800TG		●	67.3	93.3	143.3	140	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWN1800T	●		103.3	128.3	178.3	175	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWK1800TG		●	103.3	128.3	178.3	175	3.3	20	TIP10W
	8	STAWLN1800S20	●		STAWN1800T	●		157.3	177.3	227.3	224	3.3	20	TIP10W
	8	STAWLN1800S20	●		STAWK1800TG		●	157.3	177.3	227.3	224	3.3	20	TIP10W

WSP BESCHREIBUNG > L 123

SCHNITTBEDINGUNGEN > L 127

EINSATZ HINWEISE > L 128

TECHNISCHE DATEN > N001

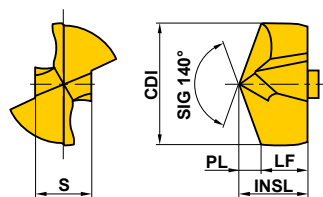
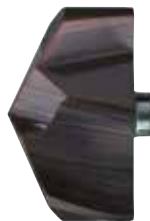
DC (mm)	Bohrtiefe (l/d)	Halter		WSP				Abmessungen (mm)						
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager		LBX	LH	OAL	LF	PL	DCON	
						VP15TF	DP5010							Schlüssel
18.1 18.4	1.5	STAWSS1800S20	●	18.1	STAWN1810T	●		40.3	58.3	108.3	105	3.3	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1810TG		●	40.3	58.3	108.3	105	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWN1810T	●		67.3	93.3	143.3	140	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWK1810TG		●	67.3	93.3	143.3	140	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWN1810T	●		103.3	128.3	178.3	175	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWK1810TG		●	103.3	128.3	178.3	175	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWN1810T	●		157.3	177.3	227.3	224	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWK1810TG		●	157.3	177.3	227.3	224	3.3	20	TIP10W
	1.5	STAWSS1800S20	●	18.2	STAWN1820T	●		40.3	58.3	108.3	105	3.3	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1820TG		●	40.3	58.3	108.3	105	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWN1820T	●		67.3	93.3	143.3	140	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWK1820TG		●	67.3	93.3	143.3	140	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWN1820T	●		103.3	128.3	178.3	175	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWK1820TG		●	103.3	128.3	178.3	175	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWN1820T	●		157.3	177.3	227.3	224	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWK1820TG		●	157.3	177.3	227.3	224	3.3	20	TIP10W
	1.5	STAWSS1800S20	●	18.3	STAWN1830T	●		40.3	58.3	108.3	105	3.3	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1830TG		●	40.3	58.3	108.3	105	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWN1830T	●		67.3	93.3	143.3	140	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWK1830TG		●	67.3	93.3	143.3	140	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWN1830T	●		103.3	128.3	178.3	175	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWK1830TG		●	103.3	128.3	178.3	175	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWN1830T	●		157.3	177.3	227.3	224	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWK1830TG		●	157.3	177.3	227.3	224	3.3	20	TIP10W
	1.5	STAWSS1800S20	●	18.4	STAWN1840T	●		40.3	58.3	108.3	105	3.3	20	TIP10W
	1.5	STAWSS1800S20	●		STAWK1840TG		●	40.3	58.3	108.3	105	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWN1840T	●		67.3	93.3	143.3	140	3.3	20	TIP10W
	3	STAWSN1800S20	●		STAWK1840TG		●	67.3	93.3	143.3	140	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWN1840T	●		103.3	128.3	178.3	175	3.3	20	TIP10W
	5	STAWMN1800S20	●		STAWK1840TG		●	103.3	128.3	178.3	175	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWN1840T	●		157.3	177.3	227.3	224	3.3	20	TIP10W
	8	STAWN1800S20	●		STAWK1840TG		●	157.3	177.3	227.3	224	3.3	20	TIP10W

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung ★.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

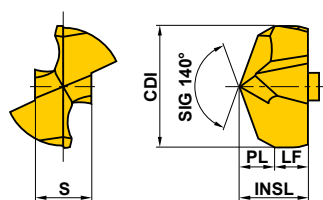
(Andere Durchmesser und Längen können bestellt werden).

WSP



Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	VP15TF		CDI	LF	S	INSL	PL	
STAWN1000TH	●		10.0	3.8	4.6	5.6	1.8	STAWSS1000S16 STAWSN1000S16 STAWMN1000S16 STAWLN1000S16
STAWN1010TH	●		10.1	3.8	4.6	5.6	1.8	
STAWN1020TH	●		10.2	3.8	4.6	5.7	1.9	
STAWN1030TH	●		10.3	3.8	4.6	5.7	1.9	
STAWN1040TH	●		10.4	3.8	4.6	5.7	1.9	
STAWN1050TH	●		10.5	4.0	4.8	5.9	1.9	STAWSS1050S16 STAWSN1050S16 STAWMN1050S16 STAWLN1050S16
STAWN1060TH	●		10.6	4.0	4.8	5.9	1.9	
STAWN1070TH	●		10.7	4.0	4.8	5.9	1.9	
STAWN1080TH	●		10.8	4.0	4.8	6.0	2.0	
STAWN1090TH	●		10.9	4.0	4.8	6.0	2.0	
STAWN1100TH	●		11.0	4.2	5.1	6.2	2.0	STAWSS1100S16 STAWSN1100S16 STAWMN1100S16 STAWLN1100S16
STAWN1110TH	●		11.1	4.2	5.1	6.2	2.0	
STAWN1120TH	●		11.2	4.2	5.1	6.2	2.0	
STAWN1130TH	●		11.3	4.2	5.1	6.3	2.1	
STAWN1140TH	●		11.4	4.2	5.1	6.3	2.1	
STAWN1150TH	●		11.5	4.4	5.3	6.5	2.1	STAWSS1150S16 STAWSN1150S16 STAWMN1150S16 STAWLN1150S16
STAWN1160TH	●		11.6	4.4	5.3	6.5	2.1	
STAWN1170TH	●		11.7	4.4	5.3	6.5	2.1	
STAWN1180TH	●		11.8	4.4	5.3	6.5	2.1	
STAWN1190TH	●		11.9	4.4	5.3	6.6	2.2	
STAWN1200TH	●		12.0	4.6	5.5	6.8	2.2	STAWSS1200S16 STAWSN1200S16 STAWMN1200S16 STAWLN1200S16
STAWN1210TH	●		12.1	4.6	5.5	6.8	2.2	
STAWN1220TH	●		12.2	4.6	5.5	6.8	2.2	
STAWN1230TH	●		12.3	4.6	5.5	6.8	2.2	
STAWN1240TH	●		12.4	4.6	5.5	6.9	2.3	
STAWN1250TH	●		12.5	4.8	5.8	7.1	2.3	STAWSS1250S16 STAWSN1250S16 STAWMN1250S16 STAWLN1250S16
STAWN1260TH	●		12.6	4.8	5.8	7.1	2.3	
STAWN1270TH	●		12.7	4.8	5.8	7.1	2.3	
STAWN1280TH	●		12.8	4.8	5.8	7.1	2.3	
STAWN1290TH	●		12.9	4.8	5.8	7.1	2.3	
STAWN1300TH	●		13.0	4.9	6.0	7.3	2.4	STAWSS1300S16 STAWSN1300S16 STAWMN1300S16 STAWLN1300S16
STAWN1310TH	●		13.1	4.9	6.0	7.3	2.4	
STAWN1320TH	●		13.2	4.9	6.0	7.3	2.4	
STAWN1330TH	●		13.3	4.9	6.0	7.3	2.4	
STAWN1340TH	●		13.4	4.9	6.0	7.3	2.4	
STAWN1350TH	●		13.5	5.1	6.2	7.6	2.5	STAWSS1350S16 STAWSN1350S16 STAWMN1350S16 STAWLN1350S16
STAWN1360TH	●		13.6	5.1	6.2	7.6	2.5	
STAWN1370TH	●		13.7	5.1	6.2	7.6	2.5	
STAWN1380TH	●		13.8	5.1	6.2	7.6	2.5	
STAWN1390TH	●		13.9	5.1	6.2	7.6	2.5	

Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	VP	15TF	CDI	LF	S	INSL	PL	
STAWN1400TH	●		14.0	5.3	6.4	7.8	2.5	STAWSS1400S16 STAWSN1400S16 STAWMN1400S16 STAWLN1400S16
STAWN1410TH	●		14.1	5.3	6.4	7.9	2.6	
STAWN1420TH	●		14.2	5.3	6.4	7.9	2.6	
STAWN1430TH	●		14.3	5.3	6.4	7.9	2.6	
STAWN1440TH	●		14.4	5.3	6.4	7.9	2.6	
STAWN1450TH	●		14.5	5.5	6.7	8.1	2.6	STAWSS1450S16 STAWSN1450S16 STAWMN1450S16 STAWLN1450S16
STAWN1460TH	●		14.6	5.5	6.7	8.2	2.7	
STAWN1470TH	●		14.7	5.5	6.7	8.2	2.7	
STAWN1480TH	●		14.8	5.5	6.7	8.2	2.7	
STAWN1490TH	●		14.9	5.5	6.7	8.2	2.7	
STAWN1500TH	●		15.0	5.7	6.9	8.4	2.7	STAWSS1500S20 STAWSN1500S20 STAWMN1500S20 STAWLN1500S20
STAWN1510TH	●		15.1	5.7	6.9	8.4	2.7	
STAWN1520TH	●		15.2	5.7	6.9	8.5	2.8	
STAWN1530TH	●		15.3	5.7	6.9	8.5	2.8	
STAWN1540TH	●		15.4	5.7	6.9	8.5	2.8	
STAWN1550T	●		15.5	5.9	7.1	8.7	2.8	STAWSS1600S20 STAWSN1600S20 STAWMN1600S20 STAWLN1600S20
STAWN1560T	●		15.6	5.9	7.1	8.7	2.8	
STAWN1570T	●		15.7	5.9	7.1	8.8	2.9	
STAWN1580T	●		15.8	5.9	7.1	8.8	2.9	
STAWN1590T	●		15.9	5.9	7.1	8.8	2.9	
STAWN1600T	●		16.0	5.9	7.1	8.8	2.9	
STAWN1610T	●		16.1	5.9	7.1	8.8	2.9	
STAWN1620T	●		16.2	5.9	7.1	8.8	2.9	
STAWN1630T	●		16.3	5.9	7.1	8.9	3.0	
STAWN1640T	●		16.4	5.9	7.1	8.9	3.0	
STAWN1650T	●		16.5	6.3	7.6	9.3	3.0	STAWSS1700S20 STAWSN1700S20 STAWMN1700S20 STAWLN1700S20
STAWN1660T	●		16.6	6.3	7.6	9.3	3.0	
STAWN1670T	●		16.7	6.3	7.6	9.3	3.0	
STAWN1680T	●		16.8	6.3	7.6	9.4	3.1	
STAWN1690T	●		16.9	6.3	7.6	9.4	3.1	
STAWN1700T	●		17.0	6.3	7.6	9.4	3.1	
STAWN1710T	●		17.1	6.3	7.6	9.4	3.1	
STAWN1720T	●		17.2	6.3	7.6	9.4	3.1	
STAWN1730T	●		17.3	6.3	7.6	9.4	3.1	
STAWN1740T	●		17.4	6.3	7.6	9.5	3.2	
STAWN1750T	●		17.5	6.7	8.1	9.9	3.2	STAWSS1800S20 STAWSN1800S20 STAWMN1800S20 STAWLN1800S20
STAWN1760T	●		17.6	6.7	8.1	9.9	3.2	
STAWN1770T	●		17.7	6.7	8.1	9.9	3.2	
STAWN1780T	●		17.8	6.7	8.1	9.9	3.2	
STAWN1790T	●		17.9	6.7	8.1	10.0	3.3	
STAWN1800T	●		18.0	6.7	8.1	10.0	3.3	
STAWN1810T	●		18.1	6.7	8.1	10.0	3.3	
STAWN1820T	●		18.2	6.7	8.1	10.0	3.3	
STAWN1830T	●		18.3	6.7	8.1	10.0	3.3	
STAWN1840T	●		18.4	6.7	8.1	10.0	3.3	

WSP
 (Für Guss)


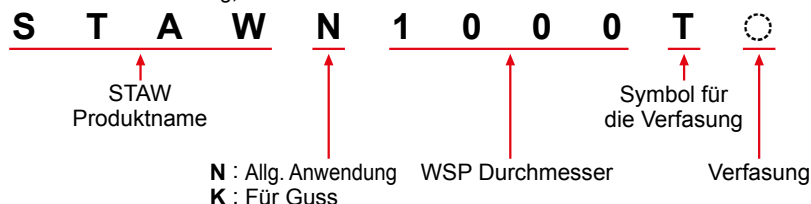
Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	DP5010		CDI	LF	S	INSL	PL	
STAWK1000TG	●		10.0	3.3	4.6	5.1	1.8	STAWSS1000S16 STAWSN1000S16 STAWMN1000S16 STAWLN1000S16
STAWK1010TG	●		10.1	3.3	4.6	5.1	1.8	
STAWK1020TG	●		10.2	3.3	4.6	5.2	1.9	
STAWK1030TG	●		10.3	3.3	4.6	5.2	1.9	
STAWK1040TG	●		10.4	3.3	4.6	5.2	1.9	
STAWK1050TG	●		10.5	3.5	4.8	5.4	1.9	STAWSS1050S16 STAWSN1050S16 STAWMN1050S16 STAWLN1050S16
STAWK1060TG	●		10.6	3.5	4.8	5.4	1.9	
STAWK1070TG	●		10.7	3.5	4.8	5.4	1.9	
STAWK1080TG	●		10.8	3.5	4.8	5.5	2.0	
STAWK1090TG	●		10.9	3.5	4.8	5.5	2.0	
STAWK1100TG	●		11.0	3.7	5.1	5.7	2.0	STAWSS1100S16 STAWSN1100S16 STAWMN1100S16 STAWLN1100S16
STAWK1110TG	●		11.1	3.7	5.1	5.7	2.0	
STAWK1120TG	●		11.2	3.7	5.1	5.7	2.0	
STAWK1130TG	●		11.3	3.7	5.1	5.8	2.1	
STAWK1140TG	●		11.4	3.7	5.1	5.8	2.1	
STAWK1150TG	●		11.5	3.9	5.3	6.0	2.1	STAWSS1150S16 STAWSN1150S16 STAWMN1150S16 STAWLN1150S16
STAWK1160TG	●		11.6	3.9	5.3	6.0	2.1	
STAWK1170TG	●		11.7	3.9	5.3	6.0	2.1	
STAWK1180TG	●		11.8	3.9	5.3	6.0	2.1	
STAWK1190TG	●		11.9	3.9	5.3	6.1	2.2	
STAWK1200TG	●		12.0	4.1	5.5	6.3	2.2	STAWSS1200S16 STAWSN1200S16 STAWMN1200S16 STAWLN1200S16
STAWK1210TG	●		12.1	4.1	5.5	6.3	2.2	
STAWK1220TG	●		12.2	4.1	5.5	6.3	2.2	
STAWK1230TG	●		12.3	4.1	5.5	6.3	2.2	
STAWK1240TG	●		12.4	4.1	5.5	6.4	2.3	
STAWK1250TG	●		12.5	4.2	5.8	6.5	2.3	STAWSS1250S16 STAWSN1250S16 STAWMN1250S16 STAWLN1250S16
STAWK1260TG	●		12.6	4.2	5.8	6.5	2.3	
STAWK1270TG	●		12.7	4.2	5.8	6.5	2.3	
STAWK1280TG	●		12.8	4.2	5.8	6.5	2.3	
STAWK1290TG	●		12.9	4.2	5.8	6.5	2.3	
STAWK1300TG	●		13.0	4.4	6.0	6.8	2.4	STAWSS1300S16 STAWSN1300S16 STAWMN1300S16 STAWLN1300S16
STAWK1310TG	●		13.1	4.4	6.0	6.8	2.4	
STAWK1320TG	●		13.2	4.4	6.0	6.8	2.4	
STAWK1330TG	●		13.3	4.4	6.0	6.8	2.4	
STAWK1340TG	●		13.4	4.4	6.0	6.8	2.4	
STAWK1350TG	●		13.5	4.6	6.2	7.1	2.5	STAWSS1350S16 STAWSN1350S16 STAWMN1350S16 STAWLN1350S16
STAWK1360TG	●		13.6	4.6	6.2	7.1	2.5	
STAWK1370TG	●		13.7	4.6	6.2	7.1	2.5	
STAWK1380TG	●		13.8	4.6	6.2	7.1	2.5	
STAWK1390TG	●		13.9	4.6	6.2	7.1	2.5	

Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	DP5010		CDI	LF	S	INSL	PL	
STAWK1400TG	●		14.0	4.8	6.4	7.3	2.5	STAWSS1400S16 STAWSN1400S16 STAWMN1400S16 STAWLN1400S16
STAWK1410TG	●		14.1	4.8	6.4	7.4	2.6	
STAWK1420TG	●		14.2	4.8	6.4	7.4	2.6	
STAWK1430TG	●		14.3	4.8	6.4	7.4	2.6	
STAWK1440TG	●		14.4	4.8	6.4	7.4	2.6	
STAWK1450TG	●		14.5	5.0	6.7	7.6	2.6	STAWSS1450S16 STAWSN1450S16 STAWMN1450S16 STAWLN1450S16
STAWK1460TG	●		14.6	5.0	6.7	7.7	2.7	
STAWK1470TG	●		14.7	5.0	6.7	7.7	2.7	
STAWK1480TG	●		14.8	5.0	6.7	7.7	2.7	
STAWK1490TG	●		14.9	5.0	6.7	7.7	2.7	
STAWK1500TG	●		15.0	5.2	6.9	7.9	2.7	STAWSS1500S20 STAWSN1500S20 STAWMN1500S20 STAWLN1500S20
STAWK1510TG	●		15.1	5.2	6.9	7.9	2.7	
STAWK1520TG	●		15.2	5.2	6.9	8.0	2.8	
STAWK1530TG	●		15.3	5.2	6.9	8.0	2.8	
STAWK1540TG	●		15.4	5.2	6.9	8.0	2.8	
STAWK1550TG	●		15.5	5.3	7.1	8.1	2.8	STAWSS1600S20 STAWSN1600S20 STAWMN1600S20 STAWLN1600S20
STAWK1560TG	●		15.6	5.3	7.1	8.1	2.8	
STAWK1570TG	●		15.7	5.3	7.1	8.2	2.9	
STAWK1580TG	●		15.8	5.3	7.1	8.2	2.9	
STAWK1590TG	●		15.9	5.3	7.1	8.2	2.9	
STAWK1600TG	●		16.0	5.3	7.1	8.2	2.9	
STAWK1610TG	●		16.1	5.3	7.1	8.2	2.9	
STAWK1620TG	●		16.2	5.3	7.1	8.2	2.9	
STAWK1630TG	●		16.3	5.3	7.1	8.3	3.0	
STAWK1640TG	●		16.4	5.3	7.1	8.3	3.0	STAWSS1700S20 STAWSN1700S20 STAWMN1700S20 STAWLN1700S20
STAWK1650TG	●		16.5	5.7	7.6	8.7	3.0	
STAWK1660TG	●		16.6	5.7	7.6	8.7	3.0	
STAWK1670TG	●		16.7	5.7	7.6	8.7	3.0	
STAWK1680TG	●		16.8	5.7	7.6	8.8	3.1	
STAWK1690TG	●		16.9	5.7	7.6	8.8	3.1	
STAWK1700TG	●		17.0	5.7	7.6	8.8	3.1	
STAWK1710TG	●		17.1	5.7	7.6	8.8	3.1	
STAWK1720TG	●		17.2	5.7	7.6	8.8	3.1	
STAWK1730TG	●		17.3	5.7	7.6	8.8	3.1	STAWSS1800S20 STAWSN1800S20 STAWMN1800S20 STAWLN1800S20
STAWK1740TG	●		17.4	5.7	7.6	8.9	3.2	
STAWK1750TG	●		17.5	6.0	8.1	9.2	3.2	
STAWK1760TG	●		17.6	6.0	8.1	9.2	3.2	
STAWK1770TG	●		17.7	6.0	8.1	9.2	3.2	
STAWK1780TG	●		17.8	6.0	8.1	9.2	3.2	
STAWK1790TG	●		17.9	6.0	8.1	9.3	3.3	
STAWK1800TG	●		18.0	6.0	8.1	9.3	3.3	
STAWK1810TG	●		18.1	6.0	8.1	9.3	3.3	
STAWK1820TG	●		18.2	6.0	8.1	9.3	3.3	STAWSS1800S20 STAWSN1800S20 STAWMN1800S20 STAWLN1800S20
STAWK1830TG	●		18.3	6.0	8.1	9.3	3.3	
STAWK1840TG	●		18.4	6.0	8.1	9.3	3.3	

FASENBREITE

Wenn eine WSP mit einer anderen Verfassung bevorzugt wird, verwenden Sie bitte folgende Symbole bei der Bestellbezeichnung.

(WSP Bestellbezeichnung)



(Verfassungen)

Verfassung	Fasenbreite (mm)
F	0
G	0.02—0.05
H	0.05—0.10
-(Standard)	0.10—0.15
K	0.15—0.20
S	0.20—0.25
M	0.25—0.30

SCHNITTDATENEMPFEHLUNGEN

Werkstoff	Bohrer Durchm. Bedingung Härte	Ø 10.0—Ø 12.9		Ø 13.0—Ø 13.9		Ø 14.0—Ø 15.4		Ø 15.5—Ø 18.4	
		Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P Allg. Baustahl	≤180HB	80 (60—100)	0.20 (0.15—0.25)	90 (70—110)	0.25 (0.20—0.30)	100 (80—120)	0.30 (0.25—0.35)	100 (80—120)	0.35 (0.25—0.40)
	180—280HB	80 (60—100)	0.20 (0.15—0.25)	90 (70—110)	0.25 (0.20—0.30)	100 (80—120)	0.30 (0.25—0.35)	100 (80—120)	0.35 (0.25—0.40)
	280—350HB	70 (60—90)	0.20 (0.15—0.25)	80 (60—100)	0.25 (0.20—0.30)	90 (70—110)	0.25 (0.20—0.30)	90 (70—110)	0.30 (0.20—0.35)
M Rostfreier Stahl	≤200HB	40 (30—50)	0.13 (0.10—0.16)	50 (40—60)	0.15 (0.12—0.18)	60 (50—70)	0.17 (0.14—0.20)	60 (50—70)	0.17 (0.14—0.20)
K Guss	Zugfestigkeit ≤350MPa	80 (60—100)	0.20 (0.15—0.25)	90 (70—110)	0.25 (0.20—0.30)	100 (80—120)	0.30 (0.25—0.35)	120 (80—140)	0.45 (0.35—0.55)
	Duktiler Guss Zugfestigkeit ≤450MPa	70 (60—90)	0.20 (0.15—0.25)	80 (60—100)	0.25 (0.20—0.30)	90 (70—110)	0.30 (0.25—0.35)	100 (80—120)	0.35 (0.25—0.40)

(Hinweis 1) Bei Verwendung eines Bohrers für eine Bohrtiefe von 1,5xDC kann der Vorschub um etwa 20% erhöht werden.

(Hinweis 2) Bei Verwendung des langen Bohrers (8xDC) muss die Schnittgeschwindigkeit um etwa 20% reduziert werden.

(Hinweis 3) Bei Verwendung des langen Bohrers (8xDC) empfehlen wir eine Pilotbohrung.

(Hinweis 4) Bitte verwenden Sie interne Kühlmittelzufuhr bei rostfreien Stählen. Bitte keine MMS (Minimalmengenschmierung) einsetzen.

GEBRAUCHSANLEITUNG

WSP-BEFESTIGUNG

1. Bevor Sie die WSP in den Halter einsetzen, vergewissern Sie sich, dass sich in der Halteröffnung bzw. in dem Schlitz weder Fremdkörper noch Schmutz befinden. Reinigen Sie den Halter gegebenenfalls mit Druckluft.
2. Verwenden Sie den beiliegenden Schlüssel, um die innere Schraube zu lockern und die Spitze des Halters zu öffnen. Setzen Sie dann die WSP in die Halteröffnung ein wie in Abb. 1 gezeigt.
*Achten Sie darauf, dass der Schlüssel beim Festziehen der Schraube einen engen Kontakt mit dem Kopf der Schraube hat.
3. Nachdem Sie die WSP in die Halteröffnung eingesetzt haben, ziehen Sie die innere Schraube fest und drücken Sie gleichzeitig die WSP in die Tasche (wie in Abb. 2 gezeigt), damit dieser richtig sitzt und sicher gespannt ist.
*Achten Sie darauf, dass der Schlüssel beim Festziehen der Schraube einen engen Kontakt mit dem Kopf der Schraube hat.

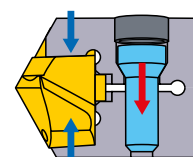
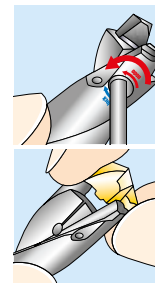
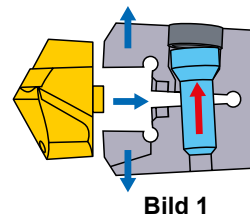
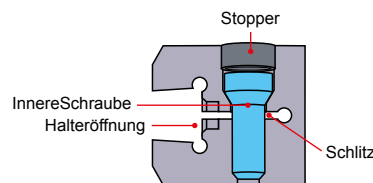
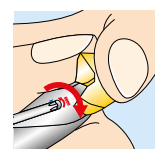


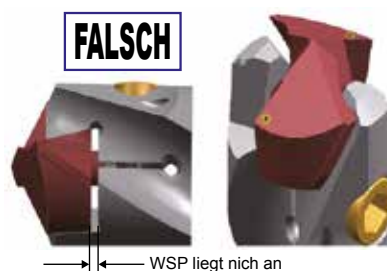
Bild 2



Spannschraube mit Drehmoment gemäß nachfolgender Tabelle festziehen.

Bohrer Durchm. (mm)	Dreh-moment	
	N•m	
10 – 12.9	1	
13 – 15.4	2	
15.5 – 18.4	2.5	

4. Vergewissern Sie sich, dass kein Spalt zwischen der Unterseite der WSP und der Halteröffnung besteht.



(Bemerkung) Wenn die WSP unzureichend oder nicht richtig eingespannt wird, kann die Bohrleistung nachlassen und/oder der Bohrer brechen. Achten Sie daher beim Einsetzen darauf, dass die Ausrichtungsmarkierungen am Halter und an der WSP übereinstimmen. Verwenden Sie bei der Bearbeitung Sicherheitsvorrichtungen und eine Schutzbrille.

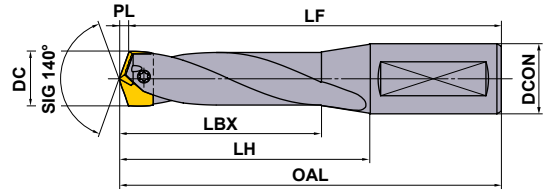
ERSATZTEILE

WSP-Träger	Set-Bestellbezeichnung (Innere Schraube und stopper)		
		Innere Schraube	Stopper
STAWSS/SN/MN/LN1000S16	WS203107TPS-35LH	WS203107TPS	WS35LH
STAWSS/SN/MN/LN1050S16	WS203107TPS-35LH	WS203107TPS	WS35LH
STAWSS/SN/MN/LN1100S16	WS203108TPS-35LH	WS203108TPS	WS35LH
STAWSS/SN/MN/LN1150S16	WS203108TPS-35LH	WS203108TPS	WS35LH
STAWSS/SN/MN/LN1200S16	WS203108TPS-35LH	WS203108TPS	WS35LH
STAWSS/SN/MN/LN1250S16	WS203108TPS-35LH	WS203108TPS	WS35LH
STAWSS/SN/MN/LN1300S16	WS253909TPS-45LH	WS253909TPS	WS45LH
STAWSS/SN/MN/LN1350S16	WS253909TPS-45LH	WS253909TPS	WS45LH
STAWSS/SN/MN/LN1400S16	WS253909TPS-45LH	WS253909TPS	WS45LH
STAWSS/SN/MN/LN1450S16	WS253909TPS-45LH	WS253909TPS	WS45LH
STAWSS/SN/MN/LN1500S20	WS253909TPS-45LH	WS253909TPS	WS45LH
STAWSS/SN/MN/LN1600S20	WS304912TPS-55LH	WS304912TPS	WS55LH
STAWSS/SN/MN/LN1700S20	WS304912TPS-55LH	WS304912TPS	WS55LH
STAWSS/SN/MN/LN1800S20	WS304912TPS-55LH	WS304912TPS	WS55LH

(Bemerkung) Das KIT beinhaltet Spannschraube, Stopper und Bedienungsanleitung. Wechseln Sie bitte die Ersatzteile entsprechend der beiliegenden Anleitung.



(Allg. Anwendung)



WSP-TRÄGER

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)									
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager	LBX	LH	OAL	LF	PL	DCON				
18.5 19.2	3	TAWSN1900S25	●	18.5	TAWNH1850T	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1850TG	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1850T	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1850TG	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1850T	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1850TG	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	18.6	TAWNH1860T	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1860TG	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1860T	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1860TG	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1860T	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1860TG	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	18.7	TAWNH1870T	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1870TG	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1870T	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1870TG	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1870T	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1870TG	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	18.8	TAWNH1880T	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1880TG	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1880T	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1880TG	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1880T	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1880TG	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	18.9	TAWNH1890T	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1890TG	●	71.4	102.4	158.4	155	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1890T	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1890TG	●	110.4	137.4	193.4	190	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1890T	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1890TG	●	165.4	188.4	244.4	241	3.4	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	19.0	TAWNH1900T	●	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1900TG	●	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1900T	●	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1900TG	●	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1900T	●	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1900TG	●	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	19.1	TAWNH1910T	●	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1910TG	●	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1910T	●	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1910TG	●	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1910T	●	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1910TG	●	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	19.2	TAWNH1920T	●	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1920TG	●	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1920T	●	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1920TG	●	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1920T	●	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1920TG	●	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS

(Bemerkung 1) Maße in Klammern repräsentieren die Größen, bei denen WSP des Typs TAWNH eingesetzt werden.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

WSP BESCHREIBUNG > L 142
 SCHNITTBEDINGUNGEN > L 146
 EINSATZ HINWEISE > L 147
 TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

TAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)										
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF	PL	DCON			
						VP15TF	DP5010	VP10H									
19.3 19.4	3	TAWSN1900S25	●	19.3	TAWNH1930T	●	□	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1930TG	●	□	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1930T	●	□	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1930TG	●	□	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1930T	●	□	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1930TG	●	□	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●	19.4	TAWNH1940T	●	□	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	3	TAWSN1900S25	●		TAWKH1940TG	●	□	71.5	102.5	158.5	155	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWNH1940T	●	□	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	5	TAWMN1900S25	●		TAWKH1940TG	●	□	110.5	137.5	193.5	190	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWNH1940T	●	□	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
	8	TAWLN1900S25	●		TAWKH1940TG	●	□	165.5	188.5	244.5	241	3.5	25	WS304517T	TKY10T	WPT4405	MK1KS
19.5 20.2	3	TAWSN2000S25	●	19.5	TAWNH1950T	●	□	75.5	102.5	158.5	155	3.5	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●		TAWKH1950TG	●	□	75.5	102.5	158.5	155	3.5	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWNH1950T	●	□	116.5	142.5	198.5	195	3.5	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWKH1950TG	●	□	116.5	142.5	198.5	195	3.5	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWNH1950T	●	□	173.5	196.5	252.5	249	3.5	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWKH1950TG	●	□	173.5	196.5	252.5	249	3.5	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●	19.6	TAWNH1960T	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●		TAWKH1960TG	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWNH1960T	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWKH1960TG	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWNH1960T	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWKH1960TG	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●	19.7	TAWNH1970T	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●		TAWKH1970TG	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWNH1970T	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWKH1970TG	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWNH1970T	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWKH1970TG	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●	19.8	TAWNH1980T	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●		TAWKH1980TG	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWNH1980T	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWKH1980TG	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWNH1980T	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWKH1980TG	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS
3	TAWSN2000S25	●	19.9	TAWNH1990T	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●		TAWKH1990TG	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWNH1990T	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWKH1990TG	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWNH1990T	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWKH1990TG	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●	20.0	TAWNH2000T	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●		TAWKH2000TG	●	□	75.6	102.6	158.6	155	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWNH2000T	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWKH2000TG	●	□	116.6	142.6	198.6	195	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWNH2000T	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWKH2000TG	●	□	173.6	196.6	252.6	249	3.6	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●	20.1	TAWNH2010T	□	□	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●		TAWKH2010TG	□	□	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWNH2010T	□	□	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWKH2010TG	□	□	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWNH2010T	□	□	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWKH2010TG	□	□	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●	20.2	TAWNH2020T	□	□	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
3	TAWSN2000S25	●		TAWKH2020TG	□	□	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWNH2020T	□	□	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
5	TAWMN2000S25	●		TAWKH2020TG	□	□	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWNH2020T	□	□	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
8	TAWLN2000S25	●		TAWKH2020TG	□	□	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	

(Bemerkung 1) Maße in Klammern repräsentieren die Größen, bei denen WSP des Typs TAWNH eingesetzt werden.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. □ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)									
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager VP15TF DP5010 VP10H	LBX	LH	OAL	LF	PL	DCON	Spannschraube	Schlüssel	Schlitz- Reiniger	Kupfer- paste
20.3 20.4	3	TAWSN2000S25	●	20.3	TAWNH2030T	☐	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●		TAWKH2030TG	☐	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWNH2030T	☐	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWKH2030TG	☐	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWNH2030T	☐	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWKH2030TG	☐	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●	20.4	TAWNH2040T	☐	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	3	TAWSN2000S25	●		TAWKH2040TG	☐	75.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWNH2040T	☐	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	5	TAWMN2000S25	●		TAWKH2040TG	☐	116.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWNH2040T	☐	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS
	8	TAWLN2000S25	●		TAWKH2040TG	☐	173.7	196.7	252.7	249	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS

BOHREN (WSP AUSFÜHRUNG)

TAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF	PL	DCON	Spannschraube	Schlüssel	Schlitz-Reiniger	Kupfer-paste
						VP15TF	DP5010	VP10H										
20.5 21.4	3	TAWSN2100S25	●	20.5	*TAWNH2050T	●	□	78.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2050TG	●	□	78.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2050T	●	□	121.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2050TG	●	□	121.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2050T	●	□	181.7	205.7	261.7	258	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2050TG	●	□	181.7	205.7	261.7	258	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	20.6	TAWNH2060T	□	□	78.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2060TG	□	□	78.7	102.7	158.7	155	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2060T	□	□	121.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2060TG	□	□	121.7	142.7	198.7	195	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2060T	□	□	181.7	205.7	261.7	258	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2060TG	□	□	181.7	205.7	261.7	258	3.7	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	20.7	TAWNH2070T	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2070TG	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2070T	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2070TG	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2070T	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2070TG	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	20.8	TAWNH2080T	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2080TG	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2080T	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2080TG	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2080T	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2080TG	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	20.9	TAWNH2090T	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2090TG	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2090T	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2090TG	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2090T	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2090TG	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	21.0	TAWNH2100T	●	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2100TG	●	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2100T	●	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2100TG	●	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2100T	●	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2100TG	●	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	21.1	TAWNH2110T	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2110TG	□	□	78.8	102.8	158.8	155	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2110T	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2110TG	□	□	121.8	142.8	198.8	195	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2110T	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2110TG	□	□	181.8	205.8	261.8	258	3.8	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	21.2	TAWNH2120T	□	□	78.9	102.9	158.9	155	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2120TG	□	□	78.9	102.9	158.9	155	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2120T	□	□	121.9	142.9	198.9	195	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2120TG	□	□	121.9	142.9	198.9	195	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2120T	□	□	181.9	205.9	261.9	258	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2120TG	□	□	181.9	205.9	261.9	258	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	21.3	TAWNH2130T	□	□	78.9	102.9	158.9	155	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2130TG	□	□	78.9	102.9	158.9	155	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2130T	□	□	121.9	142.9	198.9	195	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2130TG	□	□	121.9	142.9	198.9	195	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2130T	□	□	181.9	205.9	261.9	258	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2130TG	□	□	181.9	205.9	261.9	258	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●	21.4	TAWNH2140T	□	□	78.9	102.9	158.9	155	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	3	TAWSN2100S25	●		TAWKH2140TG	□	□	78.9	102.9	158.9	155	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWNH2140T	□	□	121.9	142.9	198.9	195	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	5	TAWMN2100S25	●		TAWKH2140TG	□	□	121.9	142.9	198.9	195	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWNH2140T	□	□	181.9	205.9	261.9	258	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	
	8	TAWLN2100S25	●		TAWKH2140TG	□	□	181.9	205.9	261.9	258	3.9	25	WS304518T	TKY10T	WPT4405	MK1KS	

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF	PL	DCON	Spannschraube	Schlüssel	Schlitz-Reiniger	Kupfer-paste
						VP15TF	DP5010	VP10H										
21.5 22.4	3	TAWSN2200S25	●	21.5	*TAWNH2150T	●			83.2	108.2	164.2	160	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2150TG		●		83.2	108.2	164.2	160	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2150T	●			128.2	148.2	204.2	200	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2150TG		●		128.2	148.2	204.2	200	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2150T	●			189.9	213.9	269.9	266	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2150TG		●		189.9	213.9	269.9	266	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	21.6	TAWNH2160T				83.2	108.2	164.2	160	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2160TG				83.2	108.2	164.2	160	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2160T				128.2	148.2	204.2	200	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2160TG				128.2	148.2	204.2	200	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2160T				189.9	213.9	269.9	266	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2160TG				189.9	213.9	269.9	266	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	21.7	TAWNH2170T				83.2	108.2	164.2	160	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2170TG				83.2	108.2	164.2	160	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2170T				128.2	148.2	204.2	200	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2170TG				128.2	148.2	204.2	200	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2170T				189.9	213.9	269.9	266	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2170TG				189.9	213.9	269.9	266	3.9	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	21.8	TAWNH2180T				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2180TG				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2180T				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2180TG				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2180T				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2180TG				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	21.9	TAWNH2190T				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2190TG				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2190T				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2190TG				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2190T				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2190TG				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	22.0	TAWNH2200T	●			83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2200TG		●		83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2200T	●			128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2200TG		●		128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2200T	●			190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2200TG		●		190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	22.1	TAWNH2210T				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2210TG				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2210T				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2210TG				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2210T				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2210TG				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	22.2	TAWNH2220T				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2220TG				83.3	108.3	164.3	160	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2220T				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2220TG				128.3	148.3	204.3	200	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2220T				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2220TG				190.0	214.0	270.0	266	4.0	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	22.3	TAWNH2230T				83.4	108.4	164.4	160	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2230TG				83.4	108.4	164.4	160	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2230T				128.4	148.4	204.4	200	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2230TG				128.4	148.4	204.4	200	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2230T				190.1	214.1	270.1	266	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2230TG				190.1	214.1	270.1	266	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●	22.4	TAWNH2240T				83.4	108.4	164.4	160	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	3	TAWSN2200S25	●		TAWKH2240TG				83.4	108.4	164.4	160	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWNH2240T				128.4	148.4	204.4	200	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	5	TAWMN2200S25	●		TAWKH2240TG				128.4	148.4	204.4	200	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWNH2240T				190.1	214.1	270.1	266	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS
	8	TAWLN2200S25	●		TAWKH2240TG				190.1	214.1	270.1	266	4.1	25	WS355520T	TKY15T	WPT4405	MK1KS

BOHREN (WSP AUSFÜHRUNG)

TAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF					PL	DCON
						VP15TF	DP5010	VP10H										
22.5 23.4	3	TAWSN2300S25	●	22.5	*TAWNH2250T	●			86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2250TG		●		86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2250T	●			133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2250TG		●		133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2250T	●			198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2250TG		●		198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	22.6	TAWNH2260T				86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2260TG				86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2260T				133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2260TG				133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2260T				198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2260TG				198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	22.7	TAWNH2270T				86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2270TG				86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2270T				133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2270TG				133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2270T				198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2270TG				198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	22.8	TAWNH2280T				86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2280TG				86.4	108.4	164.4	160	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2280T				133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2280TG				133.4	158.4	214.4	210	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2280T				198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2280TG				198.1	227.1	283.1	279	4.1	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	22.9	TAWNH2290T				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2290TG				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2290T				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2290TG				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2290T				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2290TG				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	23.0	TAWNH2300T	●			86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2300TG		●		86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2300T	●			133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2300TG		●		133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2300T	●			198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2300TG		●		198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	23.1	TAWNH2310T				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2310TG				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2310T				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2310TG				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2310T				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2310TG				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	23.2	TAWNH2320T				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2320TG				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2320T				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2320TG				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2320T				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2320TG				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	23.3	TAWNH2330T				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2330TG				86.5	108.5	164.5	160	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2330T				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2330TG				133.5	158.5	214.5	210	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2330T				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2330TG				198.2	227.2	283.2	279	4.2	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●	23.4	TAWNH2340T				86.6	108.6	164.6	160	4.3	25	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAVSN2300S25	●		TAWKH2340TG				86.6	108.6	164.6	160	4.3	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWNH2340T				133.6	158.6	214.6	210	4.3	25	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAVMN2300S25	●		TAWKH2340TG				133.6	158.6	214.6	210	4.3	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWNH2340T				198.3	227.3	283.3	279	4.3	25	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAVLN2300S25	●		TAWKH2340TG				198.3	227.3	283.3	279	4.3	25	WS355521T	TKY15T	WPT4405	MK1KS

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF	PL	DCON				
						VP15TF	DP5010	VP10H										
23.5 24.4	3	TAWSN2400S32	●	23.5	*TAWNH2350T	●			90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2350TG		●		90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2350T	●			139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2350TG		●		139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2350T	●			206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2350TG		●		206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	23.6	TAWNH2360T				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2360TG				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2360T				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2360TG				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2360T				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2360TG				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	23.7	TAWNH2370T				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2370TG				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2370T				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2370TG				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2370T				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2370TG				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	23.8	TAWNH2380T				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2380TG				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2380T				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2380TG				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2380T				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2380TG				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	23.9	TAWNH2390T				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2390TG				90.6	114.6	174.6	170	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2390T				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2390TG				139.6	164.6	224.6	220	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2390T				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2390TG				206.3	236.3	296.3	292	4.3	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	24.0	TAWNH2400T	●			90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2400TG		●		90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2400T	●			139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2400TG		●		139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2400T	●			206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2400TG		●		206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	24.1	TAWNH2410T				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2410TG				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2410T				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2410TG				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2410T				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2410TG				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	24.2	TAWNH2420T				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2420TG				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2420T				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2420TG				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2420T				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2420TG				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	24.3	TAWNH2430T				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2430TG				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2430T				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2430TG				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2430T				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2430TG				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●	24.4	TAWNH2440T				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	3	TAWSN2400S32	●		TAWKH2440TG				90.7	114.7	174.7	170	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWNH2440T				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	5	TAWMN2400S32	●		TAWKH2440TG				139.7	164.7	224.7	220	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWNH2440T				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS
	8	TAWLN2400S32	●		TAWKH2440TG				206.4	236.4	296.4	292	4.4	32	WS355521T	TKY15T	WPT4405	MK1KS

WSP BESCHREIBUNG ➤ L 142
SCHNITTBEDINGUNGEN ➤ L 146
EINSATZ HINWEISE ➤ L 147
TECHNISCHE DATEN ➤ N001

BOHREN (WSP AUSFÜHRUNG)

TAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF					PL	DCON
						VP15TF	DP5010	VP10H										
24.5 25.4	3	TAWSN2500S32	●	24.5	*TAWNH2450T	●			93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2450TG		●		93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2450T	●			145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2450TG		●		145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2450T	●			214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2450TG		●		214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	24.6	TAWNH2460T				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2460TG				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2460T				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2460TG				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2460T				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2460TG				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	24.7	TAWNH2470T				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2470TG				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2470T				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2470TG				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2470T				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2470TG				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	24.8	TAWNH2480T				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2480TG				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2480T				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2480TG				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2480T				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2480TG				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	24.9	TAWNH2490T				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2490TG				93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2490T				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2490TG				145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2490T				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2490TG				214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	25.0	TAWNH2500T	●			93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2500TG		●		93.1	115.1	175.1	171	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2500T	●			145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2500TG		●		145.1	170.1	230.1	226	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2500T	●			214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2500TG		●		214.5	244.5	304.5	300	4.5	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	25.1	TAWNH2510T				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2510TG				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2510T				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2510TG				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2510T				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2510TG				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	25.2	TAWNH2520T				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2520TG				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2520T				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2520TG				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2520T				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2520TG				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	25.3	TAWNH2530T				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2530TG				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2530T				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2530TG				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2530T				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2530TG				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●	25.4	TAWNH2540T				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	3	TAVSN2500S32	●		TAWKH2540TG				93.2	115.2	175.2	171	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWNH2540T				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	5	TAVMN2500S32	●		TAWKH2540TG				145.2	170.2	230.2	226	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWNH2540T				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS
	8	TAVLN2500S32	●		TAWKH2540TG				214.6	244.6	304.6	300	4.6	32	WS406023T	TKY25T	WPT4405	MK1KS

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

WSP BESCHREIBUNG	➤ L 142
SCHNITTBEDINGUNGEN	➤ L 146
EINSATZ HINWEISE	➤ L 147
TECHNISCHE DATEN	➤ N001

BOHREN (WSP AUSFÜHRUNG)

TAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)										
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF					PL
						VP15TF	DP5010	VP10H									
26.5 27.4	3	TAWSN2700S32	●	26.5	*TAWNH2650T	●	□	99.4	120.4	180.4	176	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2650TG	●	□	99.4	120.4	180.4	176	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2650T	●	□	156.4	180.4	240.4	236	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2650TG	●	□	156.4	180.4	240.4	236	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2650T	●	□	230.8	260.8	320.8	316	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2650TG	●	□	230.8	260.8	320.8	316	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	26.6	TAWNH2660T	□	□	99.4	120.4	180.4	176	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2660TG	□	□	99.4	120.4	180.4	176	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2660T	□	□	156.4	180.4	240.4	236	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2660TG	□	□	156.4	180.4	240.4	236	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2660T	□	□	230.8	260.8	320.8	316	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2660TG	□	□	230.8	260.8	320.8	316	4.8	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	26.7	TAWNH2670T	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2670TG	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2670T	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2670TG	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2670T	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2670TG	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	26.8	TAWNH2680T	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2680TG	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2680T	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2680TG	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2680T	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2680TG	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	26.9	TAWNH2690T	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2690TG	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2690T	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2690TG	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2690T	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2690TG	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	27.0	TAWNH2700T	●	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2700TG	●	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2700T	●	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2700TG	●	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2700T	●	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2700TG	●	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	27.1	TAWNH2710T	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2710TG	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2710T	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2710TG	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2710T	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2710TG	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	27.2	TAWNH2720T	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2720TG	□	□	99.5	120.5	180.5	176	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2720T	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2720TG	□	□	156.5	180.5	240.5	236	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2720T	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2720TG	□	□	230.9	260.9	320.9	316	4.9	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	27.3	TAWNH2730T	□	□	99.6	120.6	180.6	176	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2730TG	□	□	99.6	120.6	180.6	176	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2730T	□	□	156.6	180.6	240.6	236	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2730TG	□	□	156.6	180.6	240.6	236	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2730T	□	□	231.0	261.0	321.0	316	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2730TG	□	□	231.0	261.0	321.0	316	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●	27.4	TAWNH2740T	□	□	99.6	120.6	180.6	176	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	3	TAWSN2700S32	●		TAWKH2740TG	□	□	99.6	120.6	180.6	176	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWNH2740T	□	□	156.6	180.6	240.6	236	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	5	TAWMN2700S32	●		TAWKH2740TG	□	□	156.6	180.6	240.6	236	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWNH2740T	□	□	231.0	261.0	321.0	316	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS
	8	TAWLN2700S32	●		TAWKH2740TG	□	□	231.0	261.0	321.0	316	5.0	32	WS406024T	TKY25T	WPT4405	MK1KS

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF					PL	DCON
						VP15TF	DP5010	VP10H										
27.5 28.4	3	TAWSN2800S32	●	27.5	*TAWNH2750T	●			102.2	125.2	185.2	180	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2750TG		●		102.2	125.2	185.2	180	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2750T	●			162.2	185.2	245.2	240	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2750TG		●		162.2	185.2	245.2	240	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2750T	●			239.0	269.0	329.0	324	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2750TG		●		239.0	269.0	329.0	324	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	27.6	TAWNH2760T				102.2	125.2	185.2	180	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2760TG				102.2	125.2	185.2	180	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2760T				162.2	185.2	245.2	240	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2760TG				162.2	185.2	245.2	240	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2760T				239.0	269.0	329.0	324	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2760TG				239.0	269.0	329.0	324	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	27.7	TAWNH2770T				102.2	125.2	185.2	180	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2770TG				102.2	125.2	185.2	180	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2770T				162.2	185.2	245.2	240	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2770TG				162.2	185.2	245.2	240	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2770T				239.0	269.0	329.0	324	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2770TG				239.0	269.0	329.0	324	5.0	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	27.8	TAWNH2780T				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2780TG				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2780T				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2780TG				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2780T				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2780TG				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	27.9	TAWNH2790T				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2790TG				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2790T				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2790TG				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2790T				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2790TG				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	28.0	TAWNH2800T	●			102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2800TG		●		102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2800T	●			162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2800TG		●		162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2800T	●			239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2800TG		●		239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	28.1	TAWNH2810T				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2810TG				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2810T				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2810TG				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2810T				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2810TG				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	28.2	TAWNH2820T				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2820TG				102.3	125.3	185.3	180	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2820T				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2820TG				162.3	185.3	245.3	240	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2820T				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2820TG				239.1	269.1	329.1	324	5.1	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	28.3	TAWNH2830T				102.4	125.4	185.4	180	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2830TG				102.4	125.4	185.4	180	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2830T				162.4	185.4	245.4	240	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2830TG				162.4	185.4	245.4	240	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2830T				239.2	269.2	329.2	324	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2830TG				239.2	269.2	329.2	324	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●	28.4	TAWNH2840T				102.4	125.4	185.4	180	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	3	TAVSN2800S32	●		TAWKH2840TG				102.4	125.4	185.4	180	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWNH2840T				162.4	185.4	245.4	240	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	5	TAVMN2800S32	●		TAWKH2840TG				162.4	185.4	245.4	240	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWNH2840T				239.2	269.2	329.2	324	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS
	8	TAVLN2800S32	●		TAWKH2840TG				239.2	269.2	329.2	324	5.2	32	WS508026T	TKY27T	WPT4405	MK1KS

WSP BESCHREIBUNG > L 142
 SCHNITTBEDINGUNGEN > L 146
 EINSATZ HINWEISE > L 147
 TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

TAW

HARTMETALL

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)										
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF					PL
						VP15TF	DP5010	VP10H									
28.5 29.4	3	TAWSN2900S32	●	28.5	*TAWNH2850T	●	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2850TG	●	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2850T	●	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2850TG	●	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2850T	●	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2850TG	●	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	28.6	TAWNH2860T	□	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2860TG	□	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2860T	□	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2860TG	□	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2860T	□	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2860TG	□	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	28.7	TAWNH2870T	□	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2870TG	□	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2870T	□	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2870TG	□	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2870T	□	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2870TG	□	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	28.8	TAWNH2880T	□	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2880TG	□	□	105.4	130.4	190.4	185	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2880T	□	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2880TG	□	□	167.4	190.4	250.4	245	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2880T	□	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2880TG	□	□	247.2	277.2	337.2	332	5.2	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	28.9	TAWNH2890T	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2890TG	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2890T	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2890TG	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2890T	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2890TG	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	29.0	TAWNH2900T	●	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2900TG	●	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2900T	●	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2900TG	●	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2900T	●	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2900TG	●	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	29.1	TAWNH2910T	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2910TG	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2910T	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2910TG	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2910T	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2910TG	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	29.2	TAWNH2920T	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2920TG	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2920T	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2920TG	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2920T	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2920TG	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	29.3	TAWNH2930T	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2930TG	□	□	105.5	130.5	190.5	185	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2930T	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2930TG	□	□	167.5	190.5	250.5	245	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2930T	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2930TG	□	□	247.3	277.3	337.3	332	5.3	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●	29.4	TAWNH2940T	□	□	105.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAV SN2900S32	●		TAWKH2940TG	□	□	105.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWNH2940T	□	□	167.6	190.6	250.6	245	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAV MN2900S32	●		TAWKH2940TG	□	□	167.6	190.6	250.6	245	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWNH2940T	□	□	247.4	277.4	337.4	332	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAV LN2900S32	●		TAWKH2940TG	□	□	247.4	277.4	337.4	332	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS

(Bemerkung 1) Die obigen Abmessungen beziehen sich auf die montierte STAWN-WSP (VP15TF) mit der Markierung *.

(Bemerkung 2) Bei Bedarf von abweichenden Geometrien setzen Sie sich mit unserem Hause in Verbindung.

(Andere Durchmesser und Längen können bestellt werden).

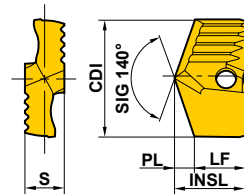
● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

DC (mm)	Bohrtiefe (l/d)	Halter		WSP			Abmessungen (mm)											
		Bestellbezeichnung	Lager	DC (mm)	Bestellbezeichnung	Lager			LBX	LH	OAL	LF	PL	DCON	Spannschraube	Schlüssel	Schlitz-Reiniger	Kupfer-paste
						VP15TF	DP5010	VP10H										
29.5 30.4	3	TAWSN3000S32	●	29.5	*TAWNH2950T	●			109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH2950TG		●		109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH2950T	●			172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH2950TG		●		172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH2950T	●			255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH2950TG		●		255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	29.6	TAWNH2960T				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH2960TG				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH2960T				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH2960TG				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH2960T				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH2960TG				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	29.7	TAWNH2970T				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH2970TG				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH2970T				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH2970TG				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH2970T				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH2970TG				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	29.8	TAWNH2980T				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH2980TG				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH2980T				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH2980TG				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH2980T				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH2980TG				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	29.9	TAWNH2990T				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH2990TG				109.6	130.6	190.6	185	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH2990T				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH2990TG				172.6	200.6	260.6	255	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH2990T				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH2990TG				255.4	290.4	350.4	345	5.4	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	30.0	TAWNH3000T	●			109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH3000TG		●		109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH3000T	●			172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH3000TG		●		172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH3000T	●			255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH3000TG		●		255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	30.1	TAWNH3010T				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH3010TG				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH3010T				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH3010TG				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH3010T				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH3010TG				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	30.2	TAWNH3020T				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH3020TG				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH3020T				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH3020TG				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH3020T				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH3020TG				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	30.3	TAWNH3030T				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH3030TG				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH3030T				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH3030TG				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH3030T				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH3030TG				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●	30.4	TAWNH3040T				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	3	TAWSN3000S32	●		TAWKH3040TG				109.7	130.7	190.7	185	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWNH3040T				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	5	TAWMN3000S32	●		TAWKH3040TG				172.7	200.7	260.7	255	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWNH3040T				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS
	8	TAWLN3000S32	●		TAWKH3040TG				255.5	290.5	350.5	345	5.5	32	WS508027T	TKY27T	WPT4405	MK1KS

WSP

Typ H



Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	VP15TF	VP10H	CDI	LF	S	INSL	PL	
TAWNH1850T	●	□	18.5	9.3	7.0	12.7	3.4	TAWSN 1900S25
TAWNH1860T	●	□	18.6	9.3	7.0	12.7	3.4	
TAWNH1870T	●	□	18.7	9.3	7.0	12.7	3.4	
TAWNH1880T	●	□	18.8	9.3	7.0	12.7	3.4	
TAWNH1890T	●	□	18.9	9.3	7.0	12.7	3.4	
TAWNH1900T	●	□	19.0	9.2	7.0	12.7	3.5	
TAWNH1910T	●	□	19.1	9.2	7.0	12.7	3.5	
TAWNH1920T	●	□	19.2	9.2	7.0	12.7	3.5	
TAWNH1930T	●	□	19.3	9.2	7.0	12.7	3.5	
TAWNH1940T	●	□	19.4	9.2	7.0	12.7	3.5	
TAWNH1950T	●	□	19.5	9.1	7.0	12.6	3.5	TAWSN 2000S25
TAWNH1960T	●	□	19.6	9.1	7.0	12.7	3.6	
TAWNH1970T	●	□	19.7	9.1	7.0	12.7	3.6	
TAWNH1980T	●	□	19.8	9.1	7.0	12.7	3.6	
TAWNH1990T	●	□	19.9	9.1	7.0	12.7	3.6	
TAWNH2000T	●	□	20.0	9.0	7.0	12.6	3.6	
TAWNH2010T	□	□	20.1	9.0	7.0	12.7	3.7	
TAWNH2020T	□	□	20.2	9.0	7.0	12.7	3.7	
TAWNH2030T	□	□	20.3	9.0	7.0	12.7	3.7	
TAWNH2040T	□	□	20.4	9.0	7.0	12.7	3.7	
TAWNH2050T	●	□	20.5	8.9	7.0	12.6	3.7	TAWSN 2100S25
TAWNH2060T	□	□	20.6	8.9	7.0	12.6	3.7	
TAWNH2070T	□	□	20.7	8.9	7.0	12.7	3.8	
TAWNH2080T	□	□	20.8	8.9	7.0	12.7	3.8	
TAWNH2090T	□	□	20.9	8.9	7.0	12.7	3.8	
TAWNH2100T	●	□	21.0	8.8	7.0	12.6	3.8	
TAWNH2110T	□	□	21.1	8.8	7.0	12.6	3.8	
TAWNH2120T	□	□	21.2	8.8	7.0	12.7	3.9	
TAWNH2130T	□	□	21.3	8.8	7.0	12.7	3.9	
TAWNH2140T	□	□	21.4	8.8	7.0	12.7	3.9	
TAWNH2150T	●	□	21.5	10.6	8.0	14.5	3.9	TAWSN 2200S25
TAWNH2160T	□	□	21.6	10.6	8.0	14.5	3.9	
TAWNH2170T	□	□	21.7	10.6	8.0	14.5	3.9	
TAWNH2180T	□	□	21.8	10.6	8.0	14.6	4.0	
TAWNH2190T	□	□	21.9	10.6	8.0	14.6	4.0	
TAWNH2200T	●	□	22.0	10.5	8.0	14.5	4.0	
TAWNH2210T	□	□	22.1	10.5	8.0	14.5	4.0	
TAWNH2220T	□	□	22.2	10.5	8.0	14.5	4.0	
TAWNH2230T	□	□	22.3	10.5	8.0	14.6	4.1	
TAWNH2240T	□	□	22.4	10.5	8.0	14.6	4.1	

Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	VP15TF	VP10H	CDI	LF	S	INSL	PL	
TAWNH2250T	●	□	22.5	10.4	8.0	14.5	4.1	TAWSN 2300S25
TAWNH2260T	□	□	22.6	10.4	8.0	14.5	4.1	
TAWNH2270T	□	□	22.7	10.4	8.0	14.5	4.1	
TAWNH2280T	□	□	22.8	10.4	8.0	14.5	4.1	
TAWNH2290T	□	□	22.9	10.4	8.0	14.6	4.2	
TAWNH2300T	●	□	23.0	10.3	8.0	14.5	4.2	
TAWNH2310T	□	□	23.1	10.3	8.0	14.5	4.2	
TAWNH2320T	□	□	23.2	10.3	8.0	14.5	4.2	
TAWNH2330T	□	□	23.3	10.3	8.0	14.5	4.2	
TAWNH2340T	□	□	23.4	10.3	8.0	14.6	4.3	
TAWNH2350T	●	□	23.5	10.2	8.0	14.5	4.3	TAWSN 2400S32
TAWNH2360T	□	□	23.6	10.2	8.0	14.5	4.3	
TAWNH2370T	□	□	23.7	10.2	8.0	14.5	4.3	
TAWNH2380T	□	□	23.8	10.2	8.0	14.5	4.3	
TAWNH2390T	□	□	23.9	10.2	8.0	14.5	4.3	
TAWNH2400T	●	□	24.0	10.1	8.0	14.5	4.4	
TAWNH2410T	□	□	24.1	10.1	8.0	14.5	4.4	
TAWNH2420T	□	□	24.2	10.1	8.0	14.5	4.4	
TAWNH2430T	□	□	24.3	10.1	8.0	14.5	4.4	
TAWNH2440T	□	□	24.4	10.1	8.0	14.5	4.4	
TAWNH2450T	●	□	24.5	11.7	9.0	16.2	4.5	TAWSN 2500S32
TAWNH2460T	□	□	24.6	11.7	9.0	16.2	4.5	
TAWNH2470T	□	□	24.7	11.7	9.0	16.2	4.5	
TAWNH2480T	□	□	24.8	11.7	9.0	16.2	4.5	
TAWNH2490T	□	□	24.9	11.7	9.0	16.2	4.5	
TAWNH2500T	●	□	25.0	11.6	9.0	16.1	4.5	
TAWNH2510T	□	□	25.1	11.6	9.0	16.2	4.6	
TAWNH2520T	□	□	25.2	11.6	9.0	16.2	4.6	
TAWNH2530T	□	□	25.3	11.6	9.0	16.2	4.6	
TAWNH2540T	□	□	25.4	11.6	9.0	16.2	4.6	
TAWNH2550T	●	□	25.5	11.5	9.0	16.1	4.6	TAWSN 2600S32
TAWNH2560T	□	□	25.6	11.5	9.0	16.2	4.7	
TAWNH2570T	□	□	25.7	11.5	9.0	16.2	4.7	
TAWNH2580T	□	□	25.8	11.5	9.0	16.2	4.7	
TAWNH2590T	□	□	25.9	11.5	9.0	16.2	4.7	
TAWNH2600T	●	□	26.0	11.4	9.0	16.1	4.7	
TAWNH2610T	□	□	26.1	11.4	9.0	16.1	4.7	
TAWNH2620T	□	□	26.2	11.4	9.0	16.2	4.8	
TAWNH2630T	□	□	26.3	11.4	9.0	16.2	4.8	
TAWNH2640T	□	□	26.4	11.4	9.0	16.2	4.8	

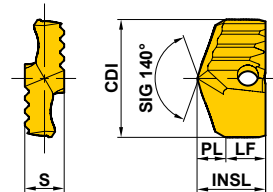
● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

Bestellbezeichnung	Lager		Abmessungen (mm)					WSP-Träger
	VP15TF	VP10H	CDI	LF	S	INSL	PL	
TAWNH2650T	●	□	26.5	11.3	9.0	16.1	4.8	TAWSN 2700S32
TAWNH2660T	□	□	26.6	11.3	9.0	16.1	4.8	
TAWNH2670T	□	□	26.7	11.3	9.0	16.2	4.9	
TAWNH2680T	□	□	26.8	11.3	9.0	16.2	4.9	
TAWNH2690T	□	□	26.9	11.3	9.0	16.2	4.9	
TAWNH2700T	●	□	27.0	11.2	9.0	16.1	4.9	
TAWNH2710T	□	□	27.1	11.2	9.0	16.1	4.9	
TAWNH2720T	□	□	27.2	11.2	9.0	16.1	4.9	
TAWNH2730T	□	□	27.3	11.2	9.0	16.2	5.0	
TAWNH2740T	□	□	27.4	11.2	9.0	16.2	5.0	
TAWNH2750T	●	□	27.5	12.3	10.0	17.3	5.0	TAWSN 2800S32
TAWNH2760T	□	□	27.6	12.3	10.0	17.3	5.0	
TAWNH2770T	□	□	27.7	12.3	10.0	17.3	5.0	
TAWNH2780T	□	□	27.8	12.3	10.0	17.4	5.1	
TAWNH2790T	□	□	27.9	12.3	10.0	17.4	5.1	
TAWNH2800T	●	□	28.0	12.2	10.0	17.3	5.1	
TAWNH2810T	□	□	28.1	12.2	10.0	17.3	5.1	
TAWNH2820T	□	□	28.2	12.2	10.0	17.3	5.1	
TAWNH2830T	□	□	28.3	12.2	10.0	17.4	5.2	
TAWNH2840T	□	□	28.4	12.2	10.0	17.4	5.2	
TAWNH2850T	●	□	28.5	12.1	10.0	17.3	5.2	TAWSN 2900S32
TAWNH2860T	□	□	28.6	12.1	10.0	17.3	5.2	
TAWNH2870T	□	□	28.7	12.1	10.0	17.3	5.2	
TAWNH2880T	□	□	28.8	12.1	10.0	17.3	5.2	
TAWNH2890T	□	□	28.9	12.1	10.0	17.4	5.3	
TAWNH2900T	●	□	29.0	12.0	10.0	17.3	5.3	
TAWNH2910T	□	□	29.1	12.0	10.0	17.3	5.3	
TAWNH2920T	□	□	29.2	12.0	10.0	17.3	5.3	
TAWNH2930T	□	□	29.3	12.0	10.0	17.3	5.3	
TAWNH2940T	□	□	29.4	12.0	10.0	17.4	5.4	
TAWNH2950T	●	□	29.5	11.9	10.0	17.3	5.4	TAWSN 3000S32
TAWNH2960T	□	□	29.6	11.9	10.0	17.3	5.4	
TAWNH2970T	□	□	29.7	11.9	10.0	17.3	5.4	
TAWNH2980T	□	□	29.8	11.9	10.0	17.3	5.4	
TAWNH2990T	□	□	29.9	11.9	10.0	17.3	5.4	
TAWNH3000T	●	□	30.0	11.8	10.0	17.3	5.5	
TAWNH3010T	□	□	30.1	11.8	10.0	17.3	5.5	
TAWNH3020T	□	□	30.2	11.8	10.0	17.3	5.5	
TAWNH3030T	□	□	30.3	11.8	10.0	17.3	5.5	
TAWNH3040T	□	□	30.4	11.8	10.0	17.3	5.5	

WSP

Typ H
(Für Guss)



Bestellbezeichnung	Lager	Abmessungen (mm)					WSP-Träger
	DP5010	CDI	LF	S	INSL	PL	
TAWKH1850TG	●	18.5	8.6	7.0	12.0	3.4	TAWSN 1900S25
TAWKH1860TG	●	18.6	8.6	7.0	12.0	3.4	
TAWKH1870TG	●	18.7	8.6	7.0	12.0	3.4	
TAWKH1880TG	●	18.8	8.6	7.0	12.0	3.4	
TAWKH1890TG	●	18.9	8.6	7.0	12.0	3.4	
TAWKH1900TG	●	19.0	8.5	7.0	12.0	3.5	
TAWKH1910TG	●	19.1	8.5	7.0	12.0	3.5	
TAWKH1920TG	●	19.2	8.5	7.0	12.0	3.5	
TAWKH1930TG	●	19.3	8.5	7.0	12.0	3.5	
TAWKH1940TG	●	19.4	8.5	7.0	12.0	3.5	
TAWKH1950TG	●	19.5	8.4	7.0	11.9	3.5	TAWSN 2000S25
TAWKH1960TG	●	19.6	8.4	7.0	12.0	3.6	
TAWKH1970TG	●	19.7	8.4	7.0	12.0	3.6	
TAWKH1980TG	●	19.8	8.4	7.0	12.0	3.6	
TAWKH1990TG	●	19.9	8.4	7.0	12.0	3.6	
TAWKH2000TG	●	20.0	8.3	7.0	11.9	3.6	
TAWKH2010TG	□	20.1	8.3	7.0	12.0	3.7	
TAWKH2020TG	□	20.2	8.3	7.0	12.0	3.7	
TAWKH2030TG	□	20.3	8.3	7.0	12.0	3.7	
TAWKH2040TG	□	20.4	8.3	7.0	12.0	3.7	
TAWKH2050TG	●	20.5	8.2	7.0	11.9	3.7	TAWSN 2100S25
TAWKH2060TG	□	20.6	8.2	7.0	11.9	3.7	
TAWKH2070TG	□	20.7	8.2	7.0	12.0	3.8	
TAWKH2080TG	□	20.8	8.2	7.0	12.0	3.8	
TAWKH2090TG	□	20.9	8.2	7.0	12.0	3.8	
TAWKH2100TG	●	21.0	8.1	7.0	11.9	3.8	
TAWKH2110TG	□	21.1	8.1	7.0	11.9	3.8	
TAWKH2120TG	□	21.2	8.1	7.0	12.0	3.9	
TAWKH2130TG	□	21.3	8.1	7.0	12.0	3.9	
TAWKH2140TG	□	21.4	8.1	7.0	12.0	3.9	
TAWKH2150TG	●	21.5	9.8	8.0	13.7	3.9	TAWSN 2200S25
TAWKH2160TG	□	21.6	9.8	8.0	13.7	3.9	
TAWKH2170TG	□	21.7	9.8	8.0	13.7	3.9	
TAWKH2180TG	□	21.8	9.8	8.0	13.8	4.0	
TAWKH2190TG	□	21.9	9.8	8.0	13.8	4.0	
TAWKH2200TG	●	22.0	9.7	8.0	13.7	4.0	
TAWKH2210TG	□	22.1	9.7	8.0	13.7	4.0	
TAWKH2220TG	□	22.2	9.7	8.0	13.7	4.0	
TAWKH2230TG	□	22.3	9.7	8.0	13.8	4.1	
TAWKH2240TG	□	22.4	9.7	8.0	13.8	4.1	

Bestellbezeichnung	Lager	Abmessungen (mm)					WSP-Träger
	DP5010	CDI	LF	S	INSL	PL	
TAWKH2250TG	●	22.5	9.6	8.0	13.7	4.1	TAWSN 2300S25
TAWKH2260TG	□	22.6	9.6	8.0	13.7	4.1	
TAWKH2270TG	□	22.7	9.6	8.0	13.7	4.1	
TAWKH2280TG	□	22.8	9.6	8.0	13.7	4.1	
TAWKH2290TG	□	22.9	9.6	8.0	13.8	4.2	
TAWKH2300TG	●	23.0	9.5	8.0	13.7	4.2	
TAWKH2310TG	□	23.1	9.5	8.0	13.7	4.2	
TAWKH2320TG	□	23.2	9.5	8.0	13.7	4.2	
TAWKH2330TG	□	23.3	9.5	8.0	13.7	4.2	
TAWKH2340TG	□	23.4	9.5	8.0	13.8	4.3	
TAWKH2350TG	●	23.5	9.4	8.0	13.7	4.3	TAWSN 2400S32
TAWKH2360TG	□	23.6	9.4	8.0	13.7	4.3	
TAWKH2370TG	□	23.7	9.4	8.0	13.7	4.3	
TAWKH2380TG	□	23.8	9.4	8.0	13.7	4.3	
TAWKH2390TG	□	23.9	9.4	8.0	13.7	4.3	
TAWKH2400TG	●	24.0	9.3	8.0	13.7	4.4	
TAWKH2410TG	□	24.1	9.3	8.0	13.7	4.4	
TAWKH2420TG	□	24.2	9.3	8.0	13.7	4.4	
TAWKH2430TG	□	24.3	9.3	8.0	13.7	4.4	
TAWKH2440TG	□	24.4	9.3	8.0	13.7	4.4	
TAWKH2450TG	●	24.5	10.8	9.0	15.3	4.5	TAWSN 2500S32
TAWKH2460TG	□	24.6	10.8	9.0	15.3	4.5	
TAWKH2470TG	□	24.7	10.8	9.0	15.3	4.5	
TAWKH2480TG	□	24.8	10.8	9.0	15.3	4.5	
TAWKH2490TG	□	24.9	10.8	9.0	15.3	4.5	
TAWKH2500TG	●	25.0	10.7	9.0	15.2	4.5	
TAWKH2510TG	□	25.1	10.7	9.0	15.3	4.6	
TAWKH2520TG	□	25.2	10.7	9.0	15.3	4.6	
TAWKH2530TG	□	25.3	10.7	9.0	15.3	4.6	
TAWKH2540TG	□	25.4	10.7	9.0	15.3	4.6	
TAWKH2550TG	●	25.5	10.6	9.0	15.2	4.6	TAWSN 2600S32
TAWKH2560TG	□	25.6	10.6	9.0	15.3	4.7	
TAWKH2570TG	□	25.7	10.6	9.0	15.3	4.7	
TAWKH2580TG	□	25.8	10.6	9.0	15.3	4.7	
TAWKH2590TG	□	25.9	10.6	9.0	15.3	4.7	
TAWKH2600TG	●	26.0	10.5	9.0	15.2	4.7	
TAWKH2610TG	□	26.1	10.5	9.0	15.2	4.7	
TAWKH2620TG	□	26.2	10.5	9.0	15.3	4.8	
TAWKH2630TG	□	26.3	10.5	9.0	15.3	4.8	
TAWKH2640TG	□	26.4	10.5	9.0	15.3	4.8	

● : Lagerstandard. (Verpackungseinheit: 1Stk.)

□ : Nichtstandard, Herstellung nur auf Anfrage.

Bestellbezeichnung	Lager	Abmessungen (mm)					WSP-Träger
	DP6010	CDI	LF	S	INSL	PL	
TAWKH2650TG	●	26.5	10.4	9.0	15.2	4.8	TAWSN 2700S32
TAWKH2660TG	□	26.6	10.4	9.0	15.2	4.8	
TAWKH2670TG	□	26.7	10.4	9.0	15.3	4.9	
TAWKH2680TG	□	26.8	10.4	9.0	15.3	4.9	
TAWKH2690TG	□	26.9	10.4	9.0	15.3	4.9	
TAWKH2700TG	●	27.0	10.3	9.0	15.2	4.9	
TAWKH2710TG	□	27.1	10.3	9.0	15.2	4.9	
TAWKH2720TG	□	27.2	10.3	9.0	15.2	4.9	
TAWKH2730TG	□	27.3	10.3	9.0	15.3	5.0	
TAWKH2740TG	□	27.4	10.3	9.0	15.3	5.0	
TAWKH2750TG	●	27.5	11.3	10.0	16.3	5.0	TAWSN 2800S32
TAWKH2760TG	□	27.6	11.3	10.0	16.3	5.0	
TAWKH2770TG	□	27.7	11.3	10.0	16.3	5.0	
TAWKH2780TG	□	27.8	11.3	10.0	16.4	5.1	
TAWKH2790TG	□	27.9	11.3	10.0	16.4	5.1	
TAWKH2800TG	●	28.0	11.2	10.0	16.3	5.1	
TAWKH2810TG	□	28.1	11.2	10.0	16.3	5.1	
TAWKH2820TG	□	28.2	11.2	10.0	16.3	5.1	
TAWKH2830TG	□	28.3	11.2	10.0	16.4	5.2	
TAWKH2840TG	□	28.4	11.2	10.0	16.4	5.2	
TAWKH2850TG	●	28.5	11.1	10.0	16.3	5.2	TAWSN 2900S32
TAWKH2860TG	□	28.6	11.1	10.0	16.3	5.2	
TAWKH2870TG	□	28.7	11.1	10.0	16.3	5.2	
TAWKH2880TG	□	28.8	11.1	10.0	16.3	5.2	
TAWKH2890TG	□	28.9	11.1	10.0	16.4	5.3	
TAWKH2900TG	●	29.0	11.0	10.0	16.3	5.3	
TAWKH2910TG	□	29.1	11.0	10.0	16.3	5.3	
TAWKH2920TG	□	29.2	11.0	10.0	16.3	5.3	
TAWKH2930TG	□	29.3	11.0	10.0	16.3	5.3	
TAWKH2940TG	□	29.4	11.0	10.0	16.4	5.4	
TAWKH2950TG	●	29.5	10.9	10.0	16.3	5.4	TAWSN 3000S32
TAWKH2960TG	□	29.6	10.9	10.0	16.3	5.4	
TAWKH2970TG	□	29.7	10.9	10.0	16.3	5.4	
TAWKH2980TG	□	29.8	10.9	10.0	16.3	5.4	
TAWKH2990TG	□	29.9	10.9	10.0	16.3	5.4	
TAWKH3000TG	●	30.0	10.8	10.0	16.3	5.5	
TAWKH3010TG	□	30.1	10.8	10.0	16.3	5.5	
TAWKH3020TG	□	30.2	10.8	10.0	16.3	5.5	
TAWKH3030TG	□	30.3	10.8	10.0	16.3	5.5	
TAWKH3040TG	□	30.4	10.8	10.0	16.3	5.5	

SCNITTDATENEMPFEHLUNGEN

Werkstoff	Bohrer Durchm.	Ø 14.0—Ø 15.4		Ø 15.5—Ø 18.4		Ø 18.5—Ø 21.4	
		Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P Allg. Baustahl	≤180HB	70 (60—90)	0.20 (0.15—0.25)	80 (60—100)	0.25 (0.20—0.30)	90 (70—110)	0.25 (0.20—0.30)
	180—280HB	70 (60—90)	0.20 (0.15—0.25)	80 (60—100)	0.25 (0.20—0.30)	80 (60—100)	0.25 (0.20—0.30)
	280—350HB	60 (50—80)	0.15 (0.12—0.18)	70 (50—90)	0.20 (0.15—0.25)	70 (50—90)	0.20 (0.15—0.25)
M Rostfreier Stahl	≤200HB	50 (40—60)	0.15 (0.12—0.18)	50 (40—60)	0.15 (0.12—0.18)	60 (50—70)	0.20 (0.15—0.22)
K Guss	Zugfestigkeit ≤350MPa	70 (50—90)	0.20 (0.15—0.25)	100 (60—120)	0.25 (0.20—0.30)	120 (60—140)	0.25 (0.20—0.30)
	Duktiler Guss	70 (50—90)	0.20 (0.15—0.25)	80 (60—90)	0.25 (0.20—0.30)	80 (60—90)	0.25 (0.20—0.30)

Werkstoff	Bohrer Durchm.	Ø 21.5—Ø 24.4		Ø 24.5—Ø 27.4		Ø 27.5—Ø 30.4	
		Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)	Schnittgeschw. (m/min)	Vorschub (mm/U.)
P Allg. Baustahl	≤180HB	100 (80—120)	0.30 (0.25—0.35)	110 (80—120)	0.30 (0.25—0.35)	110 (80—120)	0.30 (0.25—0.35)
	180—280HB	90 (70—110)	0.30 (0.25—0.35)	100 (80—120)	0.30 (0.25—0.35)	100 (80—120)	0.30 (0.25—0.35)
	280—350HB	80 (60—100)	0.25 (0.20—0.30)	90 (70—110)	0.25 (0.20—0.30)	90 (70—110)	0.25 (0.20—0.30)
M Rostfreier Stahl	≤200HB	60 (50—70)	0.20 (0.15—0.22)	70 (60—80)	0.25 (0.20—0.28)	70 (60—80)	0.25 (0.20—0.28)
K Guss	Zugfestigkeit ≤350MPa	130 (80—150)	0.35 (0.25—0.40)	140 (90—160)	0.35 (0.25—0.40)	140 (90—160)	0.40 (0.30—0.45)
	Duktiler Guss	90 (60—100)	0.30 (0.25—0.35)	100 (80—110)	0.30 (0.25—0.35)	100 (80—110)	0.30 (0.25—0.35)

(Bemerkung 1) Für das Bearbeiten von Bau- und rostfreiem Stahl empfehlen wir WSP mit Verfassung des Typ H.

(Bemerkung 2) Empfohlen für den Einsatz bei stabilen Bearbeitungsbedingungen. Verwenden Sie bitte eine interne Kühlmittelzufuhr bei Bearbeitungen von rostfreien Werkstoffen. (MMS ist nicht empfohlen)

FASENBREITE

Wenn eine WSP mit einer anderen Verfassung bevorzugt wird, verwenden Sie bitte folgende Symbole bei der Bestellbezeichnung.

(WSP Bestellbezeichnung)

T A W N H 1 4 0 0 T 

TAW Produktname

H : Typ H

N : Allg. Anwendung
K : Für Guss

WSP Durchmesser

Symbol für die Verfassung

Verfassung

(Verfassungen)

Verfassung	Fasenbreite (mm)
F	0
G	0.02—0.05
H	0.05—0.10
-(Standard)	0.10—0.15
K	0.15—0.20
S	0.20—0.25
M	0.25—0.30

Spannschraube mit Drehmoment gemäß nachfolgender Tabelle festziehen.

Bohrer Durchm.	Dreh-moment
Ø14—Ø15	2.0N•m
Ø16—Ø18	2.0N•m
Ø19—Ø21	3.5N•m
Ø22—Ø24	5.5N•m
Ø25—Ø27	8.5N•m
Ø28—Ø30	12.0N•m

GEBRAUCHSANLEITUNG

WSP-BEFESTIGUNG

- Entfernen Sie die Klemmschraube zum Installieren von WSP. (H Ausführung)
- Klemmschraube lösen. (U WSP Ausführung)
- Positionieren Sie die WSP an die Führungsrillen und schieben die WSP bis zum Anschlag ein.
- Spannen Sie die Klemmschraube bei gleichzeitigem Festhalten mit den Fingern. (Bild 1)
- Die WSP muß am Grund anliegen. (Bild 2)

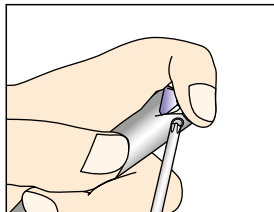


Bild 1

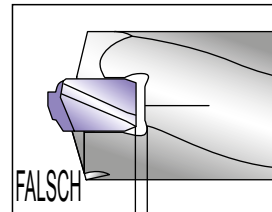
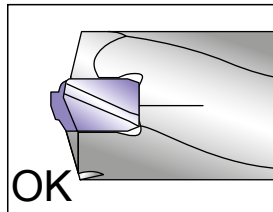


Bild 2

WSP liegt nicht an

AUSTAUSCHEN DER WSP

- Bevor Sie die neue WSP einbauen, bitte den WSP-Sitz sorgfältig reinigen und den Schlitz mit dem beiliegenden Schlitzreiniger säubern.

BOHREN (WSP AUSFÜHRUNG)

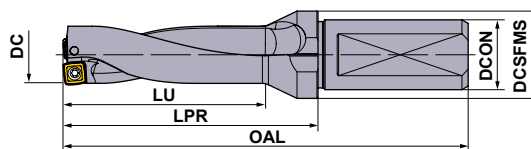
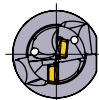
MVX

HARTMETALL

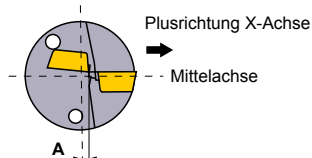
- Ideale Kombination von äußerer WSP mit CVD-Beschichtung und innerer WSP mit PVD-Beschichtung.
- Hochstabiler Werkzeugkörper für die Tieflochbohrung bis L/D=6-.

P	M	K	N	S	H
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L/D	Bearbeitungstoleranz (Leitlinien) (mm)		
	Ø17-Ø33	Ø33.5-Ø47	Ø48-Ø63
2D, 3D	$\begin{smallmatrix} 0 \\ +0.25 \end{smallmatrix}$	$\begin{smallmatrix} 0 \\ +0.3 \end{smallmatrix}$	$\begin{smallmatrix} 0 \\ +0.3 \end{smallmatrix}$
4D, 5D	$\begin{smallmatrix} 0 \\ +0.35 \end{smallmatrix}$	$\begin{smallmatrix} 0 \\ +0.4 \end{smallmatrix}$	$\begin{smallmatrix} 0 \\ +0.45 \end{smallmatrix}$
6D	$\begin{smallmatrix} 0 \\ +0.45 \end{smallmatrix}$	$\begin{smallmatrix} 0 \\ +0.6 \end{smallmatrix}$	



Maximaler Versatz für die Drehbearbeitung



Spannschraube mit Drehmoment gemäß nachfolgender Tabelle festziehen.

Bohrer Durchm.	Dreh-moment
Ø17-Ø19.5	1.0N•m
Ø20-Ø22.5	2.0N•m
Ø23-Ø27.5	2.5N•m
Ø28-Ø46	3.5N•m
Ø47-Ø63	7.5N•m

DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP	Klemmschraube	Schlüssel
					LU	LPR	OAL	DCON	DCSFMS				
17.0	2	MVX1700X2F20	●	2	41	56	99	20	25	0.5	SOMX063005-○○	TPS25	①TIP07F
	3	MVX1700X3F20	●	2	58	73	116	20	25	0.5	SOMX063005-○○	TPS25	①TIP07F
	4	MVX1700X4F20	●	2	75	90	133	20	25	0.5	SOMX063005-○○	TPS25	①TIP07F
	5	MVX1700X5F20	●	2	92	107	150	20	25	0.5	SOMX063005-○○	TPS25	①TIP07F
	6	MVX1700X6F20	●	2	109	124	167	20	25	0.5	SOMX063005-○○	TPS25	①TIP07F
17.5	2	MVX1750X2F25	●	2	42	62	112	25	32	0.45	SOMX063005-○○	TPS25	①TIP07F
	3	MVX1750X3F25	●	2	59.5	79.5	129.5	25	32	0.45	SOMX063005-○○	TPS25	①TIP07F
	4	MVX1750X4F25	●	2	77	97	147	25	32	0.45	SOMX063005-○○	TPS25	①TIP07F
	5	MVX1750X5F25	●	2	94.5	114.5	164.5	25	32	0.45	SOMX063005-○○	TPS25	①TIP07F
	6	MVX1750X6F25	●	2	112	132	182	25	32	0.45	SOMX063005-○○	TPS25	①TIP07F
18.0	2	MVX1800X2F25	●	2	43	63	113	25	32	0.4	SOMX063005-○○	TPS25	①TIP07F
	3	MVX1800X3F25	●	2	61	81	131	25	32	0.4	SOMX063005-○○	TPS25	①TIP07F
	4	MVX1800X4F25	●	2	79	99	149	25	32	0.4	SOMX063005-○○	TPS25	①TIP07F
	5	MVX1800X5F25	●	2	97	117	167	25	32	0.4	SOMX063005-○○	TPS25	①TIP07F
	6	MVX1800X6F25	●	2	115	135	185	25	32	0.4	SOMX063005-○○	TPS25	①TIP07F
18.5	2	MVX1850X2F25	●	2	44	64	114	25	32	0.35	SOMX063005-○○	TPS25	①TIP07F
	3	MVX1850X3F25	●	2	62.5	82.5	132.5	25	32	0.35	SOMX063005-○○	TPS25	①TIP07F
	4	MVX1850X4F25	●	2	81	101	151	25	32	0.35	SOMX063005-○○	TPS25	①TIP07F
	5	MVX1850X5F25	●	2	99.5	119.5	169.5	25	32	0.35	SOMX063005-○○	TPS25	①TIP07F
	6	MVX1850X6F25	●	2	118	138	188	25	32	0.35	SOMX063005-○○	TPS25	①TIP07F
19.0	2	MVX1900X2F25	●	2	45	65	115	25	32	0.3	SOMX063005-○○	TPS25	①TIP07F
	3	MVX1900X3F25	●	2	64	84	134	25	32	0.3	SOMX063005-○○	TPS25	①TIP07F
	4	MVX1900X4F25	●	2	83	103	153	25	32	0.3	SOMX063005-○○	TPS25	①TIP07F
	5	MVX1900X5F25	●	2	102	122	172	25	32	0.3	SOMX063005-○○	TPS25	①TIP07F
	6	MVX1900X6F25	●	2	121	141	191	25	32	0.3	SOMX063005-○○	TPS25	①TIP07F
19.5	2	MVX1950X2F25	●	2	46	66	116	25	32	0.25	SOMX063005-○○	TPS25	①TIP07F
	3	MVX1950X3F25	●	2	65.5	85.5	135.5	25	32	0.25	SOMX063005-○○	TPS25	①TIP07F
	4	MVX1950X4F25	●	2	85	105	155	25	32	0.25	SOMX063005-○○	TPS25	①TIP07F
	5	MVX1950X5F25	●	2	104.5	124.5	174.5	25	32	0.25	SOMX063005-○○	TPS25	①TIP07F
	6	MVX1950X6F25	●	2	124	144	194	25	32	0.25	SOMX063005-○○	TPS25	①TIP07F
20.0	2	MVX2000X2F25	●	2	47	67	117	25	32	0.6	SOMX073505-○○	TPS3	②TIP10W
	3	MVX2000X3F25	●	2	67	87	137	25	32	0.6	SOMX073505-○○	TPS3	②TIP10W
	4	MVX2000X4F25	●	2	87	107	157	25	32	0.6	SOMX073505-○○	TPS3	②TIP10W
	5	MVX2000X5F25	●	2	107	127	177	25	32	0.6	SOMX073505-○○	TPS3	②TIP10W
	6	MVX2000X6F25	●	2	127	147	197	25	32	0.6	SOMX073505-○○	TPS3	②TIP10W

* Spannmoment (N • m) : TPS25=1.0, TPS3=2.0

● : Lagerstandard.

DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP		
					LU	LPR	OAL	DCON	DCSFS			Klemmschraube	Schlüssel
20.5	2	MVX2050X2F25	●	2	48	68	118	25	32	0.55	SOMX073505-○○	TPS3	TIP10W
	3	MVX2050X3F25	●	2	68.5	88.5	138.5	25	32	0.55	SOMX073505-○○	TPS3	TIP10W
21.0	2	MVX2100X2F25	●	2	49	69	119	25	32	0.5	SOMX073505-○○	TPS3	TIP10W
	3	MVX2100X3F25	●	2	70	90	140	25	32	0.5	SOMX073505-○○	TPS3	TIP10W
	4	MVX2100X4F25	●	2	91	111	161	25	32	0.5	SOMX073505-○○	TPS3	TIP10W
	5	MVX2100X5F25	●	2	112	132	182	25	32	0.5	SOMX073505-○○	TPS3	TIP10W
	6	MVX2100X6F25	●	2	133	153	203	25	32	0.5	SOMX073505-○○	TPS3	TIP10W
21.5	2	MVX2150X2F25	●	2	50	70	120	25	32	0.45	SOMX073505-○○	TPS3	TIP10W
	3	MVX2150X3F25	●	2	71.5	91.5	141.5	25	32	0.45	SOMX073505-○○	TPS3	TIP10W
22.0	2	MVX2200X2F25	●	2	51	71	121	25	32	0.4	SOMX073505-○○	TPS3	TIP10W
	3	MVX2200X3F25	●	2	73	93	143	25	32	0.4	SOMX073505-○○	TPS3	TIP10W
	4	MVX2200X4F25	●	2	95	115	165	25	32	0.4	SOMX073505-○○	TPS3	TIP10W
	5	MVX2200X5F25	●	2	117	137	187	25	32	0.4	SOMX073505-○○	TPS3	TIP10W
	6	MVX2200X6F25	●	2	139	159	209	25	32	0.4	SOMX073505-○○	TPS3	TIP10W
22.5	2	MVX2250X2F25	●	2	52	72	122	25	32	0.35	SOMX073505-○○	TPS3	TIP10W
	3	MVX2250X3F25	●	2	74.5	94.5	144.5	25	32	0.35	SOMX073505-○○	TPS3	TIP10W
23.0	2	MVX2300X2F25	●	2	53	73	123	25	32	0.8	SOMX084005-○○	TPS351	TIP10W
	3	MVX2300X3F25	●	2	76	96	146	25	32	0.8	SOMX084005-○○	TPS351	TIP10W
	4	MVX2300X4F25	●	2	99	119	169	25	32	0.8	SOMX084005-○○	TPS351	TIP10W
	5	MVX2300X5F25	●	2	122	142	192	25	32	0.8	SOMX084005-○○	TPS351	TIP10W
	6	MVX2300X6F25	●	2	145	165	215	25	32	0.8	SOMX084005-○○	TPS351	TIP10W
23.5	2	MVX2350X2F25	●	2	54	74	124	25	32	0.75	SOMX084005-○○	TPS351	TIP10W
	3	MVX2350X3F25	●	2	77.5	97.5	147.5	25	32	0.75	SOMX084005-○○	TPS351	TIP10W
24.0	2	MVX2400X2F25	●	2	55	75	125	25	32	0.7	SOMX084005-○○	TPS351	TIP10W
	3	MVX2400X3F25	●	2	79	99	149	25	32	0.7	SOMX084005-○○	TPS351	TIP10W
	4	MVX2400X4F25	●	2	103	123	173	25	32	0.7	SOMX084005-○○	TPS351	TIP10W
	5	MVX2400X5F25	●	2	127	147	197	25	32	0.7	SOMX084005-○○	TPS351	TIP10W
	6	MVX2400X6F25	●	2	151	171	221	25	32	0.7	SOMX084005-○○	TPS351	TIP10W
24.5	2	MVX2450X2F25	●	2	56	76	126	25	32	0.65	SOMX084005-○○	TPS351	TIP10W
	3	MVX2450X3F25	●	2	80.5	100.5	150.5	25	32	0.65	SOMX084005-○○	TPS351	TIP10W
25.0	2	MVX2500X2F25	●	2	57	77	127	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
	3	MVX2500X3F25	●	2	82	102	152	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
	4	MVX2500X4F25	●	2	107	127	177	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
	5	MVX2500X5F25	●	2	132	152	202	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
	6	MVX2500X6F25	●	2	157	177	227	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
25.5	2	MVX2550X2F25	●	2	58	78	128	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
	3	MVX2550X3F25	●	2	83.5	103.5	153.5	25	32	0.6	SOMX084005-○○	TPS351	TIP10W
26.0	2	MVX2600X2F32	●	2	59	79	134	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
	3	MVX2600X3F32	●	2	85	105	160	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
	4	MVX2600X4F32	●	2	111	131	186	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
	5	MVX2600X5F32	●	2	137	157	212	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
	6	MVX2600X6F32	●	2	163	183	238	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
26.5	2	MVX2650X2F32	●	2	60	80	135	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
	3	MVX2650X3F32	●	2	86.5	106.5	161.5	32	42	0.5	SOMX084005-○○	TPS351	TIP10W
27.0	2	MVX2700X2F32	●	2	61	81	136	32	42	0.45	SOMX084005-○○	TPS351	TIP10W
	3	MVX2700X3F32	●	2	88	108	163	32	42	0.45	SOMX084005-○○	TPS351	TIP10W
	4	MVX2700X4F32	●	2	115	135	190	32	42	0.45	SOMX084005-○○	TPS351	TIP10W
	5	MVX2700X5F32	●	2	142	162	217	32	42	0.45	SOMX084005-○○	TPS351	TIP10W
	6	MVX2700X6F32	●	2	169	189	244	32	42	0.45	SOMX084005-○○	TPS351	TIP10W

* Spannmoment (N • m) : TPS3=2.0, TPS351=2.5

WSP BESCHREIBUNG > L 155
 SCHNITTBEDINGUNGEN > L 156
 EINSATZ HINWEISE > L 167
 TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

HARTMETALL

MVX

DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP		
					LU	LPR	OAL	DCON	DCSFMS			Klemmschraube	Schlüssel
27.5	2	MVX2750X2F32	●	2	62	82	137	32	42	0.4	SOMX084005-○○	TPS351	TIP10W
	3	MVX2750X3F32	●	2	89.5	109.5	164.5	32	42	0.4	SOMX084005-○○	TPS351	TIP10W
28.0	2	MVX2800X2F32	●	2	63	83	138	32	42	0.85	SOMX094506-○○	TPS4	TIP15W
	3	MVX2800X3F32	●	2	91	111	166	32	42	0.85	SOMX094506-○○	TPS4	TIP15W
	4	MVX2800X4F32	●	2	119	139	194	32	42	0.85	SOMX094506-○○	TPS4	TIP15W
	5	MVX2800X5F32	●	2	147	167	222	32	42	0.85	SOMX094506-○○	TPS4	TIP15W
	6	MVX2800X6F32	●	2	175	195	250	32	42	0.85	SOMX094506-○○	TPS4	TIP15W
28.5	2	MVX2850X2F32	●	2	64	84	139	32	42	0.8	SOMX094506-○○	TPS4	TIP15W
	3	MVX2850X3F32	●	2	92.5	112.5	167.5	32	42	0.8	SOMX094506-○○	TPS4	TIP15W
29.0	2	MVX2900X2F32	●	2	65	85	140	32	42	0.75	SOMX094506-○○	TPS4	TIP15W
	3	MVX2900X3F32	●	2	94	114	169	32	42	0.75	SOMX094506-○○	TPS4	TIP15W
	4	MVX2900X4F32	●	2	123	143	198	32	42	0.75	SOMX094506-○○	TPS4	TIP15W
	5	MVX2900X5F32	●	2	152	172	227	32	42	0.75	SOMX094506-○○	TPS4	TIP15W
	6	MVX2900X6F32	●	2	181	201	256	32	42	0.75	SOMX094506-○○	TPS4	TIP15W
29.5	2	MVX2950X2F32	●	2	66	86	141	32	42	0.7	SOMX094506-○○	TPS4	TIP15W
	3	MVX2950X3F32	●	2	95.5	115.5	170.5	32	42	0.7	SOMX094506-○○	TPS4	TIP15W
30.0	2	MVX3000X2F32	●	2	67	87	142	32	42	0.65	SOMX094506-○○	TPS4	TIP15W
	3	MVX3000X3F32	●	2	97	117	172	32	42	0.65	SOMX094506-○○	TPS4	TIP15W
	4	MVX3000X4F32	●	2	127	147	202	32	42	0.65	SOMX094506-○○	TPS4	TIP15W
	5	MVX3000X5F32	●	2	157	177	232	32	42	0.65	SOMX094506-○○	TPS4	TIP15W
	6	MVX3000X6F32	●	2	187	207	262	32	42	0.65	SOMX094506-○○	TPS4	TIP15W
30.5	3	MVX3050X3F32	●	2	98.5	118.5	173.5	32	42	0.6	SOMX094506-○○	TPS4	TIP15W
31.0	2	MVX3100X2F32	●	2	69	89	144	32	42	0.55	SOMX094506-○○	TPS4	TIP15W
	3	MVX3100X3F32	●	2	100	120	175	32	42	0.55	SOMX094506-○○	TPS4	TIP15W
	4	MVX3100X4F32	●	2	131	151	206	32	42	0.55	SOMX094506-○○	TPS4	TIP15W
	2	MVX3100X2F40	●	2	69	89	154	40	50	0.55	SOMX094506-○○	TPS4	TIP15W
	3	MVX3100X3F40	●	2	100	120	185	40	50	0.55	SOMX094506-○○	TPS4	TIP15W
	4	MVX3100X4F40	●	2	131	151	216	40	50	0.55	SOMX094506-○○	TPS4	TIP15W
	5	MVX3100X5F40	●	2	162	182	247	40	50	0.55	SOMX094506-○○	TPS4	TIP15W
31.5	6	MVX3100X6F40	●	2	193	213	278	40	50	0.55	SOMX094506-○○	TPS4	TIP15W
	3	MVX3150X3F40	●	2	101.5	121.5	186.5	40	50	0.55	SOMX094506-○○	TPS4	TIP15W
32.0	2	MVX3200X2F32	●	2	71	91	146	32	42	0.45	SOMX094506-○○	TPS4	TIP15W
	3	MVX3200X3F32	●	2	103	123	178	32	42	0.45	SOMX094506-○○	TPS4	TIP15W
	4	MVX3200X4F32	●	2	135	155	210	32	42	0.45	SOMX094506-○○	TPS4	TIP15W
	2	MVX3200X2F40	●	2	71	91	156	40	50	0.45	SOMX094506-○○	TPS4	TIP15W
	3	MVX3200X3F40	●	2	103	123	188	40	50	0.45	SOMX094506-○○	TPS4	TIP15W
	4	MVX3200X4F40	●	2	135	155	220	40	50	0.45	SOMX094506-○○	TPS4	TIP15W
	5	MVX3200X5F40	●	2	167	187	252	40	50	0.45	SOMX094506-○○	TPS4	TIP15W
32.5	6	MVX3200X6F40	●	2	199	219	284	40	50	0.45	SOMX094506-○○	TPS4	TIP15W
	3	MVX3250X3F40	●	2	104.5	124.5	189.5	40	50	0.45	SOMX094506-○○	TPS4	TIP15W
33.0	2	MVX3300X2F32	●	2	73	93	148	32	42	0.4	SOMX094506-○○	TPS4	TIP15W
	3	MVX3300X3F32	●	2	106	126	181	32	42	0.4	SOMX094506-○○	TPS4	TIP15W
	4	MVX3300X4F32	●	2	139	159	214	32	42	0.4	SOMX094506-○○	TPS4	TIP15W
	2	MVX3300X2F40	●	2	73	93	158	40	50	0.4	SOMX094506-○○	TPS4	TIP15W
	3	MVX3300X3F40	●	2	106	126	191	40	50	0.4	SOMX094506-○○	TPS4	TIP15W
	4	MVX3300X4F40	●	2	139	159	224	40	50	0.4	SOMX094506-○○	TPS4	TIP15W
	5	MVX3300X5F40	●	2	172	192	257	40	50	0.4	SOMX094506-○○	TPS4	TIP15W
33.5	6	MVX3300X6F40	●	2	205	225	290	40	50	0.4	SOMX094506-○○	TPS4	TIP15W

* Spannmoment (N • m) : TPS351=2.5, TPS4=3.5

● : Lagerstandard. ★ : Lagerstandard in Japan.

NEW

DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP		
					LU	LPR	OAL	DCON	DCSFS			Klemmschraube	Schlüssel
33.5	3	MVX3350X3F40	●	2	107.5	127.5	192.5	40	50	1.2	SOMX115506-○○	TPS43	TIP15W
34.0	2	MVX3400X2F40	●	2	75	105	170	40	50	1.1	SOMX115506-○○	TPS43	TIP15W
	3	MVX3400X3F40	●	2	109	139	204	40	50	1.1	SOMX115506-○○	TPS43	TIP15W
	4	MVX3400X4F40	●	2	143	173	238	40	50	1.1	SOMX115506-○○	TPS43	TIP15W
	5	MVX3400X5F40	●	2	177	207	272	40	50	1.1	SOMX115506-○○	TPS43	TIP15W
	6	MVX3400X6F40	●	2	211	241	306	40	50	1.1	SOMX115506-○○	TPS43	TIP15W
34.5	3	MVX3450X3F40	●	2	110.5	140.5	205.5	40	50	1.1	SOMX115506-○○	TPS43	TIP15W
35.0	2	MVX3500X2F40	●	2	77	107	172	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	3	MVX3500X3F40	●	2	112	142	207	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	4	MVX3500X4F40	●	2	147	177	242	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	5	MVX3500X5F40	●	2	182	212	277	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	6	MVX3500X6F40	●	2	217	247	312	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
35.5	3	MVX3550X3F40	●	2	113.5	143.5	208.5	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
36.0	2	MVX3600X2F40	●	2	79	109	174	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	3	MVX3600X3F40	●	2	115	145	210	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	4	MVX3600X4F40	●	2	151	181	246	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	5	MVX3600X5F40	●	2	187	217	282	40	50	1.0	SOMX115506-○○	TPS43	TIP15W
	6	MVX3600X6F40	●	2	223	253	318	40	50	0.9	SOMX115506-○○	TPS43	TIP15W
37.0	2	MVX3700X2F40	●	2	81	111	176	40	50	0.9	SOMX115506-○○	TPS43	TIP15W
	3	MVX3700X3F40	●	2	118	148	213	40	50	0.9	SOMX115506-○○	TPS43	TIP15W
	4	MVX3700X4F40	●	2	155	185	250	40	50	0.9	SOMX115506-○○	TPS43	TIP15W
	5	MVX3700X5F40	●	2	192	222	287	40	50	0.9	SOMX115506-○○	TPS43	TIP15W
	6	MVX3700X6F40	●	2	229	259	324	40	50	0.9	SOMX115506-○○	TPS43	TIP15W
38.0	2	MVX3800X2F40	●	2	83	113	178	40	50	0.8	SOMX115506-○○	TPS43	TIP15W
	3	MVX3800X3F40	●	2	121	151	216	40	50	0.8	SOMX115506-○○	TPS43	TIP15W
	4	MVX3800X4F40	●	2	159	189	254	40	50	0.8	SOMX115506-○○	TPS43	TIP15W
	5	MVX3800X5F40	●	2	197	227	292	40	50	0.8	SOMX115506-○○	TPS43	TIP15W
	6	MVX3800X6F40	●	2	235	265	330	40	50	0.8	SOMX115506-○○	TPS43	TIP15W
39.0	2	MVX3900X2F40	●	2	85	115	180	40	50	0.7	SOMX115506-○○	TPS43	TIP15W
	3	MVX3900X3F40	●	2	124	154	219	40	50	0.7	SOMX115506-○○	TPS43	TIP15W
	4	MVX3900X4F40	●	2	163	193	258	40	50	0.7	SOMX115506-○○	TPS43	TIP15W
	5	MVX3900X5F40	●	2	202	232	297	40	50	0.7	SOMX115506-○○	TPS43	TIP15W
	6	MVX3900X6F40	●	2	241	271	336	40	50	0.7	SOMX115506-○○	TPS43	TIP15W
40.0	2	MVX4000X2F40	●	2	87	117	182	40	50	1.5	SOMX136008-○○	TPS43	TIP15W
	3	MVX4000X3F40	●	2	127	157	222	40	50	1.5	SOMX136008-○○	TPS43	TIP15W
	4	MVX4000X4F40	●	2	167	197	262	40	50	1.5	SOMX136008-○○	TPS43	TIP15W
	5	MVX4000X5F40	●	2	207	237	302	40	50	1.5	SOMX136008-○○	TPS43	TIP15W
	6	MVX4000X6F40	●	2	247	277	342	40	50	1.4	SOMX136008-○○	TPS43	TIP15W
41.0	2	MVX4100X2F40	●	2	89	119	184	40	50	1.4	SOMX136008-○○	TPS43	TIP15W
	3	MVX4100X3F40	●	2	130	160	225	40	50	1.4	SOMX136008-○○	TPS43	TIP15W
	4	MVX4100X4F40	●	2	171	201	266	40	50	1.4	SOMX136008-○○	TPS43	TIP15W
	5	MVX4100X5F40	●	2	212	242	307	40	50	1.4	SOMX136008-○○	TPS43	TIP15W
	6	MVX4100X6F40	●	2	253	283	348	40	50	1.4	SOMX136008-○○	TPS43	TIP15W
42.0	2	MVX4200X2F40	●	2	91	121	186	40	50	1.3	SOMX136008-○○	TPS43	TIP15W
	3	MVX4200X3F40	●	2	133	163	228	40	50	1.3	SOMX136008-○○	TPS43	TIP15W
	4	MVX4200X4F40	●	2	175	205	270	40	63	1.3	SOMX136008-○○	TPS43	TIP15W
	5	MVX4200X5F40	●	2	217	247	312	40	63	1.3	SOMX136008-○○	TPS43	TIP15W
	6	MVX4200X6F40	●	2	259	289	354	40	63	1.3	SOMX136008-○○	TPS43	TIP15W
	4	MVX4200X4F50	★	2	175	205	280	50	63	1.3	SOMX136008-○○	TPS43	TIP15W
	5	MVX4200X5F50	★	2	217	247	322	50	63	1.3	SOMX136008-○○	TPS43	TIP15W
	6	MVX4200X6F50	★	2	259	289	364	50	63	1.3	SOMX136008-○○	TPS43	TIP15W

* Spannmoment (N • m) : TPS3=43.5

WSP BESCHREIBUNG > L 155
 SCHNITTBEDINGUNGEN > L 156
 EINSATZ HINWEISE > L 167
 TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

HARTMETALL

MVX

NEW

DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP		
					LU	LPR	OAL	DCON	DCSFMS				
43.0	2	MVX4300X2F40	●	2	93	123	188	40	50	1.2	SOMX136008-○○	TPS43	①TIP15W
	3	MVX4300X3F40	●	2	136	166	231	40	50	1.2	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4300X4F40	●	2	179	209	274	40	63	1.2	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4300X5F40	●	2	222	252	317	40	63	1.2	SOMX136008-○○	TPS43	①TIP15W
	6	MVX4300X6F40	●	2	265	295	360	40	63	1.2	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4300X4F50	★	2	179	209	284	50	63	1.2	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4300X5F50	★	2	222	252	327	50	63	1.2	SOMX136008-○○	TPS43	①TIP15W
	6	MVX4300X6F50	★	2	265	295	370	50	63	1.2	SOMX136008-○○	TPS43	①TIP15W
44.0	2	MVX4400X2F40	●	2	95	125	190	40	50	1.1	SOMX136008-○○	TPS43	①TIP15W
	3	MVX4400X3F40	●	2	139	169	234	40	50	1.1	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4400X4F40	●	2	183	213	278	40	63	1.1	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4400X5F40	●	2	227	257	322	40	63	1.1	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4400X4F50	★	2	183	213	288	50	63	1.1	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4400X5F50	★	2	227	257	332	50	63	1.1	SOMX136008-○○	TPS43	①TIP15W
45.0	2	MVX4500X2F40	●	2	97	127	192	40	50	1.0	SOMX136008-○○	TPS43	①TIP15W
	3	MVX4500X3F40	●	2	142	172	237	40	50	1.0	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4500X4F40	●	2	187	217	282	40	63	1.0	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4500X5F40	●	2	232	262	327	40	63	1.0	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4500X4F50	★	2	187	217	292	50	63	1.0	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4500X5F50	★	2	232	262	337	50	63	1.0	SOMX136008-○○	TPS43	①TIP15W
46.0	2	MVX4600X2F40	●	2	99	129	194	40	50	0.9	SOMX136008-○○	TPS43	①TIP15W
	3	MVX4600X3F40	●	2	145	175	240	40	50	0.9	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4600X4F40	●	2	191	221	286	40	63	0.9	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4600X5F40	●	2	237	267	332	40	63	0.9	SOMX136008-○○	TPS43	①TIP15W
	4	MVX4600X4F50	★	2	191	221	296	50	63	0.9	SOMX136008-○○	TPS43	①TIP15W
	5	MVX4600X5F50	★	2	237	267	342	50	63	0.9	SOMX136008-○○	TPS43	①TIP15W
47.0	2	MVX4700X2F40	●	2	101	141	206	40	63	1.9	SOMX166508-○○	TPS54	②TIP25D
	3	MVX4700X3F40	●	2	148	188	253	40	63	1.9	SOMX166508-○○	TPS54	②TIP25D
	4	MVX4700X4F40	●	2	195	235	300	40	63	1.9	SOMX166508-○○	TPS54	②TIP25D
	5	MVX4700X5F40	●	2	242	282	347	40	63	1.9	SOMX166508-○○	TPS54	②TIP25D
	4	MVX4700X4F50	★	2	195	235	310	50	63	1.9	SOMX166508-○○	TPS54	②TIP25D
	5	MVX4700X5F50	★	2	242	282	357	50	63	1.9	SOMX166508-○○	TPS54	②TIP25D
48.0	2	MVX4800X2F40	●	2	103	143	208	40	63	1.8	SOMX166508-○○	TPS54	②TIP25D
	3	MVX4800X3F40	●	2	151	191	256	40	63	1.8	SOMX166508-○○	TPS54	②TIP25D
	4	MVX4800X4F40	●	2	199	239	304	40	63	1.8	SOMX166508-○○	TPS54	②TIP25D
	5	MVX4800X5F40	●	2	247	287	352	40	63	1.8	SOMX166508-○○	TPS54	②TIP25D
	4	MVX4800X4F50	★	2	199	239	314	50	63	1.8	SOMX166508-○○	TPS54	②TIP25D
	5	MVX4800X5F50	★	2	247	287	362	50	63	1.8	SOMX166508-○○	TPS54	②TIP25D
49.0	2	MVX4900X2F40	●	2	105	145	210	40	63	1.7	SOMX166508-○○	TPS54	②TIP25D
	3	MVX4900X3F40	●	2	154	194	259	40	63	1.7	SOMX166508-○○	TPS54	②TIP25D
	4	MVX4900X4F40	●	2	203	243	308	40	63	1.7	SOMX166508-○○	TPS54	②TIP25D
	5	MVX4900X5F40	●	2	252	292	357	40	63	1.7	SOMX166508-○○	TPS54	②TIP25D
	4	MVX4900X4F50	★	2	203	243	318	50	63	1.7	SOMX166508-○○	TPS54	②TIP25D
	5	MVX4900X5F50	★	2	252	292	367	50	63	1.7	SOMX166508-○○	TPS54	②TIP25D

★ Spannmoment (N • m) : TPS43=3.5, TPS54=7.5

● : Lagerstandard. ★ : Lagerstandard in Japan.

NEW

DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP		
					LU	LPR	OAL	DCON	DCSFMS			Klemmschraube	Schlüssel
50.0	2	MVX5000X2F40	●	2	107	147	212	40	63	1.6	SOMX166508-○○	TPS54	TIP25D
	3	MVX5000X3F40	●	2	157	197	262	40	63	1.6	SOMX166508-○○	TPS54	TIP25D
	4	MVX5000X4F40	●	2	207	247	312	40	63	1.6	SOMX166508-○○	TPS54	TIP25D
	5	MVX5000X5F40	●	2	257	297	362	40	63	1.6	SOMX166508-○○	TPS54	TIP25D
	4	MVX5000X4F50	★	2	207	247	322	50	63	1.6	SOMX166508-○○	TPS54	TIP25D
	5	MVX5000X5F50	★	2	257	297	372	50	63	1.6	SOMX166508-○○	TPS54	TIP25D
51.0	2	MVX5100X2F40	●	2	109	149	214	40	63	1.5	SOMX166508-○○	TPS54	TIP25D
	3	MVX5100X3F40	●	2	160	200	265	40	63	1.5	SOMX166508-○○	TPS54	TIP25D
	4	MVX5100X4F40	●	2	211	251	316	40	63	1.5	SOMX166508-○○	TPS54	TIP25D
	5	MVX5100X5F40	●	2	262	302	367	40	63	1.5	SOMX166508-○○	TPS54	TIP25D
	4	MVX5100X4F50	★	2	211	251	326	50	63	1.5	SOMX166508-○○	TPS54	TIP25D
	5	MVX5100X5F50	★	2	262	302	377	50	63	1.5	SOMX166508-○○	TPS54	TIP25D
52.0	2	MVX5200X2F40	●	2	111	151	216	40	63	1.4	SOMX166508-○○	TPS54	TIP25D
	3	MVX5200X3F40	●	2	163	203	268	40	63	1.4	SOMX166508-○○	TPS54	TIP25D
	4	MVX5200X4F40	●	2	215	255	320	40	63	1.4	SOMX166508-○○	TPS54	TIP25D
	5	MVX5200X5F40	●	2	267	307	372	40	63	1.4	SOMX166508-○○	TPS54	TIP25D
	4	MVX5200X4F50	★	2	215	255	330	50	63	1.4	SOMX166508-○○	TPS54	TIP25D
	5	MVX5200X5F50	★	2	267	307	382	50	63	1.4	SOMX166508-○○	TPS54	TIP25D
53.0	2	MVX5300X2F40	●	2	113	153	218	40	63	1.3	SOMX166508-○○	TPS54	TIP25D
	3	MVX5300X3F40	●	2	166	206	271	40	63	1.3	SOMX166508-○○	TPS54	TIP25D
	4	MVX5300X4F40	●	2	219	259	324	40	63	1.3	SOMX166508-○○	TPS54	TIP25D
	5	MVX5300X5F40	●	2	272	312	377	40	63	1.3	SOMX166508-○○	TPS54	TIP25D
	4	MVX5300X4F50	★	2	219	259	334	50	63	1.3	SOMX166508-○○	TPS54	TIP25D
	5	MVX5300X5F50	★	2	272	312	387	50	63	1.3	SOMX166508-○○	TPS54	TIP25D
54.0	2	MVX5400X2F40	●	2	115	155	220	40	63	1.2	SOMX166508-○○	TPS54	TIP25D
	3	MVX5400X3F40	●	2	169	209	274	40	63	1.2	SOMX166508-○○	TPS54	TIP25D
	4	MVX5400X4F40	●	2	223	263	328	40	63	1.2	SOMX166508-○○	TPS54	TIP25D
	5	MVX5400X5F40	●	2	277	317	382	40	63	1.2	SOMX166508-○○	TPS54	TIP25D
	4	MVX5400X4F50	★	2	223	263	338	50	63	1.2	SOMX166508-○○	TPS54	TIP25D
	5	MVX5400X5F50	★	2	277	317	392	50	63	1.2	SOMX166508-○○	TPS54	TIP25D
55.0	2	MVX5500X2F40	●	2	117	157	222	40	63	1.1	SOMX166508-○○	TPS54	TIP25D
	3	MVX5500X3F40	●	2	172	212	277	40	63	1.1	SOMX166508-○○	TPS54	TIP25D
	4	MVX5500X4F40	●	2	227	267	332	40	63	1.1	SOMX166508-○○	TPS54	TIP25D
	5	MVX5500X5F40	●	2	282	322	387	40	63	1.1	SOMX166508-○○	TPS54	TIP25D
	4	MVX5500X4F50	★	2	227	267	342	50	63	1.1	SOMX166508-○○	TPS54	TIP25D
	5	MVX5500X5F50	★	2	282	322	397	50	63	1.1	SOMX166508-○○	TPS54	TIP25D
56.0	2	MVX5600X2F40	●	2	119	159	224	40	63	1.0	SOMX166508-○○	TPS54	TIP25D
	3	MVX5600X3F40	●	2	175	215	280	40	63	1.0	SOMX166508-○○	TPS54	TIP25D
	4	MVX5600X4F40	●	2	231	271	336	40	63	1.0	SOMX166508-○○	TPS54	TIP25D
	5	MVX5600X5F40	●	2	287	327	392	40	63	1.0	SOMX166508-○○	TPS54	TIP25D
	4	MVX5600X4F50	★	2	231	271	346	50	63	1.0	SOMX166508-○○	TPS54	TIP25D
	5	MVX5600X5F50	★	2	287	327	402	50	63	1.0	SOMX166508-○○	TPS54	TIP25D

* Spannmoment (N • m) : TPS54=7.5

BOHREN

WSP BESCHREIBUNG > L 155
 SCHNITTBEDINGUNGEN > L 156
 EINSATZ HINWEISE > L 167
 TECHNISCHE DATEN > N001

BOHREN (WSP AUSFÜHRUNG)

HARTMETALL

MVX

NEW

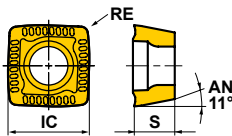
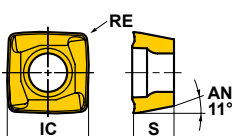
DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Zähne	Abmessungen (mm)					A (mm)	WSP		
					LU	LPR	OAL	DCON	DCSFMS				
57.0	2	MVX5700X2F40	●	2	121	161	226	40	68	1.5	SOMX187008-○○	TPS54	TIP25D
	3	MVX5700X3F40	●	2	178	218	283	40	68	1.5	SOMX187008-○○	TPS54	TIP25D
	4	MVX5700X4F40	●	2	235	275	340	40	68	1.5	SOMX187008-○○	TPS54	TIP25D
	5	MVX5700X5F40	●	2	292	332	397	40	68	1.5	SOMX187008-○○	TPS54	TIP25D
	4	MVX5700X4F50	★	2	235	275	350	50	68	1.5	SOMX187008-○○	TPS54	TIP25D
	5	MVX5700X5F50	★	2	292	332	407	50	68	1.5	SOMX187008-○○	TPS54	TIP25D
58.0	2	MVX5800X2F40	●	2	123	163	228	40	68	1.4	SOMX187008-○○	TPS54	TIP25D
	3	MVX5800X3F40	●	2	181	221	286	40	68	1.4	SOMX187008-○○	TPS54	TIP25D
	4	MVX5800X4F40	●	2	239	279	344	40	68	1.4	SOMX187008-○○	TPS54	TIP25D
	5	MVX5800X5F40	●	2	297	337	402	40	68	1.4	SOMX187008-○○	TPS54	TIP25D
	4	MVX5800X4F50	★	2	239	279	354	50	68	1.4	SOMX187008-○○	TPS54	TIP25D
	5	MVX5800X5F50	★	2	297	337	412	50	68	1.4	SOMX187008-○○	TPS54	TIP25D
59.0	2	MVX5900X2F40	●	2	125	165	230	40	68	1.3	SOMX187008-○○	TPS54	TIP25D
	3	MVX5900X3F40	●	2	184	224	289	40	68	1.3	SOMX187008-○○	TPS54	TIP25D
	4	MVX5900X4F40	●	2	243	283	348	40	68	1.3	SOMX187008-○○	TPS54	TIP25D
	5	MVX5900X5F40	●	2	302	342	407	40	68	1.3	SOMX187008-○○	TPS54	TIP25D
	4	MVX5900X4F50	★	2	243	283	358	50	68	1.3	SOMX187008-○○	TPS54	TIP25D
	5	MVX5900X5F50	★	2	302	342	417	50	68	1.3	SOMX187008-○○	TPS54	TIP25D
60.0	2	MVX6000X2F40	●	2	127	167	232	40	68	1.2	SOMX187008-○○	TPS54	TIP25D
	3	MVX6000X3F40	●	2	187	227	292	40	68	1.2	SOMX187008-○○	TPS54	TIP25D
	4	MVX6000X4F40	●	2	247	287	352	40	68	1.2	SOMX187008-○○	TPS54	TIP25D
	5	MVX6000X5F40	●	2	307	347	412	40	68	1.2	SOMX187008-○○	TPS54	TIP25D
	4	MVX6000X4F50	★	2	247	287	362	50	68	1.2	SOMX187008-○○	TPS54	TIP25D
	5	MVX6000X5F50	★	2	307	347	422	50	68	1.2	SOMX187008-○○	TPS54	TIP25D
61.0	2	MVX6100X2F40	●	2	129	169	234	40	68	1.1	SOMX187008-○○	TPS54	TIP25D
	3	MVX6100X3F40	●	2	190	230	295	40	68	1.1	SOMX187008-○○	TPS54	TIP25D
	4	MVX6100X4F40	●	2	251	291	356	40	68	1.1	SOMX187008-○○	TPS54	TIP25D
	5	MVX6100X5F40	●	2	312	352	417	40	68	1.1	SOMX187008-○○	TPS54	TIP25D
	4	MVX6100X4F50	★	2	251	291	366	50	68	1.1	SOMX187008-○○	TPS54	TIP25D
	5	MVX6100X5F50	★	2	312	352	427	50	68	1.1	SOMX187008-○○	TPS54	TIP25D
62.0	2	MVX6200X2F40	●	2	131	171	236	40	68	1.0	SOMX187008-○○	TPS54	TIP25D
	3	MVX6200X3F40	●	2	193	233	298	40	68	1.0	SOMX187008-○○	TPS54	TIP25D
	4	MVX6200X4F40	●	2	255	295	360	40	68	1.0	SOMX187008-○○	TPS54	TIP25D
	5	MVX6200X5F40	●	2	317	357	422	40	68	1.0	SOMX187008-○○	TPS54	TIP25D
	4	MVX6200X4F50	★	2	255	295	370	50	68	1.0	SOMX187008-○○	TPS54	TIP25D
	5	MVX6200X5F50	★	2	317	357	432	50	68	1.0	SOMX187008-○○	TPS54	TIP25D
63.0	2	MVX6300X2F40	●	2	133	173	238	40	68	0.8	SOMX187008-○○	TPS54	TIP25D
	3	MVX6300X3F40	●	2	196	236	301	40	68	0.8	SOMX187008-○○	TPS54	TIP25D
	4	MVX6300X4F40	●	2	259	299	364	40	68	0.8	SOMX187008-○○	TPS54	TIP25D
	5	MVX6300X5F40	●	2	322	362	427	40	68	0.8	SOMX187008-○○	TPS54	TIP25D
	4	MVX6300X4F50	★	2	259	299	374	50	68	0.8	SOMX187008-○○	TPS54	TIP25D
	5	MVX6300X5F50	★	2	322	362	437	50	68	0.8	SOMX187008-○○	TPS54	TIP25D

* Spannmoment (N · m) : TPS54=7.5

BOHREN

● : Lagerstandard. ★ : Lagerstandard in Japan.

WSP

Form	Bohrer-Durchm.	WSP-Nummer	Abmessungen (mm)			Lager			Geometrie
			IC	S	RE	VP15TF	MC1020	MC5020	
UM 	ø17—ø19.5	SOMX063005-UM	6.0	3.0	0.5	●	●	●	
	ø20—ø22.5	SOMX073505-UM	7.0	3.5	0.5	●	●	●	
	ø23—ø27.5	SOMX084005-UM	8.3	4.0	0.5	●	●	●	
	ø28—ø33	SOMX094506-UM	9.7	4.5	0.6	●	●	●	
	NEW ø33.5—ø39	SOMX115506-UM	11.6	5.5	0.6	●	●	●	
	NEW ø40—ø46	SOMX136008-UM	13.8	6.0	0.8	●	●	●	
	NEW ø47—ø56	SOMX166508-UM	16.5	6.5	0.8	●	●	●	
	NEW ø57—ø63	SOMX187008-UM	18.2	7.0	0.8	●	●	●	
Allgemeine Anwendung									
US 	ø17—ø19.5	SOMX063005-US	6.0	3.0	0.5	●			
	ø20—ø22.5	SOMX073505-US	7.0	3.5	0.5	●			
	ø23—ø27.5	SOMX084005-US	8.0	4.0	0.5	●			
	ø28—ø33	SOMX094506-US	9.0	4.5	0.6	●			
	ø33.5—ø39	SOMX115506-US	11.6	5.5	0.6	●			
	ø40—ø46	SOMX136008-US	13.8	6.0	0.8	●			
	ø47—ø56	SOMX166508-US	16.5	6.5	0.8	●			
	ø57—ø63	SOMX187008-US	18.2	7.0	0.8	●			
Für rostfreien Stahl und innere Schneide									

*US-Spanbrecher ist ausschließlich für den Einsatz als innere WSP konzipiert.

*MC1020 und MC5020 sind ausschließlich für den Einsatz als äußere WSP konzipiert.

EMPFOHLENE SCHNITTDATEN

	Werkstoff	Härte	vc (m/min)	Spanbrecher	φ17—φ19.5		
					fr (mm/U)		
					l/d=2, 3	l/d=4, 5	l/d=6
P	Baustahl (C15, Ck15)	≤180HB	200 (180—235)	UM	0.05 (0.04—0.06)	0.05 (0.04—0.06)	0.04 (0.04—0.05)
	C-Stahl, legierter Stahl (Ck45, 41CrMo4)	180—280HB	140 (115—180)	UM	0.08 (0.06—0.14)	0.08 (0.06—0.09)	0.05 (0.04—0.06)
	C-Stahl, legierter Stahl (100Cr6)	280—350HB	100 (75—140)	UM	0.08 (0.06—0.14)	0.08 (0.06—0.09)	0.05 (0.04—0.06)
	Legierter Werkzeugstahl (X210Cr12)	≤350HB	135 (100—170)	UM	0.08 (0.06—0.14)	0.08 (0.06—0.09)	0.05 (0.04—0.06)
M	Austenitisch rostfreier Stahl (X5CrNi18-10, X5CrNiMo17-12-2)	≤200HB	130 (80—180)	US	0.08 (0.06—0.12)	0.06 (0.04—0.08)	0.05 (0.04—0.06)
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.04 (0.04—0.05)
	Austenitisch rostfreier Stahl (X2CrNi18-9, X5CrNiMo17-11-2)	>200HB	130 (80—180)	US	0.08 (0.06—0.12)	0.06 (0.04—0.08)	0.05 (0.04—0.06)
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.04 (0.04—0.05)
	Rostfreie Stähle, ferritisch und martensitisch (X12Cr13, X6Cr17)	≤200HB	120 (80—165)	US	0.08 (0.06—0.12)	0.06 (0.04—0.08)	0.05 (0.04—0.06)
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.04 (0.04—0.05)
	Rostfreie Stähle, ferritisch und martensitisch (X17CrNi16-2, X30Cr13)	>200HB	120 (80—165)	US	0.08 (0.06—0.12)	0.06 (0.04—0.08)	0.05 (0.04—0.06)
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.04 (0.04—0.05)
K	Guss (GG25, GG30)	≤350MPa	160 (130—195)	UM	0.11 (0.08—0.14)	0.09 (0.08—0.10)	0.05 (0.04—0.06)
	Duktiler Guss (GG40)	≤450MPa	100 (80—135)	UM	0.11 (0.08—0.14)	0.09 (0.08—0.10)	0.05 (0.04—0.06)
	Duktiler Guss (GGG70)	≤800HB	100 (70—125)	UM	0.11 (0.08—0.14)	0.09 (0.08—0.10)	0.05 (0.04—0.06)

- 1) Schnittgeschwindigkeit um 30 % reduzieren, wenn VP15TF als äußere WSP verwendet wird.
 2) L/D=3 ist die empfohlene maximale Tiefe, wenn ausschließlich externe Kühlung verwendet wird.
 3) Interne Kühlkanäle sind beim Bohren von rostfreien Stählen unerlässlich.

	$\phi 20 - \phi 23.5$			$\phi 24 - \phi 29.5$			$\phi 30 - \phi 63$		
	fr (mm/U)			fr (mm/U)			fr (mm/U)		
	l/d=2, 3	l/d=4, 5	l/d=6	l/d=2, 3	l/d=4, 5	l/d=6	l/d=2, 3	l/d=4, 5	l/d=6
	0.06 (0.04–0.08)	0.06 (0.04–0.07)	0.04 (0.04–0.05)	0.07 (0.04–0.08)	0.06 (0.04–0.07)	0.05 (0.04–0.06)	0.08 (0.06–0.10)	0.07 (0.06–0.08)	0.06 (0.06–0.07)
	0.10 (0.06–0.18)	0.09 (0.06–0.12)	0.07 (0.06–0.08)	0.12 (0.08–0.18)	0.10 (0.08–0.12)	0.09 (0.08–0.10)	0.14 (0.08–0.24)	0.12 (0.08–0.16)	0.11 (0.10–0.12)
	0.10 (0.06–0.18)	0.09 (0.06–0.12)	0.07 (0.06–0.08)	0.12 (0.08–0.18)	0.10 (0.08–0.12)	0.09 (0.08–0.10)	0.14 (0.08–0.24)	0.12 (0.08–0.16)	0.11 (0.10–0.12)
	0.10 (0.06–0.18)	0.09 (0.06–0.12)	0.07 (0.06–0.08)	0.12 (0.08–0.18)	0.10 (0.08–0.12)	0.09 (0.08–0.10)	0.14 (0.08–0.24)	0.12 (0.08–0.16)	0.10 (0.08–0.12)
	0.10 (0.06–0.14)	0.07 (0.06–0.08)	0.06 (0.06–0.07)	0.10 (0.06–0.14)	0.08 (0.06–0.10)	0.07 (0.06–0.08)	0.10 (0.06–0.14)	0.09 (0.06–0.12)	0.07 (0.06–0.10)
	0.08 (0.06–0.12)	0.07 (0.06–0.08)	0.06 (0.06–0.07)	0.09 (0.06–0.12)	0.07 (0.06–0.09)	0.06 (0.06–0.08)	0.09 (0.06–0.12)	0.08 (0.06–0.10)	0.07 (0.06–0.08)
	0.10 (0.06–0.14)	0.07 (0.06–0.08)	0.06 (0.06–0.07)	0.10 (0.06–0.14)	0.08 (0.06–0.10)	0.07 (0.06–0.08)	0.10 (0.06–0.14)	0.09 (0.06–0.12)	0.07 (0.06–0.10)
	0.08 (0.06–0.12)	0.07 (0.06–0.08)	0.06 (0.06–0.07)	0.09 (0.06–0.12)	0.07 (0.06–0.09)	0.06 (0.06–0.08)	0.09 (0.06–0.12)	0.08 (0.06–0.10)	0.07 (0.06–0.08)
	0.10 (0.06–0.14)	0.07 (0.06–0.08)	0.06 (0.06–0.07)	0.10 (0.06–0.14)	0.08 (0.06–0.10)	0.07 (0.06–0.08)	0.10 (0.06–0.14)	0.09 (0.06–0.12)	0.07 (0.06–0.10)
	0.08 (0.06–0.12)	0.07 (0.06–0.08)	0.06 (0.06–0.07)	0.09 (0.06–0.12)	0.07 (0.06–0.09)	0.06 (0.06–0.08)	0.09 (0.06–0.12)	0.08 (0.06–0.10)	0.07 (0.06–0.08)
	0.14 (0.10–0.18)	0.10 (0.10–0.12)	0.07 (0.06–0.08)	0.15 (0.10–0.20)	0.11 (0.10–0.13)	0.09 (0.08–0.10)	0.15 (0.10–0.20)	0.12 (0.10–0.13)	0.11 (0.10–0.12)
	0.13 (0.10–0.16)	0.10 (0.10–0.11)	0.07 (0.06–0.08)	0.14 (0.10–0.18)	0.11 (0.10–0.12)	0.09 (0.08–0.10)	0.15 (0.10–0.20)	0.12 (0.10–0.13)	0.11 (0.10–0.12)
	0.13 (0.10–0.16)	0.10 (0.10–0.11)	0.07 (0.06–0.08)	0.14 (0.10–0.18)	0.11 (0.10–0.12)	0.09 (0.08–0.10)	0.15 (0.10–0.20)	0.12 (0.10–0.13)	0.11 (0.10–0.12)

P

M

K

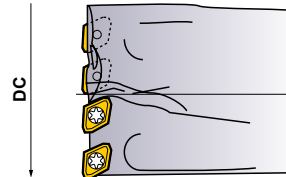
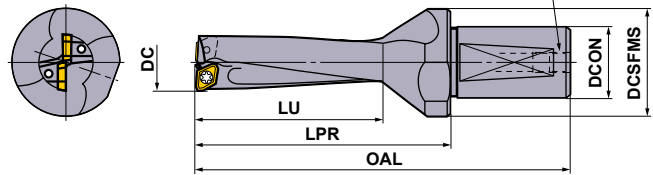
N

S

H



Durchmesser CNT (Gewindeloch, Kanäle der Kühlflüssigkeit)



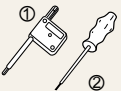
Zähnezahl = 4 (DC ≥ 49)

* Die seitliche Schraube am Flansch dient nicht zur Kühlmittelzufuhr!

Bohrer Durchm. DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Anzahl an WSP	Abmessungen (mm)						WSP Bezeichnung		
					DCON	DCSFMS	CNT	OAL	LPR	LU		Spannschraube	Schlüssel
12.0	2	TAFS1200F20	●	2	20	25	PT1/8	82	39	29	GCMT040204-U	TS2	TKY06F
	3	TAFM1200F20	●	2	20	25	PT1/8	94	51	41	GCMT040204-U	TS2	TKY06F
	4	TAFL1200F20	●	2	20	25	PT1/8	106	63	53	GCMT040204-U	TS2	TKY06F
12.5	2	TAFS1250F20	●	2	20	25	PT1/8	82	39	29	GCMT040204-U	TS2	TKY06F
	3	TAFM1250F20	●	2	20	25	PT1/8	94	51	41	GCMT040204-U	TS2	TKY06F
	4	TAFL1250F20	●	2	20	25	PT1/8	106	63	53	GCMT040204-U	TS2	TKY06F
13.0	2	TAFS1300F20	●	2	20	25	PT1/8	84	41	31	GCMT040204-U	TS2	TKY06F
	3	TAFM1300F20	●	2	20	25	PT1/8	97	54	44	GCMT040204-U	TS2	TKY06F
	4	TAFL1300F20	●	2	20	25	PT1/8	110	67	57	GCMT040204-U	TS2	TKY06F
13.5	2	TAFS1350F20	●	2	20	25	PT1/8	84	41	31	GCMT040204-U	TS2	TKY06F
	3	TAFM1350F20	●	2	20	25	PT1/8	97	54	44	GCMT040204-U	TS2	TKY06F
	4	TAFL1350F20	●	2	20	25	PT1/8	110	67	57	GCMT040204-U	TS2	TKY06F
14.0	2	TAFS1400F20	●	2	20	25	PT1/8	86	43	33	GCMT040204-U	TS2	TKY06F
	3	TAFM1400F20	●	2	20	25	PT1/8	100	57	47	GCMT040204-U	TS2	TKY06F
	4	TAFL1400F20	●	2	20	25	PT1/8	114	71	61	GCMT040204-U	TS2	TKY06F
14.5	2	TAFS1450F20	●	2	20	25	PT1/8	86	43	33	GCMT040204-U	TS2	TKY06F
	3	TAFM1450F20	●	2	20	25	PT1/8	100	57	47	GCMT040204-U	TS2	TKY06F
	4	TAFL1450F20	●	2	20	25	PT1/8	114	71	61	GCMT040204-U	TS2	TKY06F
15.0	2	TAFS1500F20	●	2	20	25	PT1/8	88	45	35	GPMT060204-U	TS2	TKY06F
	3	TAFM1500F20	●	2	20	25	PT1/8	103	60	50	GPMT060204-U	TS2	TKY06F
	4	TAFL1500F20	●	2	20	25	PT1/8	118	75	65	GPMT060204-U	TS2	TKY06F
15.5	2	TAFS1550F20	●	2	20	25	PT1/8	88	45	35	GPMT060204-U	TS2	TKY06F
	3	TAFM1550F20	●	2	20	25	PT1/8	103	60	50	GPMT060204-U	TS2	TKY06F
	4	TAFL1550F20	●	2	20	25	PT1/8	118	75	65	GPMT060204-U	TS2	TKY06F
16.0	2	TAFS1600F25	●	2	25	35	PT1/8	107	57	38	GPMT060204-U	TS2	TKY06F
	3	TAFM1600F25	●	2	25	35	PT1/8	123	73	54	GPMT060204-U	TS2	TKY06F
	4	TAFL1600F25	●	2	25	35	PT1/8	139	89	70	GPMT060204-U	TS2	TKY06F
16.5	2	TAFS1650F25	●	2	25	35	PT1/8	107	57	38	GPMT060204-U	TS2	TKY06F
	3	TAFM1650F25	●	2	25	35	PT1/8	123	73	54	GPMT060204-U	TS2	TKY06F

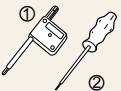
● : Lagerstandard.

Bohrer Durchm. DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Anzahl an WSP	Abmessungen (mm)						WSP Bezeichnung		
					DCON	DCSFM5	CNT	OAL	LPR	LU		Spannschraube	Schlüssel
17.0	2	TAFS1700F25	●	2	25	35	PT1/8	109	59	41	GPMT060204-U	TS2	TKY06F
	3	TAFM1700F25	●	2	25	35	PT1/8	126	76	58	GPMT060204-U	TS2	TKY06F
	4	TAFL1700F25	●	2	25	35	PT1/8	143	93	75	GPMT060204-U	TS2	TKY06F
17.5	2	TAFS1750F25	●	2	25	35	PT1/8	109	59	41	GPMT060204-U	TS2	TKY06F
	3	TAFM1750F25	●	2	25	35	PT1/8	126	76	58	GPMT060204-U	TS2	TKY06F
	4	TAFL1750F25	●	2	25	35	PT1/8	143	93	75	GPMT060204-U	TS2	TKY06F
18.0	2	TAFS1800F25	●	2	25	35	PT1/8	111	61	43	GPMT070204-U	TS25	TKY08F
	3	TAFM1800F25	●	2	25	35	PT1/8	129	79	61	GPMT070204-U	TS25	TKY08F
	4	TAFL1800F25	●	2	25	35	PT1/8	147	97	79	GPMT070204-U	TS25	TKY08F
18.5	2	TAFS1850F25	●	2	25	35	PT1/8	111	61	43	GPMT070204-U	TS25	TKY08F
	3	TAFM1850F25	●	2	25	35	PT1/8	129	79	61	GPMT070204-U	TS25	TKY08F
19.0	2	TAFS1900F25	●	2	25	35	PT1/8	113	63	46	GPMT070204-U	TS25	TKY08F
	3	TAFM1900F25	●	2	25	35	PT1/8	132	82	65	GPMT070204-U	TS25	TKY08F
	4	TAFL1900F25	●	2	25	35	PT1/8	151	101	84	GPMT070204-U	TS25	TKY08F
19.5	2	TAFS1950F25	●	2	25	35	PT1/8	113	63	46	GPMT070204-U	TS25	TKY08F
	3	TAFM1950F25	●	2	25	35	PT1/8	132	82	65	GPMT070204-U	TS25	TKY08F
20.0	2	TAFS2000F25	●	2	25	35	PT1/8	115	65	48	GPMT070204-U	TS25	TKY08F
	3	TAFM2000F25	●	2	25	35	PT1/8	135	85	68	GPMT070204-U	TS25	TKY08F
	4	TAFL2000F25	●	2	25	35	PT1/8	155	105	88	GPMT070204-U	TS25	TKY08F
20.5	2	TAFS2050F25	●	2	25	35	PT1/8	115	65	48	GPMT070204-U	TS25	TKY08F
	3	TAFM2050F25	●	2	25	35	PT1/8	135	85	68	GPMT070204-U	TS25	TKY08F
21.0	2	TAFS2100F25	●	2	25	35	PT1/8	117	67	50	GPMT070204-U	TS25	TKY08F
	3	TAFM2100F25	●	2	25	35	PT1/8	138	88	71	GPMT070204-U	TS25	TKY08F
	4	TAFL2100F25	●	2	25	35	PT1/8	159	109	92	GPMT070204-U	TS25	TKY08F
21.5	2	TAFS2150F25	●	2	25	35	PT1/8	117	67	50	GPMT070204-U	TS25	TKY08F
	3	TAFM2150F25	●	2	25	35	PT1/8	138	88	71	GPMT070204-U	TS25	TKY08F
22.0	2	TAFS2200F25	●	2	25	35	PT1/8	119	69	53	GPMT070204-U	TS25	TKY08F
	3	TAFM2200F25	●	2	25	35	PT1/8	141	91	75	GPMT070204-U	TS25	TKY08F
	4	TAFL2200F25	●	2	25	35	PT1/8	163	113	97	GPMT070204-U	TS25	TKY08F
22.5	2	TAFS2250F25	●	2	25	35	PT1/8	119	69	53	GPMT070204-U	TS25	TKY08F
	3	TAFM2250F25	●	2	25	35	PT1/8	141	91	75	GPMT070204-U	TS25	TKY08F
23.0	2	TAFS2300F25	●	2	25	35	PT1/8	121	71	55	GPMT090304-U	TS3	TKY08F
	3	TAFM2300F25	●	2	25	35	PT1/8	144	94	78	GPMT090304-U	TS3	TKY08F
	4	TAFL2300F25	●	2	25	35	PT1/8	167	117	101	GPMT090304-U	TS3	TKY08F
23.5	2	TAFS2350F25	●	2	25	35	PT1/8	121	71	55	GPMT090304-U	TS3	TKY08F
	3	TAFM2350F25	●	2	25	35	PT1/8	144	94	78	GPMT090304-U	TS3	TKY08F
	4	TAFL2350F25	●	2	25	35	PT1/8	167	117	101	GPMT090304-U	TS3	TKY08F
24.0	2	TAFS2400F25	●	2	25	35	PT1/8	123	73	58	GPMT090304-U	TS3	TKY08F
	3	TAFM2400F25	●	2	25	35	PT1/8	147	97	82	GPMT090304-U	TS3	TKY08F
	4	TAFL2400F25	●	2	25	35	PT1/8	171	121	106	GPMT090304-U	TS3	TKY08F
24.5	2	TAFS2450F25	●	2	25	35	PT1/8	123	73	58	GPMT090304-U	TS3	TKY08F
	3	TAFM2450F25	●	2	25	35	PT1/8	147	97	82	GPMT090304-U	TS3	TKY08F
25.0	2	TAFS2500F32	●	2	32	42	PT1/8	130	75	60	GPMT090304-U	TS3	TKY08F
	3	TAFM2500F32	●	2	32	42	PT1/8	155	100	85	GPMT090304-U	TS3	TKY08F
	4	TAFL2500F25	●	2	25	35	PT1/8	180	125	110	GPMT090304-U	TS3	TKY08F
	4	TAFL2500F32	●	2	32	42	PT1/8	180	125	110	GPMT090304-U	TS3	TKY08F
25.5	2	TAFS2550F32	●	2	32	42	PT1/8	130	75	60	GPMT090304-U	TS3	TKY08F
	3	TAFM2550F32	●	2	32	42	PT1/8	155	100	85	GPMT090304-U	TS3	TKY08F

Bohrer Durchm. DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Anzahl an WSP	Abmessungen (mm)						WSP Bezeichnung		
					DCON	DCSfMS	CNT	OAL	LPR	LU		Spannschraube	Schlüssel
26.0	2	TAFS2600F32	●	2	32	42	PT1/8	132	77	62	GPMT090304-U	TS3	①TKY08F
	3	TAFM2600F32	●	2	32	42	PT1/8	158	103	88	GPMT090304-U	TS3	①TKY08F
	4	TAFL2600F32	●	2	32	42	PT1/8	184	129	114	GPMT090304-U	TS3	①TKY08F
26.5	2	TAFS2650F32	●	2	32	42	PT1/8	132	77	62	GPMT090304-U	TS3	①TKY08F
	3	TAFM2650F32	●	2	32	42	PT1/8	158	103	88	GPMT090304-U	TS3	①TKY08F
	4	TAFL2650F32	●	2	32	42	PT1/8	184	129	114	GPMT090304-U	TS3	①TKY08F
27.0	2	TAFS2700F32	●	2	32	42	PT1/8	134	79	65	GPMT090304-U	TS3	①TKY08F
	3	TAFM2700F32	●	2	32	42	PT1/8	161	106	92	GPMT090304-U	TS3	①TKY08F
	4	TAFL2700F32	●	2	32	42	PT1/8	188	133	119	GPMT090304-U	TS3	①TKY08F
27.5	2	TAFS2750F32	●	2	32	42	PT1/8	134	79	65	GPMT090304-U	TS3	①TKY08F
	3	TAFM2750F32	●	2	32	42	PT1/8	161	106	92	GPMT090304-U	TS3	①TKY08F
28.0	2	TAFS2800F32	●	2	32	42	PT1/8	136	81	67	GPMT11T308-U	TS4	②TKY15D
	3	TAFM2800F32	●	2	32	42	PT1/8	164	109	95	GPMT11T308-U	TS4	②TKY15D
	4	TAFL2800F32	●	2	32	42	PT1/8	192	137	123	GPMT11T308-U	TS4	②TKY15D
28.5	2	TAFS2850F32	●	2	32	42	PT1/8	136	81	67	GPMT11T308-U	TS4	②TKY15D
	3	TAFM2850F32	●	2	32	42	PT1/8	164	109	95	GPMT11T308-U	TS4	②TKY15D
	4	TAFL2850F40	●	2	40	50	PT1/8	202	137	123	GPMT11T308-U	TS4	②TKY15D
29.0	2	TAFS2900F32	●	2	32	42	PT1/8	138	83	70	GPMT11T308-U	TS4	②TKY15D
	3	TAFM2900F32	●	2	32	42	PT1/8	167	112	99	GPMT11T308-U	TS4	②TKY15D
	4	TAFL2900F32	●	2	32	42	PT1/8	196	141	128	GPMT11T308-U	TS4	②TKY15D
29.5	2	TAFS2950F32	●	2	32	42	PT1/8	138	83	70	GPMT11T308-U	TS4	②TKY15D
	3	TAFM2950F32	●	2	32	42	PT1/8	167	112	99	GPMT11T308-U	TS4	②TKY15D
30.0	2	TAFS3000F32	●	2	32	50	PT1/8	145	90	72	GPMT11T308-U	TS4	②TKY15D
	2	TAFS3000F40	●	2	40	50	PT1/4	155	90	72	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3000F32	●	2	32	50	PT1/8	175	120	102	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3000F40	●	2	40	50	PT1/4	185	120	102	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3000F32	●	2	32	42	PT1/8	205	150	132	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3000F40	●	2	40	50	PT1/4	215	150	132	GPMT11T308-U	TS4	②TKY15D
30.5	2	TAFS3050F40	●	2	40	50	PT1/4	155	90	72	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3050F40	●	2	40	50	PT1/4	185	120	102	GPMT11T308-U	TS4	②TKY15D
31.0	2	TAFS3100F32	●	2	32	50	PT1/8	147	92	74	GPMT11T308-U	TS4	②TKY15D
	2	TAFS3100F40	●	2	40	50	PT1/4	157	92	74	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3100F32	●	2	32	50	PT1/8	178	123	105	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3100F40	●	2	40	50	PT1/4	188	123	105	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3100F32	●	2	32	42	PT1/8	209	154	135	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3100F40	●	2	40	50	PT1/4	219	154	136	GPMT11T308-U	TS4	②TKY15D
32.0	2	TAFS3200F32	●	2	32	50	PT1/8	149	94	77	GPMT11T308-U	TS4	②TKY15D
	2	TAFS3200F40	●	2	40	50	PT1/4	159	94	77	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3200F32	●	2	32	50	PT1/8	181	126	109	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3200F40	●	2	40	50	PT1/4	191	126	109	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3200F32	●	2	32	42	PT1/8	213	158	141	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3200F40	●	2	40	50	PT1/4	223	158	141	GPMT11T308-U	TS4	②TKY15D
33.0	2	TAFS3300F32	●	2	32	50	PT1/8	151	96	79	GPMT11T308-U	TS4	②TKY15D
	2	TAFS3300F40	●	2	40	50	PT1/4	161	96	79	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3300F32	●	2	32	50	PT1/8	184	129	112	GPMT11T308-U	TS4	②TKY15D
	3	TAFM3300F40	●	2	40	50	PT1/4	194	129	112	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3300F32	●	2	32	42	PT1/8	217	162	145	GPMT11T308-U	TS4	②TKY15D
	4	TAFL3300F40	●	2	40	50	PT1/4	227	162	145	GPMT11T308-U	TS4	②TKY15D

● : Lagerstandard.

Bohrer Durchm. DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Anzahl an WSP	Abmessungen (mm)						WSP Bezeichnung		
					DCON	DCSFS	CNT	OAL	LPR	LU			
34.0	2	TAFS3400F32	●	2	32	50	PT1/8	153	98	82	GPMT11T308-U	TS4	TKY15D
	2	TAFS3400F40	●	2	40	50	PT1/4	163	98	82	GPMT11T308-U	TS4	TKY15D
	3	TAFM3400F32	●	2	32	50	PT1/8	187	132	116	GPMT11T308-U	TS4	TKY15D
	3	TAFM3400F40	●	2	40	50	PT1/4	197	132	116	GPMT11T308-U	TS4	TKY15D
	4	TAFL3400F32	●	2	32	42	PT1/8	231	166	150	GPMT11T308-U	TS4	TKY15D
	4	TAFL3400F40	●	2	40	50	PT1/4	231	166	150	GPMT11T308-U	TS4	TKY15D
35.0	2	TAFS3500F32	●	2	32	50	PT1/8	155	100	84	GPMT140408-U	TS55	TKY25D
	2	TAFS3500F40	●	2	40	50	PT1/4	165	100	84	GPMT140408-U	TS55	TKY25D
	3	TAFM3500F32	●	2	32	50	PT1/8	190	135	119	GPMT140408-U	TS55	TKY25D
	3	TAFM3500F40	●	2	40	50	PT1/4	200	135	119	GPMT140408-U	TS55	TKY25D
	4	TAFL3500F32	●	2	32	42	PT1/8	235	170	154	GPMT140408-U	TS5	TKY25D
	4	TAFL3500F40	●	2	40	50	PT1/4	235	170	154	GPMT140408-U	TS5	TKY25D
36.0	2	TAFS3600F32	●	2	32	50	PT1/8	157	102	86	GPMT140408-U	TS55	TKY25D
	2	TAFS3600F40	●	2	40	50	PT1/4	167	102	86	GPMT140408-U	TS55	TKY25D
	3	TAFM3600F32	●	2	32	50	PT1/8	193	138	122	GPMT140408-U	TS55	TKY25D
	3	TAFM3600F40	●	2	40	50	PT1/4	203	138	122	GPMT140408-U	TS55	TKY25D
	4	TAFL3600F32	●	2	32	42	PT1/8	229	174	158	GPMT140408-U	TS5	TKY25D
	4	TAFL3600F40	●	2	40	50	PT1/4	239	174	158	GPMT140408-U	TS5	TKY25D
37.0	2	TAFS3700F32	●	2	32	50	PT1/8	159	104	89	GPMT140408-U	TS55	TKY25D
	2	TAFS3700F40	●	2	40	50	PT1/4	169	104	89	GPMT140408-U	TS55	TKY25D
	3	TAFM3700F32	●	2	32	50	PT1/8	196	141	126	GPMT140408-U	TS55	TKY25D
	3	TAFM3700F40	●	2	40	50	PT1/4	206	141	126	GPMT140408-U	TS55	TKY25D
	4	TAFL3700F32	●	2	32	42	PT1/8	233	178	163	GPMT140408-U	TS5	TKY25D
	4	TAFL3700F40	●	2	40	50	PT1/4	243	178	163	GPMT140408-U	TS5	TKY25D
37.5	2	TAFS3750F32	●	2	32	50	PT1/8	159	104	89	GPMT140408-U	TS55	TKY25D
	2	TAFS3750F40	●	2	40	50	PT1/4	169	104	89	GPMT140408-U	TS55	TKY25D
	3	TAFM3750F32	●	2	32	50	PT1/8	196	141	126	GPMT140408-U	TS55	TKY25D
	3	TAFM3750F40	●	2	40	50	PT1/4	206	141	126	GPMT140408-U	TS55	TKY25D
	4	TAFL3750F32	●	2	32	42	PT1/8	233	178	163	GPMT140408-U	TS5	TKY25D
	4	TAFL3750F40	●	2	40	50	PT1/4	243	178	163	GPMT140408-U	TS5	TKY25D
38.0	2	TAFS3800F32	●	2	32	50	PT1/8	161	106	91	GPMT140408-U	TS55	TKY25D
	2	TAFS3800F40	●	2	40	50	PT1/4	171	106	91	GPMT140408-U	TS55	TKY25D
	3	TAFM3800F32	●	2	32	50	PT1/8	199	144	129	GPMT140408-U	TS55	TKY25D
	3	TAFM3800F40	●	2	40	50	PT1/4	209	144	129	GPMT140408-U	TS55	TKY25D
	4	TAFL3800F32	●	2	32	42	PT1/8	247	182	167	GPMT140408-U	TS5	TKY25D
	4	TAFL3800F40	●	2	40	50	PT1/4	247	182	167	GPMT140408-U	TS5	TKY25D
39.0	2	TAFS3900F32	●	2	32	50	PT1/8	163	108	94	GPMT140408-U	TS55	TKY25D
	2	TAFS3900F40	●	2	40	50	PT1/4	173	108	94	GPMT140408-U	TS55	TKY25D
	3	TAFM3900F32	●	2	32	50	PT1/8	202	147	133	GPMT140408-U	TS55	TKY25D
	3	TAFM3900F40	●	2	40	50	PT1/4	212	147	133	GPMT140408-U	TS55	TKY25D
	4	TAFL3900F32	●	2	32	42	PT1/8	251	186	172	GPMT140408-U	TS5	TKY25D
	4	TAFL3900F40	●	2	40	50	PT1/4	251	186	172	GPMT140408-U	TS5	TKY25D
40.0	2	TAFS4000F32	●	2	32	50	PT1/8	165	110	96	GPMT140408-U	TS55	TKY25D
	2	TAFS4000F40	●	2	40	50	PT1/4	175	110	96	GPMT140408-U	TS55	TKY25D
	3	TAFM4000F32	●	2	32	50	PT1/8	205	150	136	GPMT140408-U	TS55	TKY25D
	3	TAFM4000F40	●	2	40	50	PT1/4	215	150	136	GPMT140408-U	TS55	TKY25D
	4	TAFL4000F32	●	2	32	42	PT1/8	245	190	176	GPMT140408-U	TS5	TKY25D
	4	TAFL4000F40	●	2	40	50	PT1/4	255	190	176	GPMT140408-U	TS5	TKY25D

Bohrer Durchm. DC (mm)	Bohrtiefe (l/d)	Bestellbezeichnung	Lager	Anzahl an WSP	Abmessungen (mm)						WSP Bezeichnung		
					DCON	DCSFS	CNT	OAL	LPR	LU		Spannschraube	Schlüssel
41.0	2	TAFS4100F40	●	2	40	50	PT1/4	177	112	98	GPMT140408-U	TS55	②TKY25D
	3	TAFM4100F40	●	2	40	50	PT1/4	218	153	139	GPMT140408-U	TS55	②TKY25D
	4	TAFL4100F40	●	2	40	50	PT1/4	259	194	180	GPMT140408-U	TS5	②TKY25D
42.0	2	TAFS4200F40	●	2	40	50	PT1/4	179	114	101	GPMT140408-U	TS55	②TKY25D
	3	TAFM4200F40	●	2	40	50	PT1/4	221	156	143	GPMT140408-U	TS55	②TKY25D
	4	TAFL4200F40	●	2	40	50	PT1/4	263	198	185	GPMT140408-U	TS5	②TKY25D
43.0	2	TAFS4300F40	●	2	40	50	PT1/4	181	116	103	GPMT140408-U	TS55	②TKY25D
	3	TAFM4300F40	●	2	40	50	PT1/4	224	159	146	GPMT140408-U	TS55	②TKY25D
	4	TAFL4300F40	●	2	40	50	PT1/4	267	202	189	GPMT140408-U	TS5	②TKY25D
44.0	2	TAFS4400F40	●	2	40	50	PT1/4	183	118	106	GPMT140408-U	TS55	②TKY25D
	3	TAFM4400F40	●	2	40	50	PT1/4	227	162	150	GPMT140408-U	TS55	②TKY25D
	4	TAFL4400F40	●	2	40	50	PT1/4	271	206	194	GPMT140408-U	TS5	②TKY25D
45.0	2	TAFS4500F40	●	2	40	54	PT1/4	185	120	108	GPMT140408-U	TS55	②TKY25D
	3	TAFM4500F40	●	2	40	54	PT1/4	230	165	153	GPMT140408-U	TS55	②TKY25D
	4	TAFL4500F40	●	2	40	54	PT1/4	275	210	198	GPMT140408-U	TS5	②TKY25D
46.0	2	TAFS4600F40	●	2	40	54	PT1/4	187	122	110	GPMT140408-U	TS55	②TKY25D
	3	TAFM4600F40	●	2	40	54	PT1/4	233	168	156	GPMT140408-U	TS55	②TKY25D
	4	TAFL4600F40	●	2	40	54	PT1/4	279	214	202	GPMT140408-U	TS5	②TKY25D
47.0	2	TAFS4700F40	●	2	40	54	PT1/4	189	124	113	GPMT140408-U	TS55	②TKY25D
	3	TAFM4700F40	●	2	40	54	PT1/4	236	171	160	GPMT140408-U	TS55	②TKY25D
	4	TAFL4700F40	●	2	40	54	PT1/4	283	218	207	GPMT140408-U	TS5	②TKY25D
48.0	2	TAFS4800F40	●	2	40	54	PT1/4	191	126	115	GPMT140408-U	TS55	②TKY25D
	3	TAFM4800F40	●	2	40	54	PT1/4	239	174	163	GPMT140408-U	TS55	②TKY25D
	4	TAFL4800F40	●	2	40	54	PT1/4	287	222	211	GPMT140408-U	TS5	②TKY25D
49.0	2	TAFS4900F40	●	4	40	58	PT1/4	198	133	118	GPMT090304-U	TS3	①TKY08F
	3	TAFM4900F40	●	4	40	58	PT1/4	247	182	167	GPMT090304-U	TS3	①TKY08F
	4	TAFL4900F40	●	4	40	58	PT1/4	296	231	216	GPMT090304-U	TS3	①TKY08F
50.0	2	TAFS5000F40	●	4	40	58	PT1/4	200	135	120	GPMT090304-U	TS3	①TKY08F
	3	TAFM5000F40	●	4	40	58	PT1/4	250	185	170	GPMT090304-U	TS3	①TKY08F
	4	TAFL5000F40	●	4	40	58	PT1/4	300	235	220	GPMT090304-U	TS3	①TKY08F
51.0	2	TAFS5100F40	●	4	40	58	PT1/4	202	137	122	GPMT090304-U	TS3	①TKY08F
	3	TAFM5100F40	●	4	40	58	PT1/4	253	188	173	GPMT090304-U	TS3	①TKY08F
	4	TAFL5100F40	●	4	40	58	PT1/4	304	239	224	GPMT090304-U	TS3	①TKY08F
52.0	2	TAFS5200F40	●	4	40	58	PT1/4	204	139	125	GPMT090304-U	TS3	①TKY08F
	3	TAFM5200F40	●	4	40	58	PT1/4	256	191	177	GPMT090304-U	TS3	①TKY08F
	4	TAFL5200F40	●	4	40	58	PT1/4	308	243	229	GPMT090304-U	TS3	①TKY08F
53.0	2	TAFS5300F40	●	4	40	63	PT1/4	206	141	127	GPMT090304-U	TS3	①TKY08F
	3	TAFM5300F40	●	4	40	63	PT1/4	259	194	180	GPMT090304-U	TS3	①TKY08F
	4	TAFL5300F40	●	4	40	63	PT1/4	312	247	233	GPMT090304-U	TS3	①TKY08F
54.0	2	TAFS5400F40	●	4	40	63	PT1/4	208	143	128	GPMT090304-U	TS3	①TKY08F
	3	TAFM5400F40	●	4	40	63	PT1/4	262	197	182	GPMT090304-U	TS3	①TKY08F
	4	TAFL5400F40	●	4	40	63	PT1/4	316	251	236	GPMT090304-U	TS3	①TKY08F
55.0	2	TAFS5500F40	●	4	40	63	PT1/4	210	145	130	GPMT090304-U	TS3	①TKY08F
	3	TAFM5500F40	●	4	40	63	PT1/4	265	200	185	GPMT090304-U	TS3	①TKY08F
	4	TAFL5500F40	●	4	40	63	PT1/4	320	255	240	GPMT090304-U	TS3	①TKY08F
56.0	2	TAFS5600F40	●	4	40	63	PT1/4	212	147	132	GPMT090304-U	TS3	①TKY08F
	3	TAFM5600F40	●	4	40	63	PT1/4	268	203	188	GPMT090304-U	TS3	①TKY08F
	4	TAFL5600F40	●	4	40	63	PT1/4	324	259	244	GPMT090304-U	TS3	①TKY08F

● : Lagerstandard.

P

M

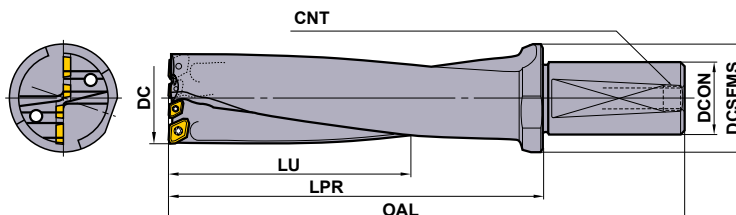
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N

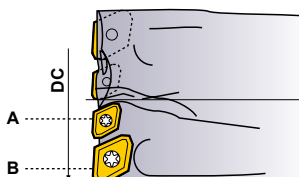
S

H

Ausführung für noch höhere Stabilität

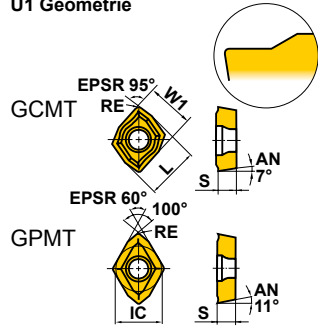
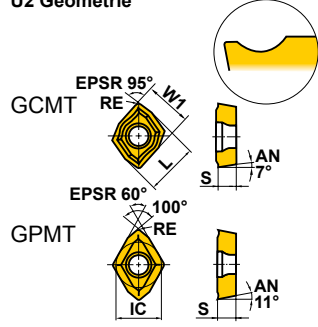
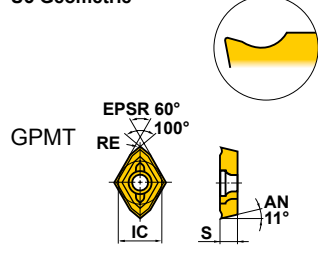


* Die seitliche Schraube am Flansch dient nicht zur Kühlmittelzufuhr!



Bohrer Durchm. DC (mm)	Bohr- tiefe (l/d)	Bestellbezeichnung	Lager	Anzahl an WSP	Abmessungen (mm)						Innen-/ Außentyp	WSP Bezeichnung		
					DCON	DCSFMS	CNT	OAL	LPR	LU				
50.0	2	TAFS5000F40-E	●	4	40	58	PT1/4	200	135	120	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
	3	TAFM5000F40-E	●	4	40	58	PT1/4	250	185	170	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
51.0	4	TAFL5000F40-E	●	4	40	58	PT1/4	300	235	220	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
	2	TAFS5100F40-E	●	4	40	58	PT1/4	202	137	122	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
52.0	3	TAFM5100F40-E	●	4	40	58	PT1/4	253	188	173	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
	4	TAFL5100F40-E	●	4	40	58	PT1/4	304	239	224	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
53.0	2	TAFS5200F40-E	●	4	40	58	PT1/4	204	139	125	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
	3	TAFM5200F40-E	●	4	40	58	PT1/4	256	191	177	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
54.0	4	TAFL5200F40-E	●	4	40	58	PT1/4	308	243	229	A	GPMT090304-U	TS3	①TKY08F
											B	GPMT11T308-U	TS4	②TKY15D
	2	TAFS5300F40-E	●	4	40	63	PT1/4	206	141	127	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
55.0	3	TAFM5300F40-E	●	4	40	63	PT1/4	259	194	180	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
	4	TAFL5300F40-E	●	4	40	63	PT1/4	312	247	233	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
56.0	2	TAFS5400F40-E	●	4	40	63	PT1/4	208	134	128	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
	3	TAFM5400F40-E	●	4	40	63	PT1/4	262	197	182	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
57.0	4	TAFL5400F40-E	●	4	40	63	PT1/4	316	251	236	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
	2	TAFS5500F40-E	●	4	40	63	PT1/4	210	145	130	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
58.0	3	TAFM5500F40-E	●	4	40	63	PT1/4	265	200	185	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
	4	TAFL5500F40-E	●	4	40	63	PT1/4	320	255	240	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
59.0	2	TAFS5600F40-E	●	4	40	63	PT1/4	212	147	132	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
	3	TAFM5600F40-E	●	4	40	63	PT1/4	268	203	188	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D
60.0	4	TAFL5600F40-E	●	4	40	63	PT1/4	324	259	244	A	GPMT11T308-U	TS4	②TKY15D
											B	GPMT11T308-U	TS4	②TKY15D

WSP

Abbildung	Bohrer Durchm.	WSP Bezeichnung	Abmessungen (mm)					Lager				
			L	W1	IC	S	RE	VP15TF	UP20M	GP20M	UE6020	US735
U1 Geometrie 	ø12–ø14.5	GCMT040204-U1	5.0	4.7	—	2.38	0.4		●			
	ø15–ø17.5	GPMT060204-U1	—	—	5.56	2.38	0.4		●		●	
	ø18–ø22.5	GPMT070204-U1	—	—	6.35	2.38	0.4		●		●	
	ø23–ø27.5 ø49–ø56	GPMT090304-U1	—	—	7.94	3.18	0.4		●		●	
	ø28–ø34	GPMT11T308-U1	—	—	9.525	3.97	0.8		●		●	
	ø35–ø48	GPMT140408-U1	—	—	12.70	4.76	0.8		●		●	
U2 Geometrie 	ø12–ø14.5	GCMT040204-U2	5.0	4.7	—	2.38	0.4	●		●		
	ø15–ø17.5	GPMT060204-U2	—	—	5.56	2.38	0.4	●	●		●	●
	ø18–ø22.5	GPMT070204-U2	—	—	6.35	2.38	0.4	●	●		●	●
	ø23–ø27.5 ø49–ø56	GPMT090304-U2	—	—	7.94	3.18	0.4	●	●		●	●
	ø28–ø34	GPMT11T308-U2	—	—	9.525	3.97	0.8	●	●		●	●
	ø35–ø48	GPMT140408-U2	—	—	12.70	4.76	0.8	●	●		●	●
U3 Geometrie 	ø15–ø17.5	GPMT060204-U3	—	—	5.56	2.38	0.4		●		●	●
	ø18–ø22.5	GPMT070204-U3	—	—	6.35	2.38	0.4		●		●	●
	ø23–ø27.5 ø49–ø56	GPMT090304-U3	—	—	7.94	3.18	0.4		●		●	●
	ø28–ø34	GPMT11T308-U3	—	—	9.525	3.97	0.8		●		●	●
	ø35–ø48	GPMT140408-U3	—	—	12.70	4.76	0.8		●		●	●

WSP EMPFEHLUNGEN**SPANBRECHER EMPFEHLUNGEN**

◎ : 1. Empfehlung ○ : 2. Empfehlung

Werkstoff	P						M		K			
	Allg. Baustahl		C-Stahl		Leg. Stahl		Rostfreier Stahl		Guss		Duktiler Guss	
	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT
Spanbrecher												
U1	◎	◎	○	○	○	○	○	○	○	○	○	○
U2	○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
U3		○		○		○		○		○		○

WSP SORTEN EMPFEHLUNGEN

◎ : 1. Empfehlung ○ : 2. Empfehlung

Werkstoff	P						M		K			
	Allg. Baustahl		C-Stahl		Leg. Stahl		Rostfreier Stahl		Guss		Duktiler Guss	
	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT	GCMT	GPMT
Sorte												
VP15TF		○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
UP20M	◎	◎	○	○	○	○	○	○	○	○	○	○
GP20M	○		○		○		○		○		○	
UE6020		○		○		○		○		○		○
US735		○		○		○		○		○		○

● : Lagerstandard.

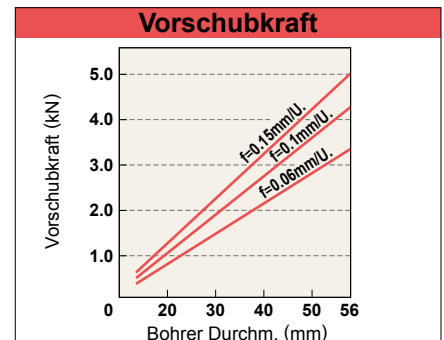
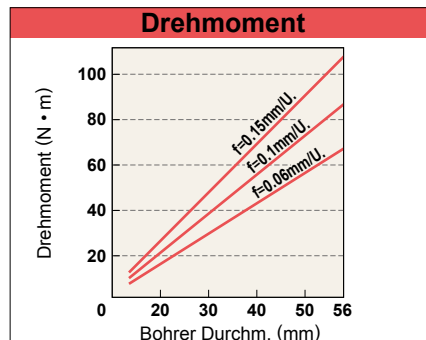
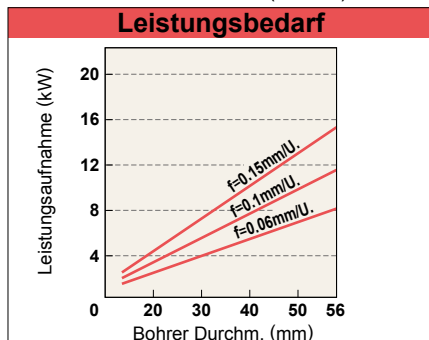
SCHNITTDATENEMPFEHLUNGEN

Werkstoff	Härte	Schnittgeschw. (m/min)			Spanbrecher	Vorschub (mm/U.)					
		For l/d=2, 3		For l/d=4		Bohrer Durchm. (mm)					
		(Ø12—Ø14.5)	(Ø15—)	(Ø16—)		Ø12—Ø14.5	Ø15—Ø22.5	Ø23—Ø34	Ø35—Ø48	Ø49—Ø56	
P	Allg. Baustahl	≤180HB	150 (100—200)	200 (150—300)	140 (100—200)	U1	0.06 (0.04—0.10)	0.07 (0.04—0.10)	0.08 (0.04—0.10)	0.10 (0.04—0.12)	0.08 (0.04—0.10)
						U2	0.06 (0.04—0.10)	0.08 (0.04—0.12)	0.10 (0.04—0.12)	0.12 (0.04—0.14)	0.10 (0.04—0.12)
						U3	—	0.08 (0.04—0.12)	0.10 (0.04—0.12)	0.12 (0.04—0.14)	0.10 (0.04—0.12)
	C-Stahl	180—280HB	120 (80—160)	150 (120—180)	100 (80—120)	U1	0.06 (0.04—0.10)	0.09 (0.06—0.12)	0.12 (0.08—0.14)	0.15 (0.08—0.18)	0.12 (0.08—0.14)
						U2	0.06 (0.04—0.10)	0.12 (0.06—0.14)	0.14 (0.08—0.18)	0.17 (0.08—0.20)	0.14 (0.08—0.18)
						U3	—	0.12 (0.06—0.14)	0.14 (0.08—0.18)	0.17 (0.08—0.20)	0.14 (0.08—0.18)
	Leg. Stahl	180—280HB	120 (80—160)	150 (120—180)	100 (80—120)	U1	0.06 (0.04—0.10)	0.08 (0.06—0.10)	0.09 (0.06—0.12)	0.11 (0.06—0.14)	0.09 (0.06—0.12)
						U2	0.06 (0.04—0.10)	0.10 (0.06—0.12)	0.12 (0.08—0.16)	0.14 (0.08—0.18)	0.12 (0.08—0.16)
						U3	—	0.10 (0.06—0.12)	0.12 (0.08—0.16)	0.14 (0.08—0.18)	0.12 (0.08—0.16)
M	Rostfreier Stahl	≤200HB	100 (80—120)	150 (120—200)	110 (80—140)	U1	0.07 (0.04—0.10)	0.07 (0.04—0.10)	0.08 (0.04—0.10)	0.10 (0.04—0.12)	0.08 (0.04—0.10)
						U2	0.07 (0.04—0.10)	0.08 (0.04—0.12)	0.10 (0.04—0.14)	0.12 (0.04—0.16)	0.10 (0.04—0.14)
						U3	—	0.08 (0.04—0.12)	0.10 (0.04—0.14)	0.12 (0.04—0.16)	0.10 (0.04—0.14)
K	Guss	Zugfestigkeit ≤350MPa	120 (80—160)	150 (120—180)	140 (110—160)	U1	0.07 (0.06—0.10)	0.07 (0.06—0.10)	0.10 (0.04—0.14)	0.10 (0.06—0.14)	0.10 (0.06—0.14)
						U2	0.07 (0.06—0.10)	0.15 (0.10—0.18)	0.20 (0.10—0.25)	0.20 (0.10—0.25)	0.20 (0.10—0.25)
						U3	—	0.15 (0.10—0.18)	0.20 (0.10—0.25)	0.20 (0.10—0.25)	0.20 (0.10—0.25)
	Duktiler Guss	Zugfestigkeit ≤450MPa	120 (80—150)	150 (120—180)	100 (80—120)	U1	0.06 (0.04—0.10)	0.07 (0.06—0.10)	0.10 (0.06—0.14)	0.10 (0.06—0.14)	0.10 (0.06—0.14)
						U2	0.06 (0.04—0.10)	0.12 (0.08—0.14)	0.15 (0.08—0.20)	0.18 (0.08—0.20)	0.15 (0.08—0.20)
						U3	—	0.12 (0.08—0.14)	0.15 (0.08—0.20)	0.18 (0.08—0.20)	0.15 (0.08—0.20)

(Bemerkung) Bei Einsatz von Bohrern l/d=4, reduzieren Sie die empfohlenen Vorschübe auf 80%.

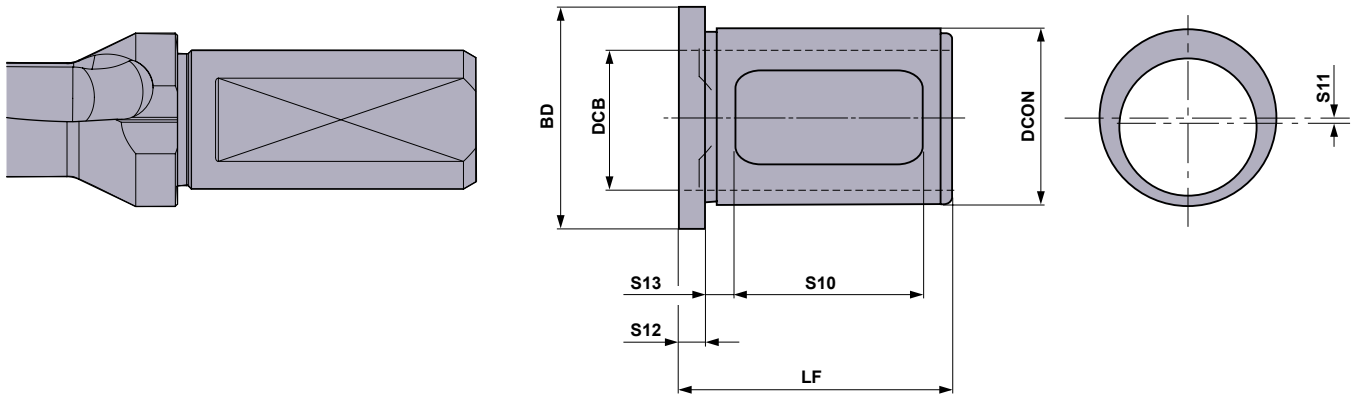
SCHNITTWIDERSTAND

Werkstoff : DIN X5CrNi189 (220HB) Schnittgeschw. : 150m/min WSP : U2



VERSTELLHÜLSEN [JFS]

- Für die Erweiterung des Bohrerdurchmessers.



*Versatz : Größe des Versatzes auf Durchmesser.

Set Bestell-bezeichnung	Individuelle Bestell - Nummer	Lager	Abmessungen (mm)							*Versatz (S11×2)	Einsetzbar für MVX-Bohrer und TAF-Bohrer
			BD	DCON	DCB	LF	S10	S12	S13		
JFS-1	JFS2520-10	●	33	25	20	43	30	5	5	0.10	MVX1700 X ØF20 TAFS/M/L1200F20 TAFS/M/L1550F20
	JFS2520-20	●	33	25	20	43	30	5	5	0.20	
	JFS2520-30	●	33	25	20	43	30	5	5	0.30	
	JFS2520-40	●	33	25	20	43	30	5	5	0.40	
	JFS2520-50	●	33	25	20	43	30	5	5	0.50	
JFS-2	JFS3225-10	●	40	32	25	50	34	5	5	0.10	MVX1750 X ØF25 MVX2550 X ØF25 TAFS/M/L1600F25 TAFS/M/L2450F25
	JFS3225-20	●	40	32	25	50	34	5	5	0.20	
	JFS3225-30	●	40	32	25	50	34	5	5	0.30	
	JFS3225-40	●	40	32	25	50	34	5	5	0.40	
	JFS3225-50	●	40	32	25	50	34	5	5	0.50	
JFS-3	JFS4032-10	●	48	40	32	55	40	5	5	0.10	TMVX2600 X ØF32 MVX3000 X ØF32 TAFS/M/L2500F32 TAFS/M/L2950F32
	JFS4032-20	●	48	40	32	55	40	5	5	0.20	
	JFS4032-30	●	48	40	32	55	40	5	5	0.30	
	JFS4032-40	●	48	40	32	55	40	5	5	0.40	
	JFS4032-50	●	48	40	32	55	40	5	5	0.50	

RICHTLINIE FÜR DIE AUSWAHL VON VERSTELLHÜLSEN

Benötigt = Bohrer ϕ + Verstellhülse + 0.1mm

(z.B.) Benötigter Durchmesser ist 20.3 mm 0.1mm ist Toleranz.

$$\phi 20.3 = (\text{MVX2000 X } \phi F25 + \text{JFS3225-20}) + 0.1$$

20mm Bohrer

Verwendung einer Hülse mit 0.2mm Versatz.

Übergröße

(Bemerkung) Toleranzgröße kann variieren, dies ist nur eine generelle Richtlinie.

<Werkzeugauswahl>

BOHRER : MVX2000 X ØF25

Verstellhülse [JFS]

: JFS3225-20

BESTELLBEZEICHNUNG DER VERSTELLHÜLSEN

●1. Bestell - Methode

Abmaße können aufgrund der Schnittbedingungen variieren. Daher empfehlen wir die Set-Bestellung. Bei Bestellungen, benennen Sie bitte die Set Bestell-Nr. (5 Hülsen/ Set).

●2. Bestell - Methode

Einzelbestellungen sind möglich, bitte nennen Sie die Produktbezeichnung.

● : Lagerstandard.

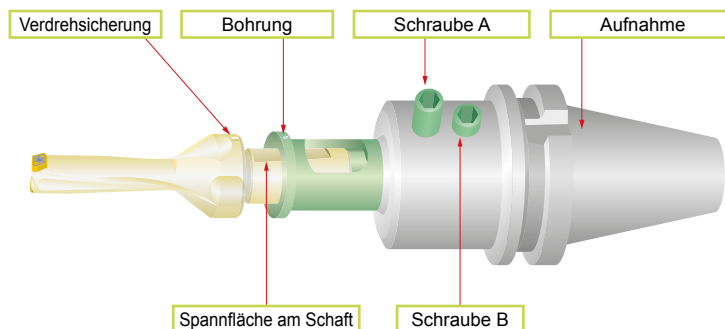
ANWENDUNGSBEREICH DER VERSTELLHÜLSEN

1 Bitte achten Sie darauf, das beim Einbauen des Bohrers die Spannfläche des Bohrers, der Schlitz der Hülse, und die Spannschrauben in die richtige Position gebracht werden. (siehe Bild)

2 Die Schraube A spannt direkt durch den Büchsen Schlitz. Bei manchen Aufnahmen kann es zu Beschädigung der Hülse kommen, da der Lochabstand zu groß ist: Bitte vorab prüfen!

(Bemerkung)

- Feineinstellungen können mit der Verstellhülse nicht vorgenommen werden.
- Kann nicht in Spannzangen gespannt werden.

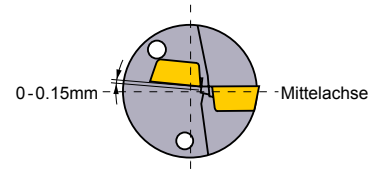


ANWENDUNG VON MVX-BOHRERN

●Einsatz auf einer Drehmaschine

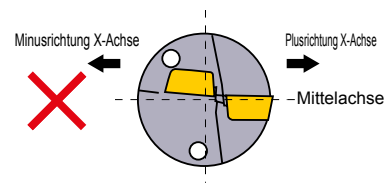
(1) Die äußere WSP muss zur X-Achse der Maschine parallel sein. Der Bohrer ist so konzipiert, dass die Mitte der inneren WSP etwa 0-0,15 mm tiefer liegt, wenn die Mitte des Bohrers und der Werkzeugspindel aneinander ausgerichtet werden.

*Die innere WSP kann brechen, wenn die Mitte der inneren WSP höher liegt als die X-Achse der Maschine.

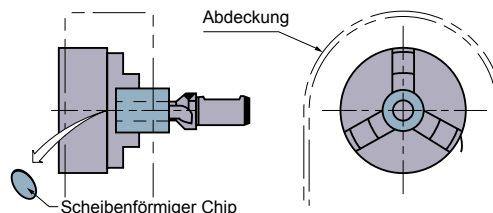


(2) Zur Einstellung des Bohrlochdurchmessers durch Versetzen des Bohrers korrigieren Sie bitte in Richtung der positiven X-Achse (Richtung, in der der Bohrlochdurchmesser erweitert wird). Hinweise zu den maximalen Einstellraten der einzelnen Halter finden Sie in den Halterabmessungen.

*Eine Einstellung zur negativen X-Achse wird nicht empfohlen (Richtung, in der der Bohrlochdurchmesser verkleinert wird), da der Halter mit dem Bohrloch kollidieren kann.



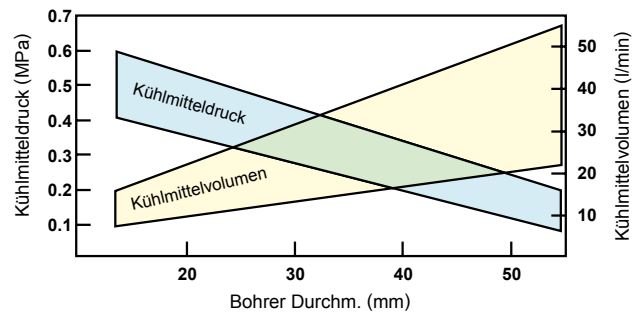
(3) Beim Bohren von Durchgangslöchern auf einer Drehmaschine kann die vom Bohrer erzeugte Scheibe mit hoher Geschwindigkeit aus dem Werkstück herausgeschleudert werden. Aus Sicherheitsgründen und zum Schutz vor Verletzungen sollte eine Schutzabdeckung angebracht werden.



VERSTELLHÜLSEN [JFS]

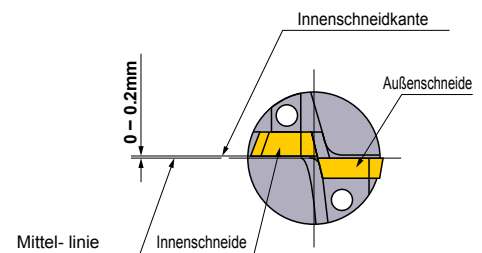
ANWENDUNG VON TAF-BOHRERN

- Stellen Sie höchstmögliche Stabilität für Maschine und Werkstückspannung sicher.
- Kühlmitteldruck und Volumen entnehmen Sie bitte der Abbildung rechts. Das Kühlmittel hat einen großen Einfluss auf die Effizienz des Bohrers.
- Paketbohren ist nicht möglich.
Dieser Bohrer läßt bei Bohreraustritt einen Deckel entstehen, dies kann zu Schneidkantenausbrüchen an der Schneide führen.

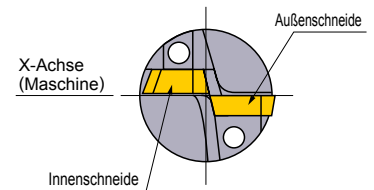


● Einsatz auf Drehmaschinen

- (1) Die Innenschneide muß zwischen 0—0,2mm über Mitte stehen.



- (2) Um den Bohrer außer Mitte stellen zu können, muß die Außenschneide und Maschinenachse parallel verlaufen

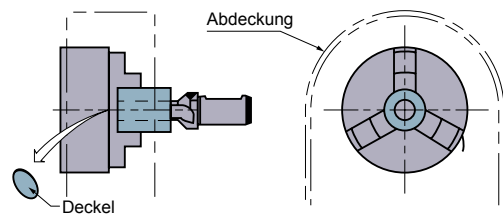


- (3) Bohren außer Mitte:

Der Mittroversatz des Bohrers sollte nicht mehr als 2% des Durchmessers sein. Es ist nicht möglich eine Bohrung mit Untermaß zu fertigen.

- (4) Bei Durchgangsbohrungen auf Drehmaschinen entstehen beim Bohreraustritt Materialdeckel, die aus der Maschine geschleudert werden können. Vorsicht, Verletzungsgefahr.

Sicherheitshinweis: Verwenden Sie immer eine Schutzvorrichtung beim Bohren.



VIOLET BOHRER

VAPDS

Kurze Spirallänge



HSS

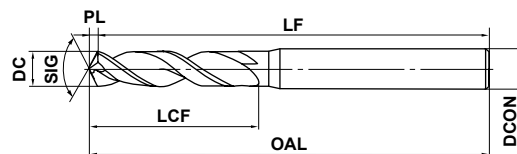
DC<2

DC≥2

P	M	K	N	S	H
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0.5≤DC≤3	3<DC≤6	6<DC≤10	10<DC≤13
0 -0.014	0 -0.018	0 -0.022	0 -0.027

★ Bohrtoleranz: 0—-0.009mm
(außer φ <1.99mm und φ in 0.1mm Stufen (e.g. 0.5 ; 0.6....))



- Mit der neu entwickelten Violet Beschichtung wird eine noch höhere Effizienz und Standzeit erreicht. (Standard Bohrtiefe: bis zu 3xD)

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.5	VAPDS0050	3.15	50.15	50	0.15	3	●
0.51	VAPDS0051	3.15	50.15	50	0.15	3	★
0.52	VAPDS0052	3.16	50.16	50	0.16	3	★
0.53	VAPDS0053	3.16	50.16	50	0.16	3	★
0.54	VAPDS0054	3.16	50.16	50	0.16	3	★
0.55	VAPDS0055	3.17	50.17	50	0.17	3	★
0.56	VAPDS0056	4.17	50.17	50	0.17	3	★
0.57	VAPDS0057	4.17	50.17	50	0.17	3	★
0.58	VAPDS0058	4.17	50.17	50	0.17	3	★
0.59	VAPDS0059	4.18	50.18	50	0.18	3	★
0.6	VAPDS0060	5.18	50.18	50	0.18	3	★
0.61	VAPDS0061	5.18	50.18	50	0.18	3	★
0.62	VAPDS0062	5.19	50.19	50	0.19	3	★
0.63	VAPDS0063	5.19	50.19	50	0.19	3	★
0.64	VAPDS0064	5.19	50.19	50	0.19	3	★
0.65	VAPDS0065	5.20	50.20	50	0.20	3	★
0.66	VAPDS0066	5.20	50.20	50	0.20	3	★
0.67	VAPDS0067	5.20	50.20	50	0.20	3	★
0.68	VAPDS0068	5.20	50.20	50	0.20	3	★
0.69	VAPDS0069	5.21	50.21	50	0.21	3	★
0.7	VAPDS0070	5.21	50.21	50	0.21	3	★
0.71	VAPDS0071	5.21	50.21	50	0.21	3	★
0.72	VAPDS0072	5.22	50.22	50	0.22	3	★
0.73	VAPDS0073	5.22	50.22	50	0.22	3	★
0.74	VAPDS0074	5.22	50.22	50	0.22	3	★
0.75	VAPDS0075	5.23	50.23	50	0.23	3	★
0.76	VAPDS0076	5.23	50.23	50	0.23	3	★
0.77	VAPDS0077	5.23	50.23	50	0.23	3	★
0.78	VAPDS0078	5.23	50.23	50	0.23	3	★
0.79	VAPDS0079	5.24	50.24	50	0.24	3	★
0.8	VAPDS0080	5.24	50.24	50	0.24	3	★
0.81	VAPDS0081	5.24	50.24	50	0.24	3	★
0.82	VAPDS0082	5.25	50.25	50	0.25	3	★
0.83	VAPDS0083	5.25	50.25	50	0.25	3	★
0.84	VAPDS0084	5.25	50.25	50	0.25	3	★
0.85	VAPDS0085	5.26	50.26	50	0.26	3	★
0.86	VAPDS0086	6.26	50.26	50	0.26	3	★
0.87	VAPDS0087	6.26	50.26	50	0.26	3	★
0.88	VAPDS0088	6.26	50.26	50	0.26	3	★
0.89	VAPDS0089	6.27	50.27	50	0.27	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.9	VAPDS0090	6.27	50.27	50	0.27	3	★
0.91	VAPDS0091	6.27	50.27	50	0.27	3	★
0.92	VAPDS0092	6.28	50.28	50	0.28	3	★
0.93	VAPDS0093	6.28	50.28	50	0.28	3	★
0.94	VAPDS0094	6.28	50.28	50	0.28	3	★
0.95	VAPDS0095	6.29	50.29	50	0.29	3	★
0.96	VAPDS0096	6.29	50.29	50	0.29	3	★
0.97	VAPDS0097	6.29	50.29	50	0.29	3	★
0.98	VAPDS0098	6.29	50.29	50	0.29	3	★
0.99	VAPDS0099	6.30	50.30	50	0.30	3	★
1.0	VAPDS0100	6.3	50.3	50	0.3	3	●
1.01	VAPDS0101	6.3	50.3	50	0.3	3	★
1.02	VAPDS0102	6.3	50.3	50	0.3	3	★
1.03	VAPDS0103	6.3	50.3	50	0.3	3	★
1.04	VAPDS0104	6.3	50.3	50	0.3	3	★
1.05	VAPDS0105	6.3	50.3	50	0.3	3	★
1.06	VAPDS0106	6.3	50.3	50	0.3	3	★
1.07	VAPDS0107	8.3	55.3	55	0.3	3	★
1.08	VAPDS0108	8.3	55.3	55	0.3	3	★
1.09	VAPDS0109	8.3	55.3	55	0.3	3	★
1.1	VAPDS0110	8.3	55.3	55	0.3	3	★
1.11	VAPDS0111	8.3	55.3	55	0.3	3	★
1.12	VAPDS0112	8.3	55.3	55	0.3	3	★
1.13	VAPDS0113	8.3	55.3	55	0.3	3	★
1.14	VAPDS0114	8.3	55.3	55	0.3	3	★
1.15	VAPDS0115	8.4	55.4	55	0.4	3	★
1.16	VAPDS0116	8.4	55.4	55	0.4	3	★
1.17	VAPDS0117	8.4	55.4	55	0.4	3	★
1.18	VAPDS0118	8.4	55.4	55	0.4	3	★
1.19	VAPDS0119	8.4	55.4	55	0.4	3	★
1.2	VAPDS0120	8.4	55.4	55	0.4	3	★
1.21	VAPDS0121	8.4	55.4	55	0.4	3	★
1.22	VAPDS0122	8.4	55.4	55	0.4	3	★
1.23	VAPDS0123	8.4	55.4	55	0.4	3	★
1.24	VAPDS0124	8.4	55.4	55	0.4	3	★
1.25	VAPDS0125	8.4	55.4	55	0.4	3	★
1.26	VAPDS0126	8.4	55.4	55	0.4	3	★
1.27	VAPDS0127	8.4	55.4	55	0.4	3	★
1.28	VAPDS0128	8.4	55.4	55	0.4	3	★
1.29	VAPDS0129	8.4	55.4	55	0.4	3	★

BOHREN

● : Lagerstandard. ★ : Lagerstandard in Japan.

VIOLET BOHRER

VAPDS

Kurze Spirallänge

HSS

BOHREN

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
1.3	VAPDS0130	9.4	55.4	55	0.4	3	★
1.31	VAPDS0131	9.4	55.4	55	0.4	3	★
1.32	VAPDS0132	9.4	55.4	55	0.4	3	★
1.33	VAPDS0133	9.4	55.4	55	0.4	3	★
1.34	VAPDS0134	9.4	55.4	55	0.4	3	★
1.35	VAPDS0135	9.4	55.4	55	0.4	3	★
1.36	VAPDS0136	9.4	55.4	55	0.4	3	★
1.37	VAPDS0137	9.4	55.4	55	0.4	3	★
1.38	VAPDS0138	9.4	55.4	55	0.4	3	★
1.39	VAPDS0139	9.4	55.4	55	0.4	3	★
1.4	VAPDS0140	9.4	55.4	55	0.4	3	★
1.41	VAPDS0141	9.4	55.4	55	0.4	3	★
1.42	VAPDS0142	9.4	55.4	55	0.4	3	★
1.43	VAPDS0143	9.4	55.4	55	0.4	3	★
1.44	VAPDS0144	9.4	55.4	55	0.4	3	★
1.45	VAPDS0145	9.4	55.4	55	0.4	3	★
1.46	VAPDS0146	9.4	55.4	55	0.4	3	★
1.47	VAPDS0147	9.4	55.4	55	0.4	3	★
1.48	VAPDS0148	9.4	55.4	55	0.4	3	★
1.49	VAPDS0149	9.5	55.5	55	0.5	3	★
1.5	VAPDS0150	9.5	55.5	55	0.5	3	●
1.51	VAPDS0151	11.5	55.5	55	0.5	3	★
1.52	VAPDS0152	11.5	55.5	55	0.5	3	★
1.53	VAPDS0153	11.5	55.5	55	0.5	3	★
1.54	VAPDS0154	11.5	55.5	55	0.5	3	★
1.55	VAPDS0155	11.5	55.5	55	0.5	3	★
1.56	VAPDS0156	11.5	55.5	55	0.5	3	★
1.57	VAPDS0157	11.5	55.5	55	0.5	3	★
1.58	VAPDS0158	11.5	55.5	55	0.5	3	★
1.59	VAPDS0159	11.5	55.5	55	0.5	3	★
1.6	VAPDS0160	11.5	55.5	55	0.5	3	★
1.61	VAPDS0161	11.5	55.5	55	0.5	3	★
1.62	VAPDS0162	11.5	55.5	55	0.5	3	★
1.63	VAPDS0163	11.5	55.5	55	0.5	3	★
1.64	VAPDS0164	11.5	55.5	55	0.5	3	★
1.65	VAPDS0165	11.5	55.5	55	0.5	3	★
1.66	VAPDS0166	11.5	55.5	55	0.5	3	★
1.67	VAPDS0167	11.5	55.5	55	0.5	3	★
1.68	VAPDS0168	11.5	55.5	55	0.5	3	★
1.69	VAPDS0169	11.5	55.5	55	0.5	3	★
1.7	VAPDS0170	11.5	55.5	55	0.5	3	★
1.71	VAPDS0171	11.5	55.5	55	0.5	3	★
1.72	VAPDS0172	11.5	55.5	55	0.5	3	★
1.73	VAPDS0173	11.5	55.5	55	0.5	3	★
1.74	VAPDS0174	11.5	55.5	55	0.5	3	★
1.75	VAPDS0175	11.5	55.5	55	0.5	3	★
1.76	VAPDS0176	11.5	55.5	55	0.5	3	★
1.77	VAPDS0177	11.5	55.5	55	0.5	3	★
1.78	VAPDS0178	11.5	55.5	55	0.5	3	★
1.79	VAPDS0179	11.5	55.5	55	0.5	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
1.8	VAPDS0180	11.5	55.5	55	0.5	3	★
1.81	VAPDS0181	11.5	55.5	55	0.5	3	★
1.82	VAPDS0182	11.6	55.6	55	0.6	3	★
1.83	VAPDS0183	11.6	55.6	55	0.6	3	★
1.84	VAPDS0184	11.6	55.6	55	0.6	3	★
1.85	VAPDS0185	11.6	55.6	55	0.6	3	★
1.86	VAPDS0186	11.6	55.6	55	0.6	3	★
1.87	VAPDS0187	11.6	55.6	55	0.6	3	★
1.88	VAPDS0188	11.6	55.6	55	0.6	3	★
1.89	VAPDS0189	11.6	55.6	55	0.6	3	★
1.9	VAPDS0190	12.6	55.6	55	0.6	3	★
1.91	VAPDS0191	12.6	60.6	60	0.6	3	★
1.92	VAPDS0192	12.6	60.6	60	0.6	3	★
1.93	VAPDS0193	12.6	60.6	60	0.6	3	★
1.94	VAPDS0194	12.6	60.6	60	0.6	3	★
1.95	VAPDS0195	12.6	60.6	60	0.6	3	★
1.96	VAPDS0196	12.6	60.6	60	0.6	3	★
1.97	VAPDS0197	12.6	60.6	60	0.6	3	★
1.98	VAPDS0198	12.6	60.6	60	0.6	3	★
1.99	VAPDS0199	12.6	60.6	60	0.6	3	★
2.0	VAPDS0200	12.4	60.4	60	0.4	3	●
2.05	VAPDS0205	12.4	60.4	60	0.4	3	★
2.1	VAPDS0210	12.4	60.4	60	0.4	3	★
2.15	VAPDS0215	12.5	60.5	60	0.5	3	★
2.2	VAPDS0220	12.5	60.5	60	0.5	3	★
2.25	VAPDS0225	12.5	60.5	60	0.5	3	★
2.3	VAPDS0230	13.5	60.5	60	0.5	3	★
2.35	VAPDS0235	13.5	60.5	60	0.5	3	★
2.4	VAPDS0240	13.5	60.5	60	0.5	3	★
2.45	VAPDS0245	13.5	60.5	60	0.5	3	★
2.5	VAPDS0250	13.5	60.5	60	0.5	3	●
2.55	VAPDS0255	13.5	60.5	60	0.5	3	★
2.6	VAPDS0260	15.5	60.5	60	0.5	3	★
2.65	VAPDS0265	15.6	60.6	60	0.6	3	★
2.7	VAPDS0270	15.6	60.6	60	0.6	3	★
2.75	VAPDS0275	15.6	60.6	60	0.6	3	★
2.8	VAPDS0280	15.6	60.6	60	0.6	3	★
2.85	VAPDS0285	15.6	60.6	60	0.6	3	★
2.9	VAPDS0290	15.6	60.6	60	0.6	3	★
2.95	VAPDS0295	15.6	60.6	60	0.6	3	★
3.0	VAPDS0300	15.6	60.6	60	0.6	3	●
3.05	VAPDS0305	17.6	70.6	70	0.6	4	★
3.1	VAPDS0310	17.6	70.6	70	0.6	4	★
3.15	VAPDS0315	17.7	70.7	70	0.7	4	★
3.2	VAPDS0320	17.7	70.7	70	0.7	4	★
3.25	VAPDS0325	17.7	70.7	70	0.7	4	★
3.3	VAPDS0330	19.7	70.7	70	0.7	4	★
3.35	VAPDS0335	19.7	70.7	70	0.7	4	★
3.4	VAPDS0340	19.7	70.7	70	0.7	4	★
3.45	VAPDS0345	19.7	70.7	70	0.7	4	★

● : Lagerstandard. ★ : Lagerstandard in Japan.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
3.5	VAPDSD0350	19.7	70.7	70	0.7	4	●
3.55	VAPDSD0355	19.7	70.7	70	0.7	4	★
3.6	VAPDSD0360	21.8	70.8	70	0.8	4	★
3.65	VAPDSD0365	21.8	70.8	70	0.8	4	★
3.7	VAPDSD0370	21.8	70.8	70	0.8	4	★
3.75	VAPDSD0375	21.8	70.8	70	0.8	4	★
3.8	VAPDSD0380	21.8	70.8	70	0.8	4	★
3.85	VAPDSD0385	21.8	70.8	70	0.8	4	★
3.9	VAPDSD0390	21.8	70.8	70	0.8	4	★
3.95	VAPDSD0395	21.8	70.8	70	0.8	4	★
4.0	VAPDSD0400	21.8	70.8	70	0.8	4	●
4.05	VAPDSD0405	21.8	80.8	80	0.8	6	★
4.1	VAPDSD0410	21.9	80.9	80	0.9	6	★
4.15	VAPDSD0415	21.9	80.9	80	0.9	6	★
4.2	VAPDSD0420	21.9	80.9	80	0.9	6	★
4.25	VAPDSD0425	21.9	80.9	80	0.9	6	★
4.3	VAPDSD0430	23.9	80.9	80	0.9	6	★
4.35	VAPDSD0435	23.9	80.9	80	0.9	6	★
4.4	VAPDSD0440	23.9	80.9	80	0.9	6	★
4.45	VAPDSD0445	23.9	80.9	80	0.9	6	★
4.5	VAPDSD0450	23.9	80.9	80	0.9	6	●
4.55	VAPDSD0455	23.9	80.9	80	0.9	6	★
4.6	VAPDSD0460	26.0	81.0	80	1.0	6	★
4.65	VAPDSD0465	26.0	81.0	80	1.0	6	★
4.7	VAPDSD0470	26.0	81.0	80	1.0	6	★
4.75	VAPDSD0475	26.0	81.0	80	1.0	6	★
4.8	VAPDSD0480	26.0	81.0	80	1.0	6	★
4.85	VAPDSD0485	26.0	81.0	80	1.0	6	★
4.9	VAPDSD0490	26.0	81.0	80	1.0	6	★
4.95	VAPDSD0495	26.0	81.0	80	1.0	6	★
5.0	VAPDSD0500	26.0	81.0	80	1.0	6	●
5.05	VAPDSD0505	26.1	81.1	80	1.1	6	★
5.1	VAPDSD0510	26.1	81.1	80	1.1	6	★
5.15	VAPDSD0515	26.1	81.1	80	1.1	6	★
5.2	VAPDSD0520	26.1	81.1	80	1.1	6	★
5.25	VAPDSD0525	26.1	81.1	80	1.1	6	★
5.3	VAPDSD0530	26.1	81.1	80	1.1	6	★
5.35	VAPDSD0535	28.1	81.1	80	1.1	6	★
5.4	VAPDSD0540	28.1	81.1	80	1.1	6	★
5.45	VAPDSD0545	28.1	81.1	80	1.1	6	★
5.5	VAPDSD0550	28.1	81.1	80	1.1	6	●
5.55	VAPDSD0555	28.2	81.2	80	1.2	6	★
5.6	VAPDSD0560	28.2	81.2	80	1.2	6	★
5.65	VAPDSD0565	28.2	81.2	80	1.2	6	★
5.7	VAPDSD0570	28.2	81.2	80	1.2	6	★
5.75	VAPDSD0575	28.2	81.2	80	1.2	6	★
5.8	VAPDSD0580	28.2	81.2	80	1.2	6	★
5.85	VAPDSD0585	28.2	81.2	80	1.2	6	★
5.9	VAPDSD0590	28.2	81.2	80	1.2	6	★
5.95	VAPDSD0595	28.2	81.2	80	1.2	6	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
6.0	VAPDSD0600	28.2	81.2	80	1.2	6	●
6.05	VAPDSD0605	31.3	81.3	80	1.3	8	★
6.1	VAPDSD0610	31.3	81.3	80	1.3	8	★
6.15	VAPDSD0615	31.3	81.3	80	1.3	8	★
6.2	VAPDSD0620	31.3	81.3	80	1.3	8	★
6.25	VAPDSD0625	31.3	81.3	80	1.3	8	★
6.3	VAPDSD0630	31.3	81.3	80	1.3	8	★
6.35	VAPDSD0635	31.3	81.3	80	1.3	8	★
6.4	VAPDSD0640	31.3	81.3	80	1.3	8	★
6.45	VAPDSD0645	31.3	81.3	80	1.3	8	★
6.5	VAPDSD0650	31.4	81.4	80	1.4	8	●
6.55	VAPDSD0655	31.4	81.4	80	1.4	8	★
6.6	VAPDSD0660	31.4	81.4	80	1.4	8	★
6.65	VAPDSD0665	31.4	81.4	80	1.4	8	★
6.7	VAPDSD0670	31.4	81.4	80	1.4	8	★
6.75	VAPDSD0675	33.4	81.4	80	1.4	8	★
6.8	VAPDSD0680	33.4	81.4	80	1.4	8	★
6.85	VAPDSD0685	33.4	81.4	80	1.4	8	★
6.9	VAPDSD0690	33.4	81.4	80	1.4	8	★
6.95	VAPDSD0695	33.4	81.4	80	1.4	8	★
7.0	VAPDSD0700	33.5	81.5	80	1.5	8	●
7.05	VAPDSD0705	33.5	81.5	80	1.5	8	★
7.1	VAPDSD0710	33.5	81.5	80	1.5	8	★
7.15	VAPDSD0715	33.5	81.5	80	1.5	8	★
7.2	VAPDSD0720	33.5	81.5	80	1.5	8	★
7.25	VAPDSD0725	33.5	81.5	80	1.5	8	★
7.3	VAPDSD0730	33.5	81.5	80	1.5	8	★
7.35	VAPDSD0735	33.5	81.5	80	1.5	8	★
7.4	VAPDSD0740	33.5	81.5	80	1.5	8	★
7.45	VAPDSD0745	33.5	81.5	80	1.5	8	★
7.5	VAPDSD0750	33.6	81.6	80	1.6	8	●
7.55	VAPDSD0755	36.6	86.6	85	1.6	8	★
7.6	VAPDSD0760	36.6	86.6	85	1.6	8	★
7.65	VAPDSD0765	36.6	86.6	85	1.6	8	★
7.7	VAPDSD0770	36.6	86.6	85	1.6	8	★
7.75	VAPDSD0775	36.6	86.6	85	1.6	8	★
7.8	VAPDSD0780	36.6	86.6	85	1.6	8	★
7.85	VAPDSD0785	36.6	86.6	85	1.6	8	★
7.9	VAPDSD0790	36.6	86.6	85	1.6	8	★
7.95	VAPDSD0795	36.7	86.7	85	1.7	8	★
8.0	VAPDSD0800	36.7	86.7	85	1.7	8	●
8.05	VAPDSD0805	36.7	91.7	90	1.7	10	★
8.1	VAPDSD0810	36.7	91.7	90	1.7	10	★
8.15	VAPDSD0815	36.7	91.7	90	1.7	10	★
8.2	VAPDSD0820	36.7	91.7	90	1.7	10	★
8.25	VAPDSD0825	36.7	91.7	90	1.7	10	★
8.3	VAPDSD0830	36.7	91.7	90	1.7	10	★
8.35	VAPDSD0835	36.7	91.7	90	1.7	10	★
8.4	VAPDSD0840	36.7	91.7	90	1.7	10	★
8.45	VAPDSD0845	36.8	91.8	90	1.8	10	★

VIOLET BOHRER

VAPDS

Kurze Spirallänge

HSS

BOHREN

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
8.5	VAPDS0850	36.8	91.8	90	1.8	10	●
8.55	VAPDS0855	39.8	94.8	93	1.8	10	★
8.6	VAPDS0860	39.8	94.8	93	1.8	10	★
8.65	VAPDS0865	39.8	94.8	93	1.8	10	★
8.7	VAPDS0870	39.8	94.8	93	1.8	10	★
8.75	VAPDS0875	39.8	94.8	93	1.8	10	★
8.8	VAPDS0880	39.8	94.8	93	1.8	10	★
8.85	VAPDS0885	39.8	94.8	93	1.8	10	★
8.9	VAPDS0890	39.8	94.8	93	1.8	10	★
8.95	VAPDS0895	39.9	94.9	93	1.9	10	★
9.0	VAPDS0900	39.9	94.9	93	1.9	10	●
9.05	VAPDS0905	39.9	94.9	93	1.9	10	★
9.1	VAPDS0910	39.9	94.9	93	1.9	10	★
9.15	VAPDS0915	39.9	94.9	93	1.9	10	★
9.2	VAPDS0920	39.9	94.9	93	1.9	10	★
9.25	VAPDS0925	39.9	94.9	93	1.9	10	★
9.3	VAPDS0930	39.9	94.9	93	1.9	10	★
9.35	VAPDS0935	39.9	94.9	93	1.9	10	★
9.4	VAPDS0940	40.0	95.0	93	2.0	10	★
9.45	VAPDS0945	40.0	95.0	93	2.0	10	★
9.5	VAPDS0950	40.0	95.0	93	2.0	10	●
9.55	VAPDS0955	43.0	98.0	96	2.0	10	★
9.6	VAPDS0960	43.0	98.0	96	2.0	10	★
9.65	VAPDS0965	43.0	98.0	96	2.0	10	★
9.7	VAPDS0970	43.0	98.0	96	2.0	10	★
9.75	VAPDS0975	43.0	98.0	96	2.0	10	★
9.8	VAPDS0980	43.0	98.0	96	2.0	10	★
9.85	VAPDS0985	43.0	98.0	96	2.0	10	★
9.9	VAPDS0990	43.1	98.1	96	2.1	10	★
9.95	VAPDS0995	43.1	98.1	96	2.1	10	★
10.0	VAPDS1000	43.1	98.1	96	2.1	10	●
10.05	VAPDS1005	43.1	103.1	101	2.1	12	★
10.1	VAPDS1010	43.1	103.1	101	2.1	12	★
10.15	VAPDS1015	43.1	103.1	101	2.1	12	★
10.2	VAPDS1020	43.1	103.1	101	2.1	12	★
10.25	VAPDS1025	43.1	103.1	101	2.1	12	★
10.3	VAPDS1030	43.1	103.1	101	2.1	12	★
10.35	VAPDS1035	43.1	103.1	101	2.1	12	★
10.4	VAPDS1040	43.2	103.2	101	2.2	12	★
10.45	VAPDS1045	43.2	103.2	101	2.2	12	★
10.5	VAPDS1050	43.2	103.2	101	2.2	12	●
10.55	VAPDS1055	43.2	103.2	101	2.2	12	★
10.6	VAPDS1060	43.2	103.2	101	2.2	12	★
10.65	VAPDS1065	47.2	107.2	105	2.2	12	★
10.7	VAPDS1070	47.2	107.2	105	2.2	12	★
10.75	VAPDS1075	47.2	107.2	105	2.2	12	★
10.8	VAPDS1080	47.2	107.2	105	2.2	12	★
10.85	VAPDS1085	47.3	107.3	105	2.3	12	★
10.9	VAPDS1090	47.3	107.3	105	2.3	12	★
10.95	VAPDS1095	47.3	107.3	105	2.3	12	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
11.0	VAPDS1100	47.3	107.3	105	2.3	12	●
11.05	VAPDS1105	47.3	107.3	105	2.3	12	★
11.1	VAPDS1110	47.3	107.3	105	2.3	12	★
11.15	VAPDS1115	47.3	107.3	105	2.3	12	★
11.2	VAPDS1120	47.3	107.3	105	2.3	12	★
11.25	VAPDS1125	47.3	107.3	105	2.3	12	★
11.3	VAPDS1130	47.3	107.3	105	2.3	12	★
11.35	VAPDS1135	47.4	107.4	105	2.4	12	★
11.4	VAPDS1140	47.4	107.4	105	2.4	12	★
11.45	VAPDS1145	47.4	107.4	105	2.4	12	★
11.5	VAPDS1150	47.4	107.4	105	2.4	12	★
11.55	VAPDS1155	47.4	107.4	105	2.4	12	★
11.6	VAPDS1160	47.4	107.4	105	2.4	12	★
11.65	VAPDS1165	47.4	107.4	105	2.4	12	★
11.7	VAPDS1170	47.4	107.4	105	2.4	12	★
11.75	VAPDS1175	47.4	107.4	105	2.4	12	★
11.8	VAPDS1180	47.4	107.4	105	2.4	12	★
11.85	VAPDS1185	51.5	111.5	109	2.5	12	★
11.9	VAPDS1190	51.5	111.5	109	2.5	12	★
11.95	VAPDS1195	51.5	111.5	109	2.5	12	★
12.0	VAPDS1200	51.5	111.5	109	2.5	12	●
12.1	VAPDS1210	51.5	111.5	109	2.5	12	★
12.2	VAPDS1220	51.5	111.5	109	2.5	12	★
12.3	VAPDS1230	51.6	111.6	109	2.6	12	★
12.4	VAPDS1240	51.6	111.6	109	2.6	12	★
12.5	VAPDS1250	51.6	111.6	109	2.6	12	●
12.6	VAPDS1260	51.6	111.6	109	2.6	12	★
12.7	VAPDS1270	51.6	111.6	109	2.6	12	★
12.8	VAPDS1280	51.7	111.7	109	2.7	12	★
12.9	VAPDS1290	51.7	111.7	109	2.7	12	★
13.0	VAPDS1300	51.7	111.7	109	2.7	12	★

● : Lagerstandard. ★ : Lagerstandard in Japan.

SCHNITTDATENEMPFEHLUNGEN (Standard Bohrtiefe: 3 x DC oder weniger)

Werkstoff	Baustahl		C-Stahl Ck55 Leg. Stahl 070M55 Guss		Leg. Werkzeugstahl X210Cr12 (Materialien mit geringer Härte) Ferritisch rostfreier Stahl X10CrAl18, X10CrAl13 Martensitischer rostfreier Stahl X20Cr13, X10CrAl13		Leg. Werkzeugstahl X40CrMoV51 (-40HRC) Ausscheidungshärtung von rostfreiem Stahl X7CrNiAl177	
Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)
0.5	18000	0.02	16000	0.02	9000	0.02	8200	0.02
1.0	12000	0.05	10000	0.05	6300	0.05	5500	0.04
2.0	6400	0.09	5500	0.09	3200	0.09	2900	0.05
3.0	4300	0.13	3700	0.13	2100	0.13	1900	0.06
4.0	3200	0.15	2800	0.15	1600	0.15	1400	0.08
5.0	2600	0.18	2200	0.18	1300	0.18	1100	0.10
6.0	2100	0.19	1800	0.19	1100	0.20	950	0.11
8.0	1600	0.24	1400	0.24	800	0.22	720	0.13
10.0	1300	0.28	1100	0.28	640	0.25	570	0.15
12.0	1100	0.34	930	0.34	530	0.30	480	0.17
13.0	980	0.36	860	0.36	490	0.32	440	0.19

- 1) Bitte passen Sie die Schnittwerte den Bedingungen des Werkstückes und der Maschine an.
- 2) Bitte setzen Sie Spannzangenfutter mit Präzisionshülsen ein.
- 3) Verwenden Sie genügend Kühlschmierstoff.
- 4) VAPDSSUS und VAPDMSUS werden für austenitischen, rostfreien Stahl empfohlen (X5CrNi1810).
- 5) Bei Bohrungen über 4xDC empfehlen wir Vorschubunterbrechungen.

Bei Verwendung von wasserlöslicher Schmierflüssigkeit sind oben genannte Schnittdaten der Standard.
Bitte reduzieren Sie die Umdrehungen bei Verwendung von nicht-wasserlöslichem Kühlschmierstoff.

VIOLET BOHRER

VAPDM

Mittlere Spirallänge

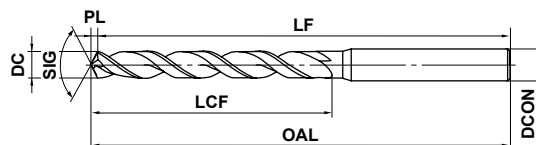


DC < 2

DC ≥ 2



$0.5 \leq DC \leq 3$	$3 < DC \leq 6$	$6 < DC \leq 10$	$10 < DC \leq 18$	$18 < DC \leq 30$	$30 < DC \leq 32$
0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.033	0 -0.039



- Mit der neu entwickelten Violet Beschichtung wird eine noch höhere Effizienz und Standzeit erreicht.
(Standard Bohrtiefe: bis zu 5xDC)

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.5	VAPDMD0050	6.15	50.15	50	0.15	3	●
0.55	VAPDMD0055	6.17	50.17	50	0.17	3	★
0.6	VAPDMD0060	8.18	50.18	50	0.18	3	★
0.65	VAPDMD0065	8.20	50.20	50	0.20	3	★
0.7	VAPDMD0070	10.21	50.21	50	0.21	3	★
0.75	VAPDMD0075	10.23	50.23	50	0.23	3	★
0.8	VAPDMD0080	10.24	50.24	50	0.24	3	★
0.85	VAPDMD0085	10.26	50.26	50	0.26	3	★
0.9	VAPDMD0090	12.27	50.27	50	0.27	3	★
0.95	VAPDMD0095	12.29	50.29	50	0.29	3	★
1.0	VAPDMD0100	12.3	60.3	60	0.3	3	●
1.05	VAPDMD0105	12.3	60.3	60	0.3	3	★
1.1	VAPDMD0110	16.3	60.3	60	0.3	3	★
1.15	VAPDMD0115	16.4	60.4	60	0.4	3	★
1.2	VAPDMD0120	16.4	60.4	60	0.4	3	★
1.25	VAPDMD0125	16.4	60.4	60	0.4	3	★
1.3	VAPDMD0130	16.4	60.4	60	0.4	3	★
1.35	VAPDMD0135	18.4	60.4	60	0.4	3	★
1.4	VAPDMD0140	18.4	60.4	60	0.4	3	★
1.45	VAPDMD0145	18.4	60.4	60	0.4	3	★
1.5	VAPDMD0150	18.5	60.5	60	0.5	3	●
1.55	VAPDMD0155	20.5	60.5	60	0.5	3	★
1.6	VAPDMD0160	20.5	60.5	60	0.5	3	★
1.65	VAPDMD0165	20.5	60.5	60	0.5	3	★
1.7	VAPDMD0170	20.5	60.5	60	0.5	3	★
1.75	VAPDMD0175	20.5	60.5	60	0.5	3	★
1.8	VAPDMD0180	22.5	60.5	60	0.5	3	★
1.85	VAPDMD0185	22.6	60.6	60	0.6	3	★
1.9	VAPDMD0190	22.6	60.6	60	0.6	3	★
1.95	VAPDMD0195	23.6	60.6	60	0.6	3	★
2.0	VAPDMD0200	23.4	70.4	70	0.4	3	●
2.05	VAPDMD0205	23.4	70.4	70	0.4	3	★
2.1	VAPDMD0210	23.4	70.4	70	0.4	3	★
2.15	VAPDMD0215	23.5	70.5	70	0.5	3	★
2.2	VAPDMD0220	26.5	70.5	70	0.5	3	★
2.25	VAPDMD0225	26.5	70.5	70	0.5	3	★
2.3	VAPDMD0230	26.5	70.5	70	0.5	3	★
2.35	VAPDMD0235	26.5	70.5	70	0.5	3	★
2.4	VAPDMD0240	29.5	70.5	70	0.5	3	★
2.45	VAPDMD0245	29.5	70.5	70	0.5	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
2.5	VAPDMD0250	29.5	70.5	70	0.5	3	●
2.55	VAPDMD0255	29.5	70.5	70	0.5	3	★
2.6	VAPDMD0260	29.5	70.5	70	0.5	3	★
2.65	VAPDMD0265	29.6	70.6	70	0.6	3	★
2.7	VAPDMD0270	32.6	70.6	70	0.6	3	★
2.75	VAPDMD0275	32.6	70.6	70	0.6	3	★
2.8	VAPDMD0280	32.6	70.6	70	0.6	3	★
2.85	VAPDMD0285	32.6	70.6	70	0.6	3	★
2.9	VAPDMD0290	32.6	70.6	70	0.6	3	★
2.95	VAPDMD0295	32.6	70.6	70	0.6	3	★
3.0	VAPDMD0300	32.6	70.6	70	0.6	3	●
3.05	VAPDMD0305	35.6	85.6	85	0.6	4	★
3.1	VAPDMD0310	35.6	85.6	85	0.6	4	★
3.15	VAPDMD0315	35.7	85.7	85	0.7	4	★
3.2	VAPDMD0320	35.7	85.7	85	0.7	4	★
3.25	VAPDMD0325	35.7	85.7	85	0.7	4	★
3.3	VAPDMD0330	35.7	85.7	85	0.7	4	★
3.35	VAPDMD0335	35.7	85.7	85	0.7	4	★
3.4	VAPDMD0340	38.7	85.7	85	0.7	4	★
3.45	VAPDMD0345	38.7	85.7	85	0.7	4	★
3.5	VAPDMD0350	38.7	85.7	85	0.7	4	●
3.55	VAPDMD0355	38.7	85.7	85	0.7	4	★
3.6	VAPDMD0360	38.8	85.8	85	0.8	4	★
3.65	VAPDMD0365	38.8	85.8	85	0.8	4	★
3.7	VAPDMD0370	38.8	85.8	85	0.8	4	★
3.75	VAPDMD0375	42.8	85.8	85	0.8	4	★
3.8	VAPDMD0380	42.8	85.8	85	0.8	4	★
3.85	VAPDMD0385	42.8	85.8	85	0.8	4	★
3.9	VAPDMD0390	42.8	85.8	85	0.8	4	★
3.95	VAPDMD0395	42.8	85.8	85	0.8	4	★
4.0	VAPDMD0400	42.8	85.8	85	0.8	4	●
4.05	VAPDMD0405	42.8	100.8	100	0.8	6	★
4.1	VAPDMD0410	42.9	100.9	100	0.9	6	★
4.15	VAPDMD0415	42.9	100.9	100	0.9	6	★
4.2	VAPDMD0420	42.9	100.9	100	0.9	6	★
4.25	VAPDMD0425	46.9	100.9	100	0.9	6	★
4.3	VAPDMD0430	46.9	100.9	100	0.9	6	★
4.35	VAPDMD0435	46.9	100.9	100	0.9	6	★
4.4	VAPDMD0440	46.9	100.9	100	0.9	6	★
4.45	VAPDMD0445	46.9	100.9	100	0.9	6	★

● : Lagerstandard. ★ : Lagerstandard in Japan.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
4.5	VAPDMD0450	46.9	100.9	100	0.9	6	●
4.55	VAPDMD0455	46.9	100.9	100	0.9	6	★
4.6	VAPDMD0460	47.0	101.0	100	1.0	6	★
4.65	VAPDMD0465	47.0	101.0	100	1.0	6	★
4.7	VAPDMD0470	47.0	101.0	100	1.0	6	★
4.75	VAPDMD0475	47.0	101.0	100	1.0	6	★
4.8	VAPDMD0480	52.0	101.0	100	1.0	6	★
4.85	VAPDMD0485	52.0	101.0	100	1.0	6	★
4.9	VAPDMD0490	52.0	101.0	100	1.0	6	★
4.95	VAPDMD0495	52.0	101.0	100	1.0	6	★
5.0	VAPDMD0500	52.0	101.0	100	1.0	6	●
5.05	VAPDMD0505	52.1	101.1	100	1.1	6	★
5.1	VAPDMD0510	52.1	101.1	100	1.1	6	★
5.15	VAPDMD0515	52.1	101.1	100	1.1	6	★
5.2	VAPDMD0520	52.1	101.1	100	1.1	6	★
5.25	VAPDMD0525	52.1	101.1	100	1.1	6	★
5.3	VAPDMD0530	52.1	101.1	100	1.1	6	★
5.35	VAPDMD0535	57.1	107.1	106	1.1	6	★
5.4	VAPDMD0540	57.1	107.1	106	1.1	6	★
5.45	VAPDMD0545	57.1	107.1	106	1.1	6	★
5.5	VAPDMD0550	57.1	107.1	106	1.1	6	●
5.55	VAPDMD0555	57.2	107.2	106	1.2	6	★
5.6	VAPDMD0560	57.2	107.2	106	1.2	6	★
5.65	VAPDMD0565	57.2	107.2	106	1.2	6	★
5.7	VAPDMD0570	57.2	107.2	106	1.2	6	★
5.75	VAPDMD0575	57.2	107.2	106	1.2	6	★
5.8	VAPDMD0580	57.2	107.2	106	1.2	6	★
5.85	VAPDMD0585	57.2	107.2	106	1.2	6	★
5.9	VAPDMD0590	57.2	107.2	106	1.2	6	★
5.95	VAPDMD0595	57.2	107.2	106	1.2	6	★
6.0	VAPDMD0600	57.2	107.2	106	1.2	6	●
6.05	VAPDMD0605	63.3	113.3	112	1.3	8	★
6.1	VAPDMD0610	63.3	113.3	112	1.3	8	★
6.15	VAPDMD0615	63.3	113.3	112	1.3	8	★
6.2	VAPDMD0620	63.3	113.3	112	1.3	8	★
6.25	VAPDMD0625	63.3	113.3	112	1.3	8	★
6.3	VAPDMD0630	63.3	113.3	112	1.3	8	★
6.35	VAPDMD0635	63.3	113.3	112	1.3	8	★
6.4	VAPDMD0640	63.3	113.3	112	1.3	8	★
6.45	VAPDMD0645	63.3	113.3	112	1.3	8	★
6.5	VAPDMD0650	63.4	113.4	112	1.4	8	●
6.55	VAPDMD0655	63.4	113.4	112	1.4	8	★
6.6	VAPDMD0660	63.4	113.4	112	1.4	8	★
6.65	VAPDMD0665	63.4	113.4	112	1.4	8	★
6.7	VAPDMD0670	63.4	113.4	112	1.4	8	★
6.75	VAPDMD0675	68.4	118.4	117	1.4	8	★
6.8	VAPDMD0680	68.4	118.4	117	1.4	8	★
6.85	VAPDMD0685	68.4	118.4	117	1.4	8	★
6.9	VAPDMD0690	68.4	118.4	117	1.4	8	★
6.95	VAPDMD0695	68.4	118.4	117	1.4	8	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
7.0	VAPDMD0700	68.5	118.5	117	1.5	8	●
7.05	VAPDMD0705	68.5	118.5	117	1.5	8	★
7.1	VAPDMD0710	68.5	118.5	117	1.5	8	★
7.15	VAPDMD0715	68.5	118.5	117	1.5	8	★
7.2	VAPDMD0720	68.5	118.5	117	1.5	8	★
7.25	VAPDMD0725	68.5	118.5	117	1.5	8	★
7.3	VAPDMD0730	68.5	118.5	117	1.5	8	★
7.35	VAPDMD0735	68.5	118.5	117	1.5	8	★
7.4	VAPDMD0740	68.5	118.5	117	1.5	8	★
7.45	VAPDMD0745	68.5	118.5	117	1.5	8	★
7.5	VAPDMD0750	68.6	118.6	117	1.6	8	●
7.55	VAPDMD0755	74.6	124.6	123	1.6	8	★
7.6	VAPDMD0760	74.6	124.6	123	1.6	8	★
7.65	VAPDMD0765	74.6	124.6	123	1.6	8	★
7.7	VAPDMD0770	74.6	124.6	123	1.6	8	★
7.75	VAPDMD0775	74.6	124.6	123	1.6	8	★
7.8	VAPDMD0780	74.6	124.6	123	1.6	8	★
7.85	VAPDMD0785	74.6	124.6	123	1.6	8	★
7.9	VAPDMD0790	74.6	124.6	123	1.6	8	★
7.95	VAPDMD0795	74.7	124.7	123	1.7	8	★
8.0	VAPDMD0800	74.7	124.7	123	1.7	8	●
8.05	VAPDMD0805	74.7	129.7	128	1.7	10	★
8.1	VAPDMD0810	74.7	129.7	128	1.7	10	★
8.15	VAPDMD0815	74.7	129.7	128	1.7	10	★
8.2	VAPDMD0820	74.7	129.7	128	1.7	10	★
8.25	VAPDMD0825	74.7	129.7	128	1.7	10	★
8.3	VAPDMD0830	74.7	129.7	128	1.7	10	★
8.35	VAPDMD0835	74.7	129.7	128	1.7	10	★
8.4	VAPDMD0840	74.7	129.7	128	1.7	10	★
8.45	VAPDMD0845	74.8	129.8	128	1.8	10	★
8.5	VAPDMD0850	74.8	129.8	128	1.8	10	●
8.55	VAPDMD0855	80.8	135.8	134	1.8	10	★
8.6	VAPDMD0860	80.8	135.8	134	1.8	10	★
8.65	VAPDMD0865	80.8	135.8	134	1.8	10	★
8.7	VAPDMD0870	80.8	135.8	134	1.8	10	★
8.75	VAPDMD0875	80.8	135.8	134	1.8	10	★
8.8	VAPDMD0880	80.8	135.8	134	1.8	10	★
8.85	VAPDMD0885	80.8	135.8	134	1.8	10	★
8.9	VAPDMD0890	80.8	135.8	134	1.8	10	★
8.95	VAPDMD0895	80.9	135.9	134	1.9	10	★
9.0	VAPDMD0900	80.9	135.9	134	1.9	10	●
9.1	VAPDMD0910	80.9	135.9	134	1.9	10	★
9.2	VAPDMD0920	80.9	135.9	134	1.9	10	★
9.3	VAPDMD0930	80.9	135.9	134	1.9	10	★
9.4	VAPDMD0940	81.0	136.0	134	2.0	10	★
9.5	VAPDMD0950	81.0	136.0	134	2.0	10	●
9.6	VAPDMD0960	87.0	142.0	140	2.0	10	★
9.7	VAPDMD0970	87.0	142.0	140	2.0	10	★
9.8	VAPDMD0980	87.0	142.0	140	2.0	10	★
9.9	VAPDMD0990	87.1	142.1	140	2.1	10	★

VIOLET BOHRER

VAPDM

Mittlere Spirallänge

HSS

BOHREN

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
10.0	VAPDMD1000	87.1	142.1	140	2.1	10	●
10.1	VAPDMD1010	87.1	147.1	145	2.1	12	★
10.2	VAPDMD1020	87.1	147.1	145	2.1	12	★
10.3	VAPDMD1030	87.1	147.1	145	2.1	12	★
10.4	VAPDMD1040	87.2	147.2	145	2.2	12	★
10.5	VAPDMD1050	87.2	147.2	145	2.2	12	●
10.6	VAPDMD1060	87.2	147.2	145	2.2	12	★
10.7	VAPDMD1070	94.2	154.2	152	2.2	12	★
10.8	VAPDMD1080	94.2	154.2	152	2.2	12	★
10.9	VAPDMD1090	94.3	154.3	152	2.3	12	★
11.0	VAPDMD1100	94.3	154.3	152	2.3	12	●
11.1	VAPDMD1110	94.3	154.3	152	2.3	12	★
11.2	VAPDMD1120	94.3	154.3	152	2.3	12	★
11.3	VAPDMD1130	94.3	154.3	152	2.3	12	★
11.4	VAPDMD1140	94.4	154.4	152	2.4	12	★
11.5	VAPDMD1150	94.4	154.4	152	2.4	12	●
11.6	VAPDMD1160	94.4	154.4	152	2.4	12	★
11.7	VAPDMD1170	94.4	154.4	152	2.4	12	★
11.8	VAPDMD1180	94.4	154.4	152	2.4	12	★
11.9	VAPDMD1190	101.5	161.5	159	2.5	12	★
12.0	VAPDMD1200	101.5	161.5	159	2.5	12	●
12.1	VAPDMD1210	101.5	161.5	159	2.5	12	★
12.2	VAPDMD1220	101.5	161.5	159	2.5	12	★
12.3	VAPDMD1230	101.6	161.6	159	2.6	12	★
12.4	VAPDMD1240	101.6	161.6	159	2.6	12	★
12.5	VAPDMD1250	101.6	161.6	159	2.6	12	●
12.6	VAPDMD1260	101.6	161.6	159	2.6	12	★
12.7	VAPDMD1270	101.6	161.6	159	2.6	12	★
12.8	VAPDMD1280	101.7	161.7	159	2.7	12	★
12.9	VAPDMD1290	101.7	161.7	159	2.7	12	★
13.0	VAPDMD1300	101.7	161.7	159	2.7	12	●
13.5	VAPDMD1350	102.8	162.8	160	2.8	16	●
14.0	VAPDMD1400	102.9	162.9	160	2.9	16	●
14.1	VAPDMD1410	107.9	167.9	165	2.9	16	★
14.2	VAPDMD1420	107.9	167.9	165	2.9	16	★
14.5	VAPDMD1450	108.0	168.0	165	3.0	16	●
15.0	VAPDMD1500	108.1	168.1	165	3.1	16	●
15.5	VAPDMD1550	113.2	173.2	170	3.2	16	★
15.6	VAPDMD1560	113.2	173.2	170	3.2	16	★
15.7	VAPDMD1570	113.3	173.3	170	3.3	16	★
16.0	VAPDMD1600	113.3	173.3	170	3.3	16	●
16.5	VAPDMD1650	113.4	178.4	175	3.4	20	●
17.0	VAPDMD1700	113.5	178.5	175	3.5	20	●
17.5	VAPDMD1750	118.6	183.6	180	3.6	20	●
17.6	VAPDMD1760	118.7	183.7	180	3.7	20	★
17.7	VAPDMD1770	118.7	183.7	180	3.7	20	★
18.0	VAPDMD1800	118.7	183.7	180	3.7	20	●
18.5	VAPDMD1850	123.8	188.8	185	3.8	20	★
19.0	VAPDMD1900	123.9	188.9	185	3.9	20	★
19.5	VAPDMD1950	124.0	189.0	185	4.0	20	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
19.6	VAPDMD1960	124.1	189.1	185	4.1	20	★
19.7	VAPDMD1970	124.1	189.1	185	4.1	20	★
20.0	VAPDMD2000	124.1	189.1	185	4.1	20	★
20.5	VAPDMD2050	129.3	204.3	200	4.3	25	●
21.0	VAPDMD2100	129.4	204.4	200	4.4	25	●
21.1	VAPDMD2110	129.4	204.4	200	4.4	25	★
21.2	VAPDMD2120	129.4	204.4	200	4.4	25	★
21.5	VAPDMD2150	129.5	204.5	200	4.5	25	★
22.0	VAPDMD2200	129.6	204.6	200	4.6	25	●
22.5	VAPDMD2250	134.7	209.7	205	4.7	25	★
23.0	VAPDMD2300	134.8	209.8	205	4.8	25	●
23.5	VAPDMD2350	134.9	209.9	205	4.9	25	★
24.0	VAPDMD2400	140.0	215.0	210	5.0	25	★
24.5	VAPDMD2450	140.1	215.1	210	5.1	25	★
25.0	VAPDMD2500	140.2	215.2	210	5.2	25	★
25.5	VAPDMD2550	145.3	225.3	220	5.3	32	●
26.0	VAPDMD2600	145.4	225.4	220	5.4	32	★
26.5	VAPDMD2650	145.5	225.5	220	5.5	32	★
27.0	VAPDMD2700	145.6	225.6	220	5.6	32	★
28.0	VAPDMD2800	145.8	225.8	220	5.8	32	★
29.0	VAPDMD2900	151.0	231.0	225	6.0	32	★
30.0	VAPDMD3000	151.2	231.2	225	6.2	32	★
31.0	VAPDMD3100	156.4	236.4	230	6.4	32	★
32.0	VAPDMD3200	161.6	241.6	235	6.6	32	★

● : Lagerstandard. ★ : Lagerstandard in Japan.

SCHNITTDATENEMPFEHLUNGEN (Standard Bohrtiefe: 5 x D oder weniger)

Werkstoff	Baustahl		C-Stahl Ck55 Leg. Stahl 070M55 Guss		Leg. Werkzeugstahl X210Cr12 (Materialien mit geringer Härte) Ferritisch rostfreier Stahl X10CrAl18, X10CrAl13 Martensitischer rostfreier Stahl X20Cr13, X10CrAl13		Leg. Werkzeugstahl X40CrMoV51 (–40HRC) Ausscheidungshärtung von rostfreiem Stahl X7CrNiAl177	
	Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)
0.5	17000	0.01	12800	0.01	8000	0.01	6600	0.01
1.0	11000	0.05	8300	0.05	5000	0.05	4100	0.04
2.0	6400	0.09	4800	0.09	2900	0.06	2400	0.05
3.0	4300	0.13	3200	0.13	1900	0.10	1600	0.06
4.0	3200	0.15	2400	0.15	1400	0.10	1200	0.08
5.0	2600	0.18	1900	0.18	1100	0.13	950	0.10
6.0	2100	0.19	1600	0.20	950	0.15	800	0.11
8.0	1600	0.24	1200	0.22	720	0.18	600	0.13
10.0	1300	0.28	950	0.25	570	0.21	480	0.15
12.0	1100	0.34	800	0.30	480	0.25	400	0.17
14.0	910	0.39	680	0.35	410	0.30	340	0.21
15.0	850	0.40	640	0.36	380	0.31	320	0.22
16.0	800	0.42	600	0.38	360	0.32	300	0.23
18.0	710	0.44	530	0.40	320	0.34	270	0.24
20.0	570	0.44	450	0.40	250	0.34	220	0.24
22.0	520	0.46	410	0.42	230	0.36	200	0.25
24.0	480	0.48	370	0.44	210	0.37	190	0.26
26.0	440	0.51	340	0.46	200	0.39	170	0.28
28.0	410	0.53	320	0.48	180	0.41	160	0.29
30.0	380	0.55	300	0.50	170	0.43	150	0.30
32.0	360	0.55	280	0.50	160	0.43	140	0.30

- 1) Bitte passen Sie die Schnittwerte den Bedingungen des Werkstückes und der Maschine an.
- 2) Bitte setzen Sie Spannzangenfutter mit Präzisionshülsen ein.
- 3) Verwenden Sie genügend Kühlschmierstoff.
- 4) VAPDSSUS und VAPDMSUS werden für austenitischen, rostfreien Stahl empfohlen (X5CrNi1810).
- 5) Bei Bohrungen über 4xDC empfehlen wir Vorschubunterbrechungen.

Bei Verwendung von wasserlöslicher Schmierflüssigkeit sind oben genannte Schnittdaten der Standard.
Bitte reduzieren Sie die Umdrehungen bei Verwendung von nicht-wasserlöslichem Kühlschmierstoff.

VIOLET BOHRER

VAPDSSUS

Kurz, hochpräzise, für rostfreien Stahl

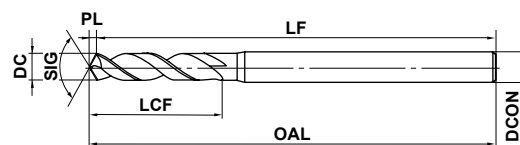


DC ≥ 1

P	M	K	N	S	H
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$0.5 \leq DC \leq 3$	$3 < DC \leq 6$	$6 < DC \leq 10$	$10 < DC \leq 18$	$18 < DC \leq 20$
$\begin{matrix} 0 \\ -0.014 \end{matrix}$	$\begin{matrix} 0 \\ -0.018 \end{matrix}$	$\begin{matrix} 0 \\ -0.022 \end{matrix}$	$\begin{matrix} 0 \\ -0.027 \end{matrix}$	$\begin{matrix} 0 \\ -0.033 \end{matrix}$

★ Bohrtoleranz: 0 — -0.009mm
(außer $\phi < 4.0\text{mm}$ und ϕ in 0.1mm Stufen (e.g. 0.5 ; 0.6....))



- Die Kombination aus neuem Design und Violet-Beschichtung ermöglicht hocheffizientes Bohren und lange Standzeit beim Bohren von rostfreien Stahlorten.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.5	VAPDSSUSD0050	3.10	50.10	50	0.10	3	●
0.51	VAPDSSUSD0051	3.11	50.11	50	0.11	3	★
0.52	VAPDSSUSD0052	3.11	50.11	50	0.11	3	★
0.53	VAPDSSUSD0053	3.11	50.11	50	0.11	3	★
0.54	VAPDSSUSD0054	3.11	50.11	50	0.11	3	★
0.55	VAPDSSUSD0055	3.11	50.11	50	0.11	3	★
0.56	VAPDSSUSD0056	4.12	50.12	50	0.12	3	★
0.57	VAPDSSUSD0057	4.12	50.12	50	0.12	3	★
0.58	VAPDSSUSD0058	4.12	50.12	50	0.12	3	★
0.59	VAPDSSUSD0059	4.12	50.12	50	0.12	3	★
0.6	VAPDSSUSD0060	5.12	50.12	50	0.12	3	★
0.61	VAPDSSUSD0061	5.13	50.13	50	0.13	3	★
0.62	VAPDSSUSD0062	5.13	50.13	50	0.13	3	★
0.63	VAPDSSUSD0063	5.13	50.13	50	0.13	3	★
0.64	VAPDSSUSD0064	5.13	50.13	50	0.13	3	★
0.65	VAPDSSUSD0065	5.13	50.13	50	0.13	3	★
0.66	VAPDSSUSD0066	5.14	50.14	50	0.14	3	★
0.67	VAPDSSUSD0067	5.14	50.14	50	0.14	3	★
0.68	VAPDSSUSD0068	5.14	50.14	50	0.14	3	★
0.69	VAPDSSUSD0069	5.14	50.14	50	0.14	3	★
0.7	VAPDSSUSD0070	5.14	50.14	50	0.14	3	★
0.71	VAPDSSUSD0071	5.15	50.15	50	0.15	3	★
0.72	VAPDSSUSD0072	5.15	50.15	50	0.15	3	★
0.73	VAPDSSUSD0073	5.15	50.15	50	0.15	3	★
0.74	VAPDSSUSD0074	5.15	50.15	50	0.15	3	★
0.75	VAPDSSUSD0075	5.16	50.16	50	0.16	3	★
0.76	VAPDSSUSD0076	5.16	50.16	50	0.16	3	★
0.77	VAPDSSUSD0077	5.16	50.16	50	0.16	3	★
0.78	VAPDSSUSD0078	5.16	50.16	50	0.16	3	★
0.79	VAPDSSUSD0079	5.16	50.16	50	0.16	3	★
0.8	VAPDSSUSD0080	5.17	50.17	50	0.17	3	★
0.81	VAPDSSUSD0081	5.17	50.17	50	0.17	3	★
0.82	VAPDSSUSD0082	5.17	50.17	50	0.17	3	★
0.83	VAPDSSUSD0083	5.17	50.17	50	0.17	3	★
0.84	VAPDSSUSD0084	5.17	50.17	50	0.17	3	★
0.85	VAPDSSUSD0085	5.18	50.18	50	0.18	3	★
0.86	VAPDSSUSD0086	6.18	50.18	50	0.18	3	★
0.87	VAPDSSUSD0087	6.18	50.18	50	0.18	3	★
0.88	VAPDSSUSD0088	6.18	50.18	50	0.18	3	★
0.89	VAPDSSUSD0089	6.18	50.18	50	0.18	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.9	VAPDSSUSD0090	6.19	50.19	50	0.19	3	●
0.91	VAPDSSUSD0091	6.19	50.19	50	0.19	3	★
0.92	VAPDSSUSD0092	6.19	50.19	50	0.19	3	★
0.93	VAPDSSUSD0093	6.19	50.19	50	0.19	3	★
0.94	VAPDSSUSD0094	6.19	50.19	50	0.19	3	★
0.95	VAPDSSUSD0095	6.20	50.20	50	0.20	3	★
0.96	VAPDSSUSD0096	6.20	50.20	50	0.20	3	★
0.97	VAPDSSUSD0097	6.20	50.20	50	0.20	3	★
0.98	VAPDSSUSD0098	6.20	50.20	50	0.20	3	★
0.99	VAPDSSUSD0099	6.21	50.21	50	0.21	3	★
1.0	VAPDSSUSD0100	6.2	50.2	50	0.2	3	●
1.01	VAPDSSUSD0101	6.2	50.2	50	0.2	3	★
1.02	VAPDSSUSD0102	6.2	50.2	50	0.2	3	★
1.03	VAPDSSUSD0103	6.2	50.2	50	0.2	3	★
1.04	VAPDSSUSD0104	6.2	50.2	50	0.2	3	★
1.05	VAPDSSUSD0105	6.2	50.2	50	0.2	3	★
1.06	VAPDSSUSD0106	6.2	50.2	50	0.2	3	★
1.07	VAPDSSUSD0107	8.2	55.2	55	0.2	3	★
1.08	VAPDSSUSD0108	8.2	55.2	55	0.2	3	★
1.09	VAPDSSUSD0109	8.2	55.2	55	0.2	3	★
1.1	VAPDSSUSD0110	8.2	55.2	55	0.2	3	★
1.11	VAPDSSUSD0111	8.2	55.2	55	0.2	3	★
1.12	VAPDSSUSD0112	8.2	55.2	55	0.2	3	★
1.13	VAPDSSUSD0113	8.2	55.2	55	0.2	3	★
1.14	VAPDSSUSD0114	8.2	55.2	55	0.2	3	★
1.15	VAPDSSUSD0115	8.2	55.2	55	0.2	3	★
1.16	VAPDSSUSD0116	8.2	55.2	55	0.2	3	★
1.17	VAPDSSUSD0117	8.2	55.2	55	0.2	3	★
1.18	VAPDSSUSD0118	8.2	55.2	55	0.2	3	★
1.19	VAPDSSUSD0119	8.3	55.3	55	0.3	3	★
1.2	VAPDSSUSD0120	8.3	55.3	55	0.3	3	★
1.21	VAPDSSUSD0121	8.3	55.3	55	0.3	3	★
1.22	VAPDSSUSD0122	8.3	55.3	55	0.3	3	★
1.23	VAPDSSUSD0123	8.3	55.3	55	0.3	3	★
1.24	VAPDSSUSD0124	8.3	55.3	55	0.3	3	★
1.25	VAPDSSUSD0125	8.3	55.3	55	0.3	3	★
1.26	VAPDSSUSD0126	8.3	55.3	55	0.3	3	★
1.27	VAPDSSUSD0127	8.3	55.3	55	0.3	3	★
1.28	VAPDSSUSD0128	8.3	55.3	55	0.3	3	★
1.29	VAPDSSUSD0129	8.3	55.3	55	0.3	3	★

BOHREN

● : Lagerstandard. ★ : Lagerstandard in Japan.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
1.3	VAPDSSUSD0130	9.3	55.3	55	0.3	3	★
1.31	VAPDSSUSD0131	9.3	55.3	55	0.3	3	★
1.32	VAPDSSUSD0132	9.3	55.3	55	0.3	3	★
1.33	VAPDSSUSD0133	9.3	55.3	55	0.3	3	★
1.34	VAPDSSUSD0134	9.3	55.3	55	0.3	3	★
1.35	VAPDSSUSD0135	9.3	55.3	55	0.3	3	★
1.36	VAPDSSUSD0136	9.3	55.3	55	0.3	3	★
1.37	VAPDSSUSD0137	9.3	55.3	55	0.3	3	★
1.38	VAPDSSUSD0138	9.3	55.3	55	0.3	3	★
1.39	VAPDSSUSD0139	9.3	55.3	55	0.3	3	★
1.4	VAPDSSUSD0140	9.3	55.3	55	0.3	3	★
1.41	VAPDSSUSD0141	9.3	55.3	55	0.3	3	★
1.42	VAPDSSUSD0142	9.3	55.3	55	0.3	3	★
1.43	VAPDSSUSD0143	9.3	55.3	55	0.3	3	★
1.44	VAPDSSUSD0144	9.3	55.3	55	0.3	3	★
1.45	VAPDSSUSD0145	9.3	55.3	55	0.3	3	★
1.46	VAPDSSUSD0146	9.3	55.3	55	0.3	3	★
1.47	VAPDSSUSD0147	9.3	55.3	55	0.3	3	★
1.48	VAPDSSUSD0148	9.3	55.3	55	0.3	3	★
1.49	VAPDSSUSD0149	9.3	55.3	55	0.3	3	★
1.5	VAPDSSUSD0150	9.3	55.3	55	0.3	3	●
1.51	VAPDSSUSD0151	11.3	55.3	55	0.3	3	★
1.52	VAPDSSUSD0152	11.3	55.3	55	0.3	3	★
1.53	VAPDSSUSD0153	11.3	55.3	55	0.3	3	★
1.54	VAPDSSUSD0154	11.3	55.3	55	0.3	3	★
1.55	VAPDSSUSD0155	11.3	55.3	55	0.3	3	★
1.56	VAPDSSUSD0156	11.3	55.3	55	0.3	3	★
1.57	VAPDSSUSD0157	11.3	55.3	55	0.3	3	★
1.58	VAPDSSUSD0158	11.3	55.3	55	0.3	3	★
1.59	VAPDSSUSD0159	11.3	55.3	55	0.3	3	★
1.6	VAPDSSUSD0160	11.3	55.3	55	0.3	3	★
1.61	VAPDSSUSD0161	11.3	55.3	55	0.3	3	★
1.62	VAPDSSUSD0162	11.3	55.3	55	0.3	3	★
1.63	VAPDSSUSD0163	11.3	55.3	55	0.3	3	★
1.64	VAPDSSUSD0164	11.3	55.3	55	0.3	3	★
1.65	VAPDSSUSD0165	11.3	55.3	55	0.3	3	★
1.66	VAPDSSUSD0166	11.3	55.3	55	0.3	3	★
1.67	VAPDSSUSD0167	11.4	55.4	55	0.4	3	★
1.68	VAPDSSUSD0168	11.4	55.4	55	0.4	3	★
1.69	VAPDSSUSD0169	11.4	55.4	55	0.4	3	★
1.7	VAPDSSUSD0170	11.4	55.4	55	0.4	3	★
1.71	VAPDSSUSD0171	11.4	55.4	55	0.4	3	★
1.72	VAPDSSUSD0172	11.4	55.4	55	0.4	3	★
1.73	VAPDSSUSD0173	11.4	55.4	55	0.4	3	★
1.74	VAPDSSUSD0174	11.4	55.4	55	0.4	3	★
1.75	VAPDSSUSD0175	11.4	55.4	55	0.4	3	★
1.76	VAPDSSUSD0176	11.4	55.4	55	0.4	3	★
1.77	VAPDSSUSD0177	11.4	55.4	55	0.4	3	★
1.78	VAPDSSUSD0178	11.4	55.4	55	0.4	3	★
1.79	VAPDSSUSD0179	11.4	55.4	55	0.4	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
1.8	VAPDSSUSD0180	11.4	55.4	55	0.4	3	★
1.81	VAPDSSUSD0181	11.4	55.4	55	0.4	3	★
1.82	VAPDSSUSD0182	11.4	55.4	55	0.4	3	★
1.83	VAPDSSUSD0183	11.4	55.4	55	0.4	3	★
1.84	VAPDSSUSD0184	11.4	55.4	55	0.4	3	★
1.85	VAPDSSUSD0185	11.4	55.4	55	0.4	3	★
1.86	VAPDSSUSD0186	11.4	55.4	55	0.4	3	★
1.87	VAPDSSUSD0187	11.4	55.4	55	0.4	3	★
1.88	VAPDSSUSD0188	11.4	55.4	55	0.4	3	★
1.89	VAPDSSUSD0189	11.4	55.4	55	0.4	3	★
1.9	VAPDSSUSD0190	12.4	55.4	55	0.4	3	★
1.91	VAPDSSUSD0191	12.4	60.4	60	0.4	3	★
1.92	VAPDSSUSD0192	12.4	60.4	60	0.4	3	★
1.93	VAPDSSUSD0193	12.4	60.4	60	0.4	3	★
1.94	VAPDSSUSD0194	12.4	60.4	60	0.4	3	★
1.95	VAPDSSUSD0195	12.4	60.4	60	0.4	3	★
1.96	VAPDSSUSD0196	12.4	60.4	60	0.4	3	★
1.97	VAPDSSUSD0197	12.4	60.4	60	0.4	3	★
1.98	VAPDSSUSD0198	12.4	60.4	60	0.4	3	★
1.99	VAPDSSUSD0199	12.4	60.4	60	0.4	3	★
2.0	VAPDSSUSD0200	12.4	60.4	60	0.4	3	●
2.01	VAPDSSUSD0201	12.4	60.4	60	0.4	3	★
2.02	VAPDSSUSD0202	12.4	60.4	60	0.4	3	★
2.03	VAPDSSUSD0203	12.4	60.4	60	0.4	3	★
2.04	VAPDSSUSD0204	12.4	60.4	60	0.4	3	★
2.05	VAPDSSUSD0205	12.4	60.4	60	0.4	3	★
2.06	VAPDSSUSD0206	12.4	60.4	60	0.4	3	★
2.07	VAPDSSUSD0207	12.4	60.4	60	0.4	3	★
2.08	VAPDSSUSD0208	12.4	60.4	60	0.4	3	★
2.09	VAPDSSUSD0209	12.4	60.4	60	0.4	3	★
2.1	VAPDSSUSD0210	12.4	60.4	60	0.4	3	★
2.11	VAPDSSUSD0211	12.4	60.4	60	0.4	3	★
2.12	VAPDSSUSD0212	12.4	60.4	60	0.4	3	★
2.13	VAPDSSUSD0213	12.4	60.4	60	0.4	3	★
2.14	VAPDSSUSD0214	12.4	60.4	60	0.4	3	★
2.15	VAPDSSUSD0215	12.5	60.5	60	0.5	3	★
2.16	VAPDSSUSD0216	12.5	60.5	60	0.5	3	★
2.17	VAPDSSUSD0217	12.5	60.5	60	0.5	3	★
2.18	VAPDSSUSD0218	12.5	60.5	60	0.5	3	★
2.19	VAPDSSUSD0219	12.5	60.5	60	0.5	3	★
2.2	VAPDSSUSD0220	12.5	60.5	60	0.5	3	★
2.21	VAPDSSUSD0221	12.5	60.5	60	0.5	3	★
2.22	VAPDSSUSD0222	12.5	60.5	60	0.5	3	★
2.23	VAPDSSUSD0223	12.5	60.5	60	0.5	3	★
2.24	VAPDSSUSD0224	12.5	60.5	60	0.5	3	★
2.25	VAPDSSUSD0225	12.5	60.5	60	0.5	3	★
2.26	VAPDSSUSD0226	12.5	60.5	60	0.5	3	★
2.27	VAPDSSUSD0227	12.5	60.5	60	0.5	3	★
2.28	VAPDSSUSD0228	12.5	60.5	60	0.5	3	★
2.29	VAPDSSUSD0229	12.5	60.5	60	0.5	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
2.3	VAPDSSUSD0230	13.5	60.5	60	0.5	3	★
2.31	VAPDSSUSD0231	13.5	60.5	60	0.5	3	★
2.32	VAPDSSUSD0232	13.5	60.5	60	0.5	3	★
2.33	VAPDSSUSD0233	13.5	60.5	60	0.5	3	★
2.34	VAPDSSUSD0234	13.5	60.5	60	0.5	3	★
2.35	VAPDSSUSD0235	13.5	60.5	60	0.5	3	★
2.36	VAPDSSUSD0236	13.5	60.5	60	0.5	3	★
2.37	VAPDSSUSD0237	13.5	60.5	60	0.5	3	★
2.38	VAPDSSUSD0238	13.5	60.5	60	0.5	3	★
2.39	VAPDSSUSD0239	13.5	60.5	60	0.5	3	★
2.4	VAPDSSUSD0240	13.5	60.5	60	0.5	3	★
2.41	VAPDSSUSD0241	13.5	60.5	60	0.5	3	★
2.42	VAPDSSUSD0242	13.5	60.5	60	0.5	3	★
2.43	VAPDSSUSD0243	13.5	60.5	60	0.5	3	★
2.44	VAPDSSUSD0244	13.5	60.5	60	0.5	3	★
2.45	VAPDSSUSD0245	13.5	60.5	60	0.5	3	★
2.46	VAPDSSUSD0246	13.5	60.5	60	0.5	3	★
2.47	VAPDSSUSD0247	13.5	60.5	60	0.5	3	★
2.48	VAPDSSUSD0248	13.5	60.5	60	0.5	3	★
2.49	VAPDSSUSD0249	13.5	60.5	60	0.5	3	★
2.5	VAPDSSUSD0250	13.5	60.5	60	0.5	3	●
2.51	VAPDSSUSD0251	13.5	60.5	60	0.5	3	★
2.52	VAPDSSUSD0252	13.5	60.5	60	0.5	3	★
2.53	VAPDSSUSD0253	13.5	60.5	60	0.5	3	★
2.54	VAPDSSUSD0254	13.5	60.5	60	0.5	3	★
2.55	VAPDSSUSD0255	13.5	60.5	60	0.5	3	★
2.56	VAPDSSUSD0256	13.5	60.5	60	0.5	3	★
2.57	VAPDSSUSD0257	13.5	60.5	60	0.5	3	★
2.58	VAPDSSUSD0258	13.5	60.5	60	0.5	3	★
2.59	VAPDSSUSD0259	13.5	60.5	60	0.5	3	★
2.6	VAPDSSUSD0260	15.5	60.5	60	0.5	3	★
2.61	VAPDSSUSD0261	15.5	60.5	60	0.5	3	★
2.62	VAPDSSUSD0262	15.5	60.5	60	0.5	3	★
2.63	VAPDSSUSD0263	15.5	60.5	60	0.5	3	★
2.64	VAPDSSUSD0264	15.6	60.6	60	0.6	3	★
2.65	VAPDSSUSD0265	15.6	60.6	60	0.6	3	★
2.66	VAPDSSUSD0266	15.6	60.6	60	0.6	3	★
2.67	VAPDSSUSD0267	15.6	60.6	60	0.6	3	★
2.68	VAPDSSUSD0268	15.6	60.6	60	0.6	3	★
2.69	VAPDSSUSD0269	15.6	60.6	60	0.6	3	★
2.7	VAPDSSUSD0270	15.6	60.6	60	0.6	3	★
2.71	VAPDSSUSD0271	15.6	60.6	60	0.6	3	★
2.72	VAPDSSUSD0272	15.6	60.6	60	0.6	3	★
2.73	VAPDSSUSD0273	15.6	60.6	60	0.6	3	★
2.74	VAPDSSUSD0274	15.6	60.6	60	0.6	3	★
2.75	VAPDSSUSD0275	15.6	60.6	60	0.6	3	★
2.76	VAPDSSUSD0276	15.6	60.6	60	0.6	3	★
2.77	VAPDSSUSD0277	15.6	60.6	60	0.6	3	★
2.78	VAPDSSUSD0278	15.6	60.6	60	0.6	3	★
2.79	VAPDSSUSD0279	15.6	60.6	60	0.6	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
2.8	VAPDSSUSD0280	15.6	60.6	60	0.6	3	★
2.81	VAPDSSUSD0281	15.6	60.6	60	0.6	3	★
2.82	VAPDSSUSD0282	15.6	60.6	60	0.6	3	★
2.83	VAPDSSUSD0283	15.6	60.6	60	0.6	3	★
2.84	VAPDSSUSD0284	15.6	60.6	60	0.6	3	★
2.85	VAPDSSUSD0285	15.6	60.6	60	0.6	3	★
2.86	VAPDSSUSD0286	15.6	60.6	60	0.6	3	★
2.87	VAPDSSUSD0287	15.6	60.6	60	0.6	3	★
2.88	VAPDSSUSD0288	15.6	60.6	60	0.6	3	★
2.89	VAPDSSUSD0289	15.6	60.6	60	0.6	3	★
2.9	VAPDSSUSD0290	15.6	60.6	60	0.6	3	★
2.91	VAPDSSUSD0291	15.6	60.6	60	0.6	3	★
2.92	VAPDSSUSD0292	15.6	60.6	60	0.6	3	★
2.93	VAPDSSUSD0293	15.6	60.6	60	0.6	3	★
2.94	VAPDSSUSD0294	15.6	60.6	60	0.6	3	★
2.95	VAPDSSUSD0295	15.6	60.6	60	0.6	3	★
2.96	VAPDSSUSD0296	15.6	60.6	60	0.6	3	★
2.97	VAPDSSUSD0297	15.6	60.6	60	0.6	3	★
2.98	VAPDSSUSD0298	15.6	60.6	60	0.6	3	★
2.99	VAPDSSUSD0299	15.6	60.6	60	0.6	3	★
3.0	VAPDSSUSD0300	15.6	60.6	60	0.6	3	●
3.01	VAPDSSUSD0301	17.6	70.6	70	0.6	4	★
3.02	VAPDSSUSD0302	17.6	70.6	70	0.6	4	★
3.03	VAPDSSUSD0303	17.6	70.6	70	0.6	4	★
3.04	VAPDSSUSD0304	17.6	70.6	70	0.6	4	★
3.05	VAPDSSUSD0305	17.6	70.6	70	0.6	4	★
3.06	VAPDSSUSD0306	17.6	70.6	70	0.6	4	★
3.07	VAPDSSUSD0307	17.6	70.6	70	0.6	4	★
3.08	VAPDSSUSD0308	17.6	70.6	70	0.6	4	★
3.09	VAPDSSUSD0309	17.6	70.6	70	0.6	4	★
3.1	VAPDSSUSD0310	17.6	70.6	70	0.6	4	★
3.11	VAPDSSUSD0311	17.6	70.6	70	0.6	4	★
3.12	VAPDSSUSD0312	17.7	70.7	70	0.7	4	★
3.13	VAPDSSUSD0313	17.7	70.7	70	0.7	4	★
3.14	VAPDSSUSD0314	17.7	70.7	70	0.7	4	★
3.15	VAPDSSUSD0315	17.7	70.7	70	0.7	4	★
3.16	VAPDSSUSD0316	17.7	70.7	70	0.7	4	★
3.17	VAPDSSUSD0317	17.7	70.7	70	0.7	4	★
3.18	VAPDSSUSD0318	17.7	70.7	70	0.7	4	★
3.19	VAPDSSUSD0319	17.7	70.7	70	0.7	4	★
3.2	VAPDSSUSD0320	17.7	70.7	70	0.7	4	★
3.21	VAPDSSUSD0321	17.7	70.7	70	0.7	4	★
3.22	VAPDSSUSD0322	17.7	70.7	70	0.7	4	★
3.23	VAPDSSUSD0323	17.7	70.7	70	0.7	4	★
3.24	VAPDSSUSD0324	17.7	70.7	70	0.7	4	★
3.25	VAPDSSUSD0325	17.7	70.7	70	0.7	4	★
3.26	VAPDSSUSD0326	17.7	70.7	70	0.7	4	★
3.27	VAPDSSUSD0327	17.7	70.7	70	0.7	4	★
3.28	VAPDSSUSD0328	17.7	70.7	70	0.7	4	★
3.29	VAPDSSUSD0329	17.7	70.7	70	0.7	4	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
3.3	VAPDSSUSD0330	19.7	70.7	70	0.7	4	★
3.31	VAPDSSUSD0331	19.7	70.7	70	0.7	4	★
3.32	VAPDSSUSD0332	19.7	70.7	70	0.7	4	★
3.33	VAPDSSUSD0333	19.7	70.7	70	0.7	4	★
3.34	VAPDSSUSD0334	19.7	70.7	70	0.7	4	★
3.35	VAPDSSUSD0335	19.7	70.7	70	0.7	4	★
3.36	VAPDSSUSD0336	19.7	70.7	70	0.7	4	★
3.37	VAPDSSUSD0337	19.7	70.7	70	0.7	4	★
3.38	VAPDSSUSD0338	19.7	70.7	70	0.7	4	★
3.39	VAPDSSUSD0339	19.7	70.7	70	0.7	4	★
3.4	VAPDSSUSD0340	19.7	70.7	70	0.7	4	★
3.41	VAPDSSUSD0341	19.7	70.7	70	0.7	4	★
3.42	VAPDSSUSD0342	19.7	70.7	70	0.7	4	★
3.43	VAPDSSUSD0343	19.7	70.7	70	0.7	4	★
3.44	VAPDSSUSD0344	19.7	70.7	70	0.7	4	★
3.45	VAPDSSUSD0345	19.7	70.7	70	0.7	4	★
3.46	VAPDSSUSD0346	19.7	70.7	70	0.7	4	★
3.47	VAPDSSUSD0347	19.7	70.7	70	0.7	4	★
3.48	VAPDSSUSD0348	19.7	70.7	70	0.7	4	★
3.49	VAPDSSUSD0349	19.7	70.7	70	0.7	4	★
3.5	VAPDSSUSD0350	19.7	70.7	70	0.7	4	●
3.51	VAPDSSUSD0351	19.7	70.7	70	0.7	4	★
3.52	VAPDSSUSD0352	19.7	70.7	70	0.7	4	★
3.53	VAPDSSUSD0353	19.7	70.7	70	0.7	4	★
3.54	VAPDSSUSD0354	19.7	70.7	70	0.7	4	★
3.55	VAPDSSUSD0355	19.7	70.7	70	0.7	4	★
3.56	VAPDSSUSD0356	19.7	70.7	70	0.7	4	★
3.57	VAPDSSUSD0357	19.7	70.7	70	0.7	4	★
3.58	VAPDSSUSD0358	19.7	70.7	70	0.7	4	★
3.59	VAPDSSUSD0359	19.7	70.7	70	0.7	4	★
3.6	VAPDSSUSD0360	21.8	70.8	70	0.8	4	★
3.61	VAPDSSUSD0361	21.8	70.8	70	0.8	4	★
3.62	VAPDSSUSD0362	21.8	70.8	70	0.8	4	★
3.63	VAPDSSUSD0363	21.8	70.8	70	0.8	4	★
3.64	VAPDSSUSD0364	21.8	70.8	70	0.8	4	★
3.65	VAPDSSUSD0365	21.8	70.8	70	0.8	4	★
3.66	VAPDSSUSD0366	21.8	70.8	70	0.8	4	★
3.67	VAPDSSUSD0367	21.8	70.8	70	0.8	4	★
3.68	VAPDSSUSD0368	21.8	70.8	70	0.8	4	★
3.69	VAPDSSUSD0369	21.8	70.8	70	0.8	4	★
3.7	VAPDSSUSD0370	21.8	70.8	70	0.8	4	★
3.71	VAPDSSUSD0371	21.8	70.8	70	0.8	4	★
3.72	VAPDSSUSD0372	21.8	70.8	70	0.8	4	★
3.73	VAPDSSUSD0373	21.8	70.8	70	0.8	4	★
3.74	VAPDSSUSD0374	21.8	70.8	70	0.8	4	★
3.75	VAPDSSUSD0375	21.8	70.8	70	0.8	4	★
3.76	VAPDSSUSD0376	21.8	70.8	70	0.8	4	★
3.77	VAPDSSUSD0377	21.8	70.8	70	0.8	4	★
3.78	VAPDSSUSD0378	21.8	70.8	70	0.8	4	★
3.79	VAPDSSUSD0379	21.8	70.8	70	0.8	4	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
3.8	VAPDSSUSD0380	21.8	70.8	70	0.8	4	★
3.81	VAPDSSUSD0381	21.8	70.8	70	0.8	4	★
3.82	VAPDSSUSD0382	21.8	70.8	70	0.8	4	★
3.83	VAPDSSUSD0383	21.8	70.8	70	0.8	4	★
3.84	VAPDSSUSD0384	21.8	70.8	70	0.8	4	★
3.85	VAPDSSUSD0385	21.8	70.8	70	0.8	4	★
3.86	VAPDSSUSD0386	21.8	70.8	70	0.8	4	★
3.87	VAPDSSUSD0387	21.8	70.8	70	0.8	4	★
3.88	VAPDSSUSD0388	21.8	70.8	70	0.8	4	★
3.89	VAPDSSUSD0389	21.8	70.8	70	0.8	4	★
3.9	VAPDSSUSD0390	21.8	70.8	70	0.8	4	★
3.91	VAPDSSUSD0391	21.8	70.8	70	0.8	4	★
3.92	VAPDSSUSD0392	21.8	70.8	70	0.8	4	★
3.93	VAPDSSUSD0393	21.8	70.8	70	0.8	4	★
3.94	VAPDSSUSD0394	21.8	70.8	70	0.8	4	★
3.95	VAPDSSUSD0395	21.8	70.8	70	0.8	4	★
3.96	VAPDSSUSD0396	21.8	70.8	70	0.8	4	★
3.97	VAPDSSUSD0397	21.8	70.8	70	0.8	4	★
3.98	VAPDSSUSD0398	21.8	70.8	70	0.8	4	★
3.99	VAPDSSUSD0399	21.8	70.8	70	0.8	4	★
4.0	VAPDSSUSD0400	21.8	70.8	70	0.8	4	●
4.05	VAPDSSUSD0405	21.8	80.8	80	0.8	6	★
4.1	VAPDSSUSD0410	21.9	80.9	80	0.9	6	★
4.15	VAPDSSUSD0415	21.9	80.9	80	0.9	6	★
4.2	VAPDSSUSD0420	21.9	80.9	80	0.9	6	★
4.25	VAPDSSUSD0425	21.9	80.9	80	0.9	6	★
4.3	VAPDSSUSD0430	23.9	80.9	80	0.9	6	★
4.35	VAPDSSUSD0435	23.9	80.9	80	0.9	6	★
4.4	VAPDSSUSD0440	23.9	80.9	80	0.9	6	★
4.45	VAPDSSUSD0445	23.9	80.9	80	0.9	6	★
4.5	VAPDSSUSD0450	23.9	80.9	80	0.9	6	●
4.55	VAPDSSUSD0455	23.9	80.9	80	0.9	6	★
4.6	VAPDSSUSD0460	26.0	81.0	80	1.0	6	★
4.65	VAPDSSUSD0465	26.0	81.0	80	1.0	6	★
4.7	VAPDSSUSD0470	26.0	81.0	80	1.0	6	★
4.75	VAPDSSUSD0475	26.0	81.0	80	1.0	6	★
4.8	VAPDSSUSD0480	26.0	81.0	80	1.0	6	★
4.85	VAPDSSUSD0485	26.0	81.0	80	1.0	6	★
4.9	VAPDSSUSD0490	26.0	81.0	80	1.0	6	★
4.95	VAPDSSUSD0495	26.0	81.0	80	1.0	6	★
5.0	VAPDSSUSD0500	26.0	81.0	80	1.0	6	●
5.05	VAPDSSUSD0505	26.1	81.1	80	1.1	6	★
5.1	VAPDSSUSD0510	26.1	81.1	80	1.1	6	★
5.15	VAPDSSUSD0515	26.1	81.1	80	1.1	6	★
5.2	VAPDSSUSD0520	26.1	81.1	80	1.1	6	★
5.25	VAPDSSUSD0525	26.1	81.1	80	1.1	6	★
5.3	VAPDSSUSD0530	26.1	81.1	80	1.1	6	★
5.35	VAPDSSUSD0535	28.1	81.1	80	1.1	6	★
5.4	VAPDSSUSD0540	28.1	81.1	80	1.1	6	★
5.45	VAPDSSUSD0545	28.1	81.1	80	1.1	6	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
5.5	VAPDSSUSD0550	28.1	81.1	80	1.1	6	●
5.55	VAPDSSUSD0555	28.2	81.2	80	1.2	6	★
5.6	VAPDSSUSD0560	28.2	81.2	80	1.2	6	★
5.65	VAPDSSUSD0565	28.2	81.2	80	1.2	6	★
5.7	VAPDSSUSD0570	28.2	81.2	80	1.2	6	★
5.75	VAPDSSUSD0575	28.2	81.2	80	1.2	6	★
5.8	VAPDSSUSD0580	28.2	81.2	80	1.2	6	★
5.85	VAPDSSUSD0585	28.2	81.2	80	1.2	6	★
5.9	VAPDSSUSD0590	28.2	81.2	80	1.2	6	★
5.95	VAPDSSUSD0595	28.2	81.2	80	1.2	6	★
6.0	VAPDSSUSD0600	28.2	81.2	80	1.2	6	●
6.05	VAPDSSUSD0605	31.3	81.3	80	1.3	8	★
6.1	VAPDSSUSD0610	31.3	81.3	80	1.3	8	★
6.15	VAPDSSUSD0615	31.3	81.3	80	1.3	8	★
6.2	VAPDSSUSD0620	31.3	81.3	80	1.3	8	★
6.25	VAPDSSUSD0625	31.3	81.3	80	1.3	8	★
6.3	VAPDSSUSD0630	31.3	81.3	80	1.3	8	★
6.35	VAPDSSUSD0635	31.3	81.3	80	1.3	8	★
6.4	VAPDSSUSD0640	31.3	81.3	80	1.3	8	★
6.45	VAPDSSUSD0645	31.3	81.3	80	1.3	8	★
6.5	VAPDSSUSD0650	31.4	81.4	80	1.4	8	●
6.55	VAPDSSUSD0655	31.4	81.4	80	1.4	8	★
6.6	VAPDSSUSD0660	31.4	81.4	80	1.4	8	★
6.65	VAPDSSUSD0665	31.4	81.4	80	1.4	8	★
6.7	VAPDSSUSD0670	31.4	81.4	80	1.4	8	★
6.75	VAPDSSUSD0675	33.4	81.4	80	1.4	8	★
6.8	VAPDSSUSD0680	33.4	81.4	80	1.4	8	★
6.85	VAPDSSUSD0685	33.4	81.4	80	1.4	8	★
6.9	VAPDSSUSD0690	33.4	81.4	80	1.4	8	★
6.95	VAPDSSUSD0695	33.4	81.4	80	1.4	8	★
7.0	VAPDSSUSD0700	33.5	81.5	80	1.5	8	●
7.05	VAPDSSUSD0705	33.5	81.5	80	1.5	8	★
7.1	VAPDSSUSD0710	33.5	81.5	80	1.5	8	★
7.15	VAPDSSUSD0715	33.5	81.5	80	1.5	8	★
7.2	VAPDSSUSD0720	33.5	81.5	80	1.5	8	★
7.25	VAPDSSUSD0725	33.5	81.5	80	1.5	8	★
7.3	VAPDSSUSD0730	33.5	81.5	80	1.5	8	★
7.35	VAPDSSUSD0735	33.5	81.5	80	1.5	8	★
7.4	VAPDSSUSD0740	33.5	81.5	80	1.5	8	★
7.45	VAPDSSUSD0745	33.5	81.5	80	1.5	8	★
7.5	VAPDSSUSD0750	33.6	81.6	80	1.6	8	●
7.55	VAPDSSUSD0755	36.6	86.6	85	1.6	8	★
7.6	VAPDSSUSD0760	36.6	86.6	85	1.6	8	★
7.65	VAPDSSUSD0765	36.6	86.6	85	1.6	8	★
7.7	VAPDSSUSD0770	36.6	86.6	85	1.6	8	★
7.75	VAPDSSUSD0775	36.6	86.6	85	1.6	8	★
7.8	VAPDSSUSD0780	36.6	86.6	85	1.6	8	★
7.85	VAPDSSUSD0785	36.6	86.6	85	1.6	8	★
7.9	VAPDSSUSD0790	36.6	86.6	85	1.6	8	★
7.95	VAPDSSUSD0795	36.7	86.7	85	1.7	8	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
8.0	VAPDSSUSD0800	36.7	86.7	85	1.7	8	●
8.05	VAPDSSUSD0805	36.7	91.7	90	1.7	10	★
8.1	VAPDSSUSD0810	36.7	91.7	90	1.7	10	★
8.15	VAPDSSUSD0815	36.7	91.7	90	1.7	10	★
8.2	VAPDSSUSD0820	36.7	91.7	90	1.7	10	★
8.25	VAPDSSUSD0825	36.7	91.7	90	1.7	10	★
8.3	VAPDSSUSD0830	36.7	91.7	90	1.7	10	★
8.35	VAPDSSUSD0835	36.7	91.7	90	1.7	10	★
8.4	VAPDSSUSD0840	36.7	91.7	90	1.7	10	★
8.45	VAPDSSUSD0845	36.8	91.8	90	1.8	10	★
8.5	VAPDSSUSD0850	36.8	91.8	90	1.8	10	●
8.55	VAPDSSUSD0855	39.8	94.8	93	1.8	10	★
8.6	VAPDSSUSD0860	39.8	94.8	93	1.8	10	★
8.65	VAPDSSUSD0865	39.8	94.8	93	1.8	10	★
8.7	VAPDSSUSD0870	39.8	94.8	93	1.8	10	★
8.75	VAPDSSUSD0875	39.8	94.8	93	1.8	10	★
8.8	VAPDSSUSD0880	39.8	94.8	93	1.8	10	★
8.85	VAPDSSUSD0885	39.8	94.8	93	1.8	10	★
8.9	VAPDSSUSD0890	39.8	94.8	93	1.8	10	★
8.95	VAPDSSUSD0895	39.9	94.9	93	1.9	10	★
9.0	VAPDSSUSD0900	39.9	94.9	93	1.9	10	●
9.1	VAPDSSUSD0910	39.9	94.9	93	1.9	10	★
9.2	VAPDSSUSD0920	39.9	94.9	93	1.9	10	★
9.3	VAPDSSUSD0930	39.9	94.9	93	1.9	10	★
9.4	VAPDSSUSD0940	40.0	95.0	93	2.0	10	★
9.5	VAPDSSUSD0950	40.0	95.0	93	2.0	10	★
9.6	VAPDSSUSD0960	43.0	98.0	96	2.0	10	★
9.7	VAPDSSUSD0970	43.0	98.0	96	2.0	10	★
9.8	VAPDSSUSD0980	43.0	98.0	96	2.0	10	★
9.9	VAPDSSUSD0990	43.1	98.1	96	2.1	10	★
10.0	VAPDSSUSD1000	43.1	98.1	96	2.1	10	●
10.1	VAPDSSUSD1010	43.1	103.1	101	2.1	12	★
10.2	VAPDSSUSD1020	43.1	103.1	101	2.1	12	★
10.3	VAPDSSUSD1030	43.1	103.1	101	2.1	12	★
10.4	VAPDSSUSD1040	43.2	103.2	101	2.2	12	★
10.5	VAPDSSUSD1050	43.2	103.2	101	2.2	12	●
10.6	VAPDSSUSD1060	43.2	103.2	101	2.2	12	★
10.7	VAPDSSUSD1070	47.2	107.2	105	2.2	12	★
10.8	VAPDSSUSD1080	47.2	107.2	105	2.2	12	★
10.9	VAPDSSUSD1090	47.3	107.3	105	2.3	12	★
11.0	VAPDSSUSD1100	47.3	107.3	105	2.3	12	●
11.1	VAPDSSUSD1110	47.3	107.3	105	2.3	12	★
11.2	VAPDSSUSD1120	47.3	107.3	105	2.3	12	★
11.3	VAPDSSUSD1130	47.3	107.3	105	2.3	12	★
11.4	VAPDSSUSD1140	47.4	107.4	105	2.4	12	★
11.5	VAPDSSUSD1150	47.4	107.4	105	2.4	12	●
11.6	VAPDSSUSD1160	47.4	107.4	105	2.4	12	★
11.7	VAPDSSUSD1170	47.4	107.4	105	2.4	12	★
11.8	VAPDSSUSD1180	47.4	107.4	105	2.4	12	★
11.9	VAPDSSUSD1190	51.5	111.5	109	2.5	12	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
12.0	VAPDSSUSD1200	51.5	111.5	109	2.5	12	●
12.1	VAPDSSUSD1210	51.5	111.5	109	2.5	12	★
12.2	VAPDSSUSD1220	51.5	111.5	109	2.5	12	★
12.3	VAPDSSUSD1230	51.6	111.6	109	2.6	12	★
12.4	VAPDSSUSD1240	51.6	111.6	109	2.6	12	★
12.5	VAPDSSUSD1250	51.6	111.6	109	2.6	12	●
12.6	VAPDSSUSD1260	51.6	111.6	109	2.6	12	★
12.7	VAPDSSUSD1270	51.6	111.6	109	2.6	12	★
12.8	VAPDSSUSD1280	51.7	111.7	109	2.7	12	★
12.9	VAPDSSUSD1290	51.7	111.7	109	2.7	12	★
13.0	VAPDSSUSD1300	51.7	111.7	109	2.7	12	●
13.5	VAPDSSUSD1350	53.8	113.8	111	2.8	16	★
14.0	VAPDSSUSD1400	53.9	113.9	111	2.9	16	●
14.1	VAPDSSUSD1410	55.9	115.9	113	2.9	16	★
14.2	VAPDSSUSD1420	55.9	115.9	113	2.9	16	★
14.5	VAPDSSUSD1450	56.0	116.0	113	3.0	16	★
15.0	VAPDSSUSD1500	56.1	116.1	113	3.1	16	●
15.5	VAPDSSUSD1550	58.2	118.2	115	3.2	16	★
15.6	VAPDSSUSD1560	58.2	118.2	115	3.2	16	★
15.7	VAPDSSUSD1570	58.3	118.3	115	3.3	16	★
16.0	VAPDSSUSD1600	58.3	118.3	115	3.3	16	●
16.5	VAPDSSUSD1650	60.4	125.4	122	3.4	20	★
17.0	VAPDSSUSD1700	60.5	125.5	122	3.5	20	★
17.5	VAPDSSUSD1750	61.6	126.6	123	3.6	20	★
17.6	VAPDSSUSD1760	61.7	126.7	123	3.7	20	★
17.7	VAPDSSUSD1770	61.7	126.7	123	3.7	20	★
18.0	VAPDSSUSD1800	61.7	126.7	123	3.7	20	★
18.5	VAPDSSUSD1850	63.8	128.8	125	3.8	20	★
19.0	VAPDSSUSD1900	63.9	128.9	125	3.9	20	★
19.5	VAPDSSUSD1950	66.0	131.0	127	4.0	20	★
19.6	VAPDSSUSD1960	66.1	131.1	127	4.1	20	★
19.7	VAPDSSUSD1970	66.1	131.1	127	4.1	20	★
20.0	VAPDSSUSD2000	66.1	131.1	127	4.1	20	★

VIOLET BOHRER

VAPDMSUS

Mittellang, hochpräzise, für rostfreien Stahl



DC<4

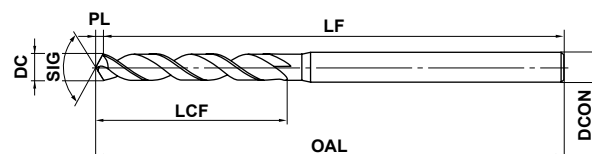
DC≥4

DC≥1

P	M	K	N	S	H
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0.5≤DC≤3	3<DC≤6	6<DC≤10	10<DC≤13
0 -0.014	0 -0.018	0 -0.022	0 -0.027

★ Bohrtoleranz: 0—-0.009mm
(außer φ <4.0mm und φ in 0.1mm Stufen (e.g. 0.5 ; 0.6....))



● Die Kombination aus neuem Design und Violet-Beschichtung ermöglicht hocheffizientes Bohren und lange Standzeit beim Bohren von rostfreien Stahlsorten.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.5	VAPDMSUSD0050	6.15	50.15	50	0.15	3	●
0.51	VAPDMSUSD0051	6.15	50.15	50	0.15	3	★
0.52	VAPDMSUSD0052	6.16	50.16	50	0.16	3	★
0.53	VAPDMSUSD0053	6.16	50.16	50	0.16	3	★
0.54	VAPDMSUSD0054	6.16	50.16	50	0.16	3	★
0.55	VAPDMSUSD0055	6.17	50.17	50	0.17	3	★
0.56	VAPDMSUSD0056	8.17	50.17	50	0.17	3	★
0.57	VAPDMSUSD0057	8.17	50.17	50	0.17	3	★
0.58	VAPDMSUSD0058	8.17	50.17	50	0.17	3	★
0.59	VAPDMSUSD0059	8.18	50.18	50	0.18	3	★
0.6	VAPDMSUSD0060	8.18	50.18	50	0.18	3	★
0.61	VAPDMSUSD0061	8.18	50.18	50	0.18	3	★
0.62	VAPDMSUSD0062	8.19	50.19	50	0.19	3	★
0.63	VAPDMSUSD0063	8.19	50.19	50	0.19	3	★
0.64	VAPDMSUSD0064	8.19	50.19	50	0.19	3	★
0.65	VAPDMSUSD0065	8.20	50.20	50	0.20	3	★
0.66	VAPDMSUSD0066	8.20	50.20	50	0.20	3	★
0.67	VAPDMSUSD0067	8.20	50.20	50	0.20	3	★
0.68	VAPDMSUSD0068	8.20	50.20	50	0.20	3	★
0.69	VAPDMSUSD0069	8.21	50.21	50	0.21	3	★
0.7	VAPDMSUSD0070	10.21	50.21	50	0.21	3	★
0.71	VAPDMSUSD0071	10.21	50.21	50	0.21	3	★
0.72	VAPDMSUSD0072	10.22	50.22	50	0.22	3	★
0.73	VAPDMSUSD0073	10.22	50.22	50	0.22	3	★
0.74	VAPDMSUSD0074	10.22	50.22	50	0.22	3	★
0.75	VAPDMSUSD0075	10.23	50.23	50	0.23	3	★
0.76	VAPDMSUSD0076	10.23	50.23	50	0.23	3	★
0.77	VAPDMSUSD0077	10.23	50.23	50	0.23	3	★
0.78	VAPDMSUSD0078	10.23	50.23	50	0.23	3	★
0.79	VAPDMSUSD0079	10.24	50.24	50	0.24	3	★
0.8	VAPDMSUSD0080	10.24	50.24	50	0.24	3	★
0.81	VAPDMSUSD0081	10.24	50.24	50	0.24	3	★
0.82	VAPDMSUSD0082	10.25	50.25	50	0.25	3	★
0.83	VAPDMSUSD0083	10.25	50.25	50	0.25	3	★
0.84	VAPDMSUSD0084	10.25	50.25	50	0.25	3	★
0.85	VAPDMSUSD0085	10.26	50.26	50	0.26	3	★
0.86	VAPDMSUSD0086	12.26	50.26	50	0.26	3	★
0.87	VAPDMSUSD0087	12.26	50.26	50	0.26	3	★
0.88	VAPDMSUSD0088	12.26	50.26	50	0.26	3	★
0.89	VAPDMSUSD0089	12.27	50.27	50	0.27	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.9	VAPDMSUSD0090	12.27	50.27	50	0.27	3	★
0.91	VAPDMSUSD0091	12.27	50.27	50	0.27	3	★
0.92	VAPDMSUSD0092	12.28	50.28	50	0.28	3	★
0.93	VAPDMSUSD0093	12.28	50.28	50	0.28	3	★
0.94	VAPDMSUSD0094	12.28	50.28	50	0.28	3	★
0.95	VAPDMSUSD0095	12.29	50.29	50	0.29	3	★
0.96	VAPDMSUSD0096	12.29	50.29	50	0.29	3	★
0.97	VAPDMSUSD0097	12.29	50.29	50	0.29	3	★
0.98	VAPDMSUSD0098	12.29	50.29	50	0.29	3	★
0.99	VAPDMSUSD0099	12.30	50.30	50	0.30	3	★
1.0	VAPDMSUSD0100	12.3	60.3	60	0.3	3	●
1.01	VAPDMSUSD0101	12.3	60.3	60	0.3	3	★
1.02	VAPDMSUSD0102	12.3	60.3	60	0.3	3	★
1.03	VAPDMSUSD0103	12.3	60.3	60	0.3	3	★
1.04	VAPDMSUSD0104	12.3	60.3	60	0.3	3	★
1.05	VAPDMSUSD0105	12.3	60.3	60	0.3	3	★
1.06	VAPDMSUSD0106	12.3	60.3	60	0.3	3	★
1.07	VAPDMSUSD0107	16.3	60.3	60	0.3	3	★
1.08	VAPDMSUSD0108	16.3	60.3	60	0.3	3	★
1.09	VAPDMSUSD0109	16.3	60.3	60	0.3	3	★
1.1	VAPDMSUSD0110	16.3	60.3	60	0.3	3	★
1.11	VAPDMSUSD0111	16.3	60.3	60	0.3	3	★
1.12	VAPDMSUSD0112	16.3	60.3	60	0.3	3	★
1.13	VAPDMSUSD0113	16.3	60.3	60	0.3	3	★
1.14	VAPDMSUSD0114	16.3	60.3	60	0.3	3	★
1.15	VAPDMSUSD0115	16.4	60.4	60	0.4	3	★
1.16	VAPDMSUSD0116	16.4	60.4	60	0.4	3	★
1.17	VAPDMSUSD0117	16.4	60.4	60	0.4	3	★
1.18	VAPDMSUSD0118	16.4	60.4	60	0.4	3	★
1.19	VAPDMSUSD0119	16.4	60.4	60	0.4	3	★
1.2	VAPDMSUSD0120	16.4	60.4	60	0.4	3	★
1.21	VAPDMSUSD0121	16.4	60.4	60	0.4	3	★
1.22	VAPDMSUSD0122	16.4	60.4	60	0.4	3	★
1.23	VAPDMSUSD0123	16.4	60.4	60	0.4	3	★
1.24	VAPDMSUSD0124	16.4	60.4	60	0.4	3	★
1.25	VAPDMSUSD0125	16.4	60.4	60	0.4	3	★
1.26	VAPDMSUSD0126	16.4	60.4	60	0.4	3	★
1.27	VAPDMSUSD0127	16.4	60.4	60	0.4	3	★
1.28	VAPDMSUSD0128	16.4	60.4	60	0.4	3	★
1.29	VAPDMSUSD0129	16.4	60.4	60	0.4	3	★

● : Lagerstandard. ★ : Lagerstandard in Japan.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
1.3	VAPDMSUSD0130	16.4	60.4	60	0.4	3	★
1.31	VAPDMSUSD0131	18.4	60.4	60	0.4	3	★
1.32	VAPDMSUSD0132	18.4	60.4	60	0.4	3	★
1.33	VAPDMSUSD0133	18.4	60.4	60	0.4	3	★
1.34	VAPDMSUSD0134	18.4	60.4	60	0.4	3	★
1.35	VAPDMSUSD0135	18.4	60.4	60	0.4	3	★
1.36	VAPDMSUSD0136	18.4	60.4	60	0.4	3	★
1.37	VAPDMSUSD0137	18.4	60.4	60	0.4	3	★
1.38	VAPDMSUSD0138	18.4	60.4	60	0.4	3	★
1.39	VAPDMSUSD0139	18.4	60.4	60	0.4	3	★
1.4	VAPDMSUSD0140	18.4	60.4	60	0.4	3	★
1.41	VAPDMSUSD0141	18.4	60.4	60	0.4	3	★
1.42	VAPDMSUSD0142	18.4	60.4	60	0.4	3	★
1.43	VAPDMSUSD0143	18.4	60.4	60	0.4	3	★
1.44	VAPDMSUSD0144	18.4	60.4	60	0.4	3	★
1.45	VAPDMSUSD0145	18.4	60.4	60	0.4	3	★
1.46	VAPDMSUSD0146	18.4	60.4	60	0.4	3	★
1.47	VAPDMSUSD0147	18.4	60.4	60	0.4	3	★
1.48	VAPDMSUSD0148	18.4	60.4	60	0.4	3	★
1.49	VAPDMSUSD0149	18.5	60.5	60	0.5	3	★
1.5	VAPDMSUSD0150	18.5	60.5	60	0.5	3	●
1.51	VAPDMSUSD0151	20.5	60.5	60	0.5	3	★
1.52	VAPDMSUSD0152	20.5	60.5	60	0.5	3	★
1.53	VAPDMSUSD0153	20.5	60.5	60	0.5	3	★
1.54	VAPDMSUSD0154	20.5	60.5	60	0.5	3	★
1.55	VAPDMSUSD0155	20.5	60.5	60	0.5	3	★
1.56	VAPDMSUSD0156	20.5	60.5	60	0.5	3	★
1.57	VAPDMSUSD0157	20.5	60.5	60	0.5	3	★
1.58	VAPDMSUSD0158	20.5	60.5	60	0.5	3	★
1.59	VAPDMSUSD0159	20.5	60.5	60	0.5	3	★
1.6	VAPDMSUSD0160	20.5	60.5	60	0.5	3	★
1.61	VAPDMSUSD0161	20.5	60.5	60	0.5	3	★
1.62	VAPDMSUSD0162	20.5	60.5	60	0.5	3	★
1.63	VAPDMSUSD0163	20.5	60.5	60	0.5	3	★
1.64	VAPDMSUSD0164	20.5	60.5	60	0.5	3	★
1.65	VAPDMSUSD0165	20.5	60.5	60	0.5	3	★
1.66	VAPDMSUSD0166	20.5	60.5	60	0.5	3	★
1.67	VAPDMSUSD0167	20.5	60.5	60	0.5	3	★
1.68	VAPDMSUSD0168	20.5	60.5	60	0.5	3	★
1.69	VAPDMSUSD0169	20.5	60.5	60	0.5	3	★
1.7	VAPDMSUSD0170	20.5	60.5	60	0.5	3	★
1.71	VAPDMSUSD0171	20.5	60.5	60	0.5	3	★
1.72	VAPDMSUSD0172	20.5	60.5	60	0.5	3	★
1.73	VAPDMSUSD0173	20.5	60.5	60	0.5	3	★
1.74	VAPDMSUSD0174	20.5	60.5	60	0.5	3	★
1.75	VAPDMSUSD0175	20.5	60.5	60	0.5	3	★
1.76	VAPDMSUSD0176	20.5	60.5	60	0.5	3	★
1.77	VAPDMSUSD0177	20.5	60.5	60	0.5	3	★
1.78	VAPDMSUSD0178	20.5	60.5	60	0.5	3	★
1.79	VAPDMSUSD0179	20.5	60.5	60	0.5	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
1.8	VAPDMSUSD0180	22.5	60.5	60	0.5	3	★
1.81	VAPDMSUSD0181	22.5	60.5	60	0.5	3	★
1.82	VAPDMSUSD0182	22.6	60.6	60	0.6	3	★
1.83	VAPDMSUSD0183	22.6	60.6	60	0.6	3	★
1.84	VAPDMSUSD0184	22.6	60.6	60	0.6	3	★
1.85	VAPDMSUSD0185	22.6	60.6	60	0.6	3	★
1.86	VAPDMSUSD0186	22.6	60.6	60	0.6	3	★
1.87	VAPDMSUSD0187	22.6	60.6	60	0.6	3	★
1.88	VAPDMSUSD0188	22.6	60.6	60	0.6	3	★
1.89	VAPDMSUSD0189	22.6	60.6	60	0.6	3	★
1.9	VAPDMSUSD0190	22.6	60.6	60	0.6	3	★
1.91	VAPDMSUSD0191	23.6	60.6	60	0.6	3	★
1.92	VAPDMSUSD0192	23.6	60.6	60	0.6	3	★
1.93	VAPDMSUSD0193	23.6	60.6	60	0.6	3	★
1.94	VAPDMSUSD0194	23.6	60.6	60	0.6	3	★
1.95	VAPDMSUSD0195	23.6	60.6	60	0.6	3	★
1.96	VAPDMSUSD0196	23.6	60.6	60	0.6	3	★
1.97	VAPDMSUSD0197	23.6	60.6	60	0.6	3	★
1.98	VAPDMSUSD0198	23.6	60.6	60	0.6	3	★
1.99	VAPDMSUSD0199	23.6	60.6	60	0.6	3	★
2.0	VAPDMSUSD0200	23.6	70.6	70	0.6	3	●
2.01	VAPDMSUSD0201	23.6	70.6	70	0.6	3	★
2.02	VAPDMSUSD0202	23.6	70.6	70	0.6	3	★
2.03	VAPDMSUSD0203	23.6	70.6	70	0.6	3	★
2.04	VAPDMSUSD0204	23.6	70.6	70	0.6	3	★
2.05	VAPDMSUSD0205	23.6	70.6	70	0.6	3	★
2.06	VAPDMSUSD0206	23.6	70.6	70	0.6	3	★
2.07	VAPDMSUSD0207	23.6	70.6	70	0.6	3	★
2.08	VAPDMSUSD0208	23.6	70.6	70	0.6	3	★
2.09	VAPDMSUSD0209	23.6	70.6	70	0.6	3	★
2.1	VAPDMSUSD0210	23.6	70.6	70	0.6	3	★
2.11	VAPDMSUSD0211	23.6	70.6	70	0.6	3	★
2.12	VAPDMSUSD0212	23.6	70.6	70	0.6	3	★
2.13	VAPDMSUSD0213	23.6	70.6	70	0.6	3	★
2.14	VAPDMSUSD0214	23.6	70.6	70	0.6	3	★
2.15	VAPDMSUSD0215	23.7	70.7	70	0.7	3	★
2.16	VAPDMSUSD0216	23.7	70.7	70	0.7	3	★
2.17	VAPDMSUSD0217	23.7	70.7	70	0.7	3	★
2.18	VAPDMSUSD0218	23.7	70.7	70	0.7	3	★
2.19	VAPDMSUSD0219	23.7	70.7	70	0.7	3	★
2.2	VAPDMSUSD0220	26.7	70.7	70	0.7	3	★
2.21	VAPDMSUSD0221	26.7	70.7	70	0.7	3	★
2.22	VAPDMSUSD0222	26.7	70.7	70	0.7	3	★
2.23	VAPDMSUSD0223	26.7	70.7	70	0.7	3	★
2.24	VAPDMSUSD0224	26.7	70.7	70	0.7	3	★
2.25	VAPDMSUSD0225	26.7	70.7	70	0.7	3	★
2.26	VAPDMSUSD0226	26.7	70.7	70	0.7	3	★
2.27	VAPDMSUSD0227	26.7	70.7	70	0.7	3	★
2.28	VAPDMSUSD0228	26.7	70.7	70	0.7	3	★
2.29	VAPDMSUSD0229	26.7	70.7	70	0.7	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
2.3	VAPDMSUSD0230	26.7	70.7	70	0.7	3	★
2.31	VAPDMSUSD0231	26.7	70.7	70	0.7	3	★
2.32	VAPDMSUSD0232	26.7	70.7	70	0.7	3	★
2.33	VAPDMSUSD0233	26.7	70.7	70	0.7	3	★
2.34	VAPDMSUSD0234	26.7	70.7	70	0.7	3	★
2.35	VAPDMSUSD0235	26.7	70.7	70	0.7	3	★
2.36	VAPDMSUSD0236	26.7	70.7	70	0.7	3	★
2.37	VAPDMSUSD0237	26.7	70.7	70	0.7	3	★
2.38	VAPDMSUSD0238	26.7	70.7	70	0.7	3	★
2.39	VAPDMSUSD0239	26.7	70.7	70	0.7	3	★
2.4	VAPDMSUSD0240	29.7	70.7	70	0.7	3	★
2.41	VAPDMSUSD0241	29.7	70.7	70	0.7	3	★
2.42	VAPDMSUSD0242	29.7	70.7	70	0.7	3	★
2.43	VAPDMSUSD0243	29.7	70.7	70	0.7	3	★
2.44	VAPDMSUSD0244	29.7	70.7	70	0.7	3	★
2.45	VAPDMSUSD0245	29.7	70.7	70	0.7	3	★
2.46	VAPDMSUSD0246	29.7	70.7	70	0.7	3	★
2.47	VAPDMSUSD0247	29.7	70.7	70	0.7	3	★
2.48	VAPDMSUSD0248	29.8	70.8	70	0.8	3	★
2.49	VAPDMSUSD0249	29.8	70.8	70	0.8	3	★
2.5	VAPDMSUSD0250	29.8	70.8	70	0.8	3	●
2.51	VAPDMSUSD0251	29.8	70.8	70	0.8	3	★
2.52	VAPDMSUSD0252	29.8	70.8	70	0.8	3	★
2.53	VAPDMSUSD0253	29.8	70.8	70	0.8	3	★
2.54	VAPDMSUSD0254	29.8	70.8	70	0.8	3	★
2.55	VAPDMSUSD0255	29.8	70.8	70	0.8	3	★
2.56	VAPDMSUSD0256	29.8	70.8	70	0.8	3	★
2.57	VAPDMSUSD0257	29.8	70.8	70	0.8	3	★
2.58	VAPDMSUSD0258	29.8	70.8	70	0.8	3	★
2.59	VAPDMSUSD0259	29.8	70.8	70	0.8	3	★
2.6	VAPDMSUSD0260	29.8	70.8	70	0.8	3	★
2.61	VAPDMSUSD0261	29.8	70.8	70	0.8	3	★
2.62	VAPDMSUSD0262	29.8	70.8	70	0.8	3	★
2.63	VAPDMSUSD0263	29.8	70.8	70	0.8	3	★
2.64	VAPDMSUSD0264	29.8	70.8	70	0.8	3	★
2.65	VAPDMSUSD0265	29.8	70.8	70	0.8	3	★
2.66	VAPDMSUSD0266	29.8	70.8	70	0.8	3	★
2.67	VAPDMSUSD0267	29.8	70.8	70	0.8	3	★
2.68	VAPDMSUSD0268	29.8	70.8	70	0.8	3	★
2.69	VAPDMSUSD0269	29.8	70.8	70	0.8	3	★
2.7	VAPDMSUSD0270	32.8	70.8	70	0.8	3	★
2.71	VAPDMSUSD0271	32.8	70.8	70	0.8	3	★
2.72	VAPDMSUSD0272	32.8	70.8	70	0.8	3	★
2.73	VAPDMSUSD0273	32.8	70.8	70	0.8	3	★
2.74	VAPDMSUSD0274	32.8	70.8	70	0.8	3	★
2.75	VAPDMSUSD0275	32.8	70.8	70	0.8	3	★
2.76	VAPDMSUSD0276	32.8	70.8	70	0.8	3	★
2.77	VAPDMSUSD0277	32.8	70.8	70	0.8	3	★
2.78	VAPDMSUSD0278	32.8	70.8	70	0.8	3	★
2.79	VAPDMSUSD0279	32.8	70.8	70	0.8	3	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
2.8	VAPDMSUSD0280	32.8	70.8	70	0.8	3	★
2.81	VAPDMSUSD0281	32.8	70.8	70	0.8	3	★
2.82	VAPDMSUSD0282	32.9	70.9	70	0.9	3	★
2.83	VAPDMSUSD0283	32.9	70.9	70	0.9	3	★
2.84	VAPDMSUSD0284	32.9	70.9	70	0.9	3	★
2.85	VAPDMSUSD0285	32.9	70.9	70	0.9	3	★
2.86	VAPDMSUSD0286	32.9	70.9	70	0.9	3	★
2.87	VAPDMSUSD0287	32.9	70.9	70	0.9	3	★
2.88	VAPDMSUSD0288	32.9	70.9	70	0.9	3	★
2.89	VAPDMSUSD0289	32.9	70.9	70	0.9	3	★
2.9	VAPDMSUSD0290	32.9	70.9	70	0.9	3	★
2.91	VAPDMSUSD0291	32.9	70.9	70	0.9	3	★
2.92	VAPDMSUSD0292	32.9	70.9	70	0.9	3	★
2.93	VAPDMSUSD0293	32.9	70.9	70	0.9	3	★
2.94	VAPDMSUSD0294	32.9	70.9	70	0.9	3	★
2.95	VAPDMSUSD0295	32.9	70.9	70	0.9	3	★
2.96	VAPDMSUSD0296	32.9	70.9	70	0.9	3	★
2.97	VAPDMSUSD0297	32.9	70.9	70	0.9	3	★
2.98	VAPDMSUSD0298	32.9	70.9	70	0.9	3	★
2.99	VAPDMSUSD0299	32.9	70.9	70	0.9	3	★
3.0	VAPDMSUSD0300	32.9	70.9	70	0.9	3	●
3.01	VAPDMSUSD0301	35.9	85.9	85	0.9	4	★
3.02	VAPDMSUSD0302	35.9	85.9	85	0.9	4	★
3.03	VAPDMSUSD0303	35.9	85.9	85	0.9	4	★
3.04	VAPDMSUSD0304	35.9	85.9	85	0.9	4	★
3.05	VAPDMSUSD0305	35.9	85.9	85	0.9	4	★
3.06	VAPDMSUSD0306	35.9	85.9	85	0.9	4	★
3.07	VAPDMSUSD0307	35.9	85.9	85	0.9	4	★
3.08	VAPDMSUSD0308	35.9	85.9	85	0.9	4	★
3.09	VAPDMSUSD0309	35.9	85.9	85	0.9	4	★
3.1	VAPDMSUSD0310	35.9	85.9	85	0.9	4	★
3.11	VAPDMSUSD0311	35.9	85.9	85	0.9	4	★
3.12	VAPDMSUSD0312	35.9	85.9	85	0.9	4	★
3.13	VAPDMSUSD0313	35.9	85.9	85	0.9	4	★
3.14	VAPDMSUSD0314	35.9	85.9	85	0.9	4	★
3.15	VAPDMSUSD0315	36.0	86.0	85	1.0	4	★
3.16	VAPDMSUSD0316	36.0	86.0	85	1.0	4	★
3.17	VAPDMSUSD0317	36.0	86.0	85	1.0	4	★
3.18	VAPDMSUSD0318	36.0	86.0	85	1.0	4	★
3.19	VAPDMSUSD0319	36.0	86.0	85	1.0	4	★
3.2	VAPDMSUSD0320	36.0	86.0	85	1.0	4	★
3.21	VAPDMSUSD0321	36.0	86.0	85	1.0	4	★
3.22	VAPDMSUSD0322	36.0	86.0	85	1.0	4	★
3.23	VAPDMSUSD0323	36.0	86.0	85	1.0	4	★
3.24	VAPDMSUSD0324	36.0	86.0	85	1.0	4	★
3.25	VAPDMSUSD0325	36.0	86.0	85	1.0	4	★
3.26	VAPDMSUSD0326	36.0	86.0	85	1.0	4	★
3.27	VAPDMSUSD0327	36.0	86.0	85	1.0	4	★
3.28	VAPDMSUSD0328	36.0	86.0	85	1.0	4	★
3.29	VAPDMSUSD0329	36.0	86.0	85	1.0	4	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
3.3	VAPDMSUSD0330	36.0	86.0	85	1.0	4	★
3.31	VAPDMSUSD0331	39.0	86.0	85	1.0	4	★
3.32	VAPDMSUSD0332	39.0	86.0	85	1.0	4	★
3.33	VAPDMSUSD0333	39.0	86.0	85	1.0	4	★
3.34	VAPDMSUSD0334	39.0	86.0	85	1.0	4	★
3.35	VAPDMSUSD0335	39.0	86.0	85	1.0	4	★
3.36	VAPDMSUSD0336	39.0	86.0	85	1.0	4	★
3.37	VAPDMSUSD0337	39.0	86.0	85	1.0	4	★
3.38	VAPDMSUSD0338	39.0	86.0	85	1.0	4	★
3.39	VAPDMSUSD0339	39.0	86.0	85	1.0	4	★
3.4	VAPDMSUSD0340	39.0	86.0	85	1.0	4	★
3.41	VAPDMSUSD0341	39.0	86.0	85	1.0	4	★
3.42	VAPDMSUSD0342	39.0	86.0	85	1.0	4	★
3.43	VAPDMSUSD0343	39.0	86.0	85	1.0	4	★
3.44	VAPDMSUSD0344	39.0	86.0	85	1.0	4	★
3.45	VAPDMSUSD0345	39.0	86.0	85	1.0	4	★
3.46	VAPDMSUSD0346	39.0	86.0	85	1.0	4	★
3.47	VAPDMSUSD0347	39.0	86.0	85	1.0	4	★
3.48	VAPDMSUSD0348	39.1	86.1	85	1.1	4	★
3.49	VAPDMSUSD0349	39.1	86.1	85	1.1	4	★
3.5	VAPDMSUSD0350	39.1	86.1	85	1.1	4	●
3.51	VAPDMSUSD0351	39.1	86.1	85	1.1	4	★
3.52	VAPDMSUSD0352	39.1	86.1	85	1.1	4	★
3.53	VAPDMSUSD0353	39.1	86.1	85	1.1	4	★
3.54	VAPDMSUSD0354	39.1	86.1	85	1.1	4	★
3.55	VAPDMSUSD0355	39.1	86.1	85	1.1	4	★
3.56	VAPDMSUSD0356	39.1	86.1	85	1.1	4	★
3.57	VAPDMSUSD0357	39.1	86.1	85	1.1	4	★
3.58	VAPDMSUSD0358	39.1	86.1	85	1.1	4	★
3.59	VAPDMSUSD0359	39.1	86.1	85	1.1	4	★
3.6	VAPDMSUSD0360	39.1	86.1	85	1.1	4	★
3.61	VAPDMSUSD0361	39.1	86.1	85	1.1	4	★
3.62	VAPDMSUSD0362	39.1	86.1	85	1.1	4	★
3.63	VAPDMSUSD0363	39.1	86.1	85	1.1	4	★
3.64	VAPDMSUSD0364	39.1	86.1	85	1.1	4	★
3.65	VAPDMSUSD0365	39.1	86.1	85	1.1	4	★
3.66	VAPDMSUSD0366	39.1	86.1	85	1.1	4	★
3.67	VAPDMSUSD0367	39.1	86.1	85	1.1	4	★
3.68	VAPDMSUSD0368	39.1	86.1	85	1.1	4	★
3.69	VAPDMSUSD0369	39.1	86.1	85	1.1	4	★
3.7	VAPDMSUSD0370	39.1	86.1	85	1.1	4	★
3.71	VAPDMSUSD0371	43.1	86.1	85	1.1	4	★
3.72	VAPDMSUSD0372	43.1	86.1	85	1.1	4	★
3.73	VAPDMSUSD0373	43.1	86.1	85	1.1	4	★
3.74	VAPDMSUSD0374	43.1	86.1	85	1.1	4	★
3.75	VAPDMSUSD0375	43.1	86.1	85	1.1	4	★
3.76	VAPDMSUSD0376	43.1	86.1	85	1.1	4	★
3.77	VAPDMSUSD0377	43.1	86.1	85	1.1	4	★
3.78	VAPDMSUSD0378	43.1	86.1	85	1.1	4	★
3.79	VAPDMSUSD0379	43.1	86.1	85	1.1	4	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
3.8	VAPDMSUSD0380	43.1	86.1	85	1.1	4	★
3.81	VAPDMSUSD0381	43.1	86.1	85	1.1	4	★
3.82	VAPDMSUSD0382	43.2	86.2	85	1.2	4	★
3.83	VAPDMSUSD0383	43.2	86.2	85	1.2	4	★
3.84	VAPDMSUSD0384	43.2	86.2	85	1.2	4	★
3.85	VAPDMSUSD0385	43.2	86.2	85	1.2	4	★
3.86	VAPDMSUSD0386	43.2	86.2	85	1.2	4	★
3.87	VAPDMSUSD0387	43.2	86.2	85	1.2	4	★
3.88	VAPDMSUSD0388	43.2	86.2	85	1.2	4	★
3.89	VAPDMSUSD0389	43.2	86.2	85	1.2	4	★
3.9	VAPDMSUSD0390	43.2	86.2	85	1.2	4	★
3.91	VAPDMSUSD0391	43.2	86.2	85	1.2	4	★
3.92	VAPDMSUSD0392	43.2	86.2	85	1.2	4	★
3.93	VAPDMSUSD0393	43.2	86.2	85	1.2	4	★
3.94	VAPDMSUSD0394	43.2	86.2	85	1.2	4	★
3.95	VAPDMSUSD0395	43.2	86.2	85	1.2	4	★
3.96	VAPDMSUSD0396	43.2	86.2	85	1.2	4	★
3.97	VAPDMSUSD0397	43.2	86.2	85	1.2	4	★
3.98	VAPDMSUSD0398	43.2	86.2	85	1.2	4	★
3.99	VAPDMSUSD0399	43.2	86.2	85	1.2	4	★
4.0	VAPDMSUSD0400	42.8	85.8	85	0.8	4	●
4.05	VAPDMSUSD0405	42.8	100.8	100	0.8	6	★
4.1	VAPDMSUSD0410	42.9	100.9	100	0.9	6	★
4.15	VAPDMSUSD0415	42.9	100.9	100	0.9	6	★
4.2	VAPDMSUSD0420	42.9	100.9	100	0.9	6	★
4.25	VAPDMSUSD0425	46.9	100.9	100	0.9	6	★
4.3	VAPDMSUSD0430	46.9	100.9	100	0.9	6	★
4.35	VAPDMSUSD0435	46.9	100.9	100	0.9	6	★
4.4	VAPDMSUSD0440	46.9	100.9	100	0.9	6	★
4.45	VAPDMSUSD0445	46.9	100.9	100	0.9	6	★
4.5	VAPDMSUSD0450	46.9	100.9	100	0.9	6	●
4.55	VAPDMSUSD0455	46.9	100.9	100	0.9	6	★
4.6	VAPDMSUSD0460	47.0	101.0	100	1.0	6	★
4.65	VAPDMSUSD0465	47.0	101.0	100	1.0	6	★
4.7	VAPDMSUSD0470	47.0	101.0	100	1.0	6	★
4.75	VAPDMSUSD0475	47.0	101.0	100	1.0	6	★
4.8	VAPDMSUSD0480	52.0	101.0	100	1.0	6	★
4.85	VAPDMSUSD0485	52.0	101.0	100	1.0	6	★
4.9	VAPDMSUSD0490	52.0	101.0	100	1.0	6	★
4.95	VAPDMSUSD0495	52.0	101.0	100	1.0	6	★
5.0	VAPDMSUSD0500	52.0	101.0	100	1.0	6	●
5.05	VAPDMSUSD0505	52.1	101.1	100	1.1	6	★
5.1	VAPDMSUSD0510	52.1	101.1	100	1.1	6	★
5.15	VAPDMSUSD0515	52.1	101.1	100	1.1	6	★
5.2	VAPDMSUSD0520	52.1	101.1	100	1.1	6	★
5.25	VAPDMSUSD0525	52.1	101.1	100	1.1	6	★
5.3	VAPDMSUSD0530	52.1	101.1	100	1.1	6	★
5.35	VAPDMSUSD0535	57.1	107.1	106	1.1	6	★
5.4	VAPDMSUSD0540	57.1	107.1	106	1.1	6	★
5.45	VAPDMSUSD0545	57.1	107.1	106	1.1	6	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
5.5	VAPDMSUSD0550	57.1	107.1	106	1.1	6	●
5.55	VAPDMSUSD0555	57.2	107.2	106	1.2	6	★
5.6	VAPDMSUSD0560	57.2	107.2	106	1.2	6	★
5.65	VAPDMSUSD0565	57.2	107.2	106	1.2	6	★
5.7	VAPDMSUSD0570	57.2	107.2	106	1.2	6	★
5.75	VAPDMSUSD0575	57.2	107.2	106	1.2	6	★
5.8	VAPDMSUSD0580	57.2	107.2	106	1.2	6	★
5.85	VAPDMSUSD0585	57.2	107.2	106	1.2	6	★
5.9	VAPDMSUSD0590	57.2	107.2	106	1.2	6	★
5.95	VAPDMSUSD0595	57.2	107.2	106	1.2	6	★
6.0	VAPDMSUSD0600	57.2	107.2	106	1.2	6	●
6.05	VAPDMSUSD0605	63.3	113.3	112	1.3	8	★
6.1	VAPDMSUSD0610	63.3	113.3	112	1.3	8	★
6.15	VAPDMSUSD0615	63.3	113.3	112	1.3	8	★
6.2	VAPDMSUSD0620	63.3	113.3	112	1.3	8	★
6.25	VAPDMSUSD0625	63.3	113.3	112	1.3	8	★
6.3	VAPDMSUSD0630	63.3	113.3	112	1.3	8	★
6.35	VAPDMSUSD0635	63.3	113.3	112	1.3	8	★
6.4	VAPDMSUSD0640	63.3	113.3	112	1.3	8	★
6.45	VAPDMSUSD0645	63.3	113.3	112	1.3	8	★
6.5	VAPDMSUSD0650	63.4	113.4	112	1.4	8	●
6.55	VAPDMSUSD0655	63.4	113.4	112	1.4	8	★
6.6	VAPDMSUSD0660	63.4	113.4	112	1.4	8	★
6.65	VAPDMSUSD0665	63.4	113.4	112	1.4	8	★
6.7	VAPDMSUSD0670	63.4	113.4	112	1.4	8	★
6.75	VAPDMSUSD0675	68.4	118.4	117	1.4	8	★
6.8	VAPDMSUSD0680	68.4	118.4	117	1.4	8	★
6.85	VAPDMSUSD0685	68.4	118.4	117	1.4	8	★
6.9	VAPDMSUSD0690	68.4	118.4	117	1.4	8	★
6.95	VAPDMSUSD0695	68.4	118.4	117	1.4	8	★
7.0	VAPDMSUSD0700	68.5	118.5	117	1.5	8	●
7.05	VAPDMSUSD0705	68.5	118.5	117	1.5	8	★
7.1	VAPDMSUSD0710	68.5	118.5	117	1.5	8	★
7.15	VAPDMSUSD0715	68.5	118.5	117	1.5	8	★
7.2	VAPDMSUSD0720	68.5	118.5	117	1.5	8	★
7.25	VAPDMSUSD0725	68.5	118.5	117	1.5	8	★
7.3	VAPDMSUSD0730	68.5	118.5	117	1.5	8	★
7.35	VAPDMSUSD0735	68.5	118.5	117	1.5	8	★
7.4	VAPDMSUSD0740	68.5	118.5	117	1.5	8	★
7.45	VAPDMSUSD0745	68.5	118.5	117	1.5	8	★
7.5	VAPDMSUSD0750	68.6	118.6	117	1.6	8	●
7.55	VAPDMSUSD0755	74.6	124.6	123	1.6	8	★
7.6	VAPDMSUSD0760	74.6	124.6	123	1.6	8	★
7.65	VAPDMSUSD0765	74.6	124.6	123	1.6	8	★
7.7	VAPDMSUSD0770	74.6	124.6	123	1.6	8	★
7.75	VAPDMSUSD0775	74.6	124.6	123	1.6	8	★
7.8	VAPDMSUSD0780	74.6	124.6	123	1.6	8	★
7.85	VAPDMSUSD0785	74.6	124.6	123	1.6	8	★
7.9	VAPDMSUSD0790	74.6	124.6	123	1.6	8	★
7.95	VAPDMSUSD0795	74.7	124.7	123	1.7	8	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
8.0	VAPDMSUSD0800	74.7	124.7	123	1.7	8	●
8.05	VAPDMSUSD0805	74.7	129.7	128	1.7	10	★
8.1	VAPDMSUSD0810	74.7	129.7	128	1.7	10	★
8.15	VAPDMSUSD0815	74.7	129.7	128	1.7	10	★
8.2	VAPDMSUSD0820	74.7	129.7	128	1.7	10	★
8.25	VAPDMSUSD0825	74.7	129.7	128	1.7	10	★
8.3	VAPDMSUSD0830	74.7	129.7	128	1.7	10	★
8.35	VAPDMSUSD0835	74.7	129.7	128	1.7	10	★
8.4	VAPDMSUSD0840	74.7	129.7	128	1.7	10	★
8.45	VAPDMSUSD0845	74.8	129.8	128	1.8	10	★
8.5	VAPDMSUSD0850	74.8	129.8	128	1.8	10	●
8.55	VAPDMSUSD0855	80.8	135.8	134	1.8	10	★
8.6	VAPDMSUSD0860	80.8	135.8	134	1.8	10	★
8.65	VAPDMSUSD0865	80.8	135.8	134	1.8	10	★
8.7	VAPDMSUSD0870	80.8	135.8	134	1.8	10	★
8.75	VAPDMSUSD0875	80.8	135.8	134	1.8	10	★
8.8	VAPDMSUSD0880	80.8	135.8	134	1.8	10	★
8.85	VAPDMSUSD0885	80.8	135.8	134	1.8	10	★
8.9	VAPDMSUSD0890	80.8	135.8	134	1.8	10	★
8.95	VAPDMSUSD0895	80.9	135.9	134	1.9	10	★
9.0	VAPDMSUSD0900	80.9	135.9	134	1.9	10	●
9.1	VAPDMSUSD0910	80.9	135.9	134	1.9	10	★
9.2	VAPDMSUSD0920	80.9	135.9	134	1.9	10	★
9.3	VAPDMSUSD0930	80.9	135.9	134	1.9	10	★
9.4	VAPDMSUSD0940	81.0	136.0	134	2.0	10	★
9.5	VAPDMSUSD0950	81.0	136.0	134	2.0	10	★
9.6	VAPDMSUSD0960	87.0	142.0	140	2.0	10	★
9.7	VAPDMSUSD0970	87.0	142.0	140	2.0	10	★
9.8	VAPDMSUSD0980	87.0	142.0	140	2.0	10	★
9.9	VAPDMSUSD0990	87.1	142.1	140	2.1	10	★
10.0	VAPDMSUSD1000	87.1	142.1	140	2.1	10	●
10.1	VAPDMSUSD1010	87.1	147.1	145	2.1	12	★
10.2	VAPDMSUSD1020	87.1	147.1	145	2.1	12	★
10.3	VAPDMSUSD1030	87.1	147.1	145	2.1	12	★
10.4	VAPDMSUSD1040	87.2	147.2	145	2.2	12	★
10.5	VAPDMSUSD1050	87.2	147.2	145	2.2	12	●
10.6	VAPDMSUSD1060	87.2	147.2	145	2.2	12	★
10.7	VAPDMSUSD1070	94.2	154.2	152	2.2	12	★
10.8	VAPDMSUSD1080	94.2	154.2	152	2.2	12	★
10.9	VAPDMSUSD1090	94.3	154.3	152	2.3	12	★
11.0	VAPDMSUSD1100	94.3	154.3	152	2.3	12	●
11.1	VAPDMSUSD1110	94.3	154.3	152	2.3	12	★
11.2	VAPDMSUSD1120	94.3	154.3	152	2.3	12	★
11.3	VAPDMSUSD1130	94.3	154.3	152	2.3	12	★
11.4	VAPDMSUSD1140	94.4	154.4	152	2.4	12	★
11.5	VAPDMSUSD1150	94.4	154.4	152	2.4	12	★
11.6	VAPDMSUSD1160	94.4	154.4	152	2.4	12	★
11.7	VAPDMSUSD1170	94.4	154.4	152	2.4	12	★
11.8	VAPDMSUSD1180	94.4	154.4	152	2.4	12	★
11.9	VAPDMSUSD1190	101.5	161.5	159	2.5	12	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
12.0	VAPDMSUSD1200	101.5	161.5	159	2.5	12	●
12.1	VAPDMSUSD1210	101.5	161.5	159	2.5	12	★
12.2	VAPDMSUSD1220	101.5	161.5	159	2.5	12	★
12.3	VAPDMSUSD1230	101.6	161.6	159	2.6	12	★
12.4	VAPDMSUSD1240	101.6	161.6	159	2.6	12	★
12.5	VAPDMSUSD1250	101.6	161.6	159	2.6	12	●
12.6	VAPDMSUSD1260	101.6	161.6	159	2.6	12	★
12.7	VAPDMSUSD1270	101.6	161.6	159	2.6	12	★
12.8	VAPDMSUSD1280	101.7	161.7	159	2.7	12	★
12.9	VAPDMSUSD1290	101.7	161.7	159	2.7	12	★
13.0	VAPDMSUSD1300	101.7	161.7	159	2.7	12	★

SCHNITTDATENEMPFEHLUNGEN

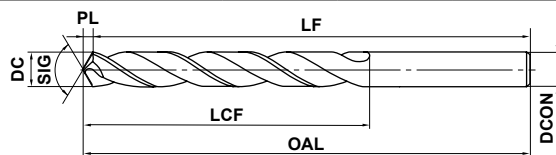
Werkstoff	Rostfreier Stahl				C-Stahl Cf53, Leg. Stahl 070M55, Guss, Kupfer,Kupfer Leg.		Baustahl, Aluminium Leg.	
	Austenitisch X5CrNi1810 X5CrNiMo17122		Martensitisch, Vorschub X10CrAl18					
Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)
0.5	7600	0.01	8800	0.01	11250	0.01	15000	0.02
1.0	4800	0.02	6300	0.05	10000	0.05	12000	0.05
2.0	2400	0.04	3200	0.06	5500	0.09	6400	0.09
3.0	1600	0.07	2100	0.10	3700	0.13	4300	0.13
4.0	1200	0.09	1600	0.10	2800	0.15	3200	0.15
5.0	950	0.12	1300	0.13	2200	0.18	2600	0.18
6.0	800	0.14	1100	0.15	1800	0.20	2100	0.19
8.0	600	0.18	800	0.18	1400	0.22	1600	0.24
10.0	480	0.22	640	0.21	1100	0.25	1300	0.28
12.0	400	0.24	530	0.25	930	0.30	1100	0.34
13.0	370	0.26	490	0.28	860	0.32	1000	0.36
14.0	340	0.30	450	0.27	730	0.31	930	0.36
15.0	320	0.31	425	0.28	680	0.32	870	0.38
16.0	300	0.32	400	0.30	640	0.34	820	0.42
18.0	270	0.34	350	0.32	570	0.36	725	0.43
20.0	240	0.36	320	0.35	510	0.38	660	0.45

- 1) Bitte passen Sie die Schnittwerte den Bedingungen des Werkstückes und der Maschine an.
- 2) Bitte verwenden Sie ein Spannzangenfutter.
- 3) Verwenden Sie genügend Kühlschmierstoff.
- 4) Bei Bohrtiefen > 3DC reduzieren Sie bitte die Schnittwerte und bohren mit Entspanzyklus.

Bei Verwendung von wasserlöslicher Schmierflüssigkeit sind oben genannte Schnittdaten der Standard.
Bitte reduzieren Sie die Umdrehungen bei Verwendung von nicht-wasserlöslichem Kühlschmierstoff.

P	M	K	N	S	H
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0.5 ≤ DC ≤ 1	1 ≤ DC ≤ 3	3 < DC ≤ 6	6 < DC ≤ 10	10 < DC ≤ 13
$0 \begin{smallmatrix} -0.010 \end{smallmatrix}$	$0 \begin{smallmatrix} -0.014 \end{smallmatrix}$	$0 \begin{smallmatrix} -0.018 \end{smallmatrix}$	$0 \begin{smallmatrix} -0.022 \end{smallmatrix}$	$0 \begin{smallmatrix} -0.027 \end{smallmatrix}$



DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
0.5	VSDD0050	6.18	27.18	27	0.18	0.5	★
0.6	VSDD0060	7.21	30.21	30	0.21	0.6	●
0.7	VSDD0070	9.21	32.21	32	0.21	0.7	●
0.8	VSDD0080	10.24	34.24	34	0.24	0.8	●
0.9	VSDD0090	11.27	36.27	36	0.27	0.9	●
1.0	VSDD0100	12.3	40.3	40	0.3	1.0	●
1.1	VSDD0110	14.3	42.3	42	0.3	1.1	●
1.2	VSDD0120	16.4	42.4	42	0.4	1.2	●
1.3	VSDD0130	16.4	45.4	45	0.4	1.3	●
1.4	VSDD0140	18.4	48.4	48	0.4	1.4	●
1.5	VSDD0150	18.5	48.5	48	0.5	1.5	●
1.6	VSDD0160	20.5	50.5	50	0.5	1.6	●
1.7	VSDD0170	20.5	50.5	50	0.5	1.7	★
1.8	VSDD0180	22.5	52.5	52	0.5	1.8	●
1.9	VSDD0190	22.6	52.6	52	0.6	1.9	●
2.0	VSDD0200	23.6	55.6	55	0.6	2.0	●
2.1	VSDD0210	23.6	55.6	55	0.6	2.1	●
2.2	VSDD0220	26.7	58.7	58	0.7	2.2	●
2.3	VSDD0230	26.7	58.7	58	0.7	2.3	★
2.4	VSDD0240	29.7	61.7	61	0.7	2.4	★
2.5	VSDD0250	29.8	61.8	61	0.8	2.5	●
2.6	VSDD0260	29.8	64.8	64	0.8	2.6	★
2.7	VSDD0270	32.8	64.8	64	0.8	2.7	★
2.8	VSDD0280	32.8	67.8	67	0.8	2.8	●
2.9	VSDD0290	32.9	71.9	71	0.9	2.9	★
3.0	VSDD0300	32.9	71.9	71	0.9	3.0	●
3.1	VSDD0310	35.9	71.9	71	0.9	3.1	●
3.2	VSDD0320	36.0	72.0	71	1.0	3.2	●
3.3	VSDD0330	36.0	74.0	73	1.0	3.3	●
3.4	VSDD0340	39.0	74.0	73	1.0	3.4	●
3.5	VSDD0350	39.1	74.1	73	1.1	3.5	●
3.6	VSDD0360	39.1	77.1	76	1.1	3.6	★
3.7	VSDD0370	39.1	77.1	76	1.1	3.7	★
3.8	VSDD0380	43.1	77.1	76	1.1	3.8	★
3.9	VSDD0390	43.2	80.2	79	1.2	3.9	★
4.0	VSDD0400	43.2	84.2	83	1.2	4.0	●
4.1	VSDD0410	43.2	84.2	83	1.2	4.1	●
4.2	VSDD0420	43.3	84.3	83	1.3	4.2	●
4.3	VSDD0430	47.3	84.3	83	1.3	4.3	●
4.4	VSDD0440	47.3	87.3	86	1.3	4.4	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
4.5	VSDD0450	47.4	87.4	86	1.4	4.5	●
4.6	VSDD0460	47.4	87.4	86	1.4	4.6	★
4.7	VSDD0470	47.4	90.4	89	1.4	4.7	★
4.8	VSDD0480	52.4	90.4	89	1.4	4.8	●
4.9	VSDD0490	52.5	93.5	92	1.5	4.9	★
5.0	VSDD0500	52.5	93.5	92	1.5	5.0	●
5.1	VSDD0510	52.5	93.5	92	1.5	5.1	●
5.2	VSDD0520	52.6	96.6	95	1.6	5.2	●
5.3	VSDD0530	52.6	96.6	95	1.6	5.3	★
5.4	VSDD0540	57.6	96.6	95	1.6	5.4	★
5.5	VSDD0550	57.7	96.7	95	1.7	5.5	●
5.6	VSDD0560	57.7	99.7	98	1.7	5.6	★
5.7	VSDD0570	57.7	99.7	98	1.7	5.7	★
5.8	VSDD0580	57.7	99.7	98	1.7	5.8	★
5.9	VSDD0590	57.8	99.8	98	1.8	5.9	●
6.0	VSDD0600	57.8	103.8	102	1.8	6.0	●
6.1	VSDD0610	63.8	103.8	102	1.8	6.1	★
6.2	VSDD0620	63.9	103.9	102	1.9	6.2	●
6.3	VSDD0630	63.9	103.9	102	1.9	6.3	●
6.4	VSDD0640	63.9	106.9	105	1.9	6.4	★
6.5	VSDD0650	64.0	107.0	105	2.0	6.5	●
6.6	VSDD0660	64.0	107.0	105	2.0	6.6	★
6.7	VSDD0670	64.0	107.0	105	2.0	6.7	★
6.8	VSDD0680	69.0	107.0	105	2.0	6.8	●
6.9	VSDD0690	69.1	107.1	105	2.1	6.9	★
7.0	VSDD0700	69.1	107.1	105	2.1	7.0	●
7.1	VSDD0710	69.1	110.1	108	2.1	7.1	★
7.2	VSDD0720	69.2	110.2	108	2.2	7.2	★
7.3	VSDD0730	69.2	110.2	108	2.2	7.3	●
7.4	VSDD0740	69.2	113.2	111	2.2	7.4	★
7.5	VSDD0750	69.3	113.3	111	2.3	7.5	★
7.6	VSDD0760	75.3	113.3	111	2.3	7.6	★
7.7	VSDD0770	75.3	116.3	114	2.3	7.7	★
7.8	VSDD0780	75.3	116.3	114	2.3	7.8	★
7.9	VSDD0790	75.4	116.4	114	2.4	7.9	●
8.0	VSDD0800	75.4	116.4	114	2.4	8.0	●
8.1	VSDD0810	75.4	119.4	117	2.4	8.1	★
8.2	VSDD0820	75.5	119.5	117	2.5	8.2	★
8.3	VSDD0830	75.5	119.5	117	2.5	8.3	★
8.4	VSDD0840	75.5	123.5	121	2.5	8.4	★

VIOLET BOHRER

VSD
Zylindrischer Schaft

HSS

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
8.5	VSDD0850	75.6	123.6	121	2.6	8.5	●
8.6	VSDD0860	81.6	123.6	121	2.6	8.6	●
8.7	VSDD0870	81.6	123.6	121	2.6	8.7	●
8.8	VSDD0880	81.6	126.6	124	2.6	8.8	★
8.9	VSDD0890	81.7	126.7	124	2.7	8.9	★
9.0	VSDD0900	81.7	126.7	124	2.7	9.0	●
9.1	VSDD0910	81.7	126.7	124	2.7	9.1	★
9.2	VSDD0920	81.8	129.8	127	2.8	9.2	★
9.3	VSDD0930	81.8	129.8	127	2.8	9.3	★
9.4	VSDD0940	81.8	129.8	127	2.8	9.4	★
9.5	VSDD0950	81.9	129.9	127	2.9	9.5	●
9.6	VSDD0960	87.9	132.9	130	2.9	9.6	★
9.7	VSDD0970	87.9	132.9	130	2.9	9.7	★
9.8	VSDD0980	87.9	132.9	130	2.9	9.8	★
9.9	VSDD0990	88.0	133.0	130	3.0	9.9	★
10.0	VSDD1000	88.0	133.0	130	3.0	10.0	●
10.1	VSDD1010	88.0	136.0	133	3.0	10.1	★
10.2	VSDD1020	88.1	136.1	133	3.1	10.2	●
10.3	VSDD1030	88.1	136.1	133	3.1	10.3	●
10.4	VSDD1040	88.1	136.1	133	3.1	10.4	★
10.5	VSDD1050	88.2	140.2	137	3.2	10.5	●
10.6	VSDD1060	88.2	140.2	137	3.2	10.6	★
10.7	VSDD1070	95.2	140.2	137	3.2	10.7	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)					Lager
		LCF	OAL	LF	PL	DCON	
10.8	VSDD1080	95.2	143.2	140	3.2	10.8	★
10.9	VSDD1090	95.3	143.3	140	3.3	10.9	★
11.0	VSDD1100	95.3	143.3	140	3.3	11.0	●
11.1	VSDD1110	95.3	143.3	140	3.3	11.1	★
11.2	VSDD1120	95.4	146.4	143	3.4	11.2	★
11.3	VSDD1130	95.4	146.4	143	3.4	11.3	★
11.4	VSDD1140	95.4	146.4	143	3.4	11.4	★
11.5	VSDD1150	95.5	146.5	143	3.5	11.5	★
11.6	VSDD1160	95.5	149.5	146	3.5	11.6	★
11.7	VSDD1170	95.5	149.5	146	3.5	11.7	★
11.8	VSDD1180	95.5	149.5	146	3.5	11.8	★
11.9	VSDD1190	102.6	149.6	146	3.6	11.9	★
12.0	VSDD1200	102.6	152.6	149	3.6	12.0	●
12.1	VSDD1210	102.6	152.6	149	3.6	12.1	★
12.2	VSDD1220	102.7	152.7	149	3.7	12.2	★
12.3	VSDD1230	102.7	152.7	149	3.7	12.3	★
12.4	VSDD1240	102.7	155.7	152	3.7	12.4	★
12.5	VSDD1250	102.8	155.8	152	3.8	12.5	★
12.6	VSDD1260	102.8	155.8	152	3.8	12.6	★
12.7	VSDD1270	102.8	155.8	152	3.8	12.7	★
12.8	VSDD1280	102.8	155.8	152	3.8	12.8	★
12.9	VSDD1290	102.9	155.9	152	3.9	12.9	★
13.0	VSDD1300	102.9	155.9	152	3.9	13.0	●

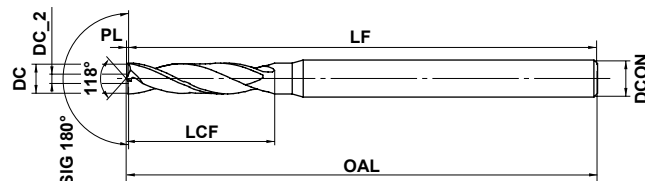
SCHNITTDATENEMPFEHLUNGEN

Werkstoff	Baustahl		C-Stahl Ck55		Rostfreier Stahl X20Cr13		Rostfreier Stahl X5CrNi1810 Werkzeugstahl X210Cr12 (Materialien mit geringer Härte) Vergüteter Stahl X40CrMoV51 (-40HRC)	
	40m/min		30m/min		20m/min		10-14m/min	
Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)
0.5	15000	0.01	11250	0.01	7500	0.01	5620	0.01
1.0	10000	0.02	7500	0.02	5000	0.02	3750	0.02
1.5	8200	0.03	6150	0.03	4100	0.03	2800	0.03
2.0	6370	0.05	4780	0.05	3180	0.05	2200	0.04
3.0	4250	0.10	3180	0.10	2120	0.07	1400	0.06
4.0	3180	0.13	2390	0.13	1590	0.09	1100	0.08
5.0	2550	0.15	1910	0.15	1270	0.11	860	0.10
6.0	2120	0.18	1590	0.18	1060	0.13	720	0.11
7.0	1820	0.20	1360	0.20	910	0.14	610	0.12
8.0	1590	0.22	1190	0.21	800	0.15	540	0.13
9.0	1420	0.24	1060	0.22	710	0.17	480	0.14
10.0	1270	0.26	960	0.23	640	0.18	430	0.15
11.0	1160	0.28	870	0.24	580	0.19	390	0.16
12.0	1060	0.30	800	0.25	530	0.20	360	0.17
13.0	980	0.30	730	0.26	490	0.20	330	0.17

- 1) Bitte passen Sie die Schnittwerte den Bedingungen des Werkstückes und der Maschine an.
- 2) Bei Bohrtiefen > l/d3 reduzieren Sie bitte die Schnittwerte und bohren mit Entspanzyklus.
- 3) Bei Verwendung von wasserlöslicher Schmierflüssigkeit sind oben genannte Schnittdaten der Standard.
Bitte reduzieren Sie die Umdrehungen bei Verwendung von nicht-wasserlöslichem Kühlschmierstoff.

P	M	K	N	S	H
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DC ≤ 3	3 < DC ≤ 6	6 < DC ≤ 10	10 < DC ≤ 18	18 < DC ≤ 30	30 < DC ≤ 32
0 -0.014	0 -0.018	0 -0.022	0 -0.027	0 -0.033	0 -0.039



- Die einzigartige Geometrie ermöglicht hocheffizientes Anbohren.
Ausgezeichnete Spanbrechung und flacher Boden der gebohrten Oberfläche.

DC (mm)	Bestellbezeichnung	Abmessungen (mm)						Lager
		DC ₂	LCF	OAL	LF	PL	DCON	
2.0	VAPDSCBD0200	0.7	12	60.2	60	0.2	3	★
2.1	VAPDSCBD0210	0.7	12	60.2	60	0.2	3	★
2.2	VAPDSCBD0220	0.7	12	60.2	60	0.2	3	★
2.3	VAPDSCBD0230	0.7	13	60.2	60	0.2	3	★
2.4	VAPDSCBD0240	0.7	13	60.2	60	0.2	3	★
2.5	VAPDSCBD0250	0.7	13	60.2	60	0.2	3	★
2.6	VAPDSCBD0260	0.8	15	60.2	60	0.2	3	★
2.7	VAPDSCBD0270	0.8	15	60.2	60	0.2	3	★
2.8	VAPDSCBD0280	0.8	15	60.2	60	0.2	3	★
2.9	VAPDSCBD0290	0.8	15	60.2	60	0.2	3	★
3.0	VAPDSCBD0300	0.8	15	60.2	60	0.2	3	★
3.1	VAPDSCBD0310	0.8	17	70.2	70	0.2	4	★
3.2	VAPDSCBD0320	0.8	17	70.2	70	0.2	4	★
3.3	VAPDSCBD0330	0.8	19	70.2	70	0.2	4	★
3.4	VAPDSCBD0340	0.8	19	70.2	70	0.2	4	★
3.5	VAPDSCBD0350	0.8	19	70.2	70	0.2	4	★
3.6	VAPDSCBD0360	1.0	21	70.2	70	0.2	4	★
3.7	VAPDSCBD0370	1.0	21	70.2	70	0.2	4	★
3.8	VAPDSCBD0380	1.0	21	70.2	70	0.2	4	★
3.9	VAPDSCBD0390	1.0	21	70.2	70	0.2	4	★
4.0	VAPDSCBD0400	1.0	21	70.3	70	0.3	4	★
4.1	VAPDSCBD0410	1.0	21	80.3	80	0.3	6	★
4.2	VAPDSCBD0420	1.0	21	80.3	80	0.3	6	★
4.3	VAPDSCBD0430	1.0	23	80.3	80	0.3	6	★
4.4	VAPDSCBD0440	1.0	23	80.3	80	0.3	6	★
4.5	VAPDSCBD0450	1.0	23	80.3	80	0.3	6	★
4.6	VAPDSCBD0460	1.4	25	80.3	80	0.3	6	★
4.7	VAPDSCBD0470	1.4	25	80.3	80	0.3	6	★
4.8	VAPDSCBD0480	1.4	25	80.3	80	0.3	6	★
4.9	VAPDSCBD0490	1.4	25	80.3	80	0.3	6	★
5.0	VAPDSCBD0500	1.4	25	80.4	80	0.4	6	★
5.1	VAPDSCBD0510	1.4	25	80.4	80	0.4	6	★
5.2	VAPDSCBD0520	1.4	25	80.4	80	0.4	6	★
5.3	VAPDSCBD0530	1.4	25	80.4	80	0.4	6	★
5.4	VAPDSCBD0540	1.4	27	80.4	80	0.4	6	★
5.5	VAPDSCBD0550	1.4	27	80.4	80	0.4	6	★
5.6	VAPDSCBD0560	1.4	27	80.4	80	0.4	6	★
5.7	VAPDSCBD0570	1.4	27	80.4	80	0.4	6	★
5.8	VAPDSCBD0580	1.4	27	80.4	80	0.4	6	★
5.9	VAPDSCBD0590	1.4	27	80.4	80	0.4	6	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)						Lager
		DC ₂	LCF	OAL	LF	PL	DCON	
6.0	VAPDSCBD0600	1.4	27	80.4	80	0.4	6	★
6.1	VAPDSCBD0610	1.4	30	80.4	80	0.4	8	★
6.2	VAPDSCBD0620	1.4	30	80.4	80	0.4	8	★
6.3	VAPDSCBD0630	1.4	30	80.4	80	0.4	8	★
6.4	VAPDSCBD0640	1.4	30	80.4	80	0.4	8	★
6.5	VAPDSCBD0650	1.4	30	80.4	80	0.4	8	★
6.6	VAPDSCBD0660	1.8	30	80.4	80	0.4	8	★
6.7	VAPDSCBD0670	1.8	30	80.4	80	0.4	8	★
6.8	VAPDSCBD0680	1.8	32	80.4	80	0.4	8	★
6.9	VAPDSCBD0690	1.8	32	80.4	80	0.4	8	★
7.0	VAPDSCBD0700	1.8	32	80.6	80	0.6	8	★
7.1	VAPDSCBD0710	1.8	32	80.6	80	0.6	8	★
7.2	VAPDSCBD0720	1.8	32	80.6	80	0.6	8	★
7.3	VAPDSCBD0730	1.8	32	80.6	80	0.6	8	★
7.4	VAPDSCBD0740	1.8	32	80.6	80	0.6	8	★
7.5	VAPDSCBD0750	1.8	32	80.6	80	0.6	8	★
7.6	VAPDSCBD0760	2.0	35	85.6	85	0.6	8	★
7.7	VAPDSCBD0770	2.0	35	85.6	85	0.6	8	★
7.8	VAPDSCBD0780	2.0	35	85.6	85	0.6	8	★
7.9	VAPDSCBD0790	2.0	35	85.6	85	0.6	8	★
8.0	VAPDSCBD0800	2.0	35	85.6	85	0.6	8	★
8.1	VAPDSCBD0810	2.0	35	90.6	90	0.6	10	★
8.5	VAPDSCBD0850	2.0	35	90.6	90	0.6	10	★
8.6	VAPDSCBD0860	2.8	38	93.6	93	0.6	10	★
8.8	VAPDSCBD0880	2.8	38	93.6	93	0.6	10	★
9.0	VAPDSCBD0900	2.8	38	93.8	93	0.8	10	★
9.1	VAPDSCBD0910	2.8	38	93.8	93	0.8	10	★
9.5	VAPDSCBD0950	2.8	38	93.8	93	0.8	10	★
9.6	VAPDSCBD0960	3.2	41	96.8	96	0.8	10	★
9.8	VAPDSCBD0980	3.2	41	96.8	96	0.8	10	★
10.0	VAPDSCBD1000	3.2	41	96.9	96	0.9	10	★
10.1	VAPDSCBD1010	3.2	41	101.9	101	0.9	12	★
10.3	VAPDSCBD1030	3.2	41	101.9	101	0.9	12	★
10.5	VAPDSCBD1050	3.2	41	101.9	101	0.9	12	★
10.8	VAPDSCBD1080	3.7	45	105.9	105	0.9	12	★
11.0	VAPDSCBD1100	3.7	45	105.9	105	0.9	12	★
11.1	VAPDSCBD1110	3.7	45	105.9	105	0.9	12	★
11.5	VAPDSCBD1150	3.7	45	105.9	105	0.9	12	★
11.8	VAPDSCBD1180	3.7	45	105.9	105	0.9	12	★
12.0	VAPDSCBD1200	3.7	49	109.9	109	0.9	12	★

DC (mm)	Bestellbezeichnung	Abmessungen (mm)						Lager
		DC ₂	LCF	OAL	LF	PL	DCON	
12.5	VAPDSCBD1250	3.7	49	109.9	109	0.9	12	★
13.0	VAPDSCBD1300	4.2	49	110.1	109	1.1	12	★
13.5	VAPDSCBD1350	4.2	51	122.1	121	1.1	16	★
13.8	VAPDSCBD1380	4.2	51	122.1	121	1.1	16	★
14.0	VAPDSCBD1400	4.2	51	122.1	121	1.1	16	★
14.1	VAPDSCBD1410	5.5	58	124.1	123	1.1	16	★
14.2	VAPDSCBD1420	5.5	58	124.1	123	1.1	16	★
14.5	VAPDSCBD1450	5.5	58	124.1	123	1.1	16	★
14.8	VAPDSCBD1480	5.5	58	124.1	123	1.1	16	★
15.0	VAPDSCBD1500	5.5	58	124.3	123	1.3	16	★
15.5	VAPDSCBD1550	5.5	60	126.3	125	1.3	16	★
15.7	VAPDSCBD1570	5.5	60	126.3	125	1.3	16	★
15.8	VAPDSCBD1580	5.5	60	126.3	125	1.3	16	★
16.0	VAPDSCBD1600	5.5	60	126.3	125	1.3	16	★
17.0	VAPDSCBD1700	5.5	62	133.3	132	1.3	20	★
17.5	VAPDSCBD1750	5.5	63	134.6	133	1.6	20	★
17.6	VAPDSCBD1760	6.5	63	134.6	133	1.6	20	★
17.7	VAPDSCBD1770	6.5	63	134.6	133	1.6	20	★
17.8	VAPDSCBD1780	6.5	63	134.6	133	1.6	20	★
18.0	VAPDSCBD1800	6.5	63	134.6	133	1.6	20	★
18.1	VAPDSCBD1810	6.5	65	136.6	135	1.6	20	★
19.0	VAPDSCBD1900	6.5	65	136.6	135	1.6	20	★
19.8	VAPDSCBD1980	7.5	67	138.6	137	1.6	20	★
20.0	VAPDSCBD2000	7.5	67	138.8	137	1.8	20	★
20.1	VAPDSCBD2010	7.5	67	138.8	137	1.8	20	★
21.0	VAPDSCBD2100	7.5	75	166.8	165	1.8	25	★
22.0	VAPDSCBD2200	7.5	75	166.8	165	1.8	25	★
23.0	VAPDSCBD2300	7.5	80	171.8	170	1.8	25	★
24.0	VAPDSCBD2400	8.5	80	172.2	170	2.2	25	★
25.0	VAPDSCBD2500	8.5	85	182.2	180	2.2	25	★
26.0	VAPDSCBD2600	9.0	85	182.2	180	2.2	32	★
27.0	VAPDSCBD2700	9.0	95	192.2	190	2.2	32	★
28.0	VAPDSCBD2800	10.0	95	192.6	190	2.6	32	★
29.0	VAPDSCBD2900	10.0	100	197.6	195	2.6	32	★
30.0	VAPDSCBD3000	11.0	100	197.6	195	2.6	32	★
31.0	VAPDSCBD3100	11.0	105	202.6	200	2.6	32	★
32.0	VAPDSCBD3200	13.0	105	202.6	200	2.6	32	★

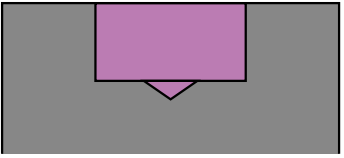
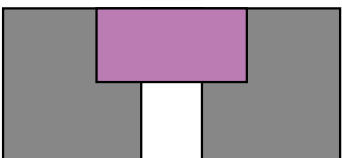
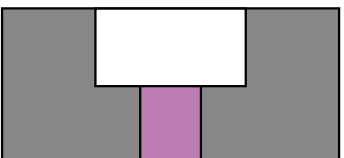
SCNITTDATENEMPFEHLUNGEN

Werkstoff	Baustahl, Aluminium Leg.		C-Stahl Ck55, Legierter Stahl 070M55, Duktiles Gusseisen		Leg. Werkzeugstahl X210Cr12, (Werkstoffe mit geringer Härte) Ferritischer rostfreier Stahl, X10CrAl18, X10CrAl13 Martensitischer rostfreier Stahl, X20Cr13, X10CrAl13		Leg. Werkzeugstahl, X40CrMoV51 (−40HRC) Aushärtbarer rostfreier Stahl, X7CrNiAl177	
	Bohrer Durchm. DC (mm)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)	Vorschub (mm/U.)	Drehzahl (min ⁻¹)
2.0	5600	0.07	4800	0.07	3200	0.07	2800	0.04
3.0	3700	0.10	3200	0.10	2100	0.10	1900	0.05
4.0	2800	0.12	2400	0.12	1600	0.12	1400	0.06
5.0	2200	0.14	1900	0.14	1300	0.14	1150	0.07
6.0	1850	0.15	1600	0.15	1050	0.15	950	0.08
8.0	1400	0.20	1200	0.20	800	0.20	720	0.10
10.0	1100	0.23	960	0.23	640	0.21	570	0.11
12.0	950	0.26	800	0.26	530	0.24	470	0.12
14.0	800	0.27	680	0.27	450	0.25	410	0.13
16.0	700	0.28	500	0.28	360	0.26	300	0.14
18.0	620	0.29	450	0.29	320	0.27	260	0.15
20.0	560	0.30	400	0.30	290	0.27	240	0.15
22.0	510	0.32	360	0.32	260	0.29	220	0.16
24.0	460	0.33	330	0.33	240	0.30	200	0.16
26.0	430	0.35	310	0.35	220	0.31	180	0.17
28.0	400	0.36	290	0.36	210	0.33	170	0.18
30.0	370	0.37	270	0.37	190	0.34	160	0.18
32.0	350	0.38	250	0.38	180	0.35	150	0.19

- Die angegebenen Schnittdaten beziehen sich auf Bohrtiefen bis 2xDC bei Bohrungen ohne Pilotbohrung.
Wenn Löcher mit einer Tiefe kleiner als 1xDC gebohrt werden, kann die Drehzahl um 20 % erhöht werden.
- Es wird empfohlen auf eine Pilotbohrung zu verzichten.
Wenn eine Pilotbohrung vorhanden ist, können die Späne möglicherweise nicht gebrochen werden. Wir empfehlen das Lüften, wenn die Späne gebrochen werden müssen.
- Beim Anbohren an geneigten Flächen ist die Verwendung eines Hartmetall-Fräsers zu empfehlen.
- Verringern Sie bei der Bearbeitung von rostfreien Austenitstählen (X5CrNi1810) die Drehzahl um 30 - 60 %, und reduzieren Sie den Vorschub um 40 - 60 %.
- Verwenden Sie ein Bohrfutter mit Spannvorrichtung.
- Verringern Sie in Abhängigkeit von der Bohrsituation Drehzahl und Vorschub, wenn Werkstück oder Maschine zu wenig Stabilität aufweisen.
- Verwenden Sie ausreichend Kühlschmierstoff.
Die oben angegebenen Schnittdaten dienen als Leitfaden für die Verwendung eines wasserlöslichen Kühlschmierstoffes.
Bei Verwendung eines nicht wasserlöslichen Kühlschmierstoffes muss die Drehzahl verringert werden.

EMPFOHLENE SCHNITTMETHODE

- Mit VAPDSCB ist eine hocheffiziente Bearbeitung möglich, ohne dass es zu Spanstau kommt.

Herkömmliche Schnittmethode		VAPDSCB-Schnittmethode	
① Bohren des Durchgangslochs 	Spangeometrie 	① Anbohren 	Spangeometrie 
② Anbohren 		② Bohren des Durchgangslochs 	Gut 

(Hinweis) Falls beim Anbohren mit dem VAPDSCB zuerst eine Pilotbohrung durchgeführt wird, können lange, zusammenhängende Späne entstehen, die sich um das Werkzeug wickeln.

CVD-DIAMANTBESCHICHTETER VHM-BOHRER

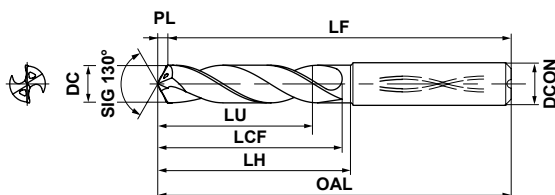
MCS

Für CFK

- Neuer VHM-Bohrer für CFK-Werkstoffe.
- Für hohe Bohrlochqualitäten.

CFK	CFK-/Aluminium-Schichtverbunde	CFK/ Verbundwerkstoff auf Titanlegierung

	3<DC≤6	6<DC≤10	10<DC≤18	18<DC≤20
	0 -0.018	0 -0.022	0 -0.027	0 -0.033
	0 -0.008	0 -0.009	0 -0.011	0 -0.013



(Bemerkung) Die MCS-Bohrer sind für Schrumpffutter geeignet.

Interne Kühlung

DC		Bohrtiefe (l/d)	Lager DD2010	Bestellbezeichnung	Abmessungen (mm)						
					LU	LCF	LH	OAL	LF	PL	DCON
(Zoll)	(mm)										
.1719	4.366	3	★	MCS01719X3DB	13.1	24.0	29.0	66.0	65	1.0	6
.1915	4.864	3	★	MCS01915X3DB	14.6	28.1	29.1	66.1	65	1.1	6
.2510	6.375	3	★	MCS02510X3DB	19.1	34.5	42.5	79.5	78	1.5	8
.3125	7.938	3	★	MCS03125X3DB	23.8	41.9	42.9	79.9	78	1.9	8
.3760	9.550	3	★	MCS03760X3DB	28.7	47.2	48.2	89.2	87	2.2	10
.3765	9.563	3	★	MCS03765X3DB	28.7	47.2	48.2	89.2	87	2.2	10
.4380	11.125	3	★	MCS04380X3DB	33.4	55.6	56.6	102.6	100	2.6	12
.5010	12.725	3	★	MCS05010X3DB	38.2	61.0	62.0	108.0	105	3.0	14

(Bemerkung) Weitere Abmessungen auf Anfrage lieferbar.

Für abweichende Abmessungen tragen Sie bitte die Maße in die nachstehenden Kästchen ☐ ein.

Bitte fragen Sie entsprechende Sonderbohrer bei uns an.

*Empfohlene Hartmetallsorte TF15 für CFK/Titan-Verbundwerkstoffe.

Bestellbezeichnung für Spiralbohrer

MC X D

Kühlung
S : Int.
E : Ext.

Bohrtiefe (l/d)

Längenbereich: 2-5

Schaft Durchm. DCON

Durchmesserbereich : 030-200

Bohrer Durchm. DC

Durchmesserbereich: 0300-2000

*Der min. Durchmesser für Bohrer mit interner Kühlmittelzufuhr beträgt $\phi 4$ mm ($\phi 0,1575$ ").

Größenbereich Bohrer-Durchm. : $\phi 3$ mm $\phi 20$ mm

Größenbereich Schaftdurchm. : $\phi 3$ mm $\phi 20$ mm

Für den Bohrerdurchm. DC - Bitte 4 Ziffern angeben
z. B. $\phi 3$ mm - 0300

Für den Schaftdurchm. DCON - Bitte 3 Ziffern verwenden
z. B. $\phi 12$ mm - 120

*Zollmaße bitte in metrische Maße umrechnen
(1" = 25,4 mm)

Bsp. : $\phi 0,3760$ " $\rightarrow \phi 9,550$ mm $\rightarrow 0955$

Bestellbezeichnung für Stufenbohrer (Sonderwerkzeug)

MC X X D

Kühlung
S : Int.
E : Ext.

Durchm. Stufenbohrer
DC_2

Bohrtiefe (l/d)

Längenbereich : 2-5

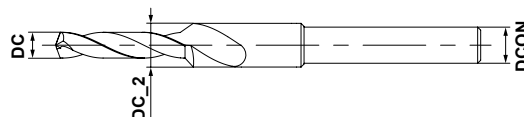
Schaft Durchm. DCON

Durchmesserbereich : 030-200

Bohrer Durchm. DC

Durchmesserbereich: 0300-2000

*Der min. Durchmesser für Bohrer mit interner Kühlmittelzufuhr beträgt $\phi 4$ mm ($\phi 0,1575$ ").



★ : Lagerstandard in Japan.

SCNITTDATENEMPFEHLUNGEN

DD2010

Werkstoff		CFK				CFK-/Aluminium-Schichtverbunde			
		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Tischvorschub (mm/min)	Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Tischvorschub (mm/min)
.1719	4.366	85	6100	0.04 (0.03—0.08)	240	55	4000	0.04 (0.03—0.06)	160
.1915	4.864	85	5500	0.04 (0.03—0.08)	220	55	3500	0.04 (0.03—0.06)	140
.251	6.375	95	4700	0.05 (0.03—0.10)	235	65	3200	0.05 (0.03—0.07)	160
.3125	7.938	95	3800	0.05 (0.03—0.10)	190	65	2600	0.05 (0.03—0.07)	130
.376	9.55	95	3100	0.07 (0.04—0.12)	215	65	2100	0.06 (0.04—0.08)	125
.3765	9.563	95	3100	0.07 (0.04—0.12)	215	65	2100	0.06 (0.04—0.08)	125
.438	11.125	100	2800	0.1 (0.05—0.15)	280	70	2000	0.07 (0.05—0.10)	140
.501	12.725	100	2500	0.1 (0.05—0.15)	250	70	1700	0.08 (0.05—0.12)	135

TF15

Werkstoff		CFK, Verbundwerkstoffe auf Titanlegierung			
		Schnittgeschw. (m/min)	Drehzahl (min ⁻¹)	Vorschub (min. — max.) (mm/U.)	Tischvorschub (mm/min)
.1719	4.366	8	500	0.03 (0.02—0.04)	15
.1915	4.864	8	500	0.03 (0.02—0.04)	15
.251	6.375	8	300	0.03 (0.02—0.04)	5
.3125	7.938	8	300	0.03 (0.02—0.04)	5
.376	9.55	10	300	0.04 (0.03—0.05)	10
.3765	9.563	10	300	0.04 (0.03—0.05)	10
.438	11.125	10	200	0.04 (0.03—0.05)	5
.501	12.725	10	200	0.04 (0.03—0.05)	5

Notizen

