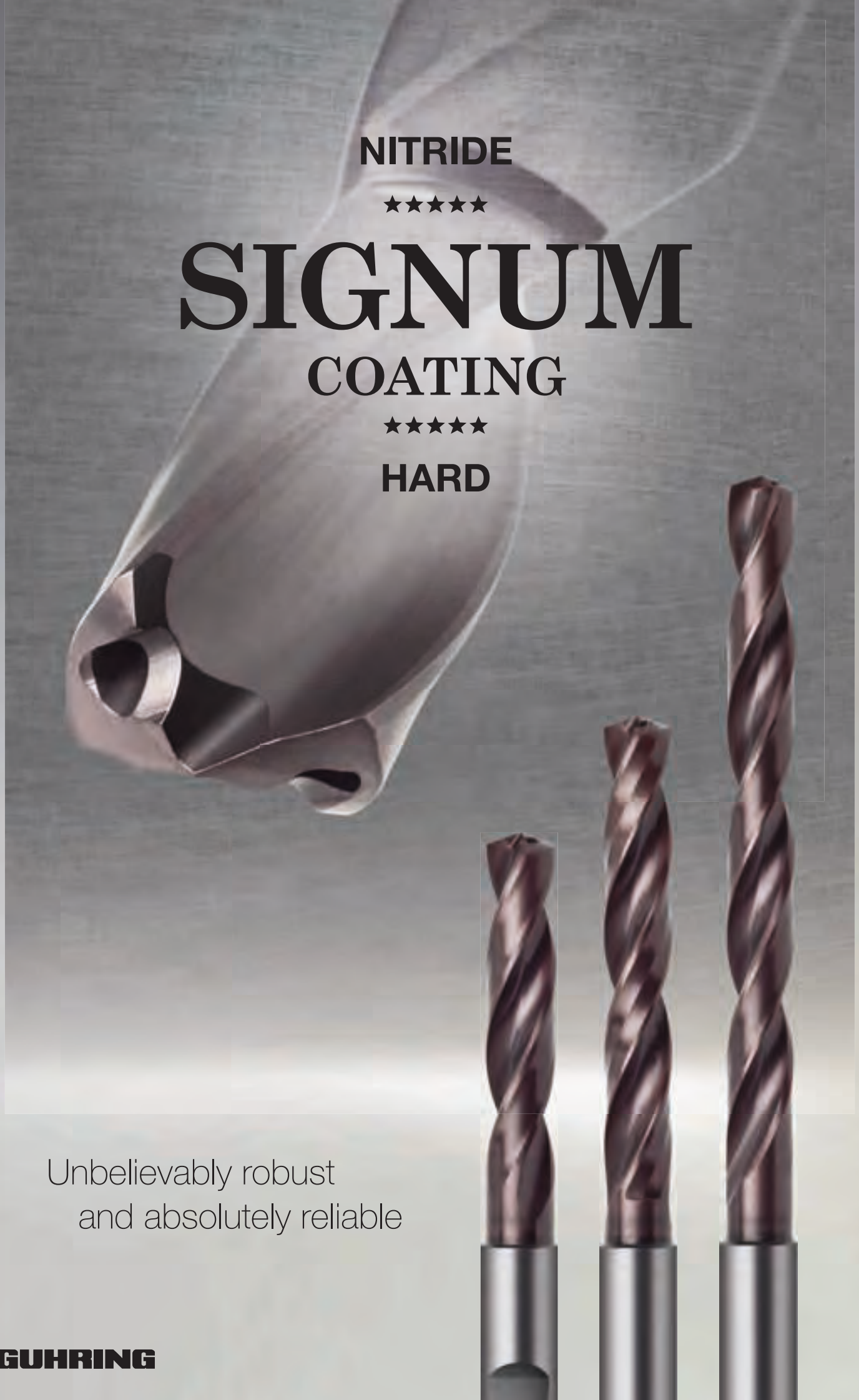
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SIGNUM
COATING
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Unbelievably robust
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Solid carbide
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Exclusive Line

Specialists for specific tasks

RT 100 T - Spiral-fluted deep hole drills up to 40xD

GUHRING

Ratio drills without oil feed

Standard	Type	Tool illustration	Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 6537 K	RT 100 U		3xD	Solid carbide	S	3,000 - 20,000	1184	121	198
DIN 6537 K	RT 100 U		3xD	Solid carbide	F	3,000 - 20,000	2480	121	198
DIN 6537 K	RT 100 U		3xD	Solid carbide	F	3,000 - 20,000	2472	121	198
DIN 6537 K	RT 100 F		3xD	Solid carbide	F	3,700 - 13,000	2475	121	198
DIN 6537 K	RT 100 HF	NEW 	3xD	Solid carbide	Y	3,000 - 20,000	8524	121	198
DIN 6537 L	RT 100 U		5xD	Solid carbide	S	3,300 - 16,000	2717	121	204
DIN 6537 L	RT 100 U		5xD	Solid carbide	F	3,000 - 20,000	2996	121	204
DIN 6537 L	RT 100 U		5xD	Solid carbide	F	3,000 - 20,000	2719	121	204
DIN 6537 L	RT 100 F		5xD	Solid carbide	F	3,000 - 15,000	2712	121	204
DIN 6539	RT 100 U		3xD	Solid carbide	S	3,000 - 16,000	1242	121	209
DIN 6539	RT 100 U		3xD	Solid carbide	F	3,000 - 16,000	2473	121	209
DIN 6539	RT 100 F		3xD	Solid carbide	S	3,000 - 14,000	1702	121	209
Guhring std.	RT 100 U		5xD	Solid carbide	S	5,000 - 16,000	1243	121	213
Guhring std.	RT 100 U		5xD	Solid carbide	F	5,000 - 15,000	2474	121	213

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Ratio drills with oil feed

Standard	Type	Tool illustration		Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 6537 K	RT 100 U			3xD	Solid carbide	S	3,000 - 20,000	1181	121	216
DIN 6537 K	RT 100 U			3xD	Solid carbide	F	3,000 - 20,000	2477	121	216
DIN 6537 K	RT 100 U			3xD	Solid carbide	F	3,000 - 20,000	2469	121	216
DIN 6537 K	RT 100 F			3xD	Solid carbide	S	3,100 - 22,000	1660	121	217
DIN 6537 K	RT 100 F			3xD	Solid carbide	S	4,000 - 25,000	1180	121	217
DIN 6537 K	RT 100 F			3xD	Solid carbide	F	3,400 - 20,000	2468	121	217
DIN 6537 K	RT 100 VA		NEW	3xD	Solid carbide	a	3,000 - 20,000	8510	121	217
DIN 6537 K	RT 100 VA		NEW	3xD	Solid carbide	a	3,000 - 20,000	8610	121	217
DIN 6537 K	RT 100 HF		NEW	3xD	Solid carbide	Y	3,000 - 20,000	8520	121	217
DIN 6537 K	RT 100 HF		NEW	3xD	Solid carbide	Y	3,000 - 20,000	8620	121	217
Guhring std.	RT 150 GG			4xD	Solid carbide	○	3,000 - 20,000	768	121	230
Guhring std.	RT 150 GG			4xD	Solid carbide	○	3,000 - 20,000	6068	121	230
DIN 6537 L	RT 100 U			5xD	Solid carbide	S	3,000 - 19,500	1663	121	234
DIN 6537 L	RT 100 U			5xD	Solid carbide	S	3,700 - 20,000	1183	121	234
DIN 6537 L	RT 100 U			5xD	Solid carbide	F	3,000 - 20,000	2479	121	234

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Ratio drills with oil feed

Standard	Type	Tool illustration		Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 6537 L	RT 100 U			5xD	Solid carbide	F	3,000 - 20,000	2471	121	234
DIN 6537 L	RT 100 F			5xD	Solid carbide	S	3,000 - 23,500	1662	121	235
DIN 6537 L	RT 100 F			5xD	Solid carbide	S	3,000 - 25,000	1182	121	235
DIN 6537 L	RT 100 F			5xD	Solid carbide	F	3,000 - 20,000	2478	121	235
DIN 6537 L	RT 100 F			5xD	Solid carbide	F	3,000 - 20,000	2470	121	235
DIN 6537 L	RT 100 R			5xD	Solid carbide	F	3,000 - 20,000	6501	165	235
DIN 6537 L	RT 100 VA		NEW	5xD	Solid carbide	a	3,000 - 20,000	8511	121	235
DIN 6537 L	RT 100 VA		NEW	5xD	Solid carbide	a	3,000 - 20,000	8611	121	235
DIN 6537 L	RT 100 HF		NEW	5xD	Solid carbide	Y	3,000 - 20,000	8521	121	235
DIN 6537 L	RT 100 HF		NEW	5xD	Solid carbide	Y	3,000 - 20,000	8621	121	235
Guhring std.	RT 100 U			7xD	Solid carbide	S	3,000 - 19,500	2711	121	248
Guhring std.	RT 100 U			7xD	Solid carbide	F	3,000 - 20,000	4044	121	248
Guhring std.	RT 100 U			7xD	Solid carbide	F	3,000 - 20,000	4045	121	248
Guhring std.	RT 100 R			7xD	Solid carbide	F	4,000 - 20,000	6502	165	248
Guhring std.	RT 100 HF		NEW	7xD	Solid carbide	Y	3,000 - 16,000	8522	121	248

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Ratio drills with oil feed

Standard	Type	Tool illustration	Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	RT 150 GG		7xD	Solid carbide	◯	3,000 - 20,000	769	121	253
Guhring std.	RT 150 GG		7xD	Solid carbide	◯	3,000 - 19,500	6069	121	253
Guhring std.	RT 150 GG		10xD	Solid carbide	◯	3,000 - 20,000	770	121	255
Guhring std.	RT 150 GG		10xD	Solid carbide	◯	3,000 - 19,500	6070	121	255
Guhring std.	RT 150 GN		15xD	Solid carbide	◯	5,000 - 14,000	773	121	257
Guhring std.	RT 100 T	 NEW	15xD	Solid carbide	A	3,000 - 14,000	6509	165	258
Guhring std.	RT 100 T		20xD	Solid carbide	A	3,000 - 14,000	6511	165	260
Guhring std.	RT 100 T		25xD	Solid carbide	A	3,000 - 12,000	6512	165	262
Guhring std.	RT 100 T		30xD	Solid carbide	A	3,000 - 10,000	6513	165	264
Guhring std.	RT 100 T	 NEW	40xD	Solid carbide	A	3,000 - 8,000	6514	165	265
DIN 6538 K	RT 80 U		3xD	Carbide	S	9,500 - 25,500	1171	128	266
DIN 6538 M	RT 80 U		5xD	Carbide	S	9,800 - 25,500	1172	128	269
DIN 6538 L	RT 80 U		7xD	Carbide	S	9,600 - 25,000	1173	128	271

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Standard	Type	Tool illustration	Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
3-flute Ratio drills									
DIN 6537 L	FT 200 G		5xD	Solid carbide	○	3,000 - 20,000	2713	109	273
DIN 6539	GS 200 U		5xD	Solid carbide	○	3,000 - 20,000	731	109	275
DIN 6539	GS 200 U		5xD	Solid carbide	Ⓢ	3,000 - 14,400	611	109	275
DIN 6539	GS 200 G		5xD	Solid carbide	○	3,570 - 12,500	745	109	275
DIN 6539	GS 200 G		5xD	Solid carbide	○	3,000 - 20,000	1025	109	275
DIN 6539	GS 200 F		5xD	Solid carbide	Ⓢ	3,000 - 11,000	1027	109	275
3-flute stepped Ratio drills									
Guhring std.	GS 200 G			Solid carbide	○	3,400 - 20,000	1032	109	279

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Standard	Type	Tool illustration		Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Tool holders for interchangeable inserts HT 800										
Guhring std.	HT 800 WP		NEW	1,5xD			11,000 - 40,000	4106	140	280
Guhring std.	HT 800 WP		NEW	3xD			11,000 - 40,000	4107	140	283
Guhring std.	HT 800 WP		NEW	5xD			11,000 - 40,000	4108	140	286
Guhring std.	HT 800 WP		NEW	7xD			11,000 - 31,500	4109	140	289
Guhring std.	HT 800 WP		NEW	10xD			11,000 - 31,500	4110	140	292
Guhring std.	HT 800 WP		NEW	1xD			11,000 - 40,000	4105	140	295
Interchangeable inserts HT 800										
Guhring std.			NEW		Solid carbide	F	11,000 - 40,000	4112	141	296
Guhring std.			NEW		Solid carbide	F	11,000 - 40,000	4113	141	297
Guhring std.			NEW		Solid carbide	○	11,000 - 40,000	4114	141	297
Guhring std.			NEW		Solid carbide	a	11,000 - 40,000	4115	141	297
Guhring std.			NEW		Solid carbide	a	11,000 - 40,000	4111	141	304
Countersinking insert HT 800										
Guhring std.					Solid carbide	○	-	7635	142	308
Guhring std.					Solid carbide	S	-	7645	142	309

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Standard	Type	Tool illustration	Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Countersinking insert HT 800									
Guhring std.				Solid carbide	A	17.000 - 46.000	**7632**	142	310
Clamping screws HT 800									
Guhring std.						-	**6128**	122	311
Guhring std.						-	**4071**	140	312
Torque wrenches									
Guhring std.						-	**4915**	114	313
Torx socket sets									
Guhring std.						-	**4917**	140	314
Torx screwdriver									
Guhring std.						-	**1612**	140	315

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Standard	Type	Tool illustration	Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Tool holders for interchangeable inserts RT 800									
Guhring std.	RT 800 WP		3xD			17,000 - 40,500	**5242**	140	316
Guhring std.	RT 800 WP		5xD			17,000 - 40,500	**5243**	140	317
Guhring std.	RT 800 WP		7xD			17,000 - 40,500	**5248**	140	318
Interchangeable inserts RT 800									
Guhring std.				**Solid carbide**	○	16,000 - 40,000	**2747**	141	319
Guhring std.				**Solid carbide**	(F)	16,000 - 40,500	**2485**	141	321
Guhring std.				**Solid carbide**	(S)	16,000 - 40,500	**1047**	141	323
Clamping screws RT 800									
Guhring std.						-	**1071**	140	325
Torque wrenches									
Guhring std.						-	**4915**	114	313
Torx socket sets									
Guhring std.						-	**4917**	140	314
Torx screwdriver									
Guhring std.						-	**1612**	140	315

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

LT 800 tooling system

Standard	Type	Tool illustration	Drilling depth	Tool material	Surface finish	Diameter range	Guhring no.	Discount group	Standard range
Guhring std.	LT800 WP	 ISO taper holder				SK 40 - SK 60/ HSK-C 63 - HSK-C 100	**4512**	114	329
Guhring std.	LT800 WP	 VDI Holder				VDI 40 - VDI 60/ HSK-C 63 - HSK-C 100	**4510**	114	329
Guhring std.	LT800 WP	 Reductions HSK-A/HSK-C				HSK-A 80 - HSK-A 100/ HSK-C 63 - HSK-C 80	**4355**	114	330
Guhring std.	LT800 WP	 Extensions HSK-A				HSK-A 63 - HSK-A 100/ HSK-C 63 - HSK-C 100	**4549**	114	330
Guhring std.	LT800 WP	 15° flutes basic holder	0.5xD/ 2.0xD			Holder size 400 - 560	**4142**	114	331

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Standard	Type	Tool illustration	Drilling depth	Tool material	Surface finish	Diameter range	Guhring no.	Discount group	Standard range
LT 800 tooling system									
Guhring std.	LT800 WP	 Un-fluted basic holder	0.5xD/ 2.0xD			Holder size 600 - 950	**4144**	114	331
Guhring std.	LT800 WP	 15° flutes extension	3xD			Holder size 400 - 560	**4148**	114	332
Guhring std.	LT800 WP	 Un-fluted extension	3xD			Holder size 600 - 950	**4149**	114	332
Guhring std.	LT800 WP	 Drill heads	1xD			Holder size 400 - 950	**4150**	114	333
Accessories for LT 800 WP drill heads									
Guhring std.	LT800 WP	 Retension spindles				Holder size 400 - 950	**4164**	114	334
Guhring std.	LT800 WP	 Torx-Bits				T30 - T45	**4188**	114	334

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Accessories for LT 800 WP drill heads

Standard	Type	Tool illustration	Drilling depth	Tool material	Surface finish	Diameter range	Guhring no.	Discount group	Standard range
Guhring std.		 Torx key				1/2“	**4915**	114	334
Guhring std.	LT800 WP	 Cartridges				Holder size 400 - 950	**4160**	114	335
Guhring std.	LT800 WP	 Clamping screws				Holder size 400 - 650	**4189**	114	335
DIN EN ISO 4762		 Clamping screws				Holder size 700 - 950	**4907**	114	335
DIN 6798	LT800 WP	 Serrated lock washers (Nord-Lock®)				Holder size 400 - 950	**4104**	114	336
Guhring std.	LT800 WP	 Distance pieces				Holder size 400 - 950	**4168**	114	336

LT 800 WP internal interchangeable inserts and accessories

Guhring std.	RT800 WP		**Carbide**	○		27.00 - 34.00	**2747**	141	337
Guhring std.	RT800 WP		**Carbide**	S		27.00 - 34.00	**1047**	141	337
Guhring std.	RT800 WP		**Carbide**	F		27.00 - 34.00	**2485**	141	337
Guhring std.	RT800 WP	 Clamping screw				T8	**1071**	140	337
Guhring std.		 Torx screwdriver				T8	**1612**	140	337
Guhring std.	RT800 WP	 Torx-Bit				1/4“	**4917**	140	337
Guhring std.		 Torque key				1/4“	**4915**	114	337

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LT 800 WP external interchangeable inserts and accessories

Standard	Type	Tool illustration	Drilling depth	Tool material	Surface finish	Diameter range	Guhring no.	Discount group	Standard range
Guhring std.	LTT			Carbide		insert 05 - 06	4170	142	338
Guhring std.	LTT			Carbide		insert 05 - 06	4171	142	338
Guhring std.	LTT			Carbide	S	insert 05 - 06	4172	142	338
Guhring std.	LTT			Carbide	A	insert 05 - 06	4173	142	338
Guhring std.	CCHX			Carbide		insert 09 - 12	4179	142	338
Guhring std.	CCHX			Carbide	S	insert 09 - 12	4180	142	338
Guhring std.	CCHX			Carbide	S	insert 09 - 12	4181	142	338
Guhring std.	CCHX			Carbide	S	insert 09 - 12	4182	142	338
Guhring std.		 Clamping screw with 75° countersink head				for insert 05 - 09	4166	114	338
Guhring std.		 Clamping screw with 60° countersink head				for insert 05 - 12	6128	122	338

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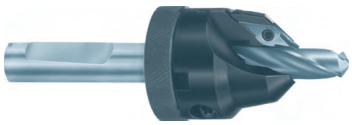
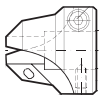
FR 90 chamfer collar

Standard	Type	Tool illustration	Drilling depth	Tool material	Surface finish	Diameter range	Guhring no.	Discount group	Standard range
Guhring std.	FR 90	 Chamfer collar complete				5.0 - 16.0	**1052**	140	341
Guhring std.	FR 90	 Chamfer collar				5.0 - 18.0	**145**	140	341
Guhring std.	FR90	 Clamping sleeve				5.0 - 16.0	**1053**	140	341
Guhring std.	FR90	 Adjustment ring				5.0 - 18.0	**1054**	140	341
Guhring std.	FR90			**Carbide**	○	4.0 - 20.0	**1156**	142	340
Guhring std.	FR90			**Carbide**	Ⓢ	4.0 - 20.0	**1056**	142	340
Guhring std.	FR90	 Adjustment element				M4	**4072**	140	340
Guhring std.	FR90	 Clamping piece				4.0 - 20.0	**1055**	140	340
Guhring std.	FR90	 Screwdriver				T8	**1612**	114	341
Guhring std.	FR90	Torx screw				T8/SW4 - SW5	**1072**	140	341
Guhring std.	FR90	 Screwdriver				SW4 - SW5	**4912**	114	341

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Jobber drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 338	N		right-hand	HSS	>Ø 2,36	0,200 - 20,000	205	130	342
DIN 338	H		right-hand	HSS		0,200 - 20,000	206	134	342
DIN 338	W		right-hand	HSS		0,200 - 20,000	207	134	342
DIN 338	N		left-hand	HSS	>Ø 6,00	0,200 - 20,000	208	134	342
DIN 338	H		left-hand	HSS		0,300 - 20,000	209	134	342
DIN 338	W		left-hand	HSS		0,250 - 20,000	210	138	342
DIN 338	N		right-hand	HSS		3,000 - 16,000	240	132	343
DIN 338	GT 100		right-hand	HSS	>Ø 2,36	0,600 - 16,000	549	136	343
DIN 338	GT 100		left-hand	HSS	>Ø 2,36	1,000 - 16,000	550	138	343
DIN 338	N		right-hand	HSS		2,370 - 5,610	560	138	343
DIN 338	N		right-hand	HSS	S	0,200 - 19,000	651	131	343
DIN 338	GT 100		right-hand	HSS	S	1,000 - 15,000	652	137	343
DIN 338	N		left-hand	HSS	S	0,250 - 14,250	664	139	343
DIN 338	GT 100		left-hand	HSS	S	1,300 - 10,200	665	139	343
DIN 338	N		right-hand	HSS	F	1,000 - 15,500	2456	135	343

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Jobber drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 338	GT 100		right-hand	HSS	F	1,000 - 15,000	2457	137	343
DIN 338	N		right-hand	HSCO	>Ø 2,36	0,200 - 20,000	305	134	380
DIN 338	N		left-hand	HSCO	>Ø 6,00	0,360 - 18,500	308	138	380
DIN 338	Ti		right-hand	HSCO		0,200 - 19,000	605	134	380
DIN 338	Ti		left-hand	HSCO		1,300 - 9,500	608	138	380
DIN 338	GT 100		right-hand	HSCO	>Ø 2,36	1,000 - 16,000	622	136	380
DIN 338	Ti		right-hand	HSCO	S	0,500 - 14,500	657	135	380
DIN 338	GT 100		right-hand	HSCO	S	1,000 - 15,000	658	137	381
DIN 338	GT 100		right-hand	HSCO	C	3,000 - 12,000	1221	137	381
DIN 338	GT 100		right-hand	HSCO	A	3,000 - 12,000	1223	137	381
DIN 338	VA		right-hand	HSCO		1,000 - 13,000	1260	134	381
DIN 338	P2000		right-hand	HSCO		1,000 - 13,000	2047	134	381
DIN 338	Ti		right-hand	HSCO	F	0,400 - 15,000	2458	135	381
DIN 338	GT 100		right-hand	HSCO	F	1,000 - 14,000	2459	137	381
DIN 338	N		right-hand	HSCO	S	1,100 - 14,000	2997	135	381

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Jobber drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 338	N		right-hand	M42		0,400 - 16,000	1146	138	381
Guhring std.	Duro 150		right-hand	Carbide		2,700 - 14,000	710	102	406
Guhring std.	N		right-hand	Solid carbide		1,000 - 12,700	732	102	406
Guhring std.	N		right-hand	Solid carbide	F	1,000 - 12,700	2464	102	406

Stub drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1897	N		right-hand	HSS	>Ø 2,36	0,350 - 48,000	223	132	412
DIN 1897	H		right-hand	HSS		0,690 - 21,000	224	138	412
DIN 1897	W		right-hand	HSS		1,000 - 20,000	225	138	412
DIN 1897	N		left-hand	HSS	>Ø 6,00	0,320 - 50,000	226	134	412
DIN 1897	H		left-hand	HSS		0,750 - 24,000	227	138	412
DIN 1897	W		left-hand	HSS		1,000 - 21,000	228	138	412
DIN 1897	GT 80		right-hand	HSS	<Ø 2,36 >Ø 16,0	1,000 - 20,000	552	136	412
DIN 1897	GT 80		left-hand	HSS	<Ø 2,36 >Ø 16,0	1,000 - 19,840	553	138	412
DIN 1897	N		right-hand	HSS	S	0,500 - 30,160	653	133	413
DIN 1897	N		left-hand	HSS	S	0,900 - 13,500	672	139	413

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Stub drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1897	N		right-hand	HSS	F	1,000 - 15,000	2460	133	413
DIN 1897	GV 120		right-hand	HSCO	>Ø 2,36	0,400 - 48,000	329	134	413
DIN 1897	GV 120		left-hand	HSCO	>Ø 6,00	0,450 - 35,000	330	138	413
DIN 1897	GV 120		right-hand	HSCO	S	0,500 - 15,500	659	135	413
DIN 1897	GT 80		right-hand	HSCO	S	1,000 - 20,000	1228	137	413
DIN 1897	VA		right-hand	HSCO		1,000 - 12,000	1261	138	413
DIN 1897	P2000		right-hand	HSCO	M	1,000 - 13,000	2048	135	413
DIN 1897	GV 120		right-hand	HSCO	F	1,000 - 13,000	2461	135	413
DIN 1897	GT 80		right-hand	HSCO	F	1,000 - 16,000	2498	137	413
DIN 1897	N		right-hand	M42		1,000 - 15,870	1259	138	444
DIN 1897	GT 500		right-hand	HSS-E-PM	F	1,000 - 14,290	515	115	444
DIN 6539	N		right-hand	Solid carbide		0,500 - 16,000	730	102	444
DIN 6539	N		right-hand	Solid carbide	F	1,000 - 16,000	2463	102	444
Guhring std.	N		right-hand	Solid carbide		0,500 - 6,500	702	102	450

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Jobber drill sets

Standard	Type	Tool illustration		Tool material	Surface finish	Ø-range mm	Guhring no.	Discount group	Standard range, page
DIN 338	N		consisting of Guhring no. 205	HSS			201/ 200	130	452
DIN 338	N		consisting of Guhring no. 651	HSS	S		201/ 200	130	452
DIN 338	N		consisting of Guhring no. 305	HSCO			201/ 200	130	454
DIN 338	Ti		consisting of Guhring no. 605	HSCO			201/ 200	134	454
DIN 338	VA		consisting of Guhring no. 1260	HSCO			195	130	454
DIN 338	P2000		consisting of Guhring no. 2047	HSCO			2049	134	455
DIN 1897	P2000		consisting of Guhring no. 2048	HSCO	M		2050	134	455
Guhring std.		Case only					36	138	452
Guhring std.		Case only					73	138	453
Guhring std.		Plastic stand only					11	138	452

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Twist drills with oversize straight shank									
Guhring std.	GU 500		right-hand	HSCO	S	2,000 - 20,000	512	115	456
Guhring std.	GT 500		right-hand	HSS-E-PM	F	2,000 - 13,000	513	115	460
Guhring std.	GU 500		right-hand	HSCO	S	2,000 - 20,000	511	115	462
DIN 6537 K	H		right-hand	Solid carbide	A	2,600 - 14,100	1946	102	466
Jobber drills with 12.7 mm dia. shank									
Guhring std.	N		right-hand	HSS		13,000 - 28,570	268	138	467
Stub drills with 16.0 mm dia. shank									
Guhring std.	N		right-hand	HSCO		16,000 - 40,000	128	138	468
Stub drills with 25.4 mm dia. shank									
Guhring std.	N		right-hand	HSCO		25,000 - 40,000	129	138	469
Guhring std.	N		left-hand	HSCO		25,000 - 39,000	136	138	469
90° NC-spotting drills									
Guhring std.	N		right-hand	HSS		2,950 - 25,400	557	134	470
Guhring std.	N		right-hand	HSS	S	3,000 - 25,400	568	135	470
Guhring std.	N		right-hand	Solid carbide		4,000 - 20,000	723	102	470

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
90° NC-spotting drills									
Guhring std.	N		right-hand	HSS	◯	6,350 - 25,400	559	138	471
120° NC-spotting drills									
Guhring std.	N		right-hand	HSS	◯	3,000 - 25,400	556	134	472
Guhring std.	N		right-hand	HSS	(S)	3,000 - 25,000	567	139	472
Guhring std.	N		right-hand	Solid carbide	◯	5,000 - 20,000	724	102	472
142° NC-spotting drills									
Guhring std.	N		right-hand	Solid carbide	◯	4,000 - 20,000	546	102	473
Straight shank drills double-ended									
Guhring std.	DK 77		right-hand	HSS	◯ ≥Ø 2,36	1,500 - 10,000	554	134	474
Micro-precision drills without oil feed									
DIN 1899	N		right-hand	HSS-E-PM	◯	0,050 - 1,930	301	134	476
DIN 1899	N		left-hand	HSS-E-PM	◯	0,130 - 1,850	303	138	476
DIN 1899	N		right-hand	HSS-E-PM	(S)	0,160 - 1,900	660	135	476
Guhring std.	N		right-hand	Solid carbide	◯	0,200 - 1,400	701	102	476
Guhring std.	N	NEW 	right-hand	Solid carbide	(A)	0,100 - 3,000	3899	102	483

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Standard	Type	Tool illustration	Drilling depth	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Micro-precision drills without oil feed									
Guhring std.	N		4xD	Solid carbide	A	0,500 - 3,000	6400	164	485
Guhring std.	N		7xD	Solid carbide	A	0,500 - 3,000	6401	164	487
Micro-precision drills with oil feed									
Guhring std.	N	 NEW	8xD	Solid carbide	A	1,400 - 3,000	6408	164	489
Guhring std.	N	 NEW	15xD	Solid carbide	A	1,400 - 3,000	6412	164	491

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Oil feed drills

Standard	Type	Tool illustration	Cooling	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	GT 80 IK		axial	HSCO	◯	5,000 - 20,000	1131	134	492
Guhring std.	GT 80 IK		axial	HSCO	(S)	5,000 - 20,000	1132	135	492
Guhring std.	N		axial	HSS	◯	3,000 - 13,000	390	136	494

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Bushing length twist drills									
DIN 339	N		right-hand	HSS	>Ø 2,36	0,800 - 20,000	211	134	495
DIN 339	N		right-hand	HSS		2,400 - 5,000	561	138	495
DIN 339	N		right-hand	HSS	S	1,000 - 13,000	666	139	495
DIN 339	N		right-hand	HSCO	>Ø 2,36	1,100 - 19,000	311	138	495
Long series twist drills									
DIN 340	N		right-hand	HSS		2,950 - 25,250	204	138	502
DIN 340	N		right-hand	HSS	>Ø 2,36	0,400 - 36,510	217	132	502
DIN 340	H		right-hand	HSS		0,500 - 16,000	218	134	502
DIN 340	W		right-hand	HSS		0,400 - 20,640	219	134	502
DIN 340	N		left-hand	HSS	>Ø 6,00	0,450 - 29,000	220	138	502
DIN 340	H		left-hand	HSS		0,450 - 15,000	221	138	502
DIN 340	GT50		right-hand	HSS		1,000 - 32,600	501	136	502
DIN 340	GT 100		left-hand	HSS	>Ø 2,36	1,400 - 13,000	506	138	503
DIN 340	GT 100		right-hand	HSS	>Ø 2,36	1,000 - 14,000	535	136	503
DIN 340	N		right-hand	HSS	S	0,500 - 22,220	667	133	503

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Long series twist drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 340	GT 100		right-hand	HSS	S	1,000 - 14,000	668	137	503
DIN 340	GT 100		right-hand	HSS	F	1,000 - 10,000	2462	137	503
DIN 340	N		right-hand	HSCO	>Ø 2,36	0,500 - 22,000	317	134	503
DIN 340	GT 100		right-hand	HSCO	>Ø 2,36	1,000 - 16,000	336	136	503
DIN 340	GT 100		right-hand	HSCO	F	1,000 - 12,000	396	137	503
DIN 340	Ti		right-hand	HSCO		1,000 - 13,000	617	134	503
DIN 340	Ti		right-hand	HSCO	S	1,000 - 10,200	669	139	503
Guhring std.	N		right-hand	Solid carbide		0,500 - 1,500	706	102	526

Extra length twist drills, series 1

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1869	N		right-hand	HSS	>Ø 2,36	1,600 - 13,000	235	134	527
DIN 1869	GT 100		right-hand	HSS	>Ø 2,36	1,950 - 13,000	502	136	527
DIN 1869	GT50		right-hand	HSS		2,000 - 12,700	524	138	527
DIN 1869	GT 100		right-hand	HSS	S	1,980 - 12,700	670	137	527
DIN 1869	GT 100		right-hand	HSCO		2,700 - 10,000	618	136	527

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Extra length twist drills, series 2

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1869	N		right-hand	HSS		2,700 - 13,000	236	134	532
DIN 1869	GT 100		right-hand	HSS	>Ø 2,36	2,000 - 13,000	503	136	532
DIN 1869	GT50		right-hand	HSS		3,000 - 13,000	528	138	532
DIN 1869	GT 100		right-hand	HSS	S	2,700 - 8,500	671	139	532
DIN 1869	GT 100		right-hand	HSCO		3,000 - 10,000	619	138	532

Extra length twist drills, series 3

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1869	N		right-hand	HSS		3,500 - 13,000	237	138	535
DIN 1869	GT 100		right-hand	HSS		2,500 - 13,000	504	136	535
DIN 1869	GT50		right-hand	HSS		2,500 - 11,500	529	138	535
DIN 1869	GT 100	NEW	right-hand	HSCO		2,500 - 13,000	571	136	535

Extra length twist drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	GT 100		right-hand	HSS		6,000 - 12,000	242	136	538
Guhring std.	GT 100		right-hand	HSS		8,000 - 12,000	243	138	539
Guhring std.	GT 100		right-hand	HSS		10,000 - 12,000	244	138	540

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Aircraft extension drills, 6 inches long									
NAS 907	N		right-hand	HSS	○	1,500 - 8,000	577	138	541
NAS 907	N		right-hand	HSS	●/○ >Ø 2,36	1,500 - 8,000	579	138	541
Aircraft extension drills, 12 inches long									
NAS 907	N		right-hand	HSS	○	1,500 - 8,000	578	138	544
NAS 907	N		right-hand	HSS	●/○ >Ø 2,36	1,500 - 8,000	580	138	544
Taper pin drills									
DIN 1898	N		right-hand	HSS	●/○ >Ø 2,36	1,000 - 12,000	531	138	546
Carbide-tipped twist drill									
DIN 8037	N		right-hand	Carbide	○	1,700 - 24,000	703	102	547
DIN 8038	N		right-hand	Carbide	○	1,900 - 24,000	704	102	547
Kevlar drills									
Guhring std.	N		right-hand	Solid carbide	○	2,500 - 12,000	1149	102	550
Carbide tipped spade drills									
Guhring std.			right-hand	Carbide	○	3,000 - 12,000	707	102	551

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Masonry drills									
Guhring std.	N		right-hand	**Carbide**	◯	4,000 - 12,000	**716**	102	552

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Jobber drills									
Guhring std.	GV 120		right-hand	HSCO		8,100 - 43,000	363	134	553
Guhring std.	GV 120		right-hand	HSCO	S	10,500 - 33,000	663	139	553
Twist drills									
DIN 345	N		right-hand	HSS		8,500 - 59,000	229	138	555
DIN 345	N		right-hand	HSS	>Ø 2,36	2,380 - 98,420	245	132	555
DIN 345	H		right-hand	HSS		6,700 - 47,000	246	138	555
DIN 345	W		right-hand	HSS		3,200 - 32,000	247	138	555
DIN 345	N		left-hand	HSS		6,000 - 60,000	248	138	555
DIN 345	GT 100		right-hand	HSS	>Ø 16,0	7,940 - 31,750	558	138	555
DIN 345	N		right-hand	HSS	>Ø 16,0	10,000 - 28,000	592	138	555
DIN 345	GT 100		right-hand	HSS	S	7,940 - 31,500	606	139	567
DIN 345	N		right-hand	HSS	S	3,000 - 31,000	654	133	567
DIN 345	N		right-hand	HSCO		3,000 - 50,000	345	134	567
DIN 345	GT 100		right-hand	HSCO	>Ø 16,0	10,000 - 39,000	645	138	567
DIN 345	N		right-hand	HSCO	S	8,000 - 30,000	661	139	567

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Twist drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 345	GT 100		right-hand	HSCO	S	10,000 - 28,500	662	139	567
DIN 345	GT 100		right-hand	HSCO	C	10,000 - 30,160	1222	139	567
DIN 345	GT 100		right-hand	HSCO	A	10,400 - 30,160	1224	139	573
DIN 345	VA		right-hand	HSCO	○	10,000 - 34,000	1262	134	573
DIN 346	N		right-hand	HSS	●	10,000 - 76,000	251	138	575
DIN 346	N		right-hand	HSCO	●	12,000 - 31,500	351	138	575

Bushing length twist drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 341	N		right-hand	HSS	●	2,900 - 50,000	257	132	577
DIN 341	GT50		right-hand	HSS	○	5,500 - 29,500	505	138	577
DIN 341	GT 100		right-hand	HSS	●/● >Ø 16,0	5,500 - 32,000	551	136	577
DIN 341	N		right-hand	HSS	S	4,200 - 22,000	655	133	577
DIN 341	GT 100		right-hand	HSS	S	6,800 - 23,000	656	139	577
DIN 341	N		right-hand	HSCO	●	4,750 - 44,000	357	138	577
DIN 341	GT 100		right-hand	HSCO	●/● >Ø 16,0	10,000 - 26,000	623	138	577
Guhring std.	N		right-hand	HSS	●	10,000 - 29,000	523	138	584

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Standard	Type	Tool illustration	Cooling	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Oil feed drills short									
Guhring std.	N		radial	HSS	●	9,520 - 23,020	269	138	585
Oil feed drills, flute length to DIN 341									
Guhring std.	N		DIN 228 BK	HSS	●	10,000 - 32,000	1101	138	587
Guhring std.	N		axial	HSS	●	10,000 - 40,000	270	138	588
Guhring std.	N		radial	HSS	●	10,000 - 44,450	271	138	588
Guhring std.	N		radial	HSS	●	10,000 - 44,450	272	138	588
Guhring std.	GT 100		axial	HSCO	●	11,000 - 34,920	370	138	588
Guhring std.	GT 100		radial	HSCO	●	11,000 - 34,920	371	138	588
Guhring std.	GT 100		radial	HSCO	●	12,500 - 34,000	372	138	588
Oil feed drills, flute length to DIN 1870									
Guhring std.	GT 100		axial	HSCO	●	11,000 - 34,000	374	138	591
Guhring std.	GT 100		radial	HSCO	●	11,000 - 34,000	375	138	591
Guhring std.	GT 100		radial	HSCO	●	11,000 - 29,000	376	138	591

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Extra length twist drills, series 1

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1870	N		right-hand	HSS		8,000 - 50,000	266	134	593
DIN 1870	GT50		right-hand	HSS		8,200 - 33,000	525	138	593
DIN 1870	GT 100		right-hand	HSS	>Ø 16,0	8,000 - 30,000	526	136	593
DIN 1870	GT 100		right-hand	HSCO	>Ø 16,0	9,520 - 30,000	620	138	593

Extra length twist drills, series 2

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 1870	N		right-hand	HSS		8,000 - 45,000	267	138	596
DIN 1870	GT 100		right-hand	HSS	>Ø 16,0	8,000 - 30,000	527	136	596
DIN 1870	GT50		right-hand	HSS		8,500 - 31,000	542	138	596
DIN 1870	GT 100		right-hand	HSCO	>Ø 16,0	9,520 - 23,420	621	138	596

Extra length twist drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	GT 100		right-hand	HSS		6,000 - 7,500	563	138	599
Guhring std.	GT 100		right-hand	HSS	>Ø 16,0	8,000 - 40,000	566	138	599
Guhring std.	GT 100		right-hand	HSS	>Ø 16,0	14,000 - 40,000	293	138	600
Guhring std.	GT 100		right-hand	HSS		6,000 - 10,000	564	138	600
Guhring std.	GT 100		right-hand	HSS	>Ø 16,0	6,000 - 17,000	565	138	601

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Extra length twist drills									
Guhring std.	GT 100		right-hand	HSS	○	14,000 - 18,000	298	138	602
Guhring std.	GT 100		right-hand	HSS	○	14,000 - 18,000	299	138	603
Taper pin drills									
DIN 1898	N		right-hand	HSS	●	5,000 - 25,000	532	138	604
Carbide-tipped twist drill									
DIN 8041	N		right-hand	Carbide	○	8,500 - 40,000	705	102	605

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Stepped drills for centering to DIN 332

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	N		right-hand	HSS	●	8,000 - 40,000	274	138	606
Guhring std.	N		right-hand	HSS	●	8,000 - 40,000	574	138	606
Guhring std.	N		right-hand	HSS	●	8,000 - 20,000	575	138	607
Guhring std.	N		right-hand	HSS	●	14,000 - 40,000	576	138	608

Straight shank short step drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	N		right-hand	HSS	○	6,000 - 19,000	378	138	609
Guhring std.	N		right-hand	HSS	○	6,600 - 21,500	1147	138	609
Guhring std.	N		right-hand	HSS	○	6,000 - 18,000	379	138	610
Guhring std.	N		right-hand	HSS	○	3,400 - 13,500	380	138	611

Straight shank subland drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
DIN 8374	N		right-hand	HSS	●	6,000 - 15,000	536	138	612
DIN 8374	N		right-hand	HSS	●	7,500 - 19,000	569	138	612
Guhring std.	N		right-hand	HSS	●	6,600 - 17,200	636	138	612
Guhring std.	N		right-hand	HSS	●	6,000 - 8,000	638	138	612
DIN 8376	N		right-hand	HSS	●	6,000 - 18,000	538	138	613

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Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Straight shank subland drills									
Guhring std.	N		right-hand	Solid carbide	○	6,000 - 15,000	738	102	613
Guhring std.	N		right-hand	HSS	●	5,900 - 17,500	514	138	614
DIN 8378	N		right-hand	HSS	●	3,400 - 13,500	540	138	615
Guhring std.	N		right-hand	Solid carbide	○	4,500 - 11,000	739	102	615
Taper shank subland drills									
Guhring std.	N		right-hand	HSS	●	11,500 - 30,000	637	138	616
Guhring std.	N		right-hand	HSS	●	11,000 - 29,000	537	138	616
Guhring std.	N		right-hand	HSS	●	18,000 - 26,000	639	138	617
DIN 8377	N		right-hand	HSS	●	10,000 - 33,000	539	138	618
Guhring std.	N		right-hand	HSS	●	9,400 - 33,000	520	138	619
DIN 8379	N		right-hand	HSS	●	9,000 - 22,000	541	138	620

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Center drills without flat

Standard	Form	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
ASA	A		right-hand	HSS	○	1,190 - 7,940	594	138	621
ASA	B		right-hand	HSS	○	1,190 - 6,350	595	138	622
BS 328	A		right-hand	HSS	○	1,190 - 7,940	292	138	623
BS 328	A		left-hand	HSS	○	1,190 - 7,940	294	138	623
DIN 333	A		right-hand	HSS	○	0,500 - 12,500	581	132	624
DIN 333	A		left-hand	HSS	○	0,500 - 12,500	582	138	624
DIN 333	R		right-hand	HSS	○	0,500 - 12,500	583	138	624
DIN 333	R		left-hand	HSS	○	0,800 - 5,000	584	138	624
DIN 333	A		right-hand	HSS	○	1,000 - 12,500	590	138	625
DIN 333	A		right-hand	HSS	Ⓢ	0,500 - 8,000	613	133	625
DIN 333	R		right-hand	HSS	Ⓢ	0,800 - 8,000	614	139	625
DIN 333	A		right-hand	HSCO	○	1,000 - 4,000	381	138	625
Guhring std.	A		right-hand	Solid carbide	○	0,500 - 6,300	736	102	625
DIN 333	A		right-hand	HSS	○	0,500 - 10,000	281	138	626
DIN 333	A		left-hand	HSS	○	0,800 - 5,000	282	138	626

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Standard	Form	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Center drills without flat									
DIN 333	R		right-hand	HSS	◯	0,500 - 10,000	283	138	626
DIN 333	R		left-hand	HSS	◯	1,600 - 4,000	284	138	626
DIN 333	B		right-hand	HSS	◯	1,000 - 10,000	585	138	627
DIN 333	B		left-hand	HSS	◯	1,000 - 10,000	586	138	627
DIN 333	B		right-hand	HSS	◯	1,000 - 10,000	591	138	627
Guhring std.	A		right-hand	HSS	◯	1,000 - 3,150	280	138	628
Guhring std.	B		right-hand	HSS	◯	1,000 - 6,300	285	138	629
Center drills with flat									
DIN 333	A		right-hand	HSS	◯	1,600 - 10,000	587	138	630
DIN 333	R		right-hand	HSS	◯	1,000 - 10,000	588	138	630
DIN 333	A		right-hand	HSS	◯	1,600 - 10,000	287	138	631
DIN 333	R		right-hand	HSS	◯	1,600 - 8,000	288	138	631
DIN 333	B		right-hand	HSS	◯	1,600 - 8,000	589	138	632
Guhring std.	B		right-hand	HSS	◯	1,600 - 5,000	289	138	633

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Straight shank core drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	N		right-hand	Carbide	○	3,800 - 15,000	750	102	634
DIN 344	N		right-hand	HSS	●	3,800 - 20,000	533	138	635

Taper shank core drills

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page
Guhring std.	N		right-hand	Carbide	○	26,700 - 40,000	729	102	638
DIN 343	N		right-hand	HSS	●	7,800 - 50,000	534	138	639
DIN 343	N		right-hand	HSCO	●	8,500 - 26,000	634	138	639
DIN 1864	N		right-hand	HSCO	●	8,000 - 15,000	635	138	643
DIN 1864	N		right-hand	HSS	●	5,000 - 31,000	555	138	644

○ bright ● steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Standard	Type	Tool illustration	Cutting direction	Tool material	Surface	d1	Guhring no.	Discount group	Standard range page

Oil feed adapters

Guhring std.						-	**230**	138	645

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.	
Standard/DIN	
Tool material	
Carbide grade	
Type	
Surface finish	
Cooling	
Std. range page	

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤3xD drilling depth

1171	1660	1180	1181	2468	2477	2469	8510	8610	8520	8620
6538K	6537K	6537K	6537K	6537K	6537K	6537K	6537K	6537K	6537K	6537K
Carbide	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.
P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	**K/P**
RT 80 U	RT 100 F	RT 100 F	RT 100 U	RT 100 F	RT 100 U	RT 100 U	RT 100 VA		RT 100 HF	
S	S	S	S	F	F	F	a	a	Y	Y
axial	axial	axial	axial	axial	axial	axial	axial	axial	axial	axial
266	216	216	216	216	216	216	216	216	216	216







v_c m/min	Feed column no.	v_c m/min	Feed column no.			v_c m/min	Feed column no.			v_c m/min	Feed column no.			v_c m/min	Feed column no.	
95	**6**	110	6	6	**6**	145	7	**7**	**7**					145	**7**	**7**
80	**5**	90	5	5	**5**	120	6	**6**	**6**					120	**6**	**6**
95	**7**	130	7	7	**7**	170	8	**8**	**8**					170	**8**	**8**
75	**6**	110	7	7	**7**	145	8	**8**	**8**					145	**8**	**8**
80	**6**	100	7	7	**7**	130	8	**8**	**8**					130	**8**	**8**
75	**6**	95	6	6	**6**	125	7	**7**	**7**					125	**7**	**7**
70	**6**	90	6	6	**6**	120	7	**7**	**7**					120	**7**	**7**
75	**6**	90	6	6	**6**	120	7	**7**	**7**					120	**7**	**7**
60	**5**	80	6	6	**6**	105	7	**7**	**7**					105	**7**	**7**
90	**7**	110	7	7	**7**	145	8	**8**	**8**					145	**8**	**8**
75	**6**	90	6	6	**6**	120	7	**7**	**7**					120	**7**	**7**
60	**5**	65	4	4	**4**	85	5	**5**	**5**					85	**5**	**5**
75	**6**	85	**6**	**6**	6	110	**7**	7	7					110	**7**	**7**
60	**5**	80	**4**	**4**	5	105	**5**	5	5					105	**5**	**5**
45	**5**	60	**5**	**5**	5	80	**6**	6	6					80	**6**	**6**
35	**5**	50	**4**	**4**	4	65	**5**	5	5					65	**5**	**5**
40	**4**	45	**3**	**3**	3	60	**4**	4	4					60	**4**	**4**
		45	**2**	**2**	2	60	**3**	3	3					60	**3**	**3**
40	**2**	45	**4**	**4**	4	60	**5**	5	5	80	**5**	**5**				
35	**2**	40	**4**	**4**	4	55	**5**	5	5	60	**2-3**	**2-3**				
35	**2**	35	**4**	**4**	4	45	**5**	5	5	80	**5**	**5**				
		40	**2**	**2**	2	55	**3**	3	3					55	**3**	**3**
		25	**1**	**1**	1	35	**2**	2	2					35	2	2
		25	**3**	**3**	3	35	**4**	4	4	30	2	2		35	**4**	**4**
150	**7**	160	8	8	**8**	210	9	**9**	**9**							
110	**7**	120	8	8	**8**	160	9	**9**	**9**							
110	**7**	100	8	8	**8**	140	9	**9**	**9**							
90	**6**	95	7	7	**7**	130	8	**8**	**8**							
		30	2	2	**2**	40	3	3	3							
		35	**3**	**3**	3	45	**4**	4	4	35	2	2		45	4	4
		30	**2**	**2**	2	40	**3**	3	3					40	3	3
200	**8**	240	8	8	**8**	310	9	**9**	**9**							
200	**8**	240	8	8	**8**	310	9	**9**	**9**							
170	**8**	200	8	8	**8**	260	9	**9**	**9**							
140	**7**	170	8	8	**8**	220	9	**9**	**9**							
		230	7	7	**7**	280	8	**8**	**8**							
		95	**6**	**6**	6	125	**7**	7	7							
		250	**7**	**7**	7	325	**8**	8	8							
		170	6	6	**6**	220	7	**7**	**7**							
		95	6	6	**6**	125	7	**7**	**7**							
		80	5	5	**5**	105	6	**6**	**6**							
		70	5	5	**5**	90	6	**6**	**6**							
		60	5	5	**5**	80	6	**6**	**6**							

C TiCN · Cb Carbo · D Cristall · F FIRE/nanoFIRE · P AlCrN · S TiN · S+ TiN+ · M MolyGlide · Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.	
Standard/DIN	
Tool material	
Carbide grade	
Type	
Surface finish	
Cooling	
Std. range page	

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Al
especially suitable for machining aluminium

G
especially suitable for machining cast iron

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤3xD drilling depth

1702	1184	1242	2475	2480	2472	2473	8524
6539	6537K	6539	6537K	6537K	6537K	6539	6537K
Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.
K/P	K/P	K/P	K/P	K/P	K/P	K/P	K/P
RT 100 F	RT 100 U	RT 100 U	RT 100 F	RT 100 U	RT 100 U	RT 100 U	RT 100 HF
S	S	S	F	F	F	F	Y
209	198	198	198	198	198	209	198

≤4xD

768	6068
G.S.	G.S.
Sol. carb.	Sol. carb.
K	K
RT 150 GG	RT 150 GG
○	○
axial	axial
230	230
Al	G









v_c m/min	Feed column no.			v_c m/min	Feed column no.				v_c m/min	Feed column no.	v_c m/min	Feed column no.	
100	6	**6**	**6**	130	7	**7**	**7**	**7**	130	**7**			
85	5	**5**	**5**	110	6	**6**	**6**	**6**	110	**6**			
110	7	**7**	**7**	145	8	**8**	**8**	**8**	145	**8**			
85	6	**6**	**6**	110	7	**7**	**7**	**7**	110	**7**			
90	6	**6**	**6**	120	7	**7**	**7**	**7**	120	**7**			
85	6	**6**	**6**	110	7	**7**	**7**	**7**	110	**7**			
80	6	**6**	**6**	105	7	**7**	**7**	**7**	105	**7**			
80	6	**6**	**6**	105	7	**7**	**7**	**7**	105	**7**			
75	5	**5**	**5**	100	6	**6**	**6**	**6**	100	**6**			
100	7	**7**	**7**	130	8	**8**	**8**	**8**	130	**8**			
90	6	**6**	**6**	120	7	**7**	**7**	**7**	120	**7**			
65	4	**4**	**4**	85	5	**5**	**5**	**5**	85	**5**			
75	**5**	5	5	100	**6**	6	6	6	100	**6**			
70	**4**	4	4	90	**5**	5	5	5	90	**5**			
50	**5**	5	5	65	**6**	6	6	6	65	**6**			
40	**4**	4	4	55	**5**	5	5	5	55	**5**			
	3				**4**				55	**4**			
35	**2**	2	2	45	**3**	3	3	3	45	**3**			
40	**3**	3	3	55	**4**	4	4	4					
35	**3**	3	3	45	**4**	4	4	4					
35	**2**	2	2	45	**3**	3	3	3					
35	**2**	2	2	45	**3**	3	3	3	45	**3**			
20	**1**	1	1	25	**2**	2	2	2	25	2			
20	**3**	3	3	25	**4**	4	4	4	25	**4**			
160	7	**7**	**7**	210	8	**8**	**8**	**8**			120	7	**7**
120	7	**7**	**7**	155	8	**8**	**8**	**8**			100	7	**7**
120	7	**6**	**6**	155	8	**7**	**7**	**7**			90	7	**7**
95	7	**6**	**6**	125	8	**7**	**7**	**7**			80	7	**7**
25	**2**	**2**	**2**	35	**3**	**3**	**3**	**3**			40	2	**2**
30	**2**	3	3	40	**3**	4	4	4	40	3			
25	**2**	2	2	35	**3**	3	3	3	35	3			
200	**8**	**8**	**8**	260	**9**	**9**	**9**	**9**			410	**9**	7
200	**8**	**8**	**8**	260	**9**	**9**	**9**	**9**			410	**9**	7
170	**8**	**8**	**8**	220	**9**	**8**	**8**	**8**			380	**9**	7
140	**7**	**7**	**7**	180	**8**	**8**	**8**	**8**			330	**9**	7
200	7	**7**	**7**	260	8	**8**	**8**	**8**					
80	**6**	6	6	105	**7**	7	7	7					
210	**7**	7	7	270	**8**	8	8	8			280	9	9
140	6	**6**	**6**	180	7	**7**	**7**	**7**					
80	5	**5**	**5**	105	6	**6**	**6**	**6**			110	6	6
65	5	**5**	**5**	85	6	**6**	**6**	**6**			80	5	5
60	4	**4**	**4**	80	5	**5**	**5**	**5**					
45	4	**4**	**4**	60	5	**5**	**5**	**5**					

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.	
Standard/DIN	
Tool material	
Carbide grade	
Type	
Surface finish	
Cooling	
Std. range page	

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤5xD drilling depth

1172	6501	1662	1182	1663	1183	2478	2470	2479	2471
6538M	6537L		6537L	6537L	6537L	6537L	6537L	6537L	6537L
Carbide	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.
P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	**K/P**
RT 80 U	RT 100 R	RT 100 F	RT 100 F	RT 100 U	RT 100 U	RT 100 F	RT 100 F	RT 100 U	RT 100 U
S	F	S	S	S	S	F	F	F	F
axial	axial	axial	axial	axial	axial	axial	axial	axial	axial
269	234	234	234	234	234	234	234	234	234






v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.				v_c m/min	Feed column no.			
95	5			110	6	6	**6**	**6**	145	7	7	**7**	**7**
80	4			90	5	5	**5**	**5**	120	6	6	**6**	**6**
95	6			130	7	7	**7**	**7**	170	8	8	**8**	**8**
75	5			110	7	7	**7**	**7**	145	8	8	**8**	**8**
80	5			100	7	7	**7**	**7**	130	8	8	**8**	**8**
75	5			95	6	6	**6**	**6**	125	7	7	**7**	**7**
75	5			90	6	6	**6**	**6**	120	7	7	**7**	**7**
75	5			90	6	6	**6**	**6**	120	7	7	**7**	**7**
55	4			80	6	6	**6**	**6**	105	7	7	**7**	**7**
90	6			110	7	7	**7**	**7**	145	8	8	**8**	**8**
75	5			90	6	6	**6**	**6**	120	7	7	**7**	**7**
55	4			65	4	4	**4**	**4**	85	5	5	**5**	**5**
70	5			85	**6**	**6**	6	6	105	**7**	**7**	7	7
55	4			80	**4**	**4**	**5**	**5**	100	**5**	**5**	5	5
40	4			60	**5**	**5**	5	5	70	**6**	**6**	6	6
35	4			50	**4**	**4**	4	4	55	**5**	**5**	5	5
40	3			45	**3**	**3**	4	4	60	**4**	**4**	5	5
				45	**2**	**2**	2	2	60	**3**	**3**	3	3
40	2			45	**4**	**4**	4	4	60	**5**	**5**	5	5
35	2			40	**4**	**4**	4	4	55	**5**	**5**	5	5
35	2			35	**4**	**4**	4	4	50	**5**	**5**	5	5
				40	**2**	**2**	2	2	55	**3**	**3**	3	3
				25	**1**	**1**	1	1	35	**2**	**2**	2	2
				25	**3**	**3**	3	3	35	**4**	**4**	4	4
150	6	210	**9**	160	8	8	**8**	**8**	195	9	9	**9**	**9**
110	6	160	**9**	120	8	8	**8**	**8**	160	9	9	**9**	**9**
110	6	160	**9**	100	8	8	**8**	**8**	140	9	9	**9**	**9**
90	5	130	**8**	95	7	7	**7**	**7**	130	8	8	**8**	**8**
				30	2	2	**2**	**2**	40	3	3	3	3
				35	**3**	**3**	3	3	45	**4**	**4**	4	4
				30	**2**	**2**	2	2	40	**3**	**3**	3	3
200	7			240	8	8	**8**	**8**	310	9	9	**9**	**9**
200	7			240	8	8	**8**	**8**	310	9	9	**9**	**9**
170	7			200	8	8	**8**	**8**	260	9	9	**9**	**9**
140	6			170	8	8	**8**	**8**	220	9	9	**9**	**9**
				230	7	7	**7**	**7**	280	8	8	**8**	**8**
				95	**6**	**6**	6	6	125	**7**	**7**	7	7
				250	**7**	**7**	7	7	325	**8**	**8**	8	8
				170	6	6	**6**	**6**	220	7	7	**7**	**7**
				95	6	6	**6**	**6**	125	7	7	**7**	**7**
				80	5	5	**5**	**5**	105	6	6	**6**	**6**
				70	5	5	**5**	**5**	90	6	6	**6**	**6**
				60	5	5	**5**	**5**	80	6	6	**6**	**6**
		130	**8**										
		100	**8**										
		80	**8**										
		60	**8**										

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Carbide grade
Type
Surface finish
Cooling
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤5xD drilling depth

8511	8611	8521	8621	1243	2717	2712	2474	2996	2719
6537L	6537L	6537L	6537L	G.S.	6537L	6537L	G.S.	6537L	6537L
Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.
K/P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	K/P	**K/P**
RT 100 VA	**RT 100 VA**	**RT 100 HF**	**RT 100 HF**	**RT 100 U**	**RT 100 U**	**RT 100 F**	**RT 100 U**	**RT 100 U**	**RT 100 U**
a	a	Y	Y	S	S	F	F	F	F
axial	**axial**	**axial**	**axial**						
234	**234**	**234**	**234**	**213**	**204**	**204**	**213**	**204**	**204**



v_c m/min	Feed column no.		v_c m/min	Feed column no.		v_c m/min	Feed column no.		v_c m/min	Feed column no.			
			145	7	**7**	*100*	**6**	**6**	*130*	7	**7**	**7**	**7**
			120	**6**	**6**	*85*	**5**	**5**	*110*	6	**6**	**6**	**6**
			170	8	**8**	*110*	**7**	**7**	*145*	8	**8**	**8**	**8**
			145	**8**	**8**	*85*	**6**	**6**	*110*	7	**7**	**7**	**7**
			130	8	**8**	*90*	**6**	**6**	*120*	7	**7**	**7**	**7**
			125	7	**7**	*85*	**6**	**6**	*110*	7	**7**	**7**	**7**
			120	**7**	**7**	*80*	**6**	**6**	*105*	7	**7**	**7**	**7**
			120	**7**	**7**	*80*	**6**	**6**	*105*	7	**7**	**7**	**7**
			105	**7**	**7**	*75*	**5**	**5**	*100*	6	**6**	**6**	**6**
			145	8	**8**	*100*	**7**	**7**	*130*	8	**8**	**8**	**8**
			120	**7**	**7**	*90*	**6**	**6**	*120*	7	**7**	**7**	**7**
			85	**5**	**5**	*65*	**4**	**4**	*85*	5	**5**	**5**	**5**
			110	**7**	**7**	*75*	5	5	*100*	**6**	6	6	6
			105	**5**	**5**	*70*	4	4	*90*	**5**	5	5	5
			80	**6**	**6**	*50*	5	5	*65*	**6**	6	6	6
			65	**5**	**5**	*40*	4	4	*55*	**5**	5	5	5
			60	**4**	**4**					**4**			
			60	**3**	**3**	*35*	2	2	*45*	**3**	3	3	3
80	**5**	**5**				*40*	3	3	*55*	**4**	4	4	4
60	**2-3**	**2-3**				*35*	3	3	*45*	**4**	4	4	4
80	**5**	**5**				*35*	2	2	*45*	**3**	3	3	3
			55	**3**	**3**	*35*	2	2	*45*	**2**	3	3	3
			35	2	2	*20*	1	1	*25*	**2**	2	2	2
30	2	2	*35*	**4**	**4**	*20*	3	3	*25*	**4**	4	4	4
						160	**7**	**7**	*210*	8	**8**	**8**	**8**
						120	**7**	**7**	*155*	8	**8**	**8**	**8**
						120	**6**	**6**	*145*	8	**7**	**7**	**7**
						95	**6**	**6**	*125*	8	**7**	**7**	**7**
						25	**2**	**2**	*35*	3	**3**	**3**	**3**
35	2	2	*45*	4	4	*30*	3	3	*40*	**3**	4	4	4
			40	3	3	*25*	2	2	*35*	**3**	3	3	3
						200	**8**	**8**	*260*	9	**9**	**9**	**9**
						200	**8**	**8**	*260*	9	**9**	**9**	**9**
						170	**8**	**8**	*235*	9	**9**	**9**	**9**
						140	**7**	**7**	*170*	8	**8**	**8**	**8**
						200	**7**	**7**	*260*	8	**8**	**8**	**8**
						80	6	6	*105*	**7**	7	7	7
						210	7	7	*270*	**8**	8	**8**	**8**
						140	**6**	**6**	*180*	7	**7**	**7**	**7**
						80	**5**	**5**	*105*	6	**6**	**6**	**6**
						65	**5**	**5**	*85*	6	**6**	**6**	**6**
						60	**4**	**4**	*80*	5	**5**	**5**	**5**
						45	**4**	**4**	*60*	5	**5**	**5**	**5**

C TiCN · Cb Carbo · D Cristall · F FIRE/nanoFIRE · P AlCrN · S TiN · S+ TiN+ · M MolyGlide · Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Pilot holes are always necessary for drilling depths over 7 x D:

1. The pilot hole can be produced with a short, rigid drill. The diameter should be 0.01 - 0.02 mm larger than the diameter of the Ratio drill. Drilling depth ≥ 1 x D.
2. Alternatively, the Ratio Drills can produce their own pilot hole. Cutting speed and feed rate must therefore be reduced by 30-40%.
3. A coolant pressure of 40 bar is recommended.

For safety reasons it is very important, that a drill does not exceed a speed of n = 6 000 rev./min when not supported. The centrifugal forces could break these long tools before reaching the workpiece surface!

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
- Air
- Neat oil
- Soluble oil

Cutting direction:
- R right-hand cutting
- L left-hand cutting

Al
especially suitable for machining aluminium

G
especially suitable for machining cast iron

Guhring no.
Standard/DIN
Tool material
Carbide grade
Type
Surface finish
Cooling
Std. range page

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		
Nitriding steels	**1.8504** 34CrAl6	≤1000		
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		
Hardened steels	–		≤48 HRC	
			≤66 HRC	
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	
Chilled cast iron	–		≤350 HB	
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		
	2.0790 CuNi18Zn19Pb	≤850		
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		
Kevlar	Kevlar	≤1000		
Glass, carbon concentrated plastics	GFK/CFK	≤1000		

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A AlTiN SuperA

≤7xD drilling depth

≤10xD

1173	769	6069	2711	4044	4045	6502	8522	770	6070
6538L	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.
Carbide	Sol. carb.		Sol. carb.	Sol. carb.		Sol. carb.	Sol. carb.	Sol. carb.	
P	K	K	K/P	K/P	K/P	K/P	K/P	K	K
RT 80 U	RT 150 GG		RT 100 U	RT 100 U		RT 100 R	RT100HF	RT 150 GG	
S	○	○	S	F	F	F	Y	○	○
axial	axial	axial	axial	axial	axial	axial	axial	axial	axial
271	253	253	248	248	248	248	248	255	255
	AI	G						AI	G









v_c m/min	Feed column no.	v_c m/min	Feed column no.		v_c m/min	Feed col. no.	v_c m/min	Feed column no.		v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed column no.	
95	4				110	**5**	145	**6**	**6**			145	**6**			
75	3				90	**4**	120	**5**	**5**			120	**5**			
90	5				130	**6**	170	**7**	**7**			170	**7**			
75	4				110	**6**	145	**7**	**7**			145	**7**			
80	4				100	**6**	130	**7**	**7**			130	**7**			
75	4				95	**5**	125	**6**	**6**			125	**6**			
60	4				90	**5**	120	**6**	**6**			120	**6**			
75	4				90	**5**	120	**6**	**6**			120	**6**			
60	3				80	**5**	105	**6**	**6**			105	**6**			
90	5				110	**6**	145	**7**	**7**			145	**7**			
75	4				90	**5**	120	**6**	**6**			120	**6**			
55	3				65	**3**	85	**4**	**4**			85	**4**			
75	4				80	5	110	6	6			110	**6**			
55	3				75	4	105	4	4			105	**4**			
40	3				55	4	80	5	5			80	**5**			
35	3				40	3	65	4	4			65	**4**			
40	2				45	2	60	4	4			60	**3**			
					45	1	60	2	2			60	**2**			
35	1				45	3	60	4	4							
33	1				40	3	55	4	4							
25	1				35	3	45	4	4							
					40	1	55	2	2			55	**2**			
					25	1	35	1	1			35	1			
					25	2	35	3	3			35	**3**			
150	5	120	6	**7**	150	**7**	195	**8**	**8**	210	**8**			120	6	**6**
110	5	100	6	**7**	120	**7**	160	**8**	**8**	160	**8**			100	6	**6**
110	5	90	6	**7**	100	**7**	140	**8**	**8**	160	**8**			90	6	**6**
90	4	80	6	**7**	95	**6**	130	**7**	**7**	130	**7**			80	6	**6**
		40	2	**2**	30	**1**	40	2	2					40	1	**2**
					35	1	40	3	3			45	3			
					30	1	40	2	2			40	4			
180	6	410	8	7	240	7	310	**8**	**8**					410	8	6
180	6	410	8	7	240	7	310	**8**	**8**					410	8	6
160	6	380	**8**	8	200	7	260	**8**	**8**					380	**8**	6
130	5	330	**8**	8	170	7	220	**8**	**8**					330	**8**	6
					230	**6**	280	**7**	**7**							
					95	6	125	6	6							
		280	7	7	250	7	325	7	7					280	7	7
					170	**6**	220	6	6							
		110	6	6	95	**6**	125	**6**	**6**					110	6	6
		80	5	5	80	**5**	105	**5**	**5**					80	5	5
					70	**5**	90	**5**	**5**							
					60	**5**	80	**5**	**5**							
										130	**7**					
										100	**7**					
										80	**7**					
										60	**7**					

C TiCN · Cb Carbo · D Cristall · F FIRE/nanoFIRE · P AlCrN · S TiN · S+ TiN+ · M MolyGlide · Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.	
Standard/DIN	
Tool material	
Carbide grade	
Type	
Surface finish	
Cooling	
Std. range page	

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤15xD	≤15xD	≤20xD	≤25xD	≤30xD	≤40xD
773	6509	6511	6512	6513	6514
G.S.	G.S.	G.S.	G.S.	G.S.	G.S.
Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.
K	K/P	K/P	K/P	K/P	K/P
RT 150 GN	RT 100 T	RT 100 T	RT 100 T	RT 100 T	RT 100 T
○	A	A	A	A	A
	40 bar | MQL	40 bar MQL	40 bar MQL	40 bar MQL	40 bar
257	258	260	262	264	265








v_c m/min	Feed column no.	v_c m/min	Feed no.	v_c m/min	Feed no.	v_c m/min	Feed no.	v_c m/min	Feed no.	v_c m/min	Feed no.	v_c m/min	Feed no.	v_c m/min	Feed no.
		110	8			110	8			100	8			80	7			80	7
		110	8			110	8			100	8			80	7			80	7
		120	8			120	8			120	8			100	8			100	8
		120	8			120	8			100	8			100	8			100	8
		110	6			110	6			110	6			110	6			110	6
		110	8			110	8			100	8			80	7			80	7
		100	7			100	7			100	7			80	7			80	7
		110	7	80	7	110	7	80	7	100	7	70	7	80	7	60	6-7	80	6-7
		110	6	80	7	110	6	80	7	100	6	70	7	80	6	60	7	80	6
		110	8			110	8			100	8			80	7			80	7
		110	7	80	6-7	110	7	80	6-7	100	7	70	6-7	80	6	60	6-7	80	6
		110	6	80	6-7	110	6	80	6-7	100	6	70	6-7	80	6	60	6-7	80	6
		100	5			100	5			80	5			80	5			80	5
		80	5			80	5			60	5			60	5			60	5
		100	6-7			100	6			90	6			80	6			80	6-7
		80	5			80	5			70	4			70	4			70	4
		50	5			50	5			50	4			50	4			50	4
		50	5			50	5			50	4			50	4			50	4
		100	5			100	5			100	5			80	5			80	5
		70	2-3			60	3			60	3			60	3			70	2-3
		100	5			100	5			100	5			80	5			80	5
		50	4			50	4			50	4			50	4			50	4
		30	2			30	2			30	2			30	2			30	2
120	5	140	8			140	8			130	8			120	8			120	8
100	5	100	8			100	8			90	8			80	8			80	8
90	5	140	8			140	8			130	8			120	8			120	8
80	5	100	8			100	8			90	8			80	8	65	8	80	8
40	1																		
410	6																		
410	6																		
380	7																		
330	7																		
		120	1			120	1			120	1			120	1			120	1
280	6	120	8			120	8			110	8			100	8			100	8
110	5																		
80	4																		
		100	6			100	6			90	6			80	6			80	6
		100	6			100	6			90	6			80	6			80	6
		90	8	90	8	90	8	90	8	80	8	80	8	70	8	70	8	70	8

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.	
Standard/DIN	
Tool material	
Carbide grade	
Type	
Surface finish	
Cooling	
Std. range page	

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤3xD

745
6539
Sol. carb.
K10/K20
GS 200 G
○
275



vc m/min	Feed column no.
100	6
80	6
80	6
70	6
180	7
160	7
150	7
120	6
180	6
180	6

≤5xD drilling depth

1025	2713	731
6539	6537L	6539
Sol. carb.	Sol. carb.	Sol. carb.
K	K	K
GS 200 G	FT 200 G	GS 200 U
○	○	○
275	273	275







vc m/min	Feed column no.		
90			6
75			5
100	6	**6**	6
80	6	**6**	6
80	6	**6**	6
70	6	**6**	6
180	7	**7**	7
160	7	**7**	7
150	7	**7**	7
120	6	**6**	6
180	6	**6**	6
180	6	**6**	6

1027 | 611

1027	611
6539	6539
Sol. carb.	Sol. carb.
K10/K20	K/P
GS 200 F	GS 200 U
Ⓢ	Ⓢ
275	275





vc m/min	Feed column no.	
100	5	5
85	4	4
110	6	6
95	5	5
90	5	5
85	5	5
80	5	5
80	5	5
70	4	4
100	6	6
80	5	5
70	4	4
75	4	4
70	4	4
50	4	4
40	4	4
35	3	3
140	6	6
100	6	6
100	6	6
90	6	6
200	7	7
180	7	7
170	7	7
140	6	6
200	6	6
210	6	6

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

All data are approximate values. The actually achievable cutting speeds and feed rates depend on the respective machining conditions. We recommend suitable drilling trials.

To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Carbide grade
Drilling depth
Surface finish
Aplication
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
- Air
- Neat oil
- Soluble oil

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		
Nitriding steels	**1.8504** 34CrAl6	≤1000		
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		
Hardened steels	–		≤48 HRC	
			≤66 HRC	
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	
Chilled cast iron	–		≤350 HB	
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		
	2.0790 CuNi18Zn19Pb	≤850		
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		
Kevlar	Kevlar	≤1000		
Glass, carbon concentrated plastics	GFK/CFK	≤1000		

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A AlTiN SuperA

HT 800 WP ≤1,5×D

4112	4115	4113	4114
G.S.	G.S.	G.S.	G.S.
S. carb.	S. carb.	S. carb.	S. carb.
K/P	K/P	K/P	K/P
1,5xD	1,5xD	1,5xD	1,5xD
F	a	F	○
steel	stainl. st.	cast iron	Al/Al-alloys
296	296	296	296

v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.
130	6						
110	5						
130	7						
110	6						
130	6						
125	6						
110	5						
110	6						
90	5						
130	7						
110	6						
70	4						
105	5						
70	4						
60	5						
55	4						
55	3						
50	2						
		55	3				
		40	3				
		35	3				
		25	2				
		25	2				
				100	6		
				90	6		
				120	7		
				100	6		
		90	6				
		40	3				
		35	2				
						200	7
						180	7
						150	7
						120	7
						180	7
						70	6
						180	7
						120	6
						70	6
						50	6
						45	6
						35	5
				80	5
				80	5
				80	5
				80	5

≤3×D

4112	4115	4113	4114
G.S.	G.S.	G.S.	G.S.
S. carb.	S. carb.	S. carb.	S. carb.
K/P	K/P	K/P	K/P
3xD	3xD	3xD	3xD
F	a	F	○
steel	stainl. st.	cast iron	Al/Al-alloys
296	296	296	296

v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.
130	6						
110	5						
130	7						
110	6						
130	6						
125	6						
110	5						
110	6						
90	5						
130	7						
110	6						
70	4						
105	5						
70	4						
60	5						
55	4						
55	3						
50	2						
		55	3				
		40	3				
		35	3				
		25	2				
		25	2				
				100	6		
				90	6		
				120	7		
				100	6		
		90	6				
		40	3				
		35	2				
						200	7
						180	7
						150	7
						120	7
						180	7
						70	6
						180	7
						120	6
						70	6
						50	6
						45	6
						35	5
				80	5
				80	5
				80	5
				80	5

C TiCN · Cb Carbo · D Cristall · F FIRE/nanoFIRE · P AlCrN · S TiN · S+ TiN+ · M MolyGlide · Y Signum

All data are approximate values. The actually achievable cutting speeds and feed rates depend on the respective machining conditions. We recommend suitable drilling trials.

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Guhring no.
Standard/DIN
Tool material
Carbide grade
Drilling depth
Surface finish
Aplication
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
- Air
- Neat oil
- Soluble oil

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		
Nitriding steels	**1.8504** 34CrAl6	≤1000		
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		
Hardened steels	–		≤48 HRC	
			≤66 HRC	
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	
Chilled cast iron	–		≤350 HB	
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		
	2.0790 CuNi18Zn19Pb	≤850		
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		
Kevlar	Kevlar	≤1000		
Glass, carbon concentrated plastics	GFK/CFK	≤1000		

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A AlTiN SuperA

HT 800 WP ≤5×D

4112	4115	4113	4114
G.S.	G.S.	G.S.	G.S.
S. carb.	S. carb.	S. carb.	S. carb.
K/P	K/P	K/P	K/P
5xD	5xD	5xD	5xD
F	a	F	○
steel	stainl. st.	cast iron	Al/Al-alloys
296	296	296	296

≤7×D

4112	4115	4113	4114
G.S.	G.S.	G.S.	G.S.
S. carb.	S. carb.	S. carb.	S. carb.
K/P	K/P	K/P	K/P
7xD	7xD	7xD	7xD
F	a	F	○
steel	stainl. st.	cast iron	Al/Al-alloys
296	296	296	296










v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.
125	6							120	5						
105	5							105	4						
125	7							120	6						
105	6							105	5						
125	6							120	5						
120	6							110	5						
105	5							100	4						
105	6							100	5						
85	5							85	4						
125	7							120	6						
105	6							100	5						
70	4							70	4						
105	5							105	4						
70	4							70	3						
55	5							55	4						
50	4							50	3						
55	3							55	2						
50	2							50	2						
		55	3							55	2				
		40	3							40	2				
		35	3							35	2				
		25	2							25	1				
		25	2							25	1				
				100	6							80	6		
				90	6							70	6		
				120	7							100	7		
				100	6							80	6		
		90	6							70	6				
		40	3							40	2				
		35	2							35	1				
						180	7							180	6
						180	7							180	6
						140	7							140	6
						110	7							110	6
						180	7							180	6
						70	6							70	5
						180	7							180	6
						120	6							120	5
						70	6							70	5
						50	6							50	5
						45	6							45	5
						35	5							35	4
				80	5							60	5		
				80	5							60	5		
				80	5							60	5		
				80	5							60	5		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

All data are approximate values. The actually achievable cutting speeds and feed rates depend on the respective machining conditions. We recommend suitable drilling trials.

To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Carbide grade
Drilling depth
Surface finish
Aplication
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
- Air
- Neat oil
- Soluble oil

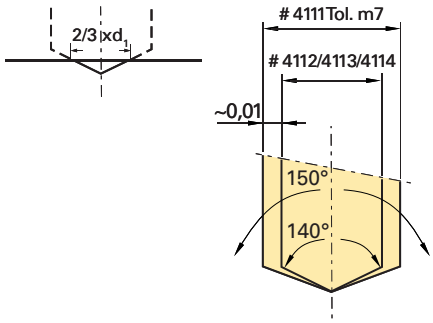
Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		
Nitriding steels	**1.8504** 34CrAl6	≤1000		
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		
Hardened steels	–		≤48 HRC	
			≤66 HRC	
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	
Chilled cast iron	–		≤350 HB	
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		
	2.0790 CuNi18Zn19Pb	≤850		
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		
Kevlar	Kevlar	≤1000		
Glass, carbon concentrated plastics	GFK/CFK	≤1000		

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A AlTiN SuperA

HT 800 WP ≤10×D

≤1×D pilot drilling/countersinking

4112	4115	4113	4114	4111
G.S.	G.S.	G.S.	G.S.	G.S.
S. carb.	S. carb.	S. carb.	S. carb.	S. carb.
K/P	K/P	K/P	K/P	K/P
10xD	10xD	10xD	10xD	1xD
F	a	F	○	a
steel	stainl. st.	cast iron	Al/Al-alloys	pil./counters.
296	296	296	296	304



- for through holes supporting lands must remain in permanent contact. In addition, we recommend reducing the feed rate prior to exiting.
- for drilling depths from 5xD we generally recommend centring or pilot drilling with holder, Guhring no. 4105, and pilot insert, Guhring no. 4111. Alternatively – depending on the material to be machined – Ratio drills type RT 100 U or RT 100VA can be applied.
- for drilling without centring we recommend reducing the feed rate at the start of the hole.
- don't apply drilling tool without trial for interrupted cutting (grooves, transverse holes). For interrupted cutting (max. 0.2 x D) it is recommended to reduce the feed rate whenever possible.
- in contrast to conventional indexable inserts, HT 800 tools are also suitable for the drilling of stacked sheets.
- on a lathe (stationary tool) it must be ensured that the tool is accurately centred.
- pre-condition for optimal machining results is a sufficient cooling lubricant supply with soluble or neat oil.
- the tool is only of limited suitability for dry machining or MQL. For MQL application we recommend the use of the conical MQL shank end as well as Guhring MQL components. Please contact our Sales Management.



v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.
100	5							130	6
95	4							110	5
100	6							130	7
95	5							110	6
100	5							130	6
95	5							125	6
90	4							110	5
90	5							110	6
85	4							90	5
100	6							130	7
90	5							110	6
70	4							70	4
95	4							105	5
70	3							70	4
55	4							60	5
50	3							55	4
55	2							55	3
50	2							50	2
		55	2					55	3
		40	2					40	3
		35	2					35	3
		25	1					25	2
		25	1						
								25	2
				80	6			100	6
				70	6			90	6
				100	7			120	7
				80	6			100	6
		70	6					90	6
		40	2					40	3
		35	1					35	2
						150	6	200	7
						150	6	180	7
						130	6	150	7
						105	6	120	7
						150	6	180	7
						70	5	70	6
						150	6	180	7
						110	5	120	6
						70	5	70	6
						50	5	50	6
						45	5	45	6
						35	4	35	5
				60	5			80	5
				60	5			80	5
				60	5			80	5
				60	5			80	5

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

All data are approximate values. The actually achievable cutting speeds and feed rates depend on the respective machining conditions. We recommend suitable drilling trials.

To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.	
Standard/DIN	
Tool material	
Carbide grade	
Drilling depth	
Surface finish	
Aplication	
Std. range page	

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
- Air
- Neat oil
- Soluble oil

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		
Nitriding steels	**1.8504** 34CrAl6	≤1000		
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		
Hardened steels	–		≤48 HRC	
			≤66 HRC	
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	
Chilled cast iron	–		≤350 HB	
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		
	2.0790 CuNi18Zn19Pb	≤850		
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		
Kevlar	Kevlar	≤1000		
Glass, carbon concentrated plastics	GFK/CFK	≤1000		

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A AlTiN SuperA

RT 800 WP ≤3xD ≤5xD ≤7xD

2747	1047	2485	2747	1047	2485	2747	1047	2485
G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.
S. carb.	S. carb.	S. carb.	S. carb.	S. carb.	S. carb.	S. carb.	S. carb.	S. carb.
K	K/P	K/P	K	K/P	K/P	K	K/P	K/P
3xD	3xD	3xD	5xD	5xD	5xD	7xD	7xD	7xD
○	(S)	(F)	○	(S)	(F)	○	(S)	(F)
cast i./Al	steels	steels	cast i./Al	steels	steels	cast i./Al	steels	steels
319	323	321	319	323	321	319	323	321











v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.
		100	6	130	6			95	6	125	6			90	5	120	5
		85	5	110	5			80	5	105	5			80	4	105	4
		100	7	130	7			95	7	125	7			90	6	120	6
		85	6	110	6			80	6	105	6			80	5	105	5
		100	6	130	6			95	6	125	6			90	5	120	5
		95	6	125	6			90	6	120	6			85	5	110	5
		85	5	110	5			80	5	105	5			75	4	100	4
		85	6	110	6			80	6	105	6			75	5	100	5
		70	5	90	5			65	5	85	5			65	4	85	4
		100	7	130	7			95	7	125	7			90	6	120	6
		85	6	110	6			80	6	105	6			75	5	100	5
		55	4	70	4			55	4	70	4			55	4	70	4
		80	5	105	5			80	5	105	5			80	4	105	4
		55	4	70	4			55	4	70	4			55	3	70	3
		40	5	55	5			40	5	55	5			40	4	55	4
		35	4	50	4			35	4	50	4			35	3	50	3
		40	3	55	3			40	3	55	3			40	2	55	2
		35	2	50	2			35	2	50	2			35	2	50	2
		40	3	55	3			40	3	55	3			40	2	55	2
		30	3	40	3			30	3	40	3			30	2	40	2
		25	3	35	3			25	3	35	3			25	2	35	2
		20	2	25	2			20	2	25	2			20	1	25	1
		20	2	25	2			20	2	25	2			20	1	25	1
100	7	160	7	210	7	90	7	150	7	195	7	90	6	150	6	195	6
80	7	80	7	155	7	70	7	110	7	145	7	70	6	110	6	145	6
80	7	120	7	155	7	70	7	110	7	145	7	70	6	110	6	145	6
70	6	100	6	130	6	60	6	90	6	120	6	60	5	90	5	120	5
10	2	25	2	35	2	10	2	25	2	35	2	10	2	25	2	35	2
		30	3	40	3			30	3	40	3			30	2	40	2
		25	2	35	2			25	2	35	2			25	1	35	1
200	7	220	7	290	7	180	7	200	7	260	7	180	6	200	6	260	6
180	7	200	7	260	7	180	7	200	7	260	7	180	6	200	6	260	6
150	7	180	7	235	7	140	7	170	7	220	7	140	6	170	6	220	6
120	7	150	7	195	7	110	7	140	7	180	7	110	6	140	6	180	6
180	7	200	7	260	7	180	7	200	7	260	7	180	6	200	6	260	6
70	6	80	6	105	6	70	6	80	6	105	6	70	5	80	5	105	5
180	7	210	7	270	7	180	7	210	7	270	7	180	6	210	6	270	6
120	6	140	6	180	6	120	6	140	6	180	6	120	5	140	5	180	5
70	6	80	6	105	6	70	6	80	6	105	6	70	5	80	5	105	5
50	6	65	6	85	6	50	6	65	6	85	6	50	5	65	5	85	5
45	6	50	6	65	6	45	6	50	6	65	6	45	5	50	5	65	5
35	5	40	5	55	5	35	5	40	5	55	5	35	4	40	4	55	4
50	5	80	5	105	5	50	5	80	5	105	5	50	4	80	4	105	4
50	5	80	5	105	5	50	5	80	5	105	5	50	4	80	4	105	4
50	5	80	5	105	5	50	5	80	5	105	5	50	4	80	4	105	4
50	5	80	5	105	5	50	5	80	5	105	5	50	4	80	4	105	4

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

All data are approximate values. The actually achievable cutting speeds and feed rates depend on the respective machining conditions. We recommend suitable drilling trials.

To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

- for through holes supporting lands must remain in permanent contact
- for 7 x D, centering is recommended with equal point angle of 140°, or larger, to min. 2/3 cutting edge diameter (do not apply standard centre drill to DIN 332). If centering is impossible, spot-drill with reduced feed.
- interrupted cutting (grooves, cross holes, oblique entry/exit) is not recommended without prior tests. We recommend reducing the feed by 50% if possible.
- the standard LT800 tool system is also suitable for drilling up to 55.9mm diameter in stacked metal sheets. For the drilling of stacked metal sheets above diameter 56 mm, the standard cartridge must be replaced with a cartridge with a suitable indexable insert arrangement.
- when replacing the central interchangeable insert (RT800), we recommend replacing the clamping screw with a new one (with clamping thread protection)
- with turning machines (vertical drilling tool), it must be ensured the tool operates precisely on centre.
- pre-requisite for optimal machining results is a sufficient coolant supply. The tool possesses only limited suitability for dry machining or minimal quantity lubrication applications. The cutting speed should be reduced by approximately 30% whilst retaining the same feed rate.

Safety recommendations:

- with rotating workpieces, a disc is created on hole break through. Due to the centrifugal effect there is a possible risk of accident. Safety precautions must be followed.
- in order to prevent damage to machine and tool, we recommend the prior determination of the required power and torque.

Tool material
Carbide grade
Drilling depth
Holder size
nom. Ø range mm

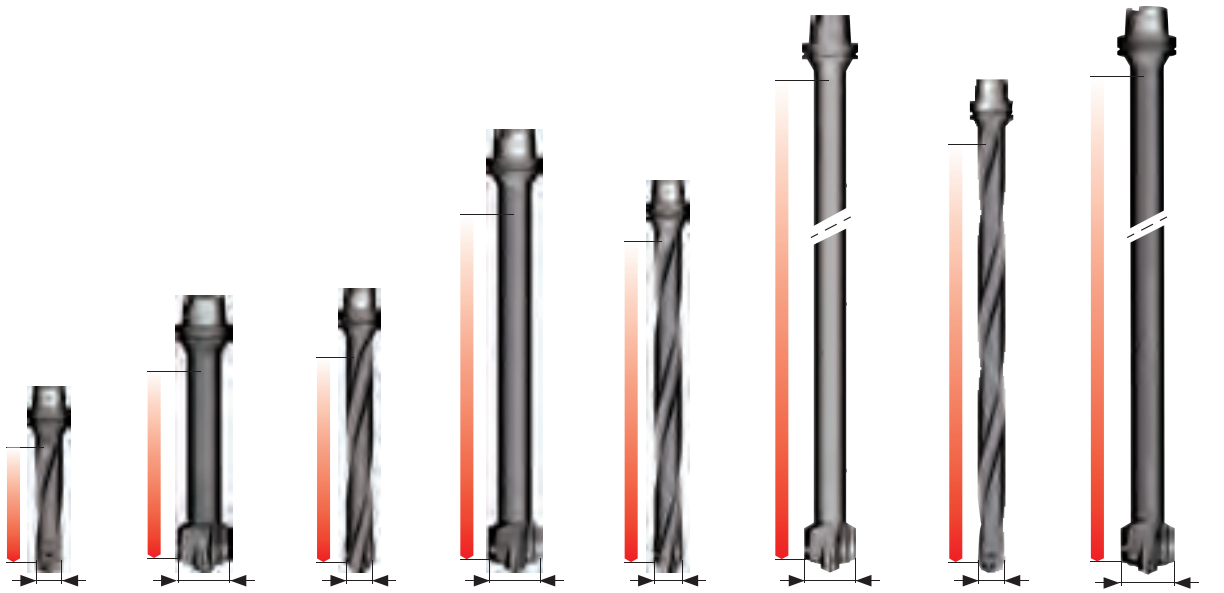
Coolant:
○ Air
● Neat oil
● Soluble oil

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm^2)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

LT 800 WP

	Carbide	Carbide	Carbide	Carbide	Carbide	Carbide	Carbide	Carbide
	depend. on insert	depend. on insert	depend. on insert	depend. on insert	depend. on insert	depend. on insert	depend. on insert	depend. on insert
	≤3xD	≤3xD	≤6xD	≤6xD	≤9xD	≤9xD	≤12xD	≤12xD
	400…560	600…950	400…560	600…950	400…560	600…950	400…560	600…950
	40…<60	60…100	40…<60	60…100	40…<60	60…100	40…<60	60…100



Feed rate f (mm/rev.)	v_c m/min							
0.20…0.40	110…150	130…180	100…130	120…155	70…120	85…145	60…110	70…130
0.20…0.40	100…130	120…155	90…120	110…145	70…110	85…130	60…110	70…130
0.20…0.40	110…150	130…180	100…130	120…155	70…120	85…145	60…120	70…145
0.15…0.30	100…130	120…160	90…120	110…145	70…110	85…130	60…110	70…130
0.20…0.40	100…130	120…155	90…120	110…145	80…110	100…130	70…100	85…120
0.20…0.40	90…120	110…145	80…110	100…130	70…100	85…120	60…90	70…110
0.15…0.35	80…110	100…130	70…100	85…120	60…90	70…110	55…80	65…100
0.20…0.40	80…110	100…130	70…100	85…120	60…90	70…110	55…80	65…100
0.15…0.35	70…100	85…120	65…90	80…110	60…80	70…100	55…75	65…90
0.20…0.40	90…120	110…145	80…110	100…130	70…100	85…120	60…90	70…110
0.20…0.40	80…110	100…130	70…100	85…120	60…90	70…110	55…80	65…100
0.15…0.35	70…100	85…120	65…90	80…110	60…80	70…100	55…75	65…90
0.20…0.40	80…110	100…130	70…100	85…120	60…90	70…110	55…80	65…100
0.15…0.35	70…100	85…120	65…90	80…110	60…80	70…100	55…75	65…90
0.20…0.40	70…100	85…120	65…95	80…115	60…90	70…110	55…80	65…100
0.15…0.35	70…90	85…110	65…90	80…110	60…80	70…100	55…75	65…90
0.15…0.35	70…100	85…120	65…95	80…115	60…90	70…110	55…85	65…100
0.15…0.35	60…90	70…110	55…85	65…100	50…80	50…100	45…75	55…90
0.15…0.35	55…85	65…100	50…80	60…100	45…75	55…90	40…70	50…85
0.30…0.60	120…200	145…240	110…180	130…220	100…160	120…190	90…150	110…180
0.30…0.60	100…160	120…190	90…150	110…180	85…140	100…170	80…130	100…155
0.30…0.60	100…160	120…190	90…150	110…180	85…140	100…170	80…130	100…155
0.20…0.40	80…120	100…145	70…110	85…130	60…100	70…120	55…90	65…110
0.30…0.60	200…300	240…360	180…280	220…340	160…260	190…310	140…240	170…290
0.30…0.60	180…280	220…340	170…260	200…310	155…250	185…300	135…235	160…280
0.30…0.60	160…240	190…290	150…230	180…280	140…220	170…260	130…210	155…250
0.30…0.60	140…200	170…240	130…190	160…230	120…180	145…220	110…170	130…200
0.30…0.60	120…200	145…240	110…180	130…220	100…160	120…190	90…150	110…180
0.20…0.40	140…200	170…240	130…190	160…230	120…180	145…220	110…170	130…200
0.30…0.60	120…200	145…240	110…180	130…220	100…160	120…190	90…150	110…180
0.20…0.40	120…200	145…240	110…180	130…220	100…160	120…190	90…150	110…180
0.20…0.40	140…200	170…240	130…190	160…230	120…180	145…220	110…170	130…200
0.15…0.35	140…200	170…240	130…190	160…230	120…180	145…220	110…170	130…200

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no. R
Guhring no. L
Standard/DIN
Tool material
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤3xD drilling depth

223	224	225	552
226	227	228	553
1897	1897	1897	1897
HSS			
>Ø 2,36			<Ø 2,36 >Ø 16,0
N	H	W	GT 80
412	412	412	412

653
672
1897
HSS
S
N
412

2460
1897
HSS
F
N
412

329	363	1261	128	129	1259
330				136	
1897	G.S.	1897	G.S.	G.S.	1897
HSCO					M42
>Ø 2,36					
GV 120	GV 120	VA	N	N	N
412	553	412	468	469	444



v_c m/min	Feed column no.				v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed column no.					
27	**6**			6	30	**6**	32	**7**	35	5	5	5			5
22	**5**			5	24	**5**	26	**6**	30	5	5	5			5
30	**6**			**6**	33	**6**	36	**7**	40	5	5	5			5
30	5			5	33	5	36	6	40	**5**	**5**	5	5	5	5
25	**5**			**5**	28	**5**	31	**6**	40	5	5	5			5
25	**5**			**5**	28	**5**	31	**6**	40	5	5				5
					25	4	28	5	35	**4**	**4**		**4**	**4**	4
					22	4	24	5	20	**4**	**4**		4	4	4
									16	**3**	**3**		3	3	3
30	**6**			6	33	**6**	36	**7**	36	6	6	6			6
					20	4	22	5	20	**4**	**4**		4	4	3
									15	**3**	**3**		3	3	3
					14	4	16	5		4	**4**		4	4	
									12	3	**3**		3	3	3
16	4			4	18	4	20	5	15	**4**	**4**		4	4	3
									12	**3**	**3**		3	3	3
									15	3	**3**		3	3	3
									8	**2**	**2**		2	2	**2**
									18	4	4	**4**	4	4	3
									14	3	3	**3**	3	3	3
									16	3	**3**	3	3	3	3
									4	1	1				1
									8	1	1		1	1	1
30	**6**			6	33	**6**	36	7	35	**6**	6				5
30	6			6	33	6	36	**7**	30	**6**	**6**				5
25	**6**			6	28	**6**	31	7	30	6	6				5
20	6			6	22	6	24	**7**	25	**6**	**6**				5
									10	3	3				3
									10	2	2	2			**2**
									6	2	2	2			**2**
70			**7**	7			85	8	90			7			7
70			**7**	7			85	8	90			7			7
50	7		7	**7**			60	**8**	80			7			7
50	6			**6**			60	**7**	70			6			6
70	6	**6**		6	80	6	90	6	70			6			6
60	5		5	**5**	65	**5**	70	**6**	40			5			5
		6			75	5	80	6	60			5			5
40	5		5	**5**	45	**5**	50	**6**	40			5			5
30	4	4		**4**	33	**4**	36	**5**	35	4	4	4			4
25	4			4	27	4	30	5	30	**4**	**4**	4			4
15	4			4	16	**4**	18	**5**	20	4	4	**4**			4
					15	4	18	5	15	4	4	**4**			4
18	4	4		**4**	22	**4**	29	**5**		4	4		4	4	
28	5	**5**	5	5	36	**5**	47	6	30			4			4

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤3xD drilling depth

2048	1228	2498	659	663	2461	512	515
1897	1897	1897	1897	G.S.	1897	G.S.	1897
HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSS-E-PM
M	S	F	S	S	F	S	F
P2000	GT 80	GT 80	GV 120	GV 120	GV 120	GU 500	GT 500
412	412	412	412	553	412	456	444



v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed column no.		v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.
35	**6**	38	6	42	6	38	5	5	42	6	38	**6**	42	6
30	**5**	33	5	36	5	33	4	4	36	5	33	**5**	37	5
40	**6**	44	**6**	48	**7**	44	5	5	48	6	44	**6**	47	**7**
40	**5**	38	**5**	42	**6**	38	5	5	42	6	40	**6**	44	6
40	**5**	44	6	48	6	44	5	5	48	6	44	**6**	47	6
40	**5**	44	5	48	6	44	5	5	48	6	44	**6**	47	6
35	**4**	38	4	42	5	38	**4**	**4**	42	**5**	40	**5**	44	**5**
25	**4**	27	4	30	5	27	**4**	**4**	30	**5**	27	4	30	4
20	3	22	3	24	4	22	**3**	**3**	24	**4**	22	3	25	**3**
40	**6**	44	4	48	4	44	4	4	48	5	44	**6**	47	4
20	4	22	4	24	5	22	**4**	**4**	24	**5**	22	4	25	**5**
15	3	18	3	20	4	18	**3**	**3**	20	**4**	18	3	20	**4**
20	4	22	4	24	5	22	4	**4**	24	**5**	22	4	25	**5**
15	3	18	3	20	4	18	3	**3**	20	**4**	16	3	18	**4**
18	4	19	4	21	5	19	**4**	**4**	21	**5**	20	4	22	**5**
12	3	14	3	16	4	14	**3**	**3**	16	**4**	15	3	17	**4**
12	3	14	3	17	4	14	3	**3**	17	**4**	13	3	14	**4**
8	2	9	2	11	3	9	**2**	**2**	11	**3**	9	2	10	**2**
14	4	15	**4**	17	**4**	20	4	4	22	5	20	**4**	22	**4**
10	3	10	3	12	3	15	3	**3**	17	**4**	16	**3**	18	3
12	3	12	3	14	3	18	3	**3**	20	**4**	18	**4**	20	3
						4	1	1	5	2				
5	2					6	2	2	7	2			6	2
38	6	45	6	50	7	40	6	6	45	7	45	**6**	50	**7**
30	6	40	6	45	7	35	**6**	**6**	40	**7**	40	**6**	44	**7**
30	6	33	6	36	7	33	6	6	36	7	40	**6**	44	**7**
25	6	27	6	29	7	27	6	6	29	7	30	**6**	33	**7**
10	3	8	3	10	4	12	3	3	14	4			16	4
						11	2	2	12	3				
						7	2	2	8	3				
90	7													
90	7													
80	7													
70	6													
85	6										80	6		
80	5	88	5	96	6						88	**5**		
70	5	77	5	84	6						77	**5**		
40	5	44	5	48	6						44	**5**		
40	4	45	5	50	5	45	5	5	50	6	45	**4**	50	5
30	4	40	4	45	5	40	**4**	**4**	45	**5**	40	**4**	44	5
25	4	22	4	25	5	23	4	4	26	5	30	**4**	33	5
15	4	17	4	20	5	17	4	**4**	20	**5**	25	**4**	28	5
20	4	22	4	24	5						22	**4**		
25	5	27	5	30	5						27	**4**		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Carbide grade
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤3xD drilling depth

730	702	1149	710	703	705	704	707	2463	1946
6539	G.S.	G.S.	G.S.	8037	8041	8038	G.S.	6539	6537K
Sol. carb.	Sol. carb.	Sol. carb.	Carbide	Carbide	Carbide	Carbide	Carbide	Solid carbide	Solid carbide
			K10/K20					K/P	K/P
○	○	○	○	○	○	○	○	F	A
N	N	N	Duro 150	N	N	N		N	H
444	450	550	406	547	605	547	551	444	466



v_c m/min	Feed column no.								v_c m/min	Feed col. no.	v_c m/min	Feed col. no.
	4								*104*	5		
	4								*91*	5		
	5			4	4	4			*104*	**6**		
	4			3	3	3			*91*	**5**		
	4								*104*	5		
	4								*91*	5		
	4								*78*	5		
	4								*78*	5	*80*	6
	5								*104*	6		
	4								*78*	5	*65*	4
	4								*65*	5	*80*	4
	3								*65*	4		
25	2			**2**	**2**	**2**		2	*32*	3		
	4								*32*	**5**		
	3								*32*	**4**		
	3								*32*	**4**		
	3			3	3	3			*26*	4	*40*	**2**
				2	2	2					*30*	**1**
	2								*20*	3		
	4			4	4	4			*117*	**5**	*90*	8
	4			4	4	4			*104*	**5**	*80*	8
	4			4	4	4			*91*	**5**	*80*	8
	4			4	4	4			*104*	**5**	*70*	7
10				**1**	**1**	**1**		1			*30*	2
	3								*26*	4		
	2								*20*	3		
	7								*260*	**8**		
	7								*260*	**8**		
	6								*195*	**7**		
	6								*156*	**7**		
	6								*234*	**6**		
	5								*104*	**6**		
	5			5	5	5			*234*	**6**		
	5			5	5	5			*234*	**6**		
	5								*156*	**6**		
	5								*156*	**6**		
	4								*91*	5		
	3								*65*	4		
	4	**4**							*65*	5		
	3	**3**					3		*52*	4		
			1									
	3	**3**					2		*104*	4		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no. R
Guhring no. L
Standard/DIN
Tool material
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤5xD drilling depth

560	205 208	240	268	229 248	245	592	251	206 209	246	207 210	247	549 550	558
338	338	338	G.S.	345	345	345	346	338	345	338	345	338	345
HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
○	>Ø 2,36	●	●	●	>Ø 2,36	>Ø 16,0	●	○	○	○	○	>Ø 2,36	>Ø 16,0
N	N	N	N	N	N	N	N	H	H	W	W	GT 100	GT 100
342	342	342	467	555	555	555	575	342	555	342	555	342	555



v_c m/min	Feed column no.													
27	6	**6**	**6**	**6**	**6**	**6**	**6**	6	**5**				6	6
22	**5**	**5**	**5**	**5**	**5**	**5**	5	5					5	5
30	6	**6**	**6**	**6**	**6**	**6**	**6**	6					**6**	**6**
30	5	5	5	5	5	5	5	5					5	5
25	5	**5**	**5**	**5**	**5**	**5**	**5**	5					5	5
25	**5**	**5**	**5**	**5**	**5**	**5**	5	5					5	5
30	6	6	6	6	6	6	6	6					6	6
16		4	4	4	4	4	4	4					4	4
30	6	**6**	**6**	**6**	**6**	**6**	**6**	6					6	6
30	6	6	6	6	6	6	6	6					6	6
25	6	6	6	6	6	6	6	6					6	6
25	6	6	6	6	6	6	6	6					6	6
70	**7**	7	7	7	7	7	7	7			7	7	**7**	**7**
70	**6**	6	6	6	6	6	6	6					**6**	**6**
50	6	6	6	6	6	6	6	6	6	6			6	6
50	5	5	5	5	5	5	5	5			**5**	**5**	**5**	**5**
40	5	5	5	5	5	5	5	5	**6**	**6**			**5**	**5**
	4	4	4	4	4	4	4	4	4	4				
	4	4	4	4	4	4	4	4						
15	4	4	4	4	4	4	4	4					4	4
18	4	4	4	4	4	4	4	4	4	4			**4**	**4**
	5	5	5	5	5	5	5	5	**5**	**5**	5	5		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no. R
Guhring no. L
Standard/DIN
Tool material
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤5xD drilling depth

651	654	2456	652	606	2457
664			665		
338	345	338	338	345	338
HSS	HSS	HSS	HSS	HSS	HSS
S	S	F	S	S	F
N	N	N	GT 100	GT 100	GT 100
342	567	342	342	567	342

305	345	351	622	645	605	1260	1262	1146
308					608			
338	345	346	338	345	338	338	345	338
HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	M42
>Ø 2,36			>Ø 2,36	>Ø 16,0				
N	N	N	GT 100	GT 100	Ti	VA	VA	N
380	567	575	380	567	380	380	573	380





v_c m/min	Feed column no.					
32	**6**	**6**	**7**	6	6	7
26	**5**	**5**	**6**	5	5	6
36	**6**	**6**	**7**	**6**	**6**	**7**
36	5	5	6	5	5	6
31	**5**	**5**	**6**	5	5	6
31	**5**	**5**	**6**	5	5	6
28	4	4	5	4	4	5
24	4	4	5	4	4	5
36	**6**	**6**	**7**	6	6	7
22	4	4	5	4	4	5
16	4	4	5	4	4	5
20	4	4	5	4	4	5
36	6	6	7	6	6	7
36	6	6	7	6	6	7
31	**6**	**6**	7	6	6	7
24	6	6	7	6	6	7
85			8			8
85			8			8
60			**8**			8
60			**8**			7
90	6	6	7			7
70	5	5	6	**5**	**5**	6
80	5	5	6	5	5	6
50	5	5	6	**5**	**5**	6
	4	**4**	**5**			
	4	**4**	**5**			
18	**4**	**4**	**5**	4	4	5
18	**4**	**4**	**5**	4	4	5
29	4	4	5	**4**	**4**	5
	5	5				

v_c m/min	Feed column no.								
35	5	5	5	5	5		5	5	5
30	5	5	5	5	5		5	5	5
40	5	5	5	5	5		5	5	5
40	5	5	5	**5**	**5**		5	5	5
40	5	5	5	5	5		5	5	5
40	5	5	5	5	5				5
35	**4**	**4**	**4**	4	4				5
20	**4**	**4**	**4**	**4**	**4**				4
16	3	3	3	**3**	**3**	3			3
36	6	6	6	6	6	6	6	6	6
20	**4**	**4**	**4**	4	4				3
15	3	3	3	**3**	**3**	3			3
16	**4**	**4**	**4**	4	4				3
12	3	3	3	**3**	**3**	3			3
15	**4**	**4**	**4**	4	4				3
12	**3**	3	3	**3**	**3**	3			3
15	3	3	3	**3**	**3**	3			3
8	**2**	2	2			**2**			**2**
18	4	4	4	**4**	**4**	4	**4**	**4**	3
	3	3	3			**3**	3	3	
16	3	3	3	3	3	**3**	3	3	3
4									**1**
8						1			**1**
35	6	6	6	6	6				5
30	**6**	**6**	**6**	6	6				5
30	6	6	6	6	6				5
28	**6**	**6**	**6**	6	6				5
10	3	3	3	3	3	3			**3**
10						**2**	2	2	2
6						**2**	2	2	2
90							**7**	**7**	7
90							**7**	**7**	7
80				7	7		7	7	7
70				6	6		6	6	6
70							6	6	6
40	**5**	5	5	5	5		5	5	5
60							5	5	5
40	5	5	5	4	4		5	5	5
35	**4**	4	4				4	4	4
33	**4**	4	4				4	4	4
20	4	4	4	4	4		**4**	**4**	4
15	4	4	4	**4**	**4**		**1**	**1**	4
	4	4	4	4	4				

C TiCN · Cb Carbo · D Cristall · F FIRE/nanoFIRE · P AlCrN · S TiN · S+ TiN+ · M MolyGlide · Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤5xD drilling depth

2997	661	658	662	2459	657	2458
338	345	338	345	338	338	338
HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSCO
S	S	S	S	F	S	F
N	N	GT 100	GT 100	GT 100	Ti	Ti
380	567	380	567	380	380	380

1223	1224	1221	1222
338	345	338	345
HSCO	HSCO	HSCO	HSCO
A	A	C	C
GT 100	GT 100	GT 100	GT 100
380	573	380	567





v_c m/min	Feed column no.						
	6	6	6	6	6		
	5	5	5	5	5		
	5	5	5	5	6		
	5	5	**5**	**5**	**6**		
	5	5	5	5	6		
	4	**4**	4	4	5		
	4	**4**	4	4	**5**		
34	3	3	**3**	**3**	**4**	3	4
	4	4	4	4	6		
	4	**4**	4	4	5		
	3	3	**3**	**3**	**4**		
	4	**4**	4	4	5		
	3	3	**3**	**3**	**4**		
	4	**4**	**4**	4	5		
	3	3	**3**	3	**4**		
17	3	3	**3**	**3**	**4**	3	4
11	2	2			3	**2**	**2**
22	4	4	**4**	**4**	**5**	4	5
17	3	3			4	**3**	**3**
20			3	3	4	**3**	**4**
					1		
7						2	2
	6	6	6	6	7		
	6	**6**	6	6	7		
	6	6	6	6	7		
	6	**6**	6	6	7		
14					4	**3**	**3**
12						**2**	**2**
8						**2**	**2**
					8		
					7		
	5	5	5	5	6		
	4	**4**					
	4	**4**	4	4	5		
20	4	4	**4**	**4**	**5**	4	4
	4	4	4	4	5		

v_c m/min	Feed column no.			
42			6	6
36			6	6
48			6	6
42	5	5	**6**	**6**
42			**5**	**5**
30			**5**	**5**
34			**4**	**4**
48			**7**	**7**
24			**5**	**5**
20			**4**	**4**
20			**5**	**5**
15			**4**	**4**
21			**5**	**5**
16			**4**	**4**
17			**4**	**4**
11			**3**	**3**
22			**5**	**5**
18			4	4
	7	**7**		
	7	**7**		
	7	**7**		
	7	**7**		
	7	7		
	6	6		
	5	5		
	5	5		
	5	5		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Surface finish
Type
Cooling
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤5xD drilling depth

2047	511	513	1131	1132	732	2464
338	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.
HSCO	HSCO	HSS-E-PM	HSCO	HSCO	Solid carbide	Solid carbide
	S	F		S		F
P2000	GU 500	GT 500	GT 80 IK	GT 80 IK	N	N
			axial	axial		
380	462	460	492	492	406	406









v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.	v_c m/min	Feed column no.		v_c m/min	Feed column no.	
35	**6**	38	**6**	42	6	60	7	7	100	4	5
30	**5**	33	**5**	37	5	48	6	6	90	4	5
40	6	44	**6**	47	6	60	7	7	100	**5**	**6**
40	5	40	**5**	44	6	48	6	6	90	**4**	**4**
40	**5**	44	**6**	47	6	60	6	6	100	4	5
40	**5**	44	**6**	47	6	60	6	6	90	4	5
35	**4**	40	**5**	44	**5**	50	**5**	**5**	80	4	5
25	**4**	27	4	30	4	33	**5**	**5**	80	4	5
20	3	22	3	25	**3**	31	**4**	**4**			
40	6	44	**6**	47	3	55	7	7	100	5	6
20	4	22	4	25	**4**	31	**5**	**5**	80	4	5
15	3	18	3	20	**3**	31	**4**	**4**			
20	**4**	22	4	25	**4**	30	**5**	**5**	65	4	5
15	3	16	3	18	**4**	24	**4**	**4**			
18	4	20	4	22	**5**	30	5	5	65	3	3
12	3	15	3	17	**4**	20	**4**	**4**			
12	3	13	3	14	**4**	18	**4**	**4**			
8	2	9	2	10	**2**	15	**3**	**3**	30	2	3
14	4	20	**4**	22	4	25	**5**	**5**	30	**4**	**5**
10	3	16	**4**	18	3	18	**4**	**4**	30	3	**4**
12	3	18	**4**	20	3	20	**4**	**4**	30	3	**4**
						5	**3**	**3**	25	3	3
5	2			6	2	12	**2**	**2**	20	2	3
38	6	45	**6**	50	**7**	60	7	7	115	**4**	**5**
30	6	40	**6**	44	**7**	48	**7**	**7**	100	**4**	**5**
30	6	40	**6**	44	**7**	52	7	7	90	**4**	5
25	6	30	**6**	33	**7**	40	**7**	**7**	80	**4**	**5**
10	3			16	4	15	**4**	**4**			
						18	3	3	25	**3**	**4**
						12	**3**	**3**	20	**2**	**3**
90	7								260	**7**	**8**
90	7								260	**7**	**8**
80	7					120	7	7	195	**6**	**7**
70	6					95	8	8	155	**6**	**7**
85	6	80	6						235	**5**	**6**
80	5	88	**5**			100	6	6	100	**5**	**6**
70	5	77	**5**						235	5	6
40	5	44	**5**			55	6	6	235	5	6
40	4	45	**4**	50	5				155	5	6
30	4	40	**4**	44	5	60	5	5	155	5	6
25	4	30	**4**	33	5	55	5	5	90	4	5
15	4	25	**4**	28	5	45	**5**	**5**	65	3	4
20	4	22	**4**						50	4	5
25	5	27	**4**			48	6	6	65	3	4
									100	3	4

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no. R
Guhring no. L
Standard/DIN
Tool material
Surface finish
Type
Cooling
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤10xD drilling depth

561	211	204	217 220	257	523
339	339	340	340	341	G.S.
HSS	HSS	HSS	HSS	HSS	HSS
○	◐ >Ø 2,36	●	◐ >Ø 2,36	●	●
N	N	N	N	N	N
495	495	502	502	577	584

218 221	219	501	505	535 506	551
340	340	340	341	340	341
HSS	HSS	HSS	HSS	HSS	HSS
○	○	○	○	◐ >Ø 2,36	◐ >Ø 16,0
H	W	GT50	GT50	GT 100	GT 100
502	502	502	577	502	577

666	667	655	668	656	2462
339	340	341	340	341	340
HSS	HSS	HSS	HSS	HSS	HSS
(S)	(S)	(S)	(S)	(S)	(F)
N	N	N	GT 100	GT 100	GT 100
495	502	577	502	577	502







v_c m/min	Feed column no.					
24	6	6	6	6	6	6
20	5	5	5	5	5	5
27	6	6	6	6	6	6
27	5	5	5	5	5	5
22	5	5	5	5	5	5
22	5	5	5	5	5	5
27		6	6	6	6	6
14		4	4	4	4	4
27	6	6	6	6	6	6
27	6	6	6	6	6	6
22	6	6	6	6	6	6
18	6	6	6	6	6	6
45	7	7	7	7	7	7
45	6	6	6	6	6	6
63	6	6	6	6	6	6
54	5	5	5	5	5	5
36	5	5	5	5	5	5
28	4	4	4	4	4	4
22	4	4	4	4	4	4
22	4	4	4	4	4	4
14	4	4	4	4	4	4
22	5	5	5	5	5	5

v_c m/min	Feed column no.					
24					**6**	**6**
20					**5**	**5**
27					**6**	**6**
27					5	5
22					**5**	**5**
22					**5**	**5**
27					**6**	**6**
14					4	4
27					**6**	**6**
27					6	6
22					**6**	**6**
18					6	6
		7	**7**	**7**		
		7	**7**	**7**		
45		7			**7**	**7**
45					**6**	**6**
	6		**6**	6		
54		5			**5**	**5**
	6					
36					**5**	**5**
	4					
22					**4**	**4**
14	4				**4**	**4**
	5	5	5	5		

v_c m/min	Feed column no.					
30	6	6	6	**6**	**6**	**7**
24	5	5	5	**5**	**5**	**6**
33	6	6	6	**6**	**6**	**7**
33	5	5	5	5	5	6
28	5	5	5	**5**	**5**	**6**
28	5	5	5	**5**	**5**	**6**
24	4	4	4	4	4	5
23	4	4	4	4	4	5
33	6	6	6	**6**	**6**	**7**
18	4	4	4	4	4	5
15	4	4	4	4	4	5
19	4	4	4	4	4	5
13	3	3	3	3	3	4
33	6	6	6	**6**	**6**	**7**
33	6	6	6	6	6	7
26	6	6	6	**6**	**6**	**7**
22	6	6	6	6	6	7
55	7	7	7	**7**	**7**	**8**
55	6	6	6	**6**	**6**	**7**
	6	6	6			
65	5	5	5	**5**	**5**	**6**
44	5	5	5	**5**	**5**	**6**
	4	**4**	**4**			
	4	**4**	**4**			
16	4	4	4	**4**	**4**	**5**
14	4	4	4	4	4	5
23	4	4	4	**4**	**4**	**5**
	5	5	5			

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Surface finish
Type
Cooling
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤10xD drilling depth

390	269	270	271	272	1101
G.S.	G.S.	G.S.	G.S.	G.S.	G.S.
HSS	HSS	HSS	HSS	HSS	HSS
○	●	●	●	●	●
N	N	N	N	N	N
axial	radial	axial	radial	radial	DIN 228 BK
494	585	588	588	588	587

>10xD drilling depth

235	236	237	266	267	524	528	529	525	542
1869	1869	1869	1870	1870	1869	1869	1869	1870	1870
HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
●○ >Ø 2,36	●	●	●	●	○	○	○	○	○
N	N	N	N	N	GT50	GT50	GT50	GT50	GT50
528	532	535	593	596	527	532	535	593	596



v_c m/min	Feed column no.														
26	6	6	6	6	6	6	5	5	5	5	5				
22	5	5	5	5	5	5	4	4	4	4	4				
30	6	6	6	6	6	6	5	5	5	5	5				
30	**5**	**5**	**5**	**5**	**5**	**5**	4	4	4	4	4				
24	**5**	**5**	**5**	**5**	**5**	**5**	4	4	4	4	4				
24	**5**	**5**	**5**	**5**	**5**	**5**	4	4	4	4	4				
22	4	4	4	4	4	4									
20	4	4	4	4	4	4	3	3	3	3	3				
14	3	3	3	3	3	3									
30	**6**	**6**	**6**	**6**	**6**	**6**	5	5	5	5	5				
17	4	4	4	4	4	4	3	3	3	3	3				
12	3	3	3	3	3	3									
14	4	4	4	4	4	4	3	3	3	3	3				
10	3	3	3	3	3	3									
15	**4**	**4**	**4**	**4**	**4**	**4**	3	3	3	3	3				
10	3	3	3	3	3	3	2	2	2	2	2				
10	3	3	3	3	3	3	2	2	2	2	2				
7	2	2	2	2	2	2									
30	**6**	**6**	**6**	**6**	**6**	**6**	5	5	5	5	5				
30	6	6	6	6	6	6	5	5	5	5	5				
24	**6**	**6**	**6**	**6**	**6**	**6**	5	5	5	5	5				
20	6	6	6	6	6	6	5	5	5	5	5				
7	3	3	3	3	3	3									
55												6	6	6	6	6
55	**6**											6	6	6	6	6
50	**7**	**7**	**7**	**7**	**7**	**7**	6	6	6	6	6				
50	**6**	**6**	**6**	**6**	**6**	**6**	5	5	5	5	5				
55							5	5	5	5	5	5	5	5	5	5
60	**5**	**5**	**5**	**5**	**5**	**5**	4	4	4	4	4				
40	**5**	**5**	**5**	**5**	**5**	**5**	4 4	4 4	4 4	4 4	4 4				
24	**4**	**4**	**4**	**4**	**4**	**4**	3 3	3 3	3 3	3 3	3 3				
24	**4**	**4**	**4**	**4**	**4**	**4**	3	3	3	3	3				
22	4	4	4	4	4	4									
24	**5**	**5**	**5**	**5**	**5**	**5**	3 4	3 4	3 4	3 4	3 4	4	4	4	4	4
18																

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

>10xD drilling depth

502	503	504	242	243	244	526	527	563	564	565	566	293	298	299	670	671
1869	1869	1869	G.S.	G.S.	G.S.	1870	1870	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.	1869	1869
HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
>Ø 2,36	>Ø 2,36					>Ø 16,0	>Ø 16,0			>Ø 16,0	>Ø 16,0	>Ø 16,0			S	S
GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100	GT 100
527	532	535	538	538	538	593	596	599	600	601	599	600	602	602	527	532



v_c m/min	Feed column no.															v_c m/min	Feed column no.	
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	28	5	5
18	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	22	4	4
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	28	5	5
18	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	22	4	4
22	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	28	4	4
18	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	22	4	4
																16	3	3
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	28	5	5
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	12	3	3
6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	2	2
																6	1	1
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	28	5	5
18	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	22	5	5
20	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	25	5	5
14	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	18	5	5
																70	6	6
																70	6	6
45	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	55	6	6
36	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	45	5	5
55	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	70	5	5
22	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	28	4	4
28	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	36	4	4
22	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	28	3	3
20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	25	3	3
18	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	22	3	3
																18	3	3
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	15	3	3
18	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	22	4	4

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Carbide grade
Surface finish
Type
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

≤10xD drilling depth

311	317	357	336	623	617	669	396	706
339	340	341	340	341	340	340	340	G.S.
HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	HSCO	Solid carbide
								K10/K20
>Ø 2,36	>Ø 2,36		>Ø 2,36	>Ø 16,0		S	F	
N	N	N	GT 100	GT 100	Ti	Ti	GT 100	N
495	502	577	502	577	502	502	502	526





v_c m/min	Feed column no.						v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.
	5	5	5	5	5				36	**5**		
	5	5	5	5	5				30	**4**		
	5	5	5	5	5				40	**5**		
	5	5	5	**5**	**5**				36	5		
	5	5	5	5	5				40	**5**		
	5	5	5	5	5				40	**5**		
	4	4	4	**4**	**4**				26	4		
	4	4	4	**4**	**4**				18	4		
14	3	3	3	**3**	**3**	3	15	3	15	3		
	5	5	5	5	5				32	**5**		
	4	4	4	**4**	**4**				20	4		
	3	3	3	**3**	**3**		13	3	18	3		
	4	4	4	**4**	**4**				18	4		
	3	3	3	**3**	**3**		10	3	12	3		
	4	4	4	**4**	**4**				15	4		
	3	3	3	**3**	**3**		10	3	12	3		
	3	3	3	**3**	**3**		10	3	14	**3**		
	2	2	2	2	2		8	**2**	9	**3**		
12	4	4	4	**4**	**4**	4	15	4	14	4		
8	3	3	3	2	2	**3**	10	**3**	10	**3**		
10	3	3	3	**3**	**3**	**3**	13	**3**	12	**3**		
				1	1				5	1		
5	1	1	1			1	6	1				
	6	6	6	6	6				35	**6**		
	6	6	6	**6**	**6**				30	6		
	6	6	6	6	6				30	**6**		
	6	6	6	**6**	**6**				26	6		
6	3	3	3	3	3	3	6	**3**	12	3		
8						**2**	10	**2**				
5						**2**	6	**2**				
				7	7				77	**7**		
				6	6				66	**6**		
60						5						
	5	5	5	5	5				40	**6**		
				5	5							
	5	5	5	5	5				40	**6**		
	4	4	4	5	5							
	4	4	4	5	5							
	4	4	4	4	4				21	**5**		
13	4	4	4	**4**	**4**	4	25	4	15	**5**		
	4	4	4	4	4				30	**5**	50	**4**
26						4					40	**3**
											80	**3**

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no.
Standard/DIN
Tool material
Surface finish
Type
Cooling
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.500	0.004	0.006	0.007	0.008	0.010	0.012	0.014	0.016	0.019
1.000	0.006	0.008	0.012	0.014	0.016	0.018	0.020	0.023	0.025
2.000	0.020	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125
2.500	0.025	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160
3.150	0.032	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.160
4.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.200
5.000	0.040	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250
6.300	0.050	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315
8.000	0.063	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.315
10.000	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.400
12.500	0.080	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500
16.000	0.100	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630
20.000	0.125	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.630
25.000	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	0.800
31.500	0.160	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000
40.000	0.200	0.250	0.315	0.400	0.500	0.630	0.800	1.000	1.250
50.000	0.250	0.310	0.400	0.500	0.630	0.800	1.000	1.250	1.250
63.000	0.315	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600
80.000	0.400	0.500	0.630	0.800	1.000	1.250	1.600	1.600	2.000

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

>10xD drilling depth

618	619	620	621
1869	1869	1870	1870
HSCO	HSCO	HSCO	HSCO
		>Ø 16,0	>Ø 16,0
GT 100	GT 100	GT 100	GT 100
527	532	593	596

571
1869
HSCO
GT 100
535

370	371	372
G.S.	G.S.	G.S.
HSCO	HSCO	HSCO
GT 100	GT 100	GT 100
axial	radial	radial
588	588	588

374	375	376
G.S.	G.S.	G.S.
HSCO	HSCO	HSCO
GT 100	GT 100	GT 100
axial	radial	radial
591	591	591









v_c m/min	Feed column no.			
30	4	4	4	4
25	4	4	4	4
33	4	4	4	4
30	**4**	**4**	**4**	**4**
33	4	4	4	4
33	4	4	4	4
20	**3**	**3**	**3**	**3**
14	**3**	**3**	**3**	**3**
10	**2**	**2**	**2**	**2**
29	4	4	4	4
14	**3**	**3**	**3**	**3**
10	**2**	**2**	**2**	**2**
10	**3**	**3**	**3**	**3**
8	**2**	**2**	**2**	**2**
11	**3**	**3**	**3**	**3**
8	**2**	**2**	**2**	**2**
8	**2**	**2**	**2**	**2**
5	**1**	**1**	**1**	**1**
10	**3**	**3**	**3**	**3**
8	**2**	**2**	**2**	**2**
10	**2**	**2**	**2**	**2**
3	1	1	1	1
5	**1**	**1**	**1**	**1**
20	**5**	**5**	**5**	**5**
16	**5**	**5**	**5**	**5**
5	2	2	2	2
6	**1**	**1**	**1**	**1**
5	**1**	**1**	**1**	**1**
50	6	6	6	6
40	5	5	5	5
30	4	4	4	4
45	4	4	4	4
30	4	4	4	4
25	4	4	4	4
20	4	4	4	4
16	3	3	3	3
10	**3**	**3**	**3**	**3**
14	3	3	3	3
20	3	3	3	3

v_c m/min	Feed col. no.

v_c m/min	Vorschubreihen-Code		
35	6	6	6
30	5	5	5
30	6	6	6
30	5	5	5
35	5	5	5
29	5	5	5
22	**4**	**4**	**4**
18	**4**	**4**	**4**
14	**3**	**3**	**3**
35	6	6	6
18	**4**	**4**	**4**
14	**3**	**3**	**3**
14	**4**	**4**	**4**
12	**3**	**3**	**3**
15	4	4	4
11	**3**	**3**	**3**
11	**3**	**3**	**3**
8	**2**	**2**	**2**
14	**4**	**4**	**4**
10	3	3	3
12	**3**	**3**	**3**
4	2	2	2
8	**1**	**1**	**1**
30	6	6	6
24	**6**	**6**	**6**
24	6	6	6
20	**6**	**6**	**6**
8	3	3	3
10	**2**	**2**	**2**
8	**2**	**2**	**2**
60	7	7	7
50	6	6	6
38	5	5	5
55	5	5	5
36	5	5	5
24	4	4	4
20	**4**	**4**	**4**
14	**4**	**4**	**4**
25	5	5	5

v_c m/min	Vorschubreihen-Code		
30	**5**	**5**	**5**
25	**4**	**4**	**4**
30	**5**	**5**	**5**
25	**4**	**4**	**4**
30	**4**	**4**	**4**
25	**4**	**4**	**4**
18	**3**	**3**	**3**
16	**3**	**3**	**3**
12	**2**	**2**	**2**
30	**5**	**5**	**5**
16	**3**	**3**	**3**
12	**2**	**2**	**2**
12	**3**	**3**	**3**
10	**2**	**2**	**2**
13	**3**	**3**	**3**
9	**2**	**2**	**2**
9	**2**	**2**	**2**
6	**2**	**2**	**2**
12	**3**	**3**	**3**
8	**2**	**2**	**2**
12	**2**	**2**	**2**
4	**1**	**1**	**1**
6	**1**	**1**	**1**
28	**5**	**5**	**5**
22	**5**	**5**	**5**
22	**5**	**5**	**5**
18	**5**	**5**	**5**
6	**2**	**2**	**2**
8	**2**	**2**	**2**
6	**2**	**2**	**2**
55	**6**	**6**	**6**
44	**5**	**5**	**5**
35	**4**	**4**	**4**
50	4	4	4
33	**4**	**4**	**4**
22	**4**	**4**	**4**
18	**4**	**4**	**4**
12	**4**	**4**	**4**
25	**4**	**4**	**4**

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Tools with bold feed column no. are preferred choice.
To select the optimal tool and the recommended machining parameters for your application, please also use the electronic version of the GuhringNavigator on the internet: www.guehring.de.

Guhring no. R
Guhring no. L
Standard/DIN
Tool material
Carbide grade
Surface finish
Type
Cooling
Std. range page

Drill Ø mm	Feed column no. 1	2	3	4	5	6	7	8	9
	f (mm/rev.)								
0.10	0.002	0.003	0.003	0.004	0.006	0.007	0.010	0.013	0.016
0.16	0.002	0.003	0.004	0.005	0.007	0.009	0.012	0.016	0.022
0.25	0.003	0.004	0.005	0.007	0.009	0.011	0.014	0.019	0.024
0.30	0.004	0.005	0.007	0.009	0.011	0.015	0.019	0.025	0.033
0.50	0.005	0.007	0.008	0.011	0.014	0.019	0.024	0.031	0.041
0.63	0.007	0.009	0.012	0.015	0.020	0.026	0.034	0.044	0.057
0.80	0.010	0.013	0.016	0.020	0.024	0.031	0.038	0.048	0.060
1.00	0.020	0.024	0.029	0.035	0.041	0.050	0.060	0.072	0.086
1.50	0.030	0.035	0.040	0.046	0.052	0.060	0.069	0.080	0.092
2.00	0.040	0.046	0.053	0.061	0.070	0.080	0.093	0.106	0.122

Coolant:
○ Air
● Neat oil
● Soluble oil

Cutting direction:
R right-hand cutting
L left-hand cutting

Drill Ø mm	Feed column no. for Guhring no. 6400/6401/6408/6412 56	57	58	59	60	61	62	63	64	65	66	67	68
	f (mm/rev.)												
0.50	0.006	0.012	0.018	0.022	0.030	0.035	0.040	0.045	0.050	0.050	0.055	0.060	0.060
0.80	0.008	0.016	0.024	0.032	0.040	0.050	0.060	0.070	0.080	0.080	0.080	0.090	0.090
1.00	0.012	0.022	0.032	0.042	0.060	0.070	0.080	0.090	0.100	0.100	0.110	0.110	0.120
1.50	0.021	0.036	0.051	0.066	0.090	0.100	0.120	0.130	0.150	0.150	0.160	0.170	0.180
2.00	0.032	0.052	0.072	0.092	0.120	0.140	0.160	0.180	0.200	0.210	0.220	0.230	0.240
2.50	0.045	0.070	0.095	0.120	0.150	0.170	0.200	0.220	0.250	0.260	0.270	0.280	0.300
3.00	0.060	0.090	0.120	0.150	0.180	0.210	0.240	0.270	0.300	0.310	0.330	0.340	0.360

Material group	Material examples, new description (old description in brackets) Figures in bold = material no. to DIN EN	Tensile strength MPa (N/mm²)	Hardness	Coolant
Common structural steels	**1.0035** S185(St33), **1.0486** P275N(StE285), **1.0345** P235GH(H1), **1.0425** P265GH(H2)	≤500		●
	1.0050 E295 (St50-2), **1.0070** E360 (St70-2), **1.8937** P500NH (WStE500)	≤1000		●
Free-cutting steels	**1.0718** 11SMnPb30 (9SMnPb28), **1.0736** 11SMn37 (9SMn36)	≤850		●
	1.0727 46S20 (45S20), **1.0728** (60S20), **1.0757** 46SPb20 (45SPb20)	≤1000		●
Unalloyed heat-treatable steels	**1.0402** C22, **1.1178** C30E (Ck30)	≤700		●
	1.0503 C45, **1.1191** C45E (Ck45)	≤850		●
	1.0601 C60, **1.1221** C60E (Ck60)	≤1000		●
Alloyed heat-treatable steels	**1.5131** 50MnSi4, **1.7003** 38Cr2, **1.7030** 28Cr4	≤1000		●
	1.5710 36NiCr6, **1.7035** 41Cr4, **1.7225** 42CrMo4	≤1400		●
Unalloyed case hardened steels	**1.0301** (C10), **1.1121** C10E (Ck10)	≤850		●
Alloyed case hardened steels	**1.7276** 10CrMo11, **1.5125** 11MnSi6	≤1000		●
	1.5752 15NiCr13, **1.7131** 16MnCr5, **1.7264** 20CrMo5	≤1400		●
Nitriding steels	**1.8504** 34CrAl6	≤1000		●
	1.8519 31CrMoV9, **1.8550** 34CrAlNi7	≤1400		●
Tool steels	**1.1750** C75W, **1.2067** 102Cr6, **1.2307** 29CrMoV9	≤850		●
	1.2080 X210Cr12, **1.2083** X42Cr13, **1.2419** 105WCr6, **1.2767** X45NiCrMo4	≤1400		●
High speed steels	**1.3243** S 6-5-2-5, **1.3343** S 6-5-2, **1.3344** S 6-5-3	≤1400		●
Spring steels	**1.5026** 55Si7, **1.7176** 55Cr3, **1.8159** 51CrV4 (51CrV4)		≤350 HB	●
Stainless steels, sulphured	**1.4005** X12CrS13, **1.4104** X14CrMoS17, **1.4105** X6CrMoS17, **1.4305** X8CrNiS18-9	≤900		●
austenitic	**1.4301** X5CrNi18-10 (V2A), **1.4541** X6CrNiTi18-10, **1.4571** X6CrNiMoTi 17-12-2 (V4A)	≤1100		●
martensitic	**1.4057** X20CrNi172 (X17CrNi16-2), **1.4122** X39CrMo17-1, **1.4521** X2CrMoTi18-2	≤1500		●
Hardened steels	–		≤48 HRC	●
			≤66 HRC	●
Special alloys	Nimonic, Inconel, Monel, Hastelloy	≤2000		●
Cast iron	**0.6010** EN-GJL-100 (GG10), **0.6020** EN-GJL-200 (GG20)		≤240 HB	● ○
	0.6025 EN-GJL-250 (GG25), **0.6035** EN-GJL-350 (GG35)		≤350 HB	● ○
Spheroidal graphite iron and	**0.7050** EN-GJS-500-7 (GGG50), **0.8035** EN-GJMW-350-4 (GTW35)		≤240 HB	●
malleable cast iron	**0.7070** EN-GJS-700-2 (GGG70), **0.8170** EN-GJMB-700-2 (GTS70)		≤350 HB	●
Chilled cast iron	–		≤350 HB	●
Ti and Ti-alloys	**3.7024** Ti99,5, **3.7114** TiAl5Sn2,5, **3.7124** TiCu2	≤850		●
	3.7154 TiAl6Zr5, **3.7165** TiAl6V4, **3.7184** TiAl4Mo4Sn2,5, - TiAl8Mo1V1	≤1400		●
Aluminium and Al-alloys	**3.0255** Al99,5, **3.2315** AlMgSi1, **3.3515** AlMg1	≤400		●
Al wrought alloys	**3.0615** AlMgSiPb, **3.1325** AlCuMg1, **3.3245** AlMg3Si, **3.4365** AlZnMgCu1,5	≤650		●
Al cast alloys ≤ 10 % Si	**3.2131** G-AlSi5Cu1, **3.2153** G-AlSi7Cu3, **3.2573** G-AlSi9	≤600		●
≤ 24 % Si	**3.2581** G-AlSi12, **3.2583** G-AlSi12Cu, - G-AlSi12CuNiMg	≤600		●
Magnesium alloys	**3.5200** MgMn2, **3.5812.05** G-MgAl8Zn1, **3.5612.05** G-MgAl6Zn1	≤400		○
Copper, low-alloyed	**2.0070** SE-Cu, **2.1020** CuSn6, **2.1096** G-CuSn5ZnPb	≤500		●
Brass, short-chipping	**2.0380** CuZn39Pb2, **2.0401** CuZn39Pb3, **2.0410** CuZn43Pb2	≤600		●
long-chipping	**2.0250** CuZn20, **2.0280** CuZn33, **2.0332** CuZn37Pb0,5	≤600		●
Bronze, short-chipping	**2.1090** CuSn7ZnPb, **2.1170** CuPb5Sn5, **2.1176** CuPb10Sn	≤600		● ●
	2.0790 CuNi18Zn19Pb	≤850		●
Bronze, long-chipping	**2.0916** CuAl5, **2.0960** CuAl9Mn, **2.1050** CuSn10	≤850		●
	2.0980 CuAl11Ni, **2.1247** CuBe2	≤1000		●
Duroplastics	Bakelit, Resopal, Pertinax, Moltopren	≤150		○
Thermoplastics	Plexiglass, Hostalen, Novodur, Makralon	≤100		● ○
New cast materials GGV	**EN-GJV250** (GGV25), **EN-GJV350** (GGV35)		≤220 HB	● ○
	EN-GJV400 (GGV40), **EN-GJV500** (GGV50), SiMo 6		≤300 HB	● ○
New cast materials ADI	**EN-GJS-800-8** (ADI800), **EN-GJS-1000-5** (ADI1000)	≤1000		● ○
	EN-GJS-1200-2 (ADI1200), **EN-GJS-1400-1** (ADI1400)	≤1400		● ○
Kevlar	Kevlar	≤1000		○
Glass, carbon concentrated plastics	GFK/CFK	≤1000		○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

				≤4xD	≤7xD	≤8xD	≤15xD
301 303	660	701	3899	6400	6401	6408	6412
1899	1899	G.S.	G.S.	G.S.	G.S.	G.S.	G.S.
HSS-E-PM	HSS-E-PM	Solid carbide	Solid carbide	Sol. carb.	Sol. carb.	Sol. carb.	Sol. carb.
		K10/K20	K/P	K/P	K/P	K/P	K/P
○	(S)	○	(A)	(A)	(A)	(A)	(A)
N	N	N	N	N	N	N	N
						axial	axial
476	476	476	483	485	487	489	491










v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed col. no.	v_c m/min	Feed column no.		v_c m/min	Feed column no.	
21	106	27	106	50	105	100	**62**	100	**64**	**62**	105	**58**	**58**
18	105	23	105	35	104	100	**62**	100	**64**	**62**	100	**58**	**58**
18	106	23	106	50	**105**	100	**62**	100	**64**	**62**	105	**59**	**59**
16	105	21	105	45	**104**	90	**61**	90	**63**	**61**	90	**59**	**59**
20	105	26	105	45	104	90	**62**	90	**64**	**62**	95	**58**	**58**
18	105	23	105	35	104	90	**62**	90	**64**	**62**	95	**58**	**58**
14	**104**	18	**104**	30	103	90	**61**	90	**63**	**61**	90	**58**	**58**
14	**104**	18	**104**	30	103	90	**61**	90	**63**	**61**	90	**58**	**58**
12	103	16	103			70	**60**	70	**62**	**60**	70	**58**	**58**
18	106	23	106	50	103	100	**61**	100	**63**	**61**	100	**57**	**57**
14	**104**	18	**104**	40	103	85	**61**	85	**63**	**61**	85	**58**	**58**
12	103	16	103			70	**60**	70	**62**	**60**	70	**58**	**58**
14	**104**	18	**104**	25	103	70	**60**	70	**62**	**60**	70	**57**	**57**
12	103	16	103			60	**60**	60	**62**	**60**	60	**57**	**57**
16	**104**	20	**104**	25	103	50	**60**	50	**62**	**60**	50	**58**	**58**
14	103	18	103			60	**60**	60	**62**	**60**	50	**58**	**58**
14	103	18	103								50	**57**	**57**
8	102	10	102	20	102						50	57	57
18	104	20	104	25	**103**						70	**57**	**57**
14	103	16	103	25	**102**						60	**56**	**56**
16	103	18	103	25	**102**						70	**57**	**57**
				15	104								
				15	**103**						25	56	56
26	106	33	106	80	**105**	130	**66**	130	**68**	**66**	150	**60**	**60**
22	**106**	28	**106**	60	**105**	130	**66**	130	**68**	**66**	140	**60**	**60**
18	106	23	106	60	105	130	**66**	130	**68**	**66**	140	**60**	**60**
22	**106**	28	**106**	50	**105**	120	**65**	120	**67**	**65**	130	**60**	**60**
				45	**104**						35	56	56
				25	**104**						35	56	56
				160	**107**						70	68	68
				150	**106**						70	68	68
26	107			100	**106**						135	59	59
18	106			60	**106**						135	59	59
75	106	80	106	150	**105**								
42	105	53	105	50	**105**								
				67	106								
22	105	28	105	44	104								
22	104	28	104	68	103								
18	104	23	104	49	103								
13	104	16	104	53	103								
		14	104	36	103								
16	104	20	104	50	103								
18	104	23	104	36	103								
				60	104								

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	1184
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	198

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2480
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	198

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2472
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	198

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Close diameter tolerances
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	2475
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	F
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.70
Standard range page	198

Ratio drills without oil feed



Special geometry
Maximum tool life
High process reliability

heat treatable and alloyed steels up to 1200 N/mm²
hardened steels 40 to 48 HRC
Inconel, Monel, Hastelloy

Guhring no.	8524
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	Y
Type	RT 100 HF
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	198

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2717
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	204

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2996
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	204

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2719
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	204

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Close diameter tolerances
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	2712
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	204

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Very good surface quality of hole
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	1242
Standard	DIN 6539
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	209

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2473
Standard	DIN 6539
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	209

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Very good self-centering characteristics
Highest cutting rates
Short chips
Close diameter tolerances
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	1702
Standard	DIN 6539
Tool material	Solid carbide
Surface	S
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	209

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	1243
Standard	Guhring std.
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	5.00
Standard range page	213

Ratio drills without oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Very good self-centering characteristics
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Chatter-free, defined feed
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2474
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	5.00
Standard range page	213

Ratio drills with oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	1181
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	216

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Ratio drills with oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2477
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	216

Ratio drills with oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2469
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	216

Ratio drills with oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	1660
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	S
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

Ratio drills with oil feed



Optimized cutting geometry
Special web thinning
Special point grind
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	1180
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	S
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

Ratio drills with oil feed



Optimized cutting geometry
Special web thinning
Special point grind
nanoFIRE coating
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	2468
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	F
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

stainless/acid/heat resistant steels
Titanium and Titanium alloys
Inconel, Monel, Hastelloy
high alloyed steels
Al-alloys

Guhring no.	8510
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	a
Type	RT 100 VA
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

stainless/acid/heat resistant steels
Titanium and Titanium alloys
Inconel, Monel, Hastelloy
high alloyed steels
Al-alloys

Guhring no.	8610
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	a
Type	RT 100 VA
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

heat treatable and alloyed steels up to 1200 N/mm²
hardened steels 40 to 48 HRC
Inconel, Monel, Hastelloy

Guhring no.	8520
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	Y
Type	RT 100 HF
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

heat treatable and alloyed steels up to 1200 N/mm²
hardened steels 40 to 48 HRC
Inconel, Monel, Hastelloy

Guhring no.	8620
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	Y
Type	RT 100 HF
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	217

Ratio drills with oil feed



Very good self-centering characteristics
High productivity
High cutting rates
Close diameter tolerances
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
Observe optimal coolant pressure
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

Aluminium and Al-alloys
with high Si-content

Guhring no.	768
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	RT 150 GG
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	3.00
Standard range page	230

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Ratio drills with oil feed

Guhring no.	6068
Standard	Guhring std.
Tool material	Solid carbide
Surface	
Type	RT 150 GG
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	230



Very good self-centering characteristics
High productivity
High cutting rates
Close diameter tolerances
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
Observe optimal coolant pressure
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

short chipping cast materials

Ratio drills with oil feed

Guhring no.	1663
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	234



Optimized cutting edge geometry
Special web thinning
Special point grind
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Ratio drills with oil feed

Guhring no.	1183
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	234



Optimized cutting edge geometry
Special web thinning
Special point grind
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Ratio drills with oil feed

Guhring no.	2479
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	234



Optimized cutting edge geometry
Special web thinning
Special point grind
nanoFIRE coating
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Ratio drills with oil feed

Guhring no.	2471
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	234



Optimized cutting edge geometry
Special web thinning
Special point grind
nanoFIRE coating
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	1662
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	S
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	1182
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	S
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
nanoFIRE coating
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	2478
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
nanoFIRE coating
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

high alloyed steels
stainless/acid/heat resistant steels
Inconel, Monel, Hastelloy
brass, bronzes
Aluminium and Al-alloys
Magnesium and Magnesium alloys
Titanium and Titanium alloys
sintered powder metals

Guhring no.	2470
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 F
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Special geometry
Radius point grind
nanoFIRE coating
Maximum tool life
High process reliability

CGI and ADI
cast materials
grey cast iron, malleable and spheroidal iron

Guhring no.	6501
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	F
Type	RT 100 R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	
Web thinned ≥Ø	3.00
Standard range page	235

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

stainless/acid/heat resistant steels
Titanium and Titanium alloys
Inconel, Monel, Hastelloy
high alloyed steels
Al-alloys

Guhring no.	8511
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	a
Type	RT 100 VA
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

stainless/acid/heat resistant steels
Titanium and Titanium alloys
Inconel, Monel, Hastelloy
high alloyed steels
Al-alloys

Guhring no.	8611
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	a
Type	RT 100 VA
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

heat treatable and alloyed steels up to 1200 N/mm²
hardened steels 40 to 48 HRC
Inconel, Monel, Hastelloy

Guhring no.	8521
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	Y
Type	RT 100 HF
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

heat treatable and alloyed steels up to 1200 N/mm²
hardened steels 40 to 48 HRC
Inconel, Monel, Hastelloy

Guhring no.	8621
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	Y
Type	RT 100 HF
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	235

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	2711
Standard	Guhring std.
Tool material	Solid carbide
Surface	S
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	248

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
nanoFIRE coating
Straight shank without flat
Highest cutting rates
Short chips
Alignment accurate holes
Application in hydraulic chucks
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	4044
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	248

Ratio drills with oil feed



Optimized cutting edge geometry
Special web thinning
Special point grind
nanoFIRE coating
Highest cutting rates
Short chips
Alignment accurate holes
Powerful machines
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

structural and case hardened steels
cast steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
carbon steels, bronze, cast iron
high alloyed AlSi-alloys

Guhring no.	4045
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	RT 100 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	248

Ratio drills with oil feed



Special geometry
Radius point grind
nanoFIRE coating
Maximum tool life
High process reliability

CGI and ADI
cast materials
grey cast iron, malleable and spheroidal iron

Guhring no.	6502
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	RT 100 R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	
Web thinned ≥Ø	4.00
Standard range page	248

Ratio drills with oil feed



Special geometry
Maximum tool life
High process reliability

heat treatable and alloyed steels up to 1200 N/mm²
hardened steels 40 to 48 HRC
Inconel, Monel, Hastelloy

Guhring no.	8522
Standard	Guhring std.
Tool material	Solid carbide
Surface	Y
Type	RT 100 HF
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	3.00
Standard range page	248

Ratio drills with oil feed



Very good self-centering characteristics
High productivity
High cutting rates
Close diameter tolerances
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
Observe optimal coolant pressure
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

Aluminium and Al-alloys
with high Si-content

Guhring no.	769
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	RT 150 GG
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	3.00
Standard range page	253

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Ratio drills with oil feed



Very good self-centering characteristics
High productivity
High cutting rates
Close diameter tolerances
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
Observe optimal coolant pressure
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

short chipping cast materials

Guhring no.	6069
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	RT 150 GG
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	253

Ratio drills with oil feed



Very good self-centering characteristics
High productivity
High cutting rates
Close diameter tolerances
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
Observe optimal coolant pressure
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

Aluminium and Al-alloys
with high Si-content

Guhring no.	770
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	RT 150 GG
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	3.00
Standard range page	255

Ratio drills with oil feed



Very good self-centering characteristics
High productivity
High cutting rates
Close diameter tolerances
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
short chipping cast materials

short chipping cast materials

Guhring no.	6070
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	RT 150 GG
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	255

Ratio drills with oil feed



Negative helix
Extremely quiet spotting characteristics
High dynamic stability
For dimensionally very accurate holes
Very good surface quality of hole
Application in hydraulic chucks
Alignment accurate tool holders
Powerful machines
Observe optimal coolant pressure
Max. conc. error of clamped tool 0.02 mm
Play-free spindles

Aluminium and Al-alloys
with high Si-content
Cast Iron

Guhring no.	773
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	RT 150 GN
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	5.00
Standard range page	257

Ratio drills with oil feed



Special geometry
Optimised flute design
Maximum diameter of coolant ducts
Highest cutting rates
Short chips
Application in hydraulic chucks
Observe optimal coolant pressure

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6509
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	RT 100 T
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	3.00
Standard range page	258

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Ratio drills with oil feed



Special geometry
Optimised flute design
Maximum diameter of coolant ducts
Highest cutting rates
Short chips
Application in hydraulic chucks
Observe optimal coolant pressure

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6511
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	RT 100 T
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	3.00
Standard range page	260

Ratio drills with oil feed



Special geometry
Optimised flute design
Maximum diameter of coolant ducts
Highest cutting rates
Short chips
Application in hydraulic chucks
Observe optimal coolant pressure

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6512
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	RT 100 T
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	3.00
Standard range page	262

Ratio drills with oil feed



Special geometry
Optimised flute design
Maximum diameter of coolant ducts
Highest cutting rates
Short chips
Application in hydraulic chucks
Observe optimal coolant pressure

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6513
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	RT 100 T
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	3.00
Standard range page	264

Ratio drills with oil feed



Special geometry
Optimised flute design
Maximum diameter of coolant ducts
Highest cutting rates
Short chips
Application in hydraulic chucks
Observe optimal coolant pressure

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6514
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	RT 100 T
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	3.00
Standard range page	265

Ratio drills with oil feed



HSS holder with brazed carbide insert
Special geometry
Dampens vibrations and shocks
Highest cutting rates
Optimal chip fracture and short chips
Close diameter tolerances
Alignment accurate holes
Alignment accurate tool holders
Coolant press./volume s. Techn. Section
Powerful machines
Max. conc. error of clamped tool 0.02 mm

unalloyed/low alloyed steels
grey cast iron, spheroidal graphite iron
brass, bronzes, plastics, graphite

Guhring no.	1171
Standard	DIN 6538 K
Tool material	Carbide
Surface	S
Type	RT 80 U
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	9.50
Standard range page	266

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A TiAlN SuperA

Ratio drills with oil feed



HSS holder with brazed carbide insert
Special geometry
Dampens vibrations and shocks
Highest cutting rates
Optimal chip fracture and short chips
Close diameter tolerances
Alignment accurate holes
Alignment accurate tool holders
Coolant press./volume s. Techn. Section
Powerful machines
Max. conc. error of clamped tool 0.02 mm

unalloyed/low alloyed steels
grey cast iron, spheroidal graphite iron
brass, bronzes, plastics, graphite

Guhring no.	1172
Standard	DIN 6538 M
Tool material	Carbide
Surface	S
Type	RT 80 U
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	9.50
Standard range page	269

Ratio drills with oil feed



HSS holder with brazed carbide insert
Special geometry
Dampens vibrations and shocks
Highest cutting rates
Optimal chip fracture and short chips
Close diameter tolerances
Alignment accurate holes
Alignment accurate tool holders
Coolant press./volume s. Techn. Section
Powerful machines
Max. conc. error of clamped tool 0.02 mm

unalloyed/low alloyed steels
grey cast iron, spheroidal graphite iron
brass, bronzes, plastics, graphite

Guhring no.	1173
Standard	DIN 6538 L
Tool material	Carbide
Surface	S
Type	RT 80 U
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	9.50
Standard range page	271

3-flute Ratio drills



Short design
Wide flutes
Three flutes
Optimal centering
Very high feed rates
Spotting on oblique surfaces
Application under difficult conditions
Reboring with interrupted cutting
Maximum process reliability

cast iron
long chipping Al alloys

Guhring no.	2713
Standard	DIN 6537 L
Tool material	Solid carbide
Surface	◯
Type	FT 200 G
Cutting direction	right-hand
Point geometry	Spiro-point grind
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	273

3-flute Ratio drills



Three flutes
Very good self-centering characteristics
For dimensionally very accurate holes
Very good surface quality of hole

cast steel
alloyed/unalloyed steels over 1000 N/mm²

Guhring no.	731
Standard	DIN 6539
Tool material	Solid carbide
Surface	◯
Type	GS 200 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	150
Web thinned ≥Ø	
Standard range page	275

3-flute Ratio drills



Three flutes
Very good self-centering characteristics
For dimensionally very accurate holes
Very good surface quality of hole

cast steel
alloyed/unalloyed steels over 1000 N/mm²

Guhring no.	611
Standard	DIN 6539
Tool material	Solid carbide
Surface	S
Type	GS 200 U
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	150
Web thinned ≥Ø	
Standard range page	275

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

3-flute Ratio drills



Three flutes
Very good self-centering characteristics
For dimensionally very accurate holes
Very good surface quality of hole

grey cast iron, chilled cast iron
short chipping brass, bronze
short chipping Al-alloys
Al alloys with high Si-content
fiber reinforced plastics
Duroplastics
Hardened steels

Guhring no.	745
Standard	DIN 6539
Tool material	Solid carbide
Surface	◯
Type	GS 200 G
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	150
Web thinned ≥Ø	
Standard range page	275

3-flute Ratio drills



Three flutes
Very good self-centering characteristics
For dimensionally very accurate holes
Very good surface quality of hole

Grey cast iron
long chipping Al cast alloys

Guhring no.	1025
Standard	DIN 6539
Tool material	Solid carbide
Surface	◯
Type	GS 200 G
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	150
Web thinned ≥Ø	
Standard range page	275

3-flute Ratio drills



Three flutes
Very good self-centering characteristics
For dimensionally very accurate holes
Very good surface quality of hole

high tensile steels
long chipping Al alloys

Guhring no.	1027
Standard	DIN 6539
Tool material	Solid carbide
Surface	(S)
Type	GS 200 F
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	150
Web thinned ≥Ø	
Standard range page	275

3-flute stepped Ratio drills



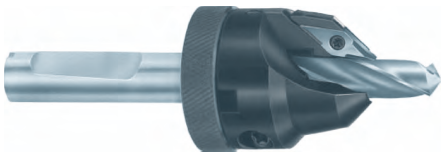
Three flutes
Very good self-centering characteristics
For dimensionally very accurate holes
Very good surface quality of hole

grey cast iron, chilled cast iron
short chipping brass, bronze
short chipping Al-alloys
Al alloys with high Si-content
fiber reinforced plastics
Duroplastics

Guhring no.	1032
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	GS 200 G
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	150
Web thinned ≥Ø	
Standard range page	279

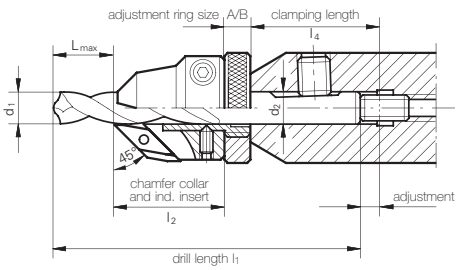
◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

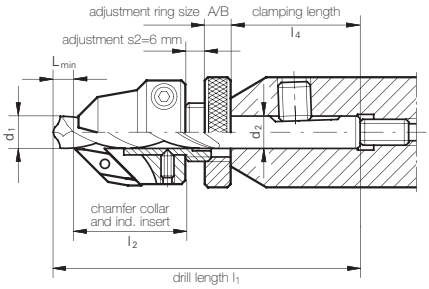
FR 90 chamfer collar



Product information
For the production of tapping size holes with a 90° chamfer. Ideal combination: Ratio drill plus chamfer collar FR 90. In comparison with other designs, the FR 90 has the main advantage of also being suitable for use with standard carbide and high speed steel drills, with or without coolant ducts and with slow or quick helix angles. Modifications to the shank i.e. whistle notch flats or to the drill body for the indexable insert are not necessary. Especially suitable for the drilling of cast iron and AlSi-alloys, but also for structural and heat-treatable steels.

Guhring no.	1052
Standard	Guhring std.
Tool material	depend. on insert
Surface finish	depend. on insert
Type	FR 90
Cutting direction	rh
Grinding	
Point angle°	
Web thinned	
Standard range, page	341





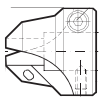
basic body / drill	size	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	l_2 mm	29	29	29	29	33	33	33	33	39	39	39	39	45	45
	d_1 > mm	4,9	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
	d_2 mm	6	6	8	8	10	10	12	12	14	14	16	16	18	18
	l_4 mm	36	36	36	36	40	40	45	45	45	45	48	48	48	48
3x D adjustment ring size A	L_{max}	–	–	12	12	14	14	22	22	21	21	26	26	28	28
	L_{min}	–	–	0	0	2	2	10	10	9	9	14	14	16	16
3x D adjustment ring size B	L_{max}	–	–	–	–	–	–	10	10	9	9	14	14	16	16
	L_{min}	–	–	–	–	–	–	0	0	0	0	2	2	4	4
5x D adjustment ring size A	L_{max}	15	15	24	24	28	28	38	38	38	38	44	44	48	48
	L_{min}	3	3	12	12	16	16	26	26	26	26	32	32	36	36
5x D adjustment ring size B	L_{max}	–	–	12	12	16	16	26	26	26	26	32	32	36	36
	L_{min}	–	–	0	0	4	4	14	14	14	14	20	20	24	24



Guhring no.	1156
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K
Surface finish	○
Standard range, page	340



Guhring no.	1056
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface finish	S
Standard range, page	340



Guhring no.	145
Standard	Guhring std.
	Chamfer collar
Standard range, page	341



Guhring no.	1053
Standard	Guhring std.
	Clamping sleeve
Standard range, page	341



Guhring no.	1054
Standard	Guhring std.
	Adjustment
Standard range, page	341



Guhring no.	1055
Standard	Guhring std.
	Clamping piece
Standard range, page	340



Guhring no.	1072
Standard	Guhring std.
	Torx screw
Standard range, page	341



Guhring no.	4072
Standard	Guhring std.
	Adjusting element
Standard range, page	340



Guhring no.	1612
Standard	Guhring std.
	Screwdriver
Standard range, page	341



Guhring no.	4912
Standard	Guhring std.
	Screwdriver
Standard range, page	341

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Tool holders for interchangeable inserts HT 800



nickel-plated
Especially high wear resistance
Optimised flute design
Especially high rigidity

Guhring no.	4106
Standard	Guhring std.
Tool material	
Surface	
Type	HT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	280

Tool holders for interchangeable inserts HT 800



nickel-plated
Especially high wear resistance
Optimised flute design
Especially high rigidity

Guhring no.	4107
Standard	Guhring std.
Tool material	
Surface	
Type	HT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	283

Tool holders for interchangeable inserts HT 800



nickel-plated
Especially high wear resistance
Optimised flute design
Especially high rigidity

Guhring no.	4108
Standard	Guhring std.
Tool material	
Surface	
Type	HT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	286

Tool holders for interchangeable inserts HT 800



nickel-plated
Especially high wear resistance
Optimised flute design
Especially high rigidity

Guhring no.	4109
Standard	Guhring std.
Tool material	
Surface	
Type	HT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	289

Tool holders for interchangeable inserts HT 800



nickel-plated
Especially high wear resistance
Optimised flute design
Especially high rigidity

Guhring no.	4110
Standard	Guhring std.
Tool material	
Surface	
Type	HT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	292

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A TiAlN SuperA

Tool holders for interchangeable inserts HT 800



nickel-plated
Especially high wear resistance
Optimised flute design
Especially high rigidity

For piloting and countersinking 45°

Guhring no.	4105
Standard	Guhring std.
Tool material	
Surface	
Type	HT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	295

Interchangeable inserts HT 800



Especially high wear resistance
nanoFIRE coating

alloyed/unalloyed steel and cast steel

Guhring no.	4112
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	
Standard range page	296

Interchangeable inserts HT 800



Especially high wear resistance

grey cast iron, malleable and spheroidal iron

Guhring no.	4113
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	
Standard range page	297

Interchangeable inserts HT 800



Especially high wear resistance

Aluminium and Al-alloys
non-ferrous metals

Guhring no.	4114
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	
Standard range page	297

Interchangeable inserts HT 800



Especially high wear resistance

Stainless steels

Guhring no.	4115
Standard	Guhring std.
Tool material	Solid carbide
Surface	a
Type	
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	140
Web thinned ≥Ø	
Standard range page	297

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Interchangeable inserts HT 800



Especially high wear resistance

Piloting in all materials

Guhring no.	4111
Standard	Guhring std.
Tool material	Solid carbide
Surface	a
Type	
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	145
Web thinned ≥Ø	
Standard range page	304

Countersinking insert HT 800



Aluminium and Al-alloys
non-ferrous metals

Guhring no.	7635
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	308

Countersinking insert HT 800



alloyed/unalloyed steel and cast steel

Guhring no.	7645
Standard	Guhring std.
Tool material	Solid carbide
Surface	S
Type	
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	309

Countersinking insert HT 800



grey cast iron, malleable and spheroidal iron

Guhring no.	7632
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	
Cutting direction	neutral
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	310

Tool holders for interchangeable inserts RT 800



Short design
high rigidity
high feed rates
Secure clamping of interchangeable insert in the holder.

Guhring no.	5242
Standard	Guhring std.
Tool material	
Surface	
Type	RT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	316

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Tool holders for interchangeable inserts RT 800



Short design
high rigidity
high feed rates
Secure clamping of interchangeable insert in the holder.

Guhring no.	5243
Standard	Guhring std.
Tool material	
Surface	
Type	RT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	317

Tool holders for interchangeable inserts RT 800



Short design
high rigidity
high feed rates
Secure clamping of interchangeable insert in the holder.

Guhring no.	5248
Standard	Guhring std.
Tool material	
Surface	
Type	RT 800 WP
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	318

Interchangeable inserts RT 800



cast and AlSi alloys

Guhring no.	2747
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	319

Interchangeable inserts RT 800



steels up to 1000 N/mm²

Guhring no.	2485
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	321

Interchangeable inserts RT 800



steels up to 1000 N/mm²

Guhring no.	1047
Standard	Guhring std.
Tool material	Solid carbide
Surface	S
Type	
Cutting direction	right-hand
Point geometry	
Point angle °	
Web thinned ≥Ø	
Standard range page	323

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Standard range, page 329

Basic tool holders

HSK tool holding modules

SK holders **4512**

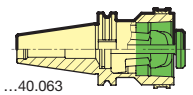
Straight (VDI) holders **4510**

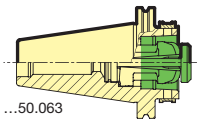
Reductions **4355**

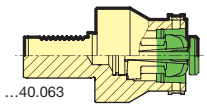
Extensions **4549**

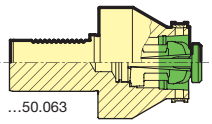
• Guhring no.
…Code no.

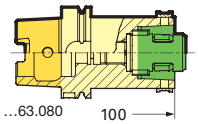
holder size	Ø nom.* range
400 (40…42.9)	40.0
	41.0
	42.0
430 (43…45.9)	43.0
	44.0
	45.0
460 (46…48.9)	46.0
	47.0
	48.0
490 (49…51.9)	49.0
	50.0
	51.0
520 (52…55.9)	52.0
	53.0
	54.0
	55.0
560 (56…59.9)	56.0
	57.0
	58.0
	59.0

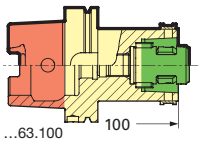




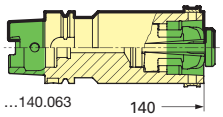


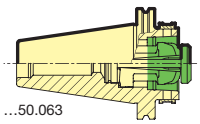


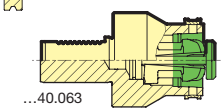


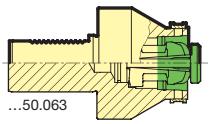


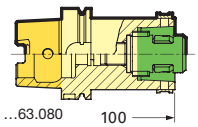


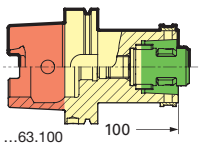


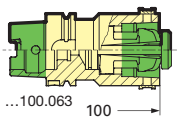


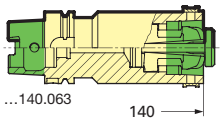






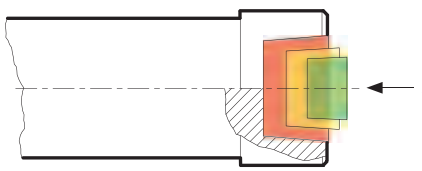






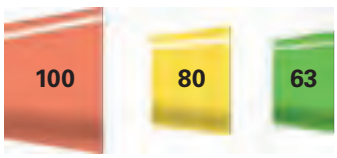
• When ordering please always state Guhring no. and code no!

* for intermediate Ø please consult Guhring application technician.



direct installation in the spindle

HSK size





bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A AlTiN SuperA

HSK
basic holders

15° spiral design
4142

Extensions
3 x D

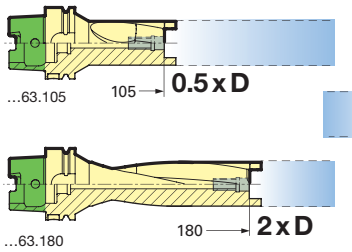
15° spiral design
4148

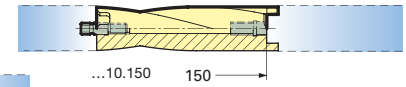
Drill heads
1 x D

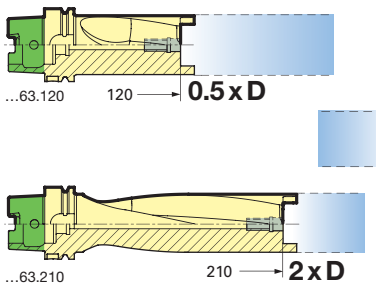
4150

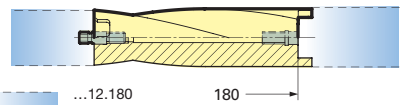
Cartridges
for mounting the external indexable inserts
(x 2 per drill head)

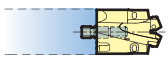
4160

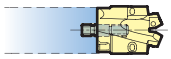


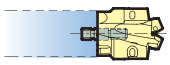


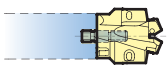


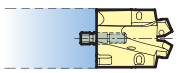


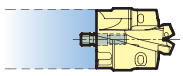




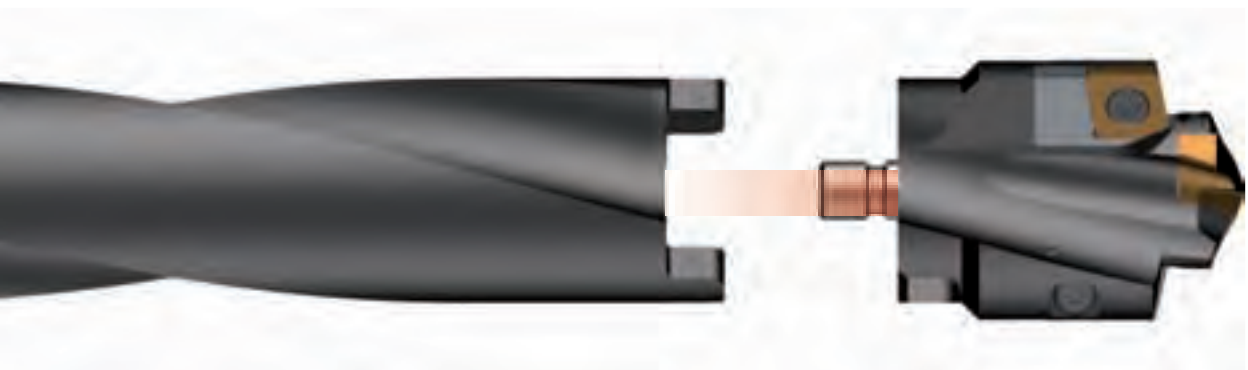








Ø nom.* range	holder size		
40.0	400		…40.046
41.0			
42.0			
43.0	430		…40.046
44.0			
45.0			
46.0	460		…46.056
47.0			
48.0			
49.0	490		…46.056
50.0			
51.0			
52.0	520		…46.056
53.0			
54.0			
55.0			
56.0	560		…56.065
57.0			
58.0			
59.0			



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Standard range, page 329

Basic tool holders

HSK tool holding modules

SK holders **4512**

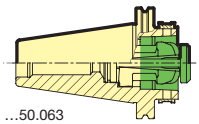
Straight (VDI) holders **4510**

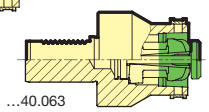
Reductions **4355**

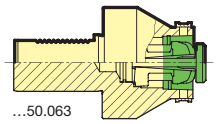
Extensions **4549**

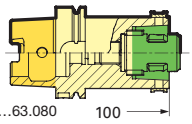
• Guhring no.
…Code no.

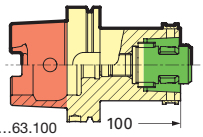
holder size	Ø nom.* range
600 (60…64.9)	60.0
	61.0
	62.0
	63.0
	64.0
650 (65…69.9)	65.0
	66.0
	67.0
	68.0
	69.0
700 (70…74.9)	70.0
	71.0
	72.0
	73.0
	74.0
750 (75…79.9)	75.0
	76.0
	77.0
	78.0
	79.0
800 (80…84.9)	80.0
	81.0
	82.0
	83.0
	84.0
850 (85…89.9)	85.0
	86.0
	87.0
	88.0
	89.0
900 (90…94.9)	90.0
	91.0
	92.0
	93.0
	94.0
950 (95…100)	95.0
	96.0
	97.0
	98.0
	99.0
	100.0

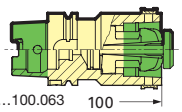


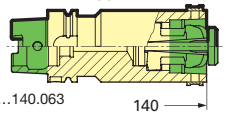


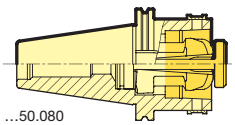


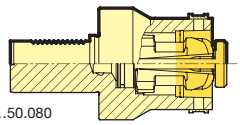


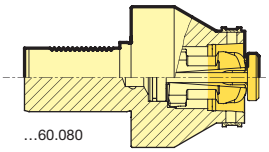


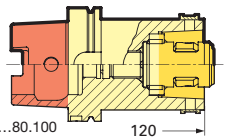


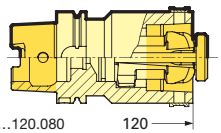


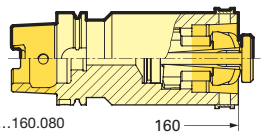


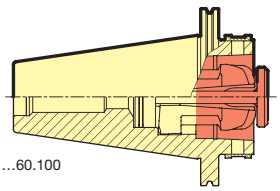


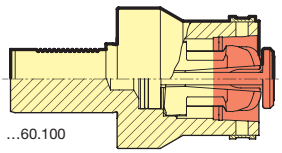


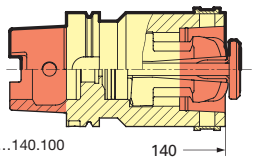


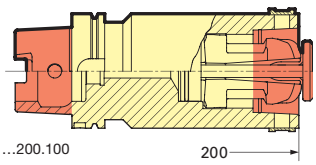






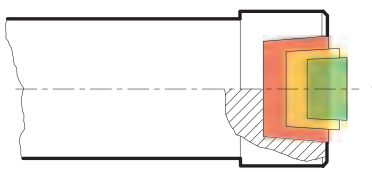




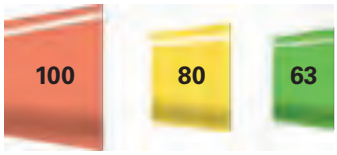


• When ordering please always state Guhring no. and code no!

* for intermediate Ø please consult Guhring application technician.



HSK size



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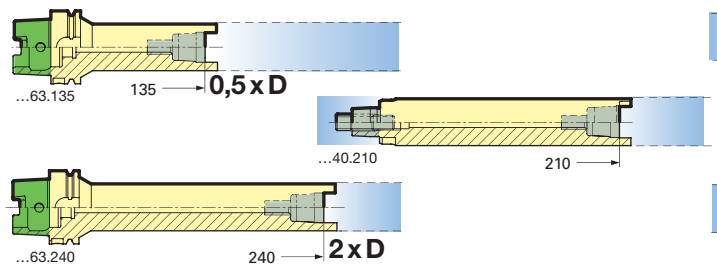
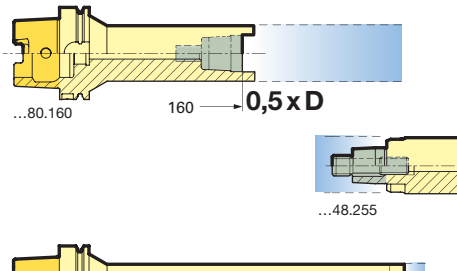
HSK
basic holders
straight stepped design,
without chip space
4144

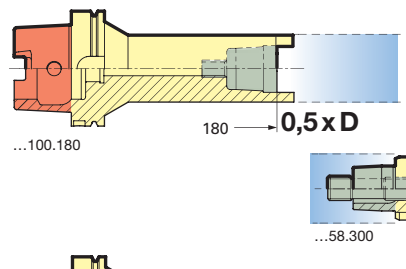
Extensions
3 x D
straight stepped design,
without chip space
4149

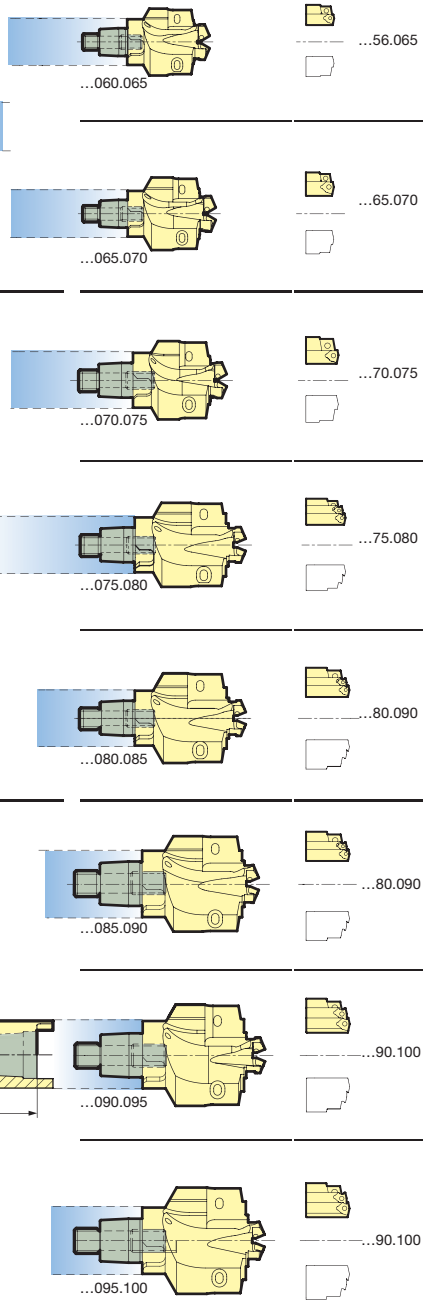
Drill heads
1 x D
4150

Cartridges
for mounting the external
indexable inserts
(x 2 per drill head)
4160









Ø nom.* range	holder size
60.0	600
61.0	
62.0	
63.0	
64.0	
65.0	650
66.0	
67.0	
68.0	
69.0	
70.0	700
71.0	
72.0	
73.0	
74.0	
75.0	750
76.0	
77.0	
78.0	
79.0	
80.0	800
81.0	
82.0	
83.0	
84.0	
85.0	850
86.0	
87.0	
88.0	
89.0	
90.0	900
91.0	
92.0	
93.0	
94.0	
95.0	950
96.0	
97.0	
98.0	
99.0	
100.0	

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Std. range, page 337

Central interchangeable inserts



Guhring no.	2747	1047	2485
Tool material	Solid carbide	Solid carbide	Solid carbide
Carbide grade	K	K/P	K/P
Surface finish	○	S	F
especially suitable for	cast materials aluminium/Al-alloys plastics	universal steel and cast machining	universal steel and cast machining
			

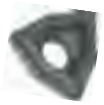
Indexable inserts Type CCHX (external)



Guhring no.	4179	4180	4181	4182
Design feature	with circular lands	with circular lands	with circular lands	with circular lands
Tool material	Solid carbide	Solid carbide	Solid carbide	Solid carbide
Carbide grade	N15	K10	P25	M35
Surface finish	○	S	S	S
especially suitable for	aluminium/Al-alloys plastics	cast materials	universal steel and cast materials	C-steels, stainless and acid-resistant steels
size 09				
size 12				

Indexable inserts Type LTT (internal)



Guhring no.	4170	4171	4172	4173
Design feature	with circular lands	with circular lands	with circular lands	with circular lands
Tool material	Solid carbide	Solid carbide	Solid carbide	Solid carbide
Carbide grade	N10	K10	P25	P40
Surface finish	○	○	S	A
especially suitable for	non-ferrous metals, aluminium/Al-alloys plastics	cast materials	universal steel and cast materials	C-steels, stainless and acid-resistant steels
size 05				
size 06				

○ bright ◐ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

Cartridges for mounting external indexable inserts (2 cartridges per drilling head)



for size **400**



for size **560**



for size **950**

Drill heads (mounting examples)



for size **400**

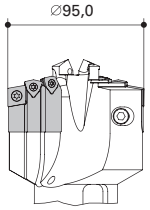


for size **560**

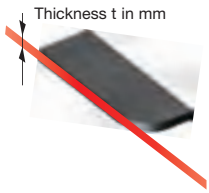


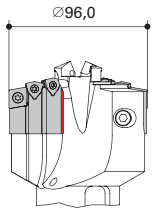
for size **950**

Diameter adjustment with distance pieces on both sides (using holder size 950 as example)

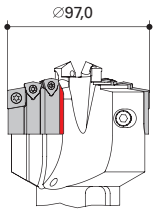


without distance piece

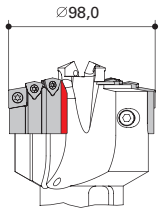




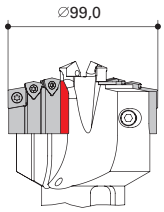
0.50



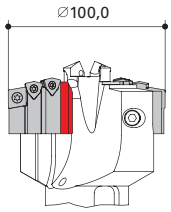
1.00



1.50



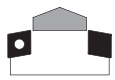
2.0

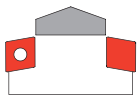


1.00/1.50

Insert mounting overview

tool **size**	central interch. insert ∅	cartridge installation
400	27	
430	30	
460	28	
490	31	
520	34	
560	27	
600		
650		
700	32	
750		
800		
850	34	
900	32	
950	34	

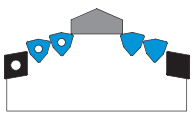


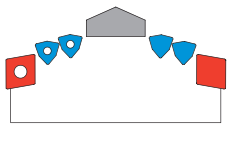


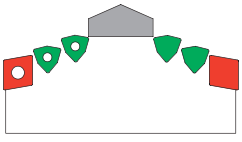












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Jobber drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Guhring no.	205
Standard	DIN 338
Tool material	HSS
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	342

Jobber drills



Standard drill

For hard and brittle materials
brass, magnesium alloys
bronze, phosphor bronze
slate, mico, pertinax

Guhring no.	206
Standard	DIN 338
Tool material	HSS
Surface	
Type	H
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	342

Jobber drills



Standard drill

soft/long chipping materials
Aluminium/Al-alloys, long-chipping
zinc, refined copper, silumin, electron
soft plastics
wood

Guhring no.	207
Standard	DIN 338
Tool material	HSS
Surface	
Type	W
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	14.01
Standard range page	342

Jobber drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Guhring no.	208
Standard	DIN 338
Tool material	HSS
Surface	>Ø 6,00
Type	N
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	342

Jobber drills



Standard drill

For hard and brittle materials
brass, magnesium alloys
bronze, phosphor bronze
slate, mico, pertinax

Guhring no.	209
Standard	DIN 338
Tool material	HSS
Surface	
Type	H
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	342

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Jobber drills

Guhring no.	210
Standard	DIN 338
Tool material	HSS
Surface	○
Type	W
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	14.01
Standard range page	342



Standard drill

soft/long chipping materials
Aluminium/Al-alloys, long-chipping
zinc, refined copper, silumin, electron
soft plastics
wood

Jobber drills

Guhring no.	240
Standard	DIN 338
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.00
Standard range page	343



Standard drill
With tang to DIN 1809

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Jobber drills

Guhring no.	549
Standard	DIN 338
Tool material	HSS
Surface	◔ >Ø 2,36
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	0.96
Standard range page	343



Wide flutes
Especially for drilling depths over 3xd

Grey cast iron
steels up to 1400 N/mm²
Not recommended for:
CrNi steels, stainless steels

Jobber drills

Guhring no.	550
Standard	DIN 338
Tool material	HSS
Surface	◔ >Ø 2,36
Type	GT 100
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	343



Wide flutes
Especially for drilling depths over 3xd

Grey cast iron
steels up to 1400 N/mm²
Not recommended for:
CrNi steels, stainless steels

Jobber drills

Guhring no.	560
Standard	DIN 338
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.37
Standard range page	343



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Jobber drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Guhring no.	651
Standard	DIN 338
Tool material	HSS
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	343

Jobber drills



Wide flutes
Especially for drilling depths over 3xd

Grey cast iron
steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	652
Standard	DIN 338
Tool material	HSS
Surface	S
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	343

Jobber drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Guhring no.	664
Standard	DIN 338
Tool material	HSS
Surface	S
Type	N
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.37
Standard range page	343

Jobber drills



Wide flutes
Especially for drilling depths over 3xd

Grey cast iron
steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	665
Standard	DIN 338
Tool material	HSS
Surface	S
Type	GT 100
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.30
Standard range page	343

Jobber drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Guhring no.	2456
Standard	DIN 338
Tool material	HSS
Surface	F
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	343

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Jobber drills

Guhring no.	2457
Standard	DIN 338
Tool material	HSS
Surface	F
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	343



Wide flutes
Especially for drilling depths over 3xd

Grey cast iron
steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Jobber drills

Guhring no.	305
Standard	DIN 338
Tool material	HSCO
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	380



Co-alloyed high speed steel
Increased wear resistance

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Jobber drills

Guhring no.	308
Standard	DIN 338
Tool material	HSCO
Surface	>Ø 6,00
Type	N
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.37
Standard range page	380



Co-alloyed high speed steel
Increased wear resistance

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Jobber drills

Guhring no.	605
Standard	DIN 338
Tool material	HSCO
Surface	○
Type	Ti
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	0.96
Standard range page	380



Co-alloyed high speed steel
Increased wear resistance

Titanium and Titanium alloys
stainless/acid-/heat resistant austenitic steels
for high tensile strength and short chipping
steels over appr. 900 N/mm²
special alloys Hastelloy, Inconel, Nimonic

Jobber drills

Guhring no.	608
Standard	DIN 338
Tool material	HSCO
Surface	○
Type	Ti
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	0.96
Standard range page	380



Co-alloyed high speed steel
Increased wear resistance

Titanium and Titanium alloys
stainless/acid-/heat resistant austenitic steels
for high tensile strength and short chipping
steels over appr. 900 N/mm²
special alloys Hastelloy, Inconel, Nimonic

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Jobber drills

Guhring no.	622
Standard	DIN 338
Tool material	HSCO
Surface	>Ø 2,36
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	0.96
Standard range page	380



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Jobber drills

Guhring no.	657
Standard	DIN 338
Tool material	HSCO
Surface	S
Type	Ti
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	0.96
Standard range page	380



Co-alloyed high speed steel
Increased wear resistance

Titanium and Titanium alloys
stainless/acid-/heat resistant austenitic steels
for high tensile strength and short chipping
steels over appr. 900 N/mm²
special alloys Hastelloy, Inconel, Nimonic

Jobber drills

Guhring no.	658
Standard	DIN 338
Tool material	HSCO
Surface	S
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	381



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Jobber drills

Guhring no.	1221
Standard	DIN 338
Tool material	HSCO
Surface	C
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.10
Standard range page	381



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Jobber drills

Guhring no.	1223
Standard	DIN 338
Tool material	HSCO
Surface	A
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	381



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A TiAlN SuperA

Jobber drills

Guhring no.	1260
Standard	DIN 338
Tool material	HSCO
Surface	
Type	VA
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	
Standard range page	381



Co-alloyed high speed steel
Special geometry
Increased wear resistance

stainless/acid-/heat resistant austenitic steels (V2A and V4A)

Jobber drills

Guhring no.	2047
Standard	DIN 338
Tool material	HSCO
Surface	
Type	P2000
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	
Standard range page	381



Universal application
Co-alloyed high speed steel
Increased wear resistance

steels up to 1000 N/mm²
AlSi-alloys

Jobber drills

Guhring no.	2458
Standard	DIN 338
Tool material	HSCO
Surface	F
Type	Ti
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	381



Co-alloyed high speed steel
Increased wear resistance

Titanium and Titanium alloys
stainless/acid-/heat resistant austenitic steels
for high tensile strength and short chipping
steels over appr. 900 N/mm²
special alloys Hastelloy, Inconel, Nimonic

Jobber drills

Guhring no.	2459
Standard	DIN 338
Tool material	HSCO
Surface	F
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	381



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Jobber drills

Guhring no.	2997
Standard	DIN 338
Tool material	HSCO
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	381



Co-alloyed high speed steel
Increased wear resistance

alloyed and high alloyed steels
castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Jobber drills

Guhring no.	1146
Standard	DIN 338
Tool material	M42
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	0.96
Standard range page	381



High alloyed CoMo steel
Especially high wear resistance

medium/high tensile CrNi-based alloys
Hastelloy, Inconel, Nimonic
stainless/acid/heat resistant steels
wear-resistant sheet metals
steels/bronzes up to 1400 N/mm²

Jobber drills

Guhring no.	710
Standard	Guhring std.
Tool material	Carbide
Surface	◯
Type	Duro 150
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.70
Standard range page	406



Special drill
Carbide tipped
Carbide tipped

abrasive materials
heat treated/hardened steel
hard cast iron, Mn steel, hard bronzes

Jobber drills

Guhring no.	732
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.00
Standard range page	406



Standard drill

cast iron, grey cast iron, chilled cast iron
Mn hard steels, bronzes
light and non-ferrous metals
abrasive materials (AlSi alloys)
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Jobber drills

Guhring no.	2464
Standard	Guhring std.
Tool material	Solid carbide
Surface	F
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.00
Standard range page	406



Standard drill
nanoFIRE coating

cast iron, grey cast iron, chilled cast iron
Mn hard steels, bronzes
light and non-ferrous metals
abrasive materials (AlSi alloys)
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Stub drills

Guhring no.	223
Standard	DIN 1897
Tool material	HSS
Surface	◯ >Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	412



Rigid twist drill
For use in automatic/capstan lathes
Also for hand drilling machines

thin materials e.g. car bodies

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Stub drills	Guhring no.	224
	Standard	DIN 1897
	Tool material	HSS
Rigid twist drill	Surface	◯
For hard and brittle materials brass, magnesium alloys bronze, phosphor bronze electron (thin sections) slate, mico, pertinax	Type	H
	Cutting direction	right-hand
	Point geometry	Relieved cone
	Point angle °	118
	Web thinned ≥Ø	14.01
	Standard range page	412

Stub drills	Guhring no.	225
	Standard	DIN 1897
	Tool material	HSS
Rigid twist drill	Surface	◯
soft/long chipping materials Aluminium/Al-alloys, long-chipping soft plastics wood	Type	W
	Cutting direction	right-hand
	Point geometry	Relieved cone
	Point angle °	130
	Web thinned ≥Ø	2.37
	Standard range page	412

Stub drills	Guhring no.	226
	Standard	DIN 1897
	Tool material	HSS
Rigid twist drill For use in automatic/capstan lathes	Surface	◯ >Ø 6,00
thin materials e.g. car bodies	Type	N
	Cutting direction	left-hand
	Point geometry	Relieved cone
	Point angle °	118
	Web thinned ≥Ø	14.01
	Standard range page	412

Stub drills	Guhring no.	227
	Standard	DIN 1897
	Tool material	HSS
Rigid twist drill	Surface	◯
For hard and brittle materials brass, magnesium alloys bronze, phosphor bronze electron (thin sections) slate, mico, pertinax	Type	H
	Cutting direction	left-hand
	Point geometry	Relieved cone
	Point angle °	118
	Web thinned ≥Ø	14.01
	Standard range page	412

Stub drills	Guhring no.	228
	Standard	DIN 1897
	Tool material	HSS
Rigid twist drill	Surface	◯
soft/long chipping materials Aluminium/Al-alloys, long-chipping soft plastics wood	Type	W
	Cutting direction	left-hand
	Point geometry	Relieved cone
	Point angle °	130
	Web thinned ≥Ø	2.37
	Standard range page	412

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Stub drills

Guhring no.	552
Standard	DIN 1897
Tool material	HSS
Surface	<Ø 2,36 >Ø 16,0
Type	GT 80
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	412



Special geometry
For higher tensile steels

Free-cutting steels
acid-/stainl. resist. steels
case hardening/heat treatable steels up to 800 N/mm²
short/medium chip length Al/Cu alloys

Stub drills

Guhring no.	553
Standard	DIN 1897
Tool material	HSS
Surface	<Ø 2,36 >Ø 16,0
Type	GT 80
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	412



Special geometry
For higher tensile steels

Free-cutting steels
acid-/stainl. resist. steels
case hardening/heat treatable steels up to 800 N/mm²
short/medium chip length Al/Cu alloys

Stub drills

Guhring no.	653
Standard	DIN 1897
Tool material	HSS
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	413



Rigid twist drill
For use in automatic/capstan lathes
Also for hand drilling machines

thin materials e.g. car bodies

Stub drills

Guhring no.	672
Standard	DIN 1897
Tool material	HSS
Surface	S
Type	N
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.37
Standard range page	413



Rigid twist drill
For use in automatic/capstan lathes

thin materials e.g. car bodies

Stub drills

Guhring no.	2460
Standard	DIN 1897
Tool material	HSS
Surface	F
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	413



Rigid twist drill
For use in automatic/capstan lathes
Also for hand drilling machines

thin materials e.g. car bodies

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A TiAlN SuperA

Stub drills



Co-alloyed high speed steel
Increased wear resistance

acid resist./stainless steels
Spring steels
Austenitic stainless steels
special alloys Hastelloy, Inconel, Nimonic

Guhring no.	329
Standard	DIN 1897
Tool material	HSCO
Surface	>Ø 2,36
Type	GV 120
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	413

Stub drills



Co-alloyed high speed steel
Increased wear resistance

acid resist./stainless steels
Spring steels
Austenitic stainless steels
special alloys Hastelloy, Inconel, Nimonic

Guhring no.	330
Standard	DIN 1897
Tool material	HSCO
Surface	>Ø 6,00
Type	GV 120
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.37
Standard range page	413

Stub drills



Co-alloyed high speed steel
Increased wear resistance

acid resist./stainless steels
Spring steels
Austenitic stainless steels
special alloys Hastelloy, Inconel, Nimonic

Guhring no.	659
Standard	DIN 1897
Tool material	HSCO
Surface	S
Type	GV 120
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	413

Stub drills



Co-alloyed high speed steel
Special geometry
Increased wear resistance

For higher tensile steels
long chipping materials up to 1000 N/mm²
Al- and Cu alloys
soft bronzes
electrolytic copper
ductile brass

Guhring no.	1228
Standard	DIN 1897
Tool material	HSCO
Surface	S
Type	GT 80
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	413

Stub drills



Co-alloyed high speed steel
Special geometry
Increased wear resistance

stainless/acid-/heat resistant austenitic steels
(V2A and V4A)

Guhring no.	1261
Standard	DIN 1897
Tool material	HSCO
Surface	○
Type	VA
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	
Standard range page	413

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Stub drills

Guhring no.	2048
Standard	DIN 1897
Tool material	HSCO
Surface	M
Type	P2000
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	
Standard range page	413



Universal application
Co-alloyed high speed steel
Increased wear resistance
For professional use
For hand drilling machines

long chipping steels up to 1000 N/mm²
cast and AlSi alloys

Stub drills

Guhring no.	2461
Standard	DIN 1897
Tool material	HSCO
Surface	F
Type	GV 120
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	413



Co-alloyed high speed steel
Increased wear resistance

acid resist./stainless steels
Spring steels
Austenitic stainless steels
special alloys Hastelloy, Inconel, Nimonic

Stub drills

Guhring no.	2498
Standard	DIN 1897
Tool material	HSCO
Surface	F
Type	GT 80
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	413



Co-alloyed high speed steel
Special geometry
Increased wear resistance

long chipping materials up to 1000 N/mm²
Al- and Cu alloys
soft bronzes
electrolytic copper
ductile brass

Stub drills

Guhring no.	1259
Standard	DIN 1897
Tool material	M42
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	1.00
Standard range page	444



High alloyed CoMo steel
Especially high wear resistance

medium/high tensile CrNi-based alloys
Hastelloy, Inconel, Nimonic
stainless/acid/heat resistant steels
wear-resistant sheet metals
steels/bronzes up to 1400 N/mm²

Stub drills

Guhring no.	515
Standard	DIN 1897
Tool material	HSS-E-PM
Surface	F
Type	GT 500
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	444



PM Co-alloyed high speed steel
Especially high rigidity
Especially high wear resistance

high alloyed steels
Heat treatable and case hardened steels
Cast iron, brass, bronze

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Stub drills



Rigid twist drill
For use in automatic/capstan lathes

cast iron, grey cast iron, chilled cast iron
Mn hard steels, bronzes
light and non-ferrous metals
abrasive materials (AlSi alloys)
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Guhring no.	730
Standard	DIN 6539
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.10
Standard range page	444

Stub drills



Rigid twist drill
For use in automatic/capstan lathes
nanoFIRE coating

cast iron, grey cast iron, chilled cast iron
Mn hard steels, bronzes
light and non-ferrous metals
abrasive materials (AlSi alloys)
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Guhring no.	2463
Standard	DIN 6539
Tool material	Solid carbide
Surface	F
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.00
Standard range page	444

Stub drills



Special drill

glass fibres reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Guhring no.	702
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	130
Web thinned ≥Ø	
Standard range page	450

Twist drills with oversize straight shank



Co-alloyed high speed steel
Low feed force required
Low torque required
Increased wear resistance
Universal application

alloyed/unalloyed steels over 800 N/mm²
cold/hot work steels
antifriction bearing steels
non-ferrous metals
cast materials
plastics

Guhring no.	512
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.00
Standard range page	456

Twist drills with oversize straight shank



PM Co-alloyed high speed steel
Especially high rigidity
Especially high wear resistance

high alloyed steels
Heat treatable and case hardened steels
Cast iron, brass, bronze

Guhring no.	513
Standard	Guhring std.
Tool material	HSS-E-PM
Surface	F
Type	GT 500
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.00
Standard range page	460

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Twist drills with oversize straight shank

Guhring no.	511
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	2.00
Standard range page	462



Co-alloyed high speed steel
Low feed force required
Low torque required
Increased wear resistance
Universal application

alloyed/unalloyed steels over 800 N/mm²
cold/hot work steels
antifriction bearing steels
non-ferrous metals
cast materials
plastics

Twist drills with oversize straight shank

Guhring no.	1946
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	A
Type	H
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	120
Web thinned ≥Ø	3.00
Standard range page	466



Especially high rigidity
Optimal chip fracture and short chips

hardened steels up to 62 HRC

Jobber drills with 12.7 mm dia. shank

Guhring no.	268
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	467



With solid shank

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal
German silver

Stub drills with 16.0 mm dia. shank

Guhring no.	128
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	N
Cutting direction	right-hand
Point geometry	without point grind
Point angle °	120
Web thinned ≥Ø	
Standard range page	468



Co-alloyed high speed steel
Increased wear resistance
With solid shank
blank, centering on both sides
without point grinding
For corrections, e.g. on diameter, step grind or form grind

difficult to machine materials
acid resist./stainless steels
Spring steels
Austenitic stainless steels

Stub drills with 25.4 mm dia. shank

Guhring no.	129
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	N
Cutting direction	right-hand
Point geometry	without point grind
Point angle °	120
Web thinned ≥Ø	
Standard range page	469



Co-alloyed high speed steel
Increased wear resistance
With solid shank
blank, centering on both sides
without point grinding
For corrections, e.g. on diameter, step grind or form grind

difficult to machine materials
acid resist./stainless steels
Spring steels
Austenitic stainless steels

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Stub drills with 25.4 mm dia. shank



Co-alloyed high speed steel
Increased wear resistance
With solid shank
blank, centering on both sides
without point grinding
For corrections, e.g. on diameter, step grind or form grind

difficult to machine materials
acid resist./stainless steels
Spring steels
Austenitic stainless steels

Guhring no.	136
Standard	Guhring std.
Tool material	HSCO
Surface	◯
Type	N
Cutting direction	left-hand
Point geometry	without point grind
Point angle °	120
Web thinned ≥Ø	
Standard range page	469

90° NC-spotting drills



Only suitable for spotting

Guhring no.	557
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	90
Web thinned ≥Ø	
Standard range page	470

90° NC-spotting drills



Only suitable for spotting

Guhring no.	568
Standard	Guhring std.
Tool material	HSS
Surface	(S)
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	90
Web thinned ≥Ø	
Standard range page	470

90° NC-spotting drills



Special drill
Only suitable for spotting

high tensile steels
cast iron, grey cast iron, chilled cast iron
austenitic manganese steel, CrNi steels
bronzes
light and non-ferrous metals

Guhring no.	723
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	90
Web thinned ≥Ø	
Standard range page	470

90° NC-spotting drills



Only suitable for spotting

Guhring no.	559
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	90
Web thinned ≥Ø	
Standard range page	471

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

120° NC-spotting drills



Only suitable for spotting

Guhring no.	556
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	472

120° NC-spotting drills



Only suitable for spotting

Guhring no.	567
Standard	Guhring std.
Tool material	HSS
Surface	Ⓢ
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	472

120° NC-spotting drills



Special drill
Only suitable for spotting

high tensile steels
cast iron, grey cast iron, chilled cast iron
austenitic manganese steel, CrNi steels
bronzes
light and non-ferrous metals

Guhring no.	724
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	120
Web thinned ≥Ø	
Standard range page	472

142° NC-spotting drills



Special drill
Only suitable for spotting

high tensile steels
cast iron, grey cast iron, chilled cast iron
austenitic manganese steel, CrNi steels
bronzes
light and non-ferrous metals

Guhring no.	546
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	142
Web thinned ≥Ø	
Standard range page	473

Straight shank drills double-ended



For application on both sides
For hand drilling mach. in car body ind.

thin materials e.g. car bodies

Guhring no.	554
Standard	Guhring std.
Tool material	HSS
Surface	◯ >Ø 2,36
Type	DK 77
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.45
Standard range page	474

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Micro-precision drills without oil feed



< Ø 0.15 mm
Co-alloyed high speed steel
With re-inforced shank

high alloyed steels

Guhring no.	301
Standard	DIN 1899
Tool material	HSS-E-PM
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	
Standard range page	476

Micro-precision drills without oil feed



< Ø 0.15 mm
Co-alloyed high speed steel
With re-inforced shank

high alloyed steels

Guhring no.	303
Standard	DIN 1899
Tool material	HSS-E-PM
Surface	○
Type	N
Cutting direction	left-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	
Standard range page	476

Micro-precision drills without oil feed



With re-inforced shank
Increased wear resistance

high alloyed steels

Guhring no.	660
Standard	DIN 1899
Tool material	HSS-E-PM
Surface	(S)
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	
Standard range page	476

Micro-precision drills without oil feed



glass fibres reinforced plastics
materials that cause wear
on cutting lips and lands

Guhring no.	701
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	130
Web thinned ≥Ø	0.80
Standard range page	476

Micro-precision drills without oil feed



Universal application

Guhring no.	3899
Standard	Guhring std.
Tool material	Solid carbide
Surface	(A)
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	0.80
Standard range page	483

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Micro-precision drills without oil feed



edge preparation
Optimal chip fracture

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6400
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	0.80
Standard range page	485

Micro-precision drills without oil feed



edge preparation
Optimal chip fracture

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6401
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	140
Web thinned ≥Ø	0.80
Standard range page	487

Micro-precision drills with oil feed



edge preparation
Optimal chip fracture

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6408
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	135
Web thinned ≥Ø	1.40
Standard range page	489

Micro-precision drills with oil feed



edge preparation
Optimal chip fracture

structural and case hardened steels
Free-cutting steels, heat-treatable steels
alloyed steels up to 1200 N/mm²
stainless steels, cast iron

Guhring no.	6412
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	135
Web thinned ≥Ø	1.40
Standard range page	491

Oil feed drills



Co-alloyed high speed steel

long chipping materials up to 1000 N/mm²
Stainless steels
cast materials
non-ferrous metals

Guhring no.	1131
Standard	Guhring std.
Tool material	HSCO
Surface	○
Type	GT 80 IK
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	5.00
Standard range page	492

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Oil feed drills

Guhring no.	1132
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GT 80 IK
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	5.00
Standard range page	492



Co-alloyed high speed steel
Increased wear resistance

long chipping materials up to 1000 N/mm²
Stainless steels
cast materials
non-ferrous metals

Oil feed drills

Guhring no.	390
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	494



Oil feed drills
For drilling through drill bushes
Especially for drilling depths over 5xD

laminated sheet metal
steel and cast steel, grey cast iron
austenitic steels up to 800 N/mm²

Bushing length twist drills

Guhring no.	211
Standard	DIN 339
Tool material	HSS
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	495



Special geometry
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Bushing length twist drills

Guhring no.	561
Standard	DIN 339
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.40
Standard range page	495



Special geometry
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Bushing length twist drills

Guhring no.	666
Standard	DIN 339
Tool material	HSS
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	495



Special geometry
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Bushing length twist drills

Guhring no.	311
Standard	DIN 339
Tool material	HSCO
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.10
Standard range page	495



Co-alloyed high speed steel
Special geometry
Increased wear resistance
For drilling through drill bushes

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Long series twist drills

Guhring no.	204
Standard	DIN 340
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.95
Standard range page	502



With tang

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Long series twist drills

Guhring no.	217
Standard	DIN 340
Tool material	HSS
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	502



Standard drill
Especially for deep holes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Long series twist drills

Guhring no.	218
Standard	DIN 340
Tool material	HSS
Surface	
Type	H
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	502



Standard drill
Especially for deep holes

hard, crumbly materials
brass, magnesium alloys
bronze, phosphor bronze
thin zamak und electron
slate, mico, pertinax
with special point grind:
insulating materials, ebonit, bakelite
galalithe, celluloid, synthetic resins, horn compounds
eternit, plexiglass

Long series twist drills

Guhring no.	219
Standard	DIN 340
Tool material	HSS
Surface	
Type	W
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	14.01
Standard range page	502



Standard drill
Especially for deep holes

soft/long chipping materials
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, soft plastics, wood

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Long series twist drills

Guhring no.	220
Standard	DIN 340
Tool material	HSS
Surface	>Ø 6,00
Type	N
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	502



Standard drill
Especially for deep holes
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Long series twist drills

Guhring no.	221
Standard	DIN 340
Tool material	HSS
Surface	
Type	H
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	502



Standard drill
Especially for deep holes

hard, crumbly materials
brass, magnesium alloys
bronze, phosphor bronze
thin zamak und electron
slate, mico, pertinax
with special point grind:
insulating materials, ebonit, bakelite
galalithe, celluloid, synthetic resins, horn compounds
eternit, plexiglass

Long series twist drills

Guhring no.	501
Standard	DIN 340
Tool material	HSS
Surface	
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.37
Standard range page	502



Especially large flute

soft/long chipping materials
up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Long series twist drills

Guhring no.	506
Standard	DIN 340
Tool material	HSS
Surface	>Ø 2,36
Type	GT 100
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.40
Standard range page	503



Wide flutes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Long series twist drills

Guhring no.	535
Standard	DIN 340
Tool material	HSS
Surface	>Ø 2,36
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503



Wide flutes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Long series twist drills



Standard drill
Especially for deep holes
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	667
Standard	DIN 340
Tool material	HSS
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	0.96
Standard range page	503

Long series twist drills



Wide flutes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	668
Standard	DIN 340
Tool material	HSS
Surface	S
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503

Long series twist drills



Wide flutes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	2462
Standard	DIN 340
Tool material	HSS
Surface	F
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503

Long series twist drills



Co-alloyed high speed steel
Increased wear resistance

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	317
Standard	DIN 340
Tool material	HSCO
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	503

Long series twist drills



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For unsatisfactory chip evacuation

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	336
Standard	DIN 340
Tool material	HSCO
Surface	>Ø 2,36
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503

bright · steam tempered · nitrided lands · nitrided · golden brown · A TiAlN · a TiAlN nanoA · A TiAlN SuperA

Long series twist drills

Guhring no.	396
Standard	DIN 340
Tool material	HSCO
Surface	F
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503



Co-alloyed high speed steel
Wide flutes
Especially high wear resistance
For unsatisfactory chip evacuation

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Long series twist drills

Guhring no.	617
Standard	DIN 340
Tool material	HSCO
Surface	◯
Type	Ti
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503



Co-alloyed high speed steel
Increased wear resistance

Titanium and Titanium alloys
stainless/acid-/heat resistant austenitic steels
for high tensile strength and short chipping steels over appr. 900 N/mm²
antifriction bearing steels
Hastelloy, Inconel, Nimonic

Long series twist drills

Guhring no.	669
Standard	DIN 340
Tool material	HSCO
Surface	S
Type	Ti
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.00
Standard range page	503



Co-alloyed high speed steel
Increased wear resistance

Titanium and Titanium alloys
stainless/acid-/heat resistant austenitic steels
for high tensile strength and short chipping steels over appr. 900 N/mm²
antifriction bearing steels
Hastelloy, Inconel, Nimonic

Long series twist drills

Guhring no.	706
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	130
Web thinned ≥Ø	
Standard range page	526



glass fibres reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Extra length twist drills, series 1

Guhring no.	235
Standard	DIN 1869
Tool material	HSS
Surface	◯ >Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.37
Standard range page	527



For extremely deep holes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Extra length twist drills, series 1

Guhring no.	502
Standard	DIN 1869
Tool material	HSS
Surface	>Ø 2,36
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.95
Standard range page	527



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills, series 1

Guhring no.	524
Standard	DIN 1869
Tool material	HSS
Surface	
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.37
Standard range page	527



For extremely deep holes

long chipping materials up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Extra length twist drills, series 1

Guhring no.	670
Standard	DIN 1869
Tool material	HSS
Surface	S
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	1.98
Standard range page	527



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills, series 1

Guhring no.	618
Standard	DIN 1869
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.70
Standard range page	527



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For extremely deep holes
For unsatisfactory chip evacuation

high tensile steels and cast steels
grey cast iron, malleable and spheroidal iron

Extra length twist drills, series 2

Guhring no.	236
Standard	DIN 1869
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.70
Standard range page	532



For extremely deep holes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Extra length twist drills, series 2

Guhring no.	503
Standard	DIN 1869
Tool material	HSS
Surface	>Ø 2,36
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.00
Standard range page	532



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills, series 2

Guhring no.	528
Standard	DIN 1869
Tool material	HSS
Surface	
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.80
Standard range page	532



For extremely deep holes

long chipping materials up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Extra length twist drills, series 2

Guhring no.	671
Standard	DIN 1869
Tool material	HSS
Surface	S
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.30
Standard range page	532



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills, series 2

Guhring no.	619
Standard	DIN 1869
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	3.00
Standard range page	532



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For extremely deep holes
For unsatisfactory chip evacuation

high tensile steels and cast steels
grey cast iron, malleable and spheroidal iron

Extra length twist drills, series 3

Guhring no.	237
Standard	DIN 1869
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.50
Standard range page	535



For extremely deep holes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Extra length twist drills, series 3

Guhring no.	504
Standard	DIN 1869
Tool material	HSS
Surface	◓
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.50
Standard range page	535



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills, series 3

Guhring no.	529
Standard	DIN 1869
Tool material	HSS
Surface	◯
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.50
Standard range page	535



For extremely deep holes

long chipping materials up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Extra length twist drills, series 3

Guhring no.	571
Standard	DIN 1869
Tool material	HSCO
Surface	◓
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	2.50
Standard range page	535



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For extremely deep holes
For unsatisfactory chip evacuation

high tensile steels and cast steels
grey cast iron, malleable and spheroidal iron

Extra length twist drills

Guhring no.	242
Standard	Guhring std.
Tool material	HSS
Surface	◓
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	6.00
Standard range page	538



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills

Guhring no.	243
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	8.00
Standard range page	539



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Extra length twist drills



Wide flutes
For extremely deep holes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	244
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	10.00
Standard range page	540

Aircraft extension drills, 6 inches long



Al-alloyed sheets
laminated plates (sandwiched materials)
steel and cast iron

Guhring no.	577
Standard	NAS 907
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.50
Standard range page	541

Aircraft extension drills, 6 inches long



Al-alloyed sheets
laminated plates (sandwiched materials)
steel and cast iron

Guhring no.	579
Standard	NAS 907
Tool material	HSS
Surface	◯ >Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	1.50
Standard range page	541

Aircraft extension drills, 12 inches long



Al-alloyed sheets
laminated plates (sandwiched materials)
steel and cast iron

Guhring no.	578
Standard	NAS 907
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.50
Standard range page	544

Aircraft extension drills, 12 inches long



Al-alloyed sheets
laminated plates (sandwiched materials)
steel and cast iron

Guhring no.	580
Standard	NAS 907
Tool material	HSS
Surface	◯ >Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	135
Web thinned ≥Ø	1.50
Standard range page	544

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Taper pin drills

Guhring no.	531
Standard	DIN 1898
Tool material	HSS
Surface	>Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.00
Standard range page	546



For tapered holes
For holding taper pins
To DIN 1 (new: DIN EN 22 339)
and DIN 7978 (new: DIN EN 28 736)
With tang

Carbide-tipped twist drill

Guhring no.	703
Standard	DIN 8037
Tool material	Carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	118
Web thinned ≥Ø	1.70
Standard range page	547



Carbide tipped

spring steel
hard cast iron over 300 Brinell
pure molybdenum
hard bronzes

Carbide-tipped twist drill

Guhring no.	704
Standard	DIN 8038
Tool material	Carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	85
Web thinned ≥Ø	1.50
Standard range page	547



Carbide tipped

glass fibres reinforced plastics
Duroplastics that cause wear on lands and cutting edges

Kevlar drills

Guhring no.	1149
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Special point grind
Point angle °	
Web thinned ≥Ø	
Standard range page	550



Special point grind

fiber reinforced plastics

Carbide tipped spade drills

Guhring no.	707
Standard	Guhring std.
Tool material	Carbide
Surface	◯
Type	
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	120
Web thinned ≥Ø	3.00
Standard range page	551



Special drill
In difficult conditions

Chilled cast iron
hard steel

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Masonry drills



Carbide tipped
For drills and hammer drills
Drilling tiles without hammer action!

brick, concrete, ceramictiles

Guhring no.	716
Standard	Guhring std.
Tool material	Carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Facet point grind
Point angle °	120
Web thinned ≥Ø	
Standard range page	552

Jobber drills



Co-alloyed high speed steel
Increased wear resistance

difficult to machine materials
acid resist./stainless steels
spring steels, austenitic steels

Guhring no.	363
Standard	Guhring std.
Tool material	HSCO
Surface	○
Type	GV 120
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	7.00
Standard range page	553

Jobber drills



Co-alloyed high speed steel
Increased wear resistance

difficult to machine materials
acid resist./stainless steels
spring steels, austenitic steels

Guhring no.	663
Standard	Guhring std.
Tool material	HSCO
Surface	(S)
Type	GV 120
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	9.00
Standard range page	553

Twist drills



Special geometry
Improved chip fracture
Note higher cutting rates

long chipping materials

Guhring no.	229
Standard	DIN 345
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	8.00
Standard range page	555

Twist drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	245
Standard	DIN 345
Tool material	HSS
Surface	○ ○ >Ø 2,36
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	555

Twist drills



Standard drill

hard, crumbly materials
brass, magnesium alloys
bronze, phosphor bronze
thin zamak und electron
slate, mico, pertinax
with special point grind:
insulating materials, ebonit, bakelite
galalithe, celluloid, synthetic resins, horn compounds
eternit, plexiglass

Guhring no.	246
Standard	DIN 345
Tool material	HSS
Surface	○
Type	H
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	555

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Twist drills	Guhring no.	247
	Standard	DIN 345
	Tool material	HSS
Standard drill	Surface	○
soft/long chipping materials Aluminium, long chipping Al-alloys zinc, refined copper, silumin, electron	Type	W
	Cutting direction	right-hand
	Point geometry	Relieved cone
	Point angle °	130
	Web thinned ≥Ø	14.01
	Standard range page	555

Twist drills	Guhring no.	248
	Standard	DIN 345
	Tool material	HSS
Standard drill	Surface	●
alloyed/unalloyed steel and cast steel grey cast iron, malleable and spheroidal iron sintered powder metal, German silver and graphite	Type	N
	Cutting direction	left-hand
	Point geometry	Relieved cone
	Point angle °	118
	Web thinned ≥Ø	14.01
	Standard range page	555

Twist drills	Guhring no.	558
	Standard	DIN 345
	Tool material	HSS
Wide flutes Especially for drilling depths over 3xd	Surface	◐ >Ø 16,0
cast iron and steels up to 1000 N/mm² Not recommended for: CrNi steels, stainless steels	Type	GT 100
	Cutting direction	right-hand
	Point geometry	Relieved cone
	Point angle °	130
	Web thinned ≥Ø	7.94
	Standard range page	555

Twist drills	Guhring no.	592
	Standard	DIN 345
	Tool material	HSS
Special geometry For heavy duty appl. in the steel ind.	Surface	◐ >Ø 16,0
alloyed/unalloyed steel and cast steel	Type	N
	Cutting direction	right-hand
	Point geometry	Relieved cone
	Point angle °	118
	Web thinned ≥Ø	10.00
	Standard range page	555

Twist drills	Guhring no.	606
	Standard	DIN 345
	Tool material	HSS
Wide flutes Especially for drilling depths over 3xd	Surface	(S)
cast iron and steels up to 1000 N/mm² Not recommended for: CrNi steels, stainless steels	Type	GT 100
	Cutting direction	right-hand
	Point geometry	Relieved cone
	Point angle °	130
	Web thinned ≥Ø	7.94
	Standard range page	567

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Twist drills



Standard drill

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	654
Standard	DIN 345
Tool material	HSS
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.00
Standard range page	567

Twist drills



Co-alloyed high speed steel
Increased wear resistance

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	345
Standard	DIN 345
Tool material	HSCO
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.00
Standard range page	567

Twist drills



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed/unalloyed steels and castings over 1000 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	645
Standard	DIN 345
Tool material	HSCO
Surface	>Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	9.52
Standard range page	567

Twist drills



Co-alloyed high speed steel
Increased wear resistance

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	661
Standard	DIN 345
Tool material	HSCO
Surface	S
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	7.94
Standard range page	567

Twist drills



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed/unalloyed steels and castings over 1000 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	662
Standard	DIN 345
Tool material	HSCO
Surface	S
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	10.00
Standard range page	567

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Twist drills



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed/unalloyed steels and castings over 1000 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	1222
Standard	DIN 345
Tool material	HSCO
Surface	C
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	10.00
Standard range page	567

Twist drills



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
Especially for drilling depths over 3xd

alloyed/unalloyed steels and castings over 1000 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	1224
Standard	DIN 345
Tool material	HSCO
Surface	A
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	10.00
Standard range page	573

Twist drills



Co-alloyed high speed steel
Special geometry
Increased wear resistance

stainless/acid-/heat resistant austenitic steels (V2A and V4A)

Guhring no.	1262
Standard	DIN 345
Tool material	HSCO
Surface	
Type	VA
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	
Standard range page	573

Twist drills



Standard drill
Oversize shank

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	251
Standard	DIN 346
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	575

Twist drills



Co-alloyed high speed steel
Increased wear resistance
Oversize shank

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	351
Standard	DIN 346
Tool material	HSCO
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	10.00
Standard range page	575

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Bushing length twist drills



Special geometry
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	257
Standard	DIN 341
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	577

Bushing length twist drills



Especially large flute

long chipping materials up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Guhring no.	505
Standard	DIN 341
Tool material	HSS
Surface	○
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	4.20
Standard range page	577

Bushing length twist drills



Wide flutes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	551
Standard	DIN 341
Tool material	HSS
Surface	◐ >Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	5.50
Standard range page	577

Bushing length twist drills



Special geometry
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	655
Standard	DIN 341
Tool material	HSS
Surface	Ⓢ
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	4.00
Standard range page	577

Bushing length twist drills



Wide flutes
For unsatisfactory chip evacuation

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Guhring no.	656
Standard	DIN 341
Tool material	HSS
Surface	Ⓢ
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	5.60
Standard range page	577

○ bright ◯ steam tempered ◐ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Bushing length twist drills



Co-alloyed high speed steel
Special geometry
Increased wear resistance
For drilling through drill bushes

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	357
Standard	DIN 341
Tool material	HSCO
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	4.75
Standard range page	577

Bushing length twist drills



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For unsatisfactory chip evacuation

alloyed/unalloyed steels and castings over 800 N/mm²
hot and cold rolled steels
antifriction bearing steels
high alloyed steels
Heat treatable and case hardened steels

Guhring no.	623
Standard	DIN 341
Tool material	HSCO
Surface	>Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	10.00
Standard range page	577

Bushing length twist drills



Special geometry
Oversize shank
For drilling through drill bushes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal, German silver and graphite

Guhring no.	523
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	14.01
Standard range page	584

Oil feed drills short



For drilling through drill bushes

laminated sheet metal
steel and cast steel, grey cast iron
austenitic steels up to 800 N/mm²

Guhring no.	269
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	9.52
Standard range page	585

Oil feed drills, flute length to DIN 341



For drilling through drill bushes

laminated sheet metal
steel and cast steel, grey cast iron
austenitic steels up to 800 N/mm²

Guhring no.	1101
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	10.00
Standard range page	587

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Oil feed drills, flute length to DIN 341



For drilling through drill bushes

laminated sheet metal
steel and cast steel, grey cast iron
austenitic steels up to 800 N/mm²

Guhring no.	270
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	10.00
Standard range page	588

Oil feed drills, flute length to DIN 341



For drilling through drill bushes

laminated sheet metal
steel and cast steel, grey cast iron
austenitic steels up to 800 N/mm²

Guhring no.	271
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	10.00
Standard range page	588

Oil feed drills, flute length to DIN 341



For drilling through drill bushes

laminated sheet metal
steel and cast steel, grey cast iron
austenitic steels up to 800 N/mm²

Guhring no.	272
Standard	Guhring std.
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	10.00
Standard range page	588

Oil feed drills, flute length to DIN 341



Co-alloyed high speed steel
Increased wear resistance
For drilling through drill bushes

tensile and high tensile steels
cast steel, grey cast iron
stainless/acid/heat resistant steels
tensile strength between 800 and 1300 N/mm²

Guhring no.	370
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	11.00
Standard range page	588

Oil feed drills, flute length to DIN 341



Co-alloyed high speed steel
Increased wear resistance
For drilling through drill bushes

tensile and high tensile steels
cast steel, grey cast iron
stainless/acid/heat resistant steels
tensile strength between 800 and 1300 N/mm²

Guhring no.	371
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	11.00
Standard range page	588

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Oil feed drills, flute length to DIN 341



Co-alloyed high speed steel
Increased wear resistance
For drilling through drill bushes

tensile and high tensile steels
cast steel, grey cast iron
stainless/acid/heat resistant steels
tensile strength between 800 and 1300 N/mm²

Guhring no.	372
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	11.00
Standard range page	588

Oil feed drills, flute length to DIN 1870



Co-alloyed high speed steel
Increased wear resistance
For drilling through drill bushes

tensile and high tensile steels
cast steel, grey cast iron
stainless/acid/heat resistant steels
tensile strength between 800 and 1300 N/mm²

Guhring no.	374
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	11.00
Standard range page	591

Oil feed drills, flute length to DIN 1870



Co-alloyed high speed steel
Increased wear resistance
For drilling through drill bushes

tensile and high tensile steels
cast steel, grey cast iron
stainless/acid/heat resistant steels
tensile strength between 800 and 1300 N/mm²

Guhring no.	375
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	11.00
Standard range page	591

Oil feed drills, flute length to DIN 1870



Co-alloyed high speed steel
Increased wear resistance
For drilling through drill bushes

tensile and high tensile steels
cast steel, grey cast iron
stainless/acid/heat resistant steels
tensile strength between 800 and 1300 N/mm²

Guhring no.	376
Standard	Guhring std.
Tool material	HSCO
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	11.00
Standard range page	591

Extra length twist drills, series 1



For extremely deep holes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Guhring no.	266
Standard	DIN 1870
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	7.55
Standard range page	593

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Extra length twist drills, series 1

Guhring no.	525
Standard	DIN 1870
Tool material	HSS
Surface	○
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	7.75
Standard range page	593



For extremely deep holes
For soft and long-chipping materials

long chipping materials up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Extra length twist drills, series 1

Guhring no.	526
Standard	DIN 1870
Tool material	HSS
Surface	◐ >Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	5.80
Standard range page	593



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills, series 1

Guhring no.	620
Standard	DIN 1870
Tool material	HSCO
Surface	◐ >Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	9.52
Standard range page	593



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For unsatisfactory chip evacuation
For extremely deep holes

high tensile steels and cast steels
grey cast iron, malleable and spheroidal iron

Extra length twist drills, series 2

Guhring no.	267
Standard	DIN 1870
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	7.70
Standard range page	596



For extremely deep holes

alloyed/unalloyed steel and cast steel
grey cast iron, malleable and spheroidal iron
sintered powder metal

Extra length twist drills, series 2

Guhring no.	527
Standard	DIN 1870
Tool material	HSS
Surface	◐ >Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	7.50
Standard range page	596



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

○ bright ● steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Extra length twist drills, series 2

Guhring no.	542
Standard	DIN 1870
Tool material	HSS
Surface	
Type	GT50
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	8.00
Standard range page	596



For extremely deep holes

long chipping materials up to 500 N/mm²
mild steel
Aluminium, long chipping Al-alloys
zinc, refined copper, silumin, electron
zamak, argalium, soft plastics, wood

Extra length twist drills, series 2

Guhring no.	621
Standard	DIN 1870
Tool material	HSCO
Surface	>Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	9.52
Standard range page	596



Co-alloyed high speed steel
Wide flutes
Increased wear resistance
For unsatisfactory chip evacuation
For extremely deep holes

high tensile steels and cast steels
grey cast iron, malleable and spheroidal iron

Extra length twist drills

Guhring no.	563
Standard	Guhring std.
Tool material	HSS
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	6.00
Standard range page	599



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills

Guhring no.	566
Standard	Guhring std.
Tool material	HSS
Surface	>Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	8.00
Standard range page	599



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills

Guhring no.	293
Standard	Guhring std.
Tool material	HSS
Surface	>Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	14.01
Standard range page	600



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

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Extra length twist drills

Guhring no.	564
Standard	Guhring std.
Tool material	HSS
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	6.00
Standard range page	600



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills

Guhring no.	565
Standard	Guhring std.
Tool material	HSS
Surface	>Ø 16,0
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	6.00
Standard range page	601



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills

Guhring no.	298
Standard	Guhring std.
Tool material	HSS
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	14.01
Standard range page	602



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Extra length twist drills

Guhring no.	299
Standard	Guhring std.
Tool material	HSS
Surface	
Type	GT 100
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	130
Web thinned ≥Ø	14.01
Standard range page	603



Wide flutes
For unsatisfactory chip evacuation
For extremely deep holes

cast iron and steels up to 1000 N/mm²
Not recommended for:
CrNi steels, stainless steels

Taper pin drills

Guhring no.	532
Standard	DIN 1898
Tool material	HSS
Surface	
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	5.00
Standard range page	604



For tapered holes
For holding taper pins
To DIN 1 (new: DIN EN 22 339)
DIN 7978 (new: DIN EN 28 736),
DIN 7977 (new: DIN EN 28737) and DIN 258

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Carbide-tipped twist drill



Carbide tipped

spring steel
hard cast iron over 300 Brinell
pure molybdenum
hard bronzes
glass fibres reinforced plastics
(e.g. printed circuit boards)
Duroplastics that cause wear on lands and cutting edges

Guhring no.	705
Standard	DIN 8041
Tool material	Carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	8.00
Standard range page	605

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Stepped drills for centering to DIN 332



60° countersink angle
For tapping size holes with centre
To DIN 332, sheet 2, form D
Application on centering/cut-off mach.

Guhring no.	274
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.30
Standard range page	606

Stepped drills for centering to DIN 332



60° countersink angle
For tapping size holes with centre
To DIN 332, sheet 2, form DR
Application on centering/cut-off mach.

Guhring no.	574
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.30
Standard range page	606

Stepped drills for centering to DIN 332



Shank without flat
60° countersink angle
For tapping size holes with centre
To DIN 332, sheet 2, form D

Guhring no.	575
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.30
Standard range page	607

Stepped drills for centering to DIN 332



Shank without flat
60° countersink angle
For tapping size holes with centre
To DIN 332, sheet 2, form D

Guhring no.	576
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	6.80
Standard range page	608

Straight shank short step drills



Very high torsional stability
For CNC and NC machines
For through holes
To DIN EN 20 273
For screwhead countersinks 90°
f dependent on small diameter
vc dependent on large diameter

Guhring no.	378
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.20
Standard range page	609

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Straight shank short step drills



Very high torsional stability
For CNC and NC machines
For through holes
To DIN EN 20 273
For screwhead countersinks 90°
f dependent on small diameter
vc dependent on large diameter

Guhring no.	1147
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.40
Standard range page	609

Straight shank short step drills



Very high torsional stability
For CNC and NC machines
For through holes
To DIN EN 20 273
For screwhead countersinks 180°
to DIN 974-1
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

Guhring no.	379
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.40
Standard range page	610

Straight shank short step drills



Very high torsional stability
For CNC and NC machines
For tapping size holes
to DIN 336
For countersinking 90°
To DIN EN 20 273
f dependent on small diameter
vc dependent on large diameter

Guhring no.	380
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.50
Standard range page	611

Straight shank subland drills



fine tolerances
For through holes
To DIN EN 20 273
For screwhead countersinks 90°
f dependent on small diameter
vc dependent on large diameter

Guhring no.	536
Standard	DIN 8374
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.20
Standard range page	612

Straight shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 90°
Form A and F
to DIN 74
f dependent on small diameter
vc dependent on large diameter

Guhring no.	569
Standard	DIN 8374
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	
Standard range page	612

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Straight shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 90°
Form A
to DIN 74
f dependent on small diameter
vc dependent on large diameter

Guhring no.	636
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.40
Standard range page	612

Straight shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 180°
to DIN 974-1
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

Guhring no.	638
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.20
Standard range page	612

Straight shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 180°
to DIN 974-1
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

Guhring no.	538
Standard	DIN 8376
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.40
Standard range page	613

Straight shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 180°
to DIN 974-1
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

abrasive materials
AlSi-alloys
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges
high tensile steels, cast steel, grey cast iron
chilled cast iron, Mn hard steels, CrNi steels
bronzes, light metals

Guhring no.	738
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	3.40
Standard range page	613

Straight shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 180°
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

Guhring no.	514
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	5.90
Standard range page	614

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Straight shank subland drills



For tapping size holes
to DIN 336
For countersinking 90°
For through holes
To DIN EN 20 273
f dependent on small diameter
vc dependent on large diameter

Guhring no.	540
Standard	DIN 8378
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.50
Standard range page	615

Straight shank subland drills



For tapping size holes
to DIN 336
For countersinking 90°
For through holes
To DIN EN 20 273
f dependent on small diameter
vc dependent on large diameter

abrasive materials
AlSi-alloys
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges
high tensile steels, cast steel, grey cast iron
chilled cast iron, Mn hard steels, CrNi steels
bronzes, light metals

Guhring no.	739
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	2.50
Standard range page	615

Taper shank subland drills



fine tolerances
For through holes
To DIN EN 20 273
For screwhead countersinks 90°
f dependent on small diameter
vc dependent on large diameter

Guhring no.	637
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	6.40
Standard range page	616

Taper shank subland drills



fine tolerances
For through holes
To DIN EN 20 273
For screwhead countersinks 90°
f dependent on small diameter
vc dependent on large diameter

Guhring no.	537
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	5.50
Standard range page	616

Taper shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 180°
to DIN 974-1
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

Guhring no.	639
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	5.30
Standard range page	617

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Taper shank subland drills



For through holes
To DIN EN 20 273
For screwhead countersinks 180°
to DIN 74
For screws
to DIN 6912, 7513, 7984
f dependent on small diameter
vc dependent on large diameter

Guhring no.	539
Standard	DIN 8377
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	5.50
Standard range page	618

Taper shank subland drills



For through holes
With old countersinks form H, J, K
To DIN 75, part 2
For screws
To DIN 84, 912, 6712
f dependent on small diameter
vc dependent on large diameter

Guhring no.	520
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	5.30
Standard range page	619

Taper shank subland drills



For tapping size holes
To DIN 336, part 1
For countersinking 90°
To DIN EN 20 273
f dependent on small diameter
vc dependent on large diameter

Guhring no.	541
Standard	DIN 8379
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	6.80
Standard range page	620

◯ bright ◯ steam tempered ◯ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Center drills without flat



For centre holes
Form A to U.S. standards

Guhring no.	594
Standard	ASA
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	621

Center drills without flat



For centre holes
Form B to U.S. standards

Guhring no.	595
Standard	ASA
Tool material	HSS
Surface	◯
Form	B
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	622

Center drills without flat



For centre holes
Form A to British standards

Guhring no.	292
Standard	BS 328
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.19
Standard range page	623

Center drills without flat



For centre holes
Form A to British standards

Guhring no.	294
Standard	BS 328
Tool material	HSS
Surface	◯
Form	A
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.19
Standard range page	623

Center drills without flat



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
d1 ≤ 0.8 mm: not double ended

Guhring no.	581
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	624

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Center drills without flat



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
d1 ≤ 0.8 mm: not double ended

Guhring no.	582
Standard	DIN 333
Tool material	HSS
Surface	○
Form	A
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	624

Center drills without flat



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R
d1 ≤ 0.8 mm: not double ended

Guhring no.	583
Standard	DIN 333
Tool material	HSS
Surface	○
Form	R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	624

Center drills without flat



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R
d1 ≤ 0.8 mm: not double ended

Guhring no.	584
Standard	DIN 333
Tool material	HSS
Surface	○
Form	R
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	624

Center drills without flat



With heel
Without protected countersink
Recess between countersink and hole
Especially high rigidity
High cutting rates
For centre holes
To DIN 332, sheet 1, form A

Guhring no.	590
Standard	DIN 333
Tool material	HSS
Surface	○
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	625

Center drills without flat



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
d1 ≤ 0.8 mm: not double ended

Guhring no.	613
Standard	DIN 333
Tool material	HSS
Surface	(S)
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	625

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown (A) TiAlN (a) TiAlN nanoA (A) TiAlN SuperA

Center drills without flat

Guhring no.	614
Standard	DIN 333
Tool material	HSS
Surface	S
Form	R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	625



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R
d1 ≤ 0.8 mm: not double ended

Center drills without flat

Guhring no.	381
Standard	DIN 333
Tool material	HSCO
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	625



Co-alloyed high speed steel
Without protected countersink
Increased wear resistance
For centre holes
To DIN 332, sheet 1, form A

materials over 800 N/mm²
stainl./acid-/heat-res. CrNi steel s

Center drills without flat

Guhring no.	736
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	625



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
d1 ≤ 0.8 mm: not double ended

abrasive materials
AlSi-alloys
fiber reinforced plastics
Duroplastics that cause wear on lands and cutting edges
high tensile steels, cast steel, grey cast iron
chilled cast iron, Mn hard steels, CrNi steels
bronzes, light metals

Center drills without flat

Guhring no.	281
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	626



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
d1 ≤ 0.8 mm: not double ended

Center drills without flat

Guhring no.	282
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	A
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	626



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
d1 ≤ 0.8 mm: not double ended

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Center drills without flat



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R
d1 ≤ 0.8 mm: not double ended

Guhring no.	283
Standard	DIN 333
Tool material	HSS
Surface	○
Form	R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	626

Center drills without flat



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R

Guhring no.	284
Standard	DIN 333
Tool material	HSS
Surface	○
Form	R
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	626

Center drills without flat



For centre holes
To DIN 332, sheet 1, form B
With protected 120° countersink

Guhring no.	585
Standard	DIN 333
Tool material	HSS
Surface	○
Form	B
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	627

Center drills without flat



For centre holes
To DIN 332, sheet 1, form B
With protected 120° countersink

Guhring no.	586
Standard	DIN 333
Tool material	HSS
Surface	○
Form	B
Cutting direction	left-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	627

Center drills without flat



With heel
Recess between countersink and hole
Especially high rigidity
High cutting rates
For centre holes
To DIN 332, sheet 1, form B
With protected 120° countersink
d1 ≤ 0.8 mm: not double ended

Guhring no.	591
Standard	DIN 333
Tool material	HSS
Surface	○
Form	B
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	627

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Center drills without flat



Long special drill
Without protected countersink
For centre holes
To DIN 332, sheet 1, form A
For deep centering positions

Guhring no.	280
Standard	Guhring std.
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	628

Center drills without flat



For centre holes
To DIN 332, sheet 1, form B
With protected 120° countersink

Guhring no.	285
Standard	Guhring std.
Tool material	HSS
Surface	◯
Form	B
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	629

Center drills with flat



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A

Guhring no.	587
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	630

Center drills with flat



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R

Guhring no.	588
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	630

Center drills with flat



Without protected countersink
For centre holes
To DIN 332, sheet 1, form A

Guhring no.	287
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	A
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	631

Center drills with flat



Especially high rigidity
Correct positioning between lathe centers
For centre holes
To DIN 332, sheet 1, form R

Guhring no.	288
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	R
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	631

Center drills with flat



For centre holes
To DIN 332, sheet 1, form B
With protected 120° countersink

Guhring no.	589
Standard	DIN 333
Tool material	HSS
Surface	◯
Form	B
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	632

Center drills with flat



For centre holes
To DIN 332, sheet 1, form B
With protected 120° countersink

Guhring no.	289
Standard	Guhring std.
Tool material	HSS
Surface	◯
Form	B
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	118
Web thinned ≥Ø	1.60
Standard range page	633

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Straight shank core drills

Guhring no.	750
Standard	Guhring std.
Tool material	Carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	634



Core drills
Three flutes
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

steels over 1000 N/mm²
cast iron over 240 Brinell
Mn-steels, AlSi alloys
hard and abrasive plastics

Straight shank core drills

Guhring no.	533
Standard	DIN 344
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	635



Core drills
Three flutes
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

Taper shank core drills

Guhring no.	729
Standard	Guhring std.
Tool material	Carbide
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	638



Core drills, carbide tipped
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

steels over 1000 N/mm²
cast iron over 240 Brinell
Mn-steels, AlSi alloys
hard and abrasive plastics

Taper shank core drills

Guhring no.	534
Standard	DIN 343
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	639



Core drills
Three flutes
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

Taper shank core drills

Guhring no.	634
Standard	DIN 343
Tool material	HSCO
Surface	●
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	639



Core drills
Co-alloyed high speed steel
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Taper shank core drills



Core drills
Co-alloyed high speed steel
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

Guhring no.	635
Standard	DIN 1864
Tool material	HSCO
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	643

Taper shank core drills



Core drills
Especially high rigidity
For pre-drilled/-cast/-punched holes
Corrects alignment inaccuracies
Corrects circularity errors
Improved surface quality of hole
Observe min. pilot hole dia.
Chamfer dia. < tapping size hole
Perf. finish reaming after core drilling

Guhring no.	555
Standard	DIN 1864
Tool material	HSS
Surface	◯
Type	N
Cutting direction	right-hand
Point geometry	Relieved cone
Point angle °	120
Web thinned ≥Ø	
Standard range page	644

Oil feed adaptors

Guhring no.	230
Standard	Guhring std.
Standard range page	645

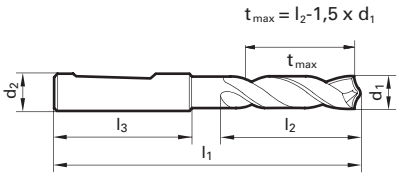


Product information
For Guhring oil feed drills (guhring no. 269, 271, 371 and 375)
Suitable for all drilling machines.
The oil feed drill fits direct into the spindle.
Radial coolant via the ball race at the run-out of the flutes.

The adaptor does not extend the drilling system.
Longitudinal stability and torsional rigidity are completely maintained.
Coolant: soluble oil.
Thin cutting oil can be used.
As a rule, coolant pumps are sufficient.

Guhring no.	1184	2480	2472	2475	8524
Standard	DIN 6537 K				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F	RT 100 HF
Drilling depth	3xD	3xD	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	121	121
Techn. data page	120	120	120	120	120

NEW



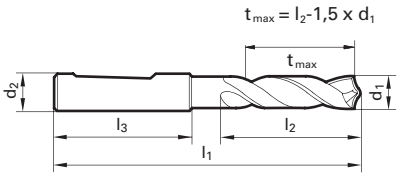


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
3.000		6.000	62.00	20.00	36.00	● ● ● ●
3.100		6.000	62.00	20.00	36.00	● ● ● ●
3.170	1/8	6.000	62.00	20.00	36.00	● ● ●
3.200		6.000	62.00	20.00	36.00	● ● ● ●
3.250		6.000	62.00	20.00	36.00	● ● ●
3.300		6.000	62.00	20.00	36.00	● ● ● ●
3.400		6.000	62.00	20.00	36.00	❍ ● ● ●
3.500		6.000	62.00	20.00	36.00	● ● ● ●
3.570	9/64	6.000	62.00	20.00	36.00	● ● ● ●
3.600		6.000	62.00	20.00	36.00	❍ ● ● ●
3.700		6.000	62.00	20.00	36.00	❍ ● ● ● ●
3.800		6.000	66.00	24.00	36.00	● ● ● ●
3.900		6.000	66.00	24.00	36.00	❍ ● ● ●
3.970	5/32	6.000	66.00	24.00	36.00	❍ ● ● ●
4.000		6.000	66.00	24.00	36.00	● ● ● ●
4.100		6.000	66.00	24.00	36.00	● ● ● ●
4.200		6.000	66.00	24.00	36.00	● ● ● ●
4.300		6.000	66.00	24.00	36.00	● ● ●
4.370	11/64	6.000	66.00	24.00	36.00	● ● ●
4.400		6.000	66.00	24.00	36.00	❍ ● ● ●
4.500		6.000	66.00	24.00	36.00	● ● ● ●
4.600		6.000	66.00	24.00	36.00	● ● ● ●
4.650		6.000	66.00	24.00	36.00	● ● ● ●
4.700		6.000	66.00	24.00	36.00	❍ ● ● ●
4.760	3/16	6.000	66.00	28.00	36.00	❍ ● ● ●
4.800		6.000	66.00	28.00	36.00	● ● ● ●
4.900		6.000	66.00	28.00	36.00	● ● ● ●
5.000		6.000	66.00	28.00	36.00	● ● ● ● ●
5.100		6.000	66.00	28.00	36.00	● ● ● ●
5.160	13/64	6.000	66.00	28.00	36.00	❍ ● ● ●
5.200		6.000	66.00	28.00	36.00	● ● ● ●
5.300		6.000	66.00	28.00	36.00	● ● ● ●
5.400		6.000	66.00	28.00	36.00	● ● ● ●
5.500		6.000	66.00	28.00	36.00	● ● ● ❍ ●
5.550		6.000	66.00	28.00	36.00	● ● ●
5.560	7/32	6.000	66.00	28.00	36.00	● ● ● ●

❍ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1184	2480	2472	2475	8524
Standard	DIN 6537 K				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F	RT 100 HF
Drilling depth	3xD	3xD	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	121	121
Techn. data page	120	120	120	120	120

NEW



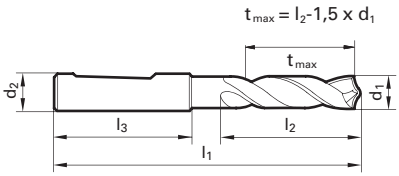


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
5.600		6.000	66.00	28.00	36.00	○ ● ● ●
5.650		6.000	66.00	28.00	36.00	●
5.700		6.000	66.00	28.00	36.00	○ ● ● ●
5.800		6.000	66.00	28.00	36.00	○ ● ● ●
5.900		6.000	66.00	28.00	36.00	● ● ● ●
5.950	15/64	6.000	66.00	28.00	36.00	○ ● ● ●
6.000		6.000	66.00	28.00	36.00	● ● ● ● ●
6.100		8.000	79.00	34.00	36.00	● ● ● ●
6.200		8.000	79.00	34.00	36.00	● ● ● ●
6.300		8.000	79.00	34.00	36.00	● ● ● ●
6.350	1/4	8.000	79.00	34.00	36.00	● ● ● ●
6.400		8.000	79.00	34.00	36.00	● ● ● ●
6.500		8.000	79.00	34.00	36.00	○ ● ● ● ●
6.600		8.000	79.00	34.00	36.00	● ● ● ●
6.700		8.000	79.00	34.00	36.00	○ ● ● ●
6.750	17/64	8.000	79.00	34.00	36.00	● ● ● ●
6.800		8.000	79.00	34.00	36.00	● ● ● ● ●
6.900		8.000	79.00	34.00	36.00	● ● ●
7.000		8.000	79.00	34.00	36.00	● ● ● ● ●
7.100		8.000	79.00	41.00	36.00	● ● ● ●
7.140	9/32	8.000	79.00	41.00	36.00	● ● ● ●
7.200		8.000	79.00	41.00	36.00	○ ● ● ●
7.300		8.000	79.00	41.00	36.00	○ ● ● ●
7.400		8.000	79.00	41.00	36.00	○ ● ● ●
7.500		8.000	79.00	41.00	36.00	○ ● ● ●
7.540	19/64	8.000	79.00	41.00	36.00	○ ● ● ●
7.600		8.000	79.00	41.00	36.00	○ ● ● ●
7.700		8.000	79.00	41.00	36.00	○ ● ● ●
7.800		8.000	79.00	41.00	36.00	○ ● ● ●
7.900		8.000	79.00	41.00	36.00	○ ● ● ●
7.940	5/16	8.000	79.00	41.00	36.00	○ ● ● ●
8.000		8.000	79.00	41.00	36.00	○ ● ● ● ●
8.100		10.000	89.00	47.00	40.00	● ● ● ●
8.200		10.000	89.00	47.00	40.00	○ ● ● ●
8.300		10.000	89.00	47.00	40.00	○ ● ● ●
8.330	21/64	10.000	89.00	47.00	40.00	○ ● ● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1184	2480	2472	2475	8524
Standard	DIN 6537 K				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F	RT 100 HF
Drilling depth	3xD	3xD	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	121	121
Techn. data page	120	120	120	120	120

NEW





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
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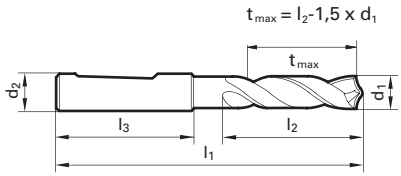
8.500		10.000	89.00	47.00	40.00	● ● ● ● ●
8.600		10.000	89.00	47.00	40.00	● ● ●
8.700		10.000	89.00	47.00	40.00	○ ● ● ●
8.730	11/32	10.000	89.00	47.00	40.00	● ● ● ●
8.800		10.000	89.00	47.00	40.00	● ● ● ●
8.900		10.000	89.00	47.00	40.00	○ ● ● ●
9.000		10.000	89.00	47.00	40.00	○ ● ● ● ●
9.100		10.000	89.00	47.00	40.00	○ ● ● ●
9.130	23/64	10.000	89.00	47.00	40.00	● ● ● ●
9.200		10.000	89.00	47.00	40.00	○ ● ● ●
9.250		10.000	89.00	47.00	40.00	● ● ●
9.300		10.000	89.00	47.00	40.00	○ ● ● ○ ●
9.400		10.000	89.00	47.00	40.00	○ ● ● ●
9.500		10.000	89.00	47.00	40.00	● ● ● ●
9.520	3/8	10.000	89.00	47.00	40.00	● ● ● ●
9.600		10.000	89.00	47.00	40.00	○ ● ● ●
9.700		10.000	89.00	47.00	40.00	○ ● ● ●
9.800		10.000	89.00	47.00	40.00	○ ● ● ●
9.900		10.000	89.00	47.00	40.00	○ ● ● ●
9.920	25/64	10.000	89.00	47.00	40.00	○ ● ● ●
10.000		10.000	89.00	47.00	40.00	● ● ● ● ●
10.100		12.000	102.00	55.00	45.00	● ● ● ●
10.200		12.000	102.00	55.00	45.00	○ ● ● ●
10.300		12.000	102.00	55.00	45.00	● ● ● ●
10.320	13/32	12.000	102.00	55.00	45.00	○ ● ● ●
10.400		12.000	102.00	55.00	45.00	● ● ●
10.500		12.000	102.00	55.00	45.00	● ● ● ○ ●
10.600		12.000	102.00	55.00	45.00	● ● ● ●
10.700		12.000	102.00	55.00	45.00	● ● ●
10.720	27/64	12.000	102.00	55.00	45.00	○
10.800		12.000	102.00	55.00	45.00	● ● ● ●
10.900		12.000	102.00	55.00	45.00	● ● ●
11.000		12.000	102.00	55.00	45.00	○ ● ● ● ●
11.100		12.000	102.00	55.00	45.00	○ ● ● ●
11.110	7/16	12.000	102.00	55.00	45.00	● ● ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1184	2480	2472	2475	8524
Standard	DIN 6537 K				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F	RT 100 HF
Drilling depth	3xD	3xD	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	121	121
Techn. data page	120	120	120	120	120

NEW





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
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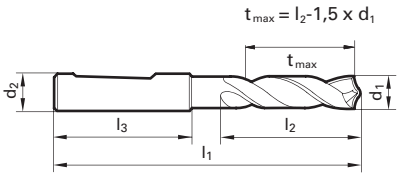
11.300		12.000	102.00	55.00	45.00	● ● ●
11.400		12.000	102.00	55.00	45.00	● ● ● ●
11.500		12.000	102.00	55.00	45.00	● ● ● ●
11.600		12.000	102.00	55.00	45.00	❍ ● ● ●
11.700		12.000	102.00	55.00	45.00	● ● ● ●
11.800		12.000	102.00	55.00	45.00	● ● ● ●
11.900		12.000	102.00	55.00	45.00	● ● ● ●
11.910	15/32	12.000	102.00	55.00	45.00	❍ ● ● ●
12.000		12.000	102.00	55.00	45.00	● ● ● ● ●
12.100		14.000	107.00	60.00	45.00	● ● ❍
12.200		14.000	107.00	60.00	45.00	❍ ● ● ●
12.300	31/64	14.000	107.00	60.00	45.00	❍
12.400		14.000	107.00	60.00	45.00	●
12.500		14.000	107.00	60.00	45.00	● ● ●
12.600		14.000	107.00	60.00	45.00	●
12.700	1/2	14.000	107.00	60.00	45.00	● ● ● ●
12.800		14.000	107.00	60.00	45.00	● ● ●
13.000		14.000	107.00	60.00	45.00	● ● ● ❍ ●
13.100	33/64	14.000	107.00	60.00	45.00	❍ ●
13.200		14.000	107.00	60.00	45.00	●
13.300		14.000	107.00	60.00	45.00	❍ ● ●
13.400		14.000	107.00	60.00	45.00	❍
13.500		14.000	107.00	60.00	45.00	● ● ● ●
13.700		14.000	107.00	60.00	45.00	● ● ●
13.800		14.000	107.00	60.00	45.00	●
13.890	35/64	14.000	107.00	60.00	45.00	●
14.000		14.000	107.00	60.00	45.00	● ● ● ●
14.200		16.000	115.00	65.00	48.00	❍ ● ● ●
14.290	9/16	16.000	115.00	65.00	48.00	● ● ● ●
14.300		16.000	115.00	65.00	48.00	● ●
14.400		16.000	115.00	65.00	48.00	❍ ❍
14.500		16.000	115.00	65.00	48.00	● ● ●
14.700		16.000	115.00	65.00	48.00	● ❍ ● ●
14.800		16.000	115.00	65.00	48.00	● ●
15.000		16.000	115.00	65.00	48.00	● ● ● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	1184	2480	2472	2475	8524
Standard	DIN 6537 K				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F	RT 100 HF
Drilling depth	3xD	3xD	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	121	121
Techn. data page	120	120	120	120	120

NEW



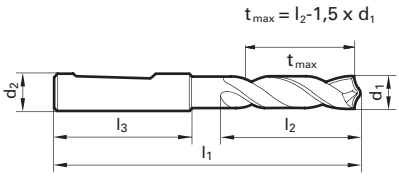


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
15.100		16.000	115.00	65.00	48.00	● ●
15.200		16.000	115.00	65.00	48.00	● ○ ● ●
15.300		16.000	115.00	65.00	48.00	○ ●
15.480	39/64	16.000	115.00	65.00	48.00	○
15.500		16.000	115.00	65.00	48.00	● ● ●
15.600		16.000	115.00	65.00	48.00	○ ● ●
15.700		16.000	115.00	65.00	48.00	○ ○ ● ●
15.800		16.000	115.00	65.00	48.00	● ○ ●
15.870	5/8	16.000	115.00	65.00	48.00	●
15.900		16.000	115.00	65.00	48.00	○
16.000		16.000	115.00	65.00	48.00	● ● ● ●
16.100		18.000	123.00	73.00	48.00	●
16.200		18.000	123.00	73.00	48.00	●
16.270	41/64	18.000	123.00	73.00	48.00	●
16.300		18.000	123.00	73.00	48.00	● ● ●
16.500		18.000	123.00	73.00	48.00	● ○ ● ●
16.800		18.000	123.00	73.00	48.00	●
16.900		18.000	123.00	73.00	48.00	●
17.000		18.000	123.00	73.00	48.00	● ● ● ●
17.300		18.000	123.00	73.00	48.00	● ●
17.460	11/16	18.000	123.00	73.00	48.00	●
17.500		18.000	123.00	73.00	48.00	● ○ ● ●
17.700		18.000	123.00	73.00	48.00	○
17.860	45/64	18.000	123.00	73.00	48.00	○
18.000		18.000	123.00	73.00	48.00	● ● ● ●
18.100		20.000	131.00	79.00	50.00	○
18.300		20.000	131.00	79.00	50.00	○ ●
18.500		20.000	131.00	79.00	50.00	○ ○ ● ●
18.650	47/64	20.000	131.00	79.00	50.00	○
18.900		20.000	131.00	79.00	50.00	●
19.000		20.000	131.00	79.00	50.00	● ● ● ●
19.050	3/4	20.000	131.00	79.00	50.00	● ●
19.200		20.000	131.00	79.00	50.00	●
19.300		20.000	131.00	79.00	50.00	●
19.500		20.000	131.00	79.00	50.00	● ○ ● ●
19.600		20.000	131.00	79.00	50.00	○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	1184	2480	2472	2475	8524
Standard	DIN 6537 K				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F	RT 100 HF
Drilling depth	3xD	3xD	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	121	121
Techn. data page	120	120	120	120	120

NEW

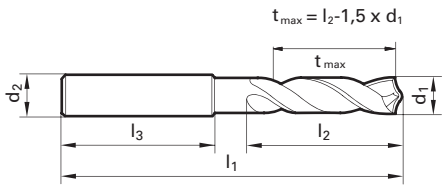




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
20.000		20.000	131.00	79.00	50.00	● ● ● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2717	2996	2719	2712
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	F	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	121	121	121	121

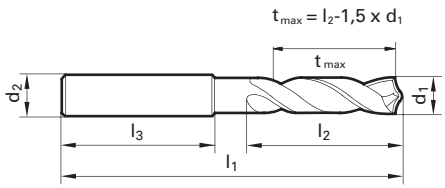




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
3.000		6.000	66.00	28.00	36.00	● ● ●
3.100		6.000	66.00	28.00	36.00	● ●
3.170	1/8	6.000	66.00	28.00	36.00	● ●
3.200		6.000	66.00	28.00	36.00	● ●
3.250		6.000	66.00	28.00	36.00	● ●
3.300		6.000	66.00	28.00	36.00	● ● ● ●
3.400		6.000	66.00	28.00	36.00	● ●
3.500		6.000	66.00	28.00	36.00	● ● ● ●
3.570	9/64	6.000	66.00	28.00	36.00	● ●
3.600		6.000	66.00	28.00	36.00	● ●
3.700		6.000	66.00	28.00	36.00	● ●
3.800		6.000	74.00	36.00	36.00	● ●
3.900		6.000	74.00	36.00	36.00	● ●
3.970	5/32	6.000	74.00	36.00	36.00	● ●
4.000		6.000	74.00	36.00	36.00	● ● ● ●
4.100		6.000	74.00	36.00	36.00	● ●
4.200		6.000	74.00	36.00	36.00	● ●
4.300		6.000	74.00	36.00	36.00	● ●
4.370	11/64	6.000	74.00	36.00	36.00	● ●
4.400		6.000	74.00	36.00	36.00	● ●
4.500		6.000	74.00	36.00	36.00	● ● ❍
4.600		6.000	74.00	36.00	36.00	● ●
4.650		6.000	74.00	36.00	36.00	● ●
4.700		6.000	74.00	36.00	36.00	● ●
4.760	3/16	6.000	82.00	44.00	36.00	● ●
4.800		6.000	82.00	44.00	36.00	● ●
4.900		6.000	82.00	44.00	36.00	● ●
5.000		6.000	82.00	44.00	36.00	● ● ● ●
5.100		6.000	82.00	44.00	36.00	● ●
5.160	13/64	6.000	82.00	44.00	36.00	● ●
5.200		6.000	82.00	44.00	36.00	● ●
5.300		6.000	82.00	44.00	36.00	● ●
5.400		6.000	82.00	44.00	36.00	● ●
5.500		6.000	82.00	44.00	36.00	❍ ● ●
5.550		6.000	82.00	44.00	36.00	● ●
5.560	7/32	6.000	82.00	44.00	36.00	● ●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2717	2996	2719	2712
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	F	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	121	121	121	121

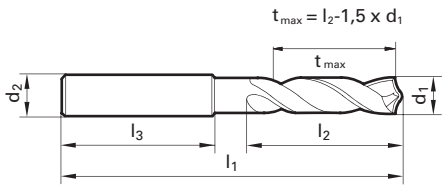




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability			
5.600		6.000	82.00	44.00	36.00		●	●	
5.700		6.000	82.00	44.00	36.00		●	●	
5.800		6.000	82.00	44.00	36.00		●	●	
5.900		6.000	82.00	44.00	36.00		●	●	
5.950	15/64	6.000	82.00	44.00	36.00		●	●	
6.000		6.000	82.00	44.00	36.00	❍	●	●	
6.100		8.000	91.00	53.00	36.00		●	●	
6.200		8.000	91.00	53.00	36.00		●	●	
6.300		8.000	91.00	53.00	36.00		●	●	
6.350	1/4	8.000	91.00	53.00	36.00		●	●	
6.400		8.000	91.00	53.00	36.00		●	●	
6.500		8.000	91.00	53.00	36.00		●	●	
6.600		8.000	91.00	53.00	36.00		●	●	
6.700		8.000	91.00	53.00	36.00		●	●	
6.750	17/64	8.000	91.00	53.00	36.00		●	●	
6.800		8.000	91.00	53.00	36.00	❍	●	●	●
6.900		8.000	91.00	53.00	36.00		●	●	
7.000		8.000	91.00	53.00	36.00	●	●	●	❍
7.100		8.000	91.00	53.00	36.00		●	●	
7.140	9/32	8.000	91.00	53.00	36.00		●	●	
7.200		8.000	91.00	53.00	36.00		●	●	
7.300		8.000	91.00	53.00	36.00		●	●	
7.400		8.000	91.00	53.00	36.00		●	●	
7.500		8.000	91.00	53.00	36.00	❍	●	●	❍
7.540	19/64	8.000	91.00	53.00	36.00		●	●	
7.600		8.000	91.00	53.00	36.00		●	●	
7.700		8.000	91.00	53.00	36.00		●	●	
7.800		8.000	91.00	53.00	36.00	❍	●	●	
7.900		8.000	91.00	53.00	36.00		●	●	
7.940	5/16	8.000	91.00	53.00	36.00		●	●	
8.000		8.000	91.00	53.00	36.00	●	●	●	●
8.100		10.000	103.00	61.00	40.00		●	●	
8.200		10.000	103.00	61.00	40.00		●	●	
8.300		10.000	103.00	61.00	40.00		●	●	
8.330	21/64	10.000	103.00	61.00	40.00		●	●	
8.400		10.000	103.00	61.00	40.00		●	●	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2717	2996	2719	2712
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	F	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	121	121	121	121

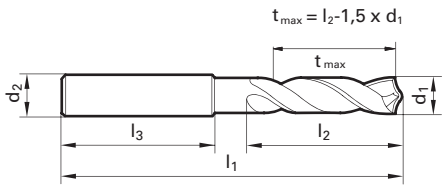




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
8.500		10.000	103.00	61.00	40.00	● ● ●
8.600		10.000	103.00	61.00	40.00	● ●
8.700		10.000	103.00	61.00	40.00	● ●
8.730	11/32	10.000	103.00	61.00	40.00	● ●
8.800		10.000	103.00	61.00	40.00	● ●
8.900		10.000	103.00	61.00	40.00	● ●
9.000		10.000	103.00	61.00	40.00	❍ ● ●
9.100		10.000	103.00	61.00	40.00	● ●
9.130	23/64	10.000	103.00	61.00	40.00	● ●
9.200		10.000	103.00	61.00	40.00	● ●
9.250		10.000	103.00	61.00	40.00	● ●
9.300		10.000	103.00	61.00	40.00	● ●
9.400		10.000	103.00	61.00	40.00	● ●
9.500		10.000	103.00	61.00	40.00	● ●
9.520	3/8	10.000	103.00	61.00	40.00	● ●
9.600		10.000	103.00	61.00	40.00	● ●
9.700		10.000	103.00	61.00	40.00	● ●
9.800		10.000	103.00	61.00	40.00	● ●
9.900		10.000	103.00	61.00	40.00	● ●
9.920	25/64	10.000	103.00	61.00	40.00	● ●
10.000		10.000	103.00	61.00	40.00	● ● ❍
10.100		12.000	118.00	71.00	45.00	● ●
10.200		12.000	118.00	71.00	45.00	● ● ● ❍
10.300		12.000	118.00	71.00	45.00	● ●
10.320	13/32	12.000	118.00	71.00	45.00	● ●
10.400		12.000	118.00	71.00	45.00	● ●
10.500		12.000	118.00	71.00	45.00	● ● ❍
10.600		12.000	118.00	71.00	45.00	● ●
10.700		12.000	118.00	71.00	45.00	● ●
10.800		12.000	118.00	71.00	45.00	● ●
10.900		12.000	118.00	71.00	45.00	● ●
11.000		12.000	118.00	71.00	45.00	❍ ● ●
11.100		12.000	118.00	71.00	45.00	● ●
11.110	7/16	12.000	118.00	71.00	45.00	● ●
11.200		12.000	118.00	71.00	45.00	● ● ●
11.300		12.000	118.00	71.00	45.00	● ●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2717	2996	2719	2712
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	F	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	121	121	121	121

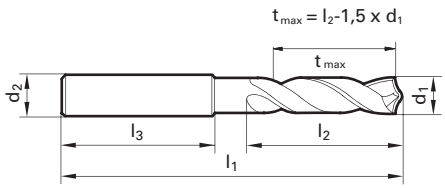




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability			
11.400		12.000	118.00	71.00	45.00		●	●	
11.500		12.000	118.00	71.00	45.00		●	●	
11.600		12.000	118.00	71.00	45.00		●	●	
11.700		12.000	118.00	71.00	45.00		●	●	
11.800		12.000	118.00	71.00	45.00		●	●	
11.900		12.000	118.00	71.00	45.00		●	●	
11.910	15/32	12.000	118.00	71.00	45.00		●	●	
12.000		12.000	118.00	71.00	45.00	❍	●	●	❍
12.100		14.000	124.00	77.00	45.00		●		
12.200		14.000	124.00	77.00	45.00		●	●	
12.400		14.000	124.00	77.00	45.00		❍		
12.500		14.000	124.00	77.00	45.00		●	●	
12.600		14.000	124.00	77.00	45.00		❍		
12.700	1/2	14.000	124.00	77.00	45.00		●	●	
12.800		14.000	124.00	77.00	45.00		❍		
13.000		14.000	124.00	77.00	45.00	●	●	●	
13.100	33/64	14.000	124.00	77.00	45.00		●		
13.300		14.000	124.00	77.00	45.00		❍		
13.500		14.000	124.00	77.00	45.00		●	●	
13.700		14.000	124.00	77.00	45.00		●	●	
14.000		14.000	124.00	77.00	45.00		●	●	
14.200		16.000	133.00	83.00	48.00		●	●	
14.290	9/16	16.000	133.00	83.00	48.00		●	●	
14.300		16.000	133.00	83.00	48.00		❍		
14.400		16.000	133.00	83.00	48.00		●		
14.500		16.000	133.00	83.00	48.00		●	●	
14.700		16.000	133.00	83.00	48.00		●	●	
14.800		16.000	133.00	83.00	48.00		❍		
15.000		16.000	133.00	83.00	48.00		●	●	❍
15.100		16.000	133.00	83.00	48.00		●		
15.200		16.000	133.00	83.00	48.00		●	●	
15.300		16.000	133.00	83.00	48.00		●		
15.500		16.000	133.00	83.00	48.00		●	●	
15.600		16.000	133.00	83.00	48.00		❍		
15.700		16.000	133.00	83.00	48.00		●	●	
15.800		16.000	133.00	83.00	48.00		●		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2717	2996	2719	2712
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	F	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 F
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	121	121	121	121



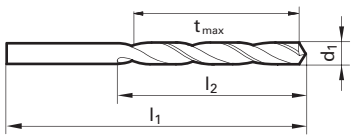


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability		
16.000		16.000	133.00	83.00	48.00	○	●	●
16.500		18.000	143.00	93.00	48.00		●	●
17.000		18.000	143.00	93.00	48.00		●	●
17.500		18.000	143.00	93.00	48.00		●	●
18.000		18.000	143.00	93.00	48.00		●	●
18.500		20.000	153.00	101.00	50.00		●	●
19.000		20.000	153.00	101.00	50.00		●	●
19.500		20.000	153.00	101.00	50.00		●	●
20.000		20.000	153.00	101.00	50.00		●	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1242	2473	1702
Standard		DIN 6539	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	S
Type	RT 100 U	RT 100 U	RT 100 F
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	121	122	122

$t_{max} = l_2 - 1{,}5 \times d_1$





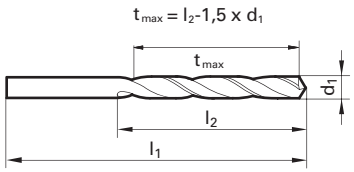




d1 mm	d1 inch	l1 mm	l2 mm	Availability		
3.000		46.00	16.00	●	●	●
3.100		49.00	18.00	●		●
3.170	1/8	49.00	18.00	●		●
3.200		49.00	18.00	●	●	●
3.300		49.00	18.00	●	●	●
3.400		52.00	20.00	●	○	●
3.500		52.00	20.00	●	●	●
3.570	9/64	52.00	20.00	●		○
3.600		52.00	20.00	●		●
3.700		52.00	20.00	●		●
3.800		55.00	22.00	●	●	●
3.900		55.00	22.00	●	●	●
3.970	5/32	55.00	22.00	●		●
4.000		55.00	22.00	●	●	●
4.100		55.00	22.00	●		●
4.200		55.00	22.00	●	●	●
4.300		58.00	24.00	●	●	●
4.370	11/64	58.00	24.00	●		●
4.400		58.00	24.00	●		●
4.500		58.00	24.00	●	○	●
4.600		58.00	24.00	●	○	●
4.700		58.00	24.00	●		○
4.760	3/16	62.00	26.00	●		●
4.800		62.00	26.00	●		●
4.900		62.00	26.00	●	●	●
5.000		62.00	26.00	●	●	●
5.100		62.00	26.00	●		●
5.160	13/64	62.00	26.00	●		●
5.200		62.00	26.00	●	●	○
5.300		62.00	26.00	●		●
5.400		66.00	28.00	●		○
5.500		66.00	28.00	●	●	●
5.560	7/32	66.00	28.00	●		●
5.600		66.00	28.00	●		●
5.700		66.00	28.00	●	●	●
5.800		66.00	28.00	●	○	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	1242	2473	1702
Standard		DIN 6539	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	S
Type	RT 100 U	RT 100 U	RT 100 F
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	121	122	122







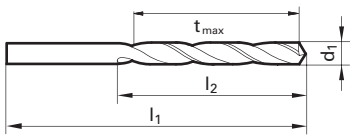


d1 mm	d1 inch	l1 mm	l2 mm	Availability		
5.900		66.00	28.00	●		○
5.950	15/64	66.00	28.00	●		●
6.000		66.00	28.00	●	●	●
6.100		70.00	31.00	●	●	●
6.200		70.00	31.00	●	●	●
6.300		70.00	31.00	●		●
6.350	1/4	70.00	31.00	●		●
6.400		70.00	31.00	●	○	○
6.500		70.00	31.00	●		●
6.600		70.00	31.00	●	○	●
6.700		70.00	31.00	●	○	●
6.750	17/64	74.00	34.00	●		○
6.800		74.00	34.00	●		●
6.900		74.00	34.00	●		●
7.000		74.00	34.00	●	●	●
7.100		74.00	34.00	●	●	○
7.140	9/32	74.00	34.00	●		○
7.200		74.00	34.00	●	●	●
7.300		74.00	34.00	○		●
7.400		74.00	34.00	●	○	○
7.500		74.00	34.00	●		
7.540	19/64	79.00	37.00	●		●
7.600		79.00	37.00	●		●
7.700		79.00	37.00	●		●
7.800		79.00	37.00	●		○
7.900		79.00	37.00	●		●
7.940	5/16	79.00	37.00	●		●
8.000		79.00	37.00	●		●
8.100		79.00	37.00	●	●	●
8.200		79.00	37.00	●		●
8.300		79.00	37.00	●		○
8.330	21/64	79.00	37.00	○		●
8.400		79.00	37.00	●		●
8.500		79.00	37.00	●	●	●
8.600		84.00	40.00	●		●
8.700		84.00	40.00	●	○	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1242	2473	1702
Standard		DIN 6539	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	S
Type	RT 100 U	RT 100 U	RT 100 F
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	121	122	122

$t_{max} = l_2 - 1{,}5 \times d_1$







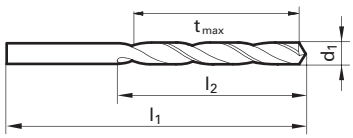


d1 mm	d1 inch	l1 mm	l2 mm	Availability		
8.730	11/32	84.00	40.00	●		●
8.800		84.00	40.00	●	○	○
8.900		84.00	40.00	○		●
9.000		84.00	40.00	●	○	○
9.100		84.00	40.00	●	○	○
9.130	23/64	84.00	40.00	●		○
9.200		84.00	40.00	●		
9.300		84.00	40.00	●		
9.400		84.00	40.00	●	○	●
9.500		84.00	40.00	●		●
9.520	3/8	89.00	43.00	●		●
9.600		89.00	43.00	●		●
9.700		89.00	43.00	○		●
9.800		89.00	43.00	●		●
9.900		89.00	43.00	●		●
9.920	25/64	89.00	43.00	●		●
10.000		89.00	43.00	●	●	●
10.100		89.00	43.00	●		
10.200		89.00	43.00	●	○	●
10.300		89.00	43.00	○		○
10.320	13/32	89.00	43.00	●		●
10.400		89.00	43.00	●		
10.500		89.00	43.00	●	○	
10.600		89.00	43.00	●		
10.700		95.00	47.00	○		
10.720	27/64	95.00	47.00	●		●
10.800		95.00	47.00	●	○	
10.900		95.00	47.00	○		
11.000		95.00	47.00	●		●
11.100		95.00	47.00	●		
11.110	7/16	95.00	47.00	●		●
11.200		95.00	47.00	●		
11.300		95.00	47.00	●		○
11.400		95.00	47.00	○		
11.500		95.00	47.00	●	○	○
11.510	29/64	95.00	47.00	●		●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	1242	2473	1702
Standard		DIN 6539	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	S
Type	RT 100 U	RT 100 U	RT 100 F
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	121	122	122

$t_{max} = l_2\text{-}1{,}5 \times d_1$





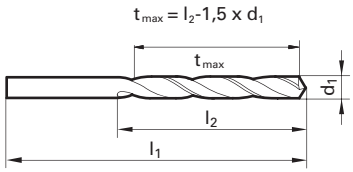




d1 mm	d1 inch	l1 mm	l2 mm	Availability		
11.600		95.00	47.00	●	●	
11.800		95.00	47.00	●	❍	
11.900		102.00	51.00	●		
11.910	15/32	102.00	51.00	●		●
12.000		102.00	51.00	●	❍	❍
12.300	31/64	102.00	51.00			●
12.500		102.00	51.00	●	❍	●
12.700	1/2	102.00	51.00	●		●
13.000		102.00	51.00	●		●
13.500		107.00	54.00	●		●
14.000		107.00	54.00	●	❍	●
14.500		111.00	56.00	●		
15.000		111.00	56.00	●		
15.500		115.00	58.00	❍	❍	
16.000		115.00	58.00	●	●	

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1243	2474
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K/P	
Surface	S	F
Type	RT 100 U	RT 100 U
Drilling depth	5xD	5xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	122	122





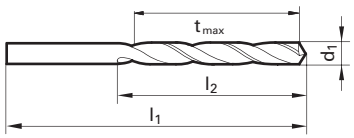


d1 mm	d1 inch	l1 mm	l2 mm	Availability	
5.000		73.00	34.00	●	●
5.100		76.00	38.00	●	●
5.160	13/64	76.00	38.00	●	
5.200		76.00	38.00	●	
5.300		76.00	38.00	●	
5.400		76.00	38.00	●	○
5.500		76.00	38.00	●	●
5.560	7/32	81.00	41.00	●	
5.600		81.00	41.00	●	●
5.700		81.00	41.00	●	○
5.800		81.00	41.00	○	
5.900		81.00	41.00	●	
5.950	15/64	81.00	41.00	○	
6.000		81.00	41.00	●	
6.100		81.00	41.00	●	
6.200		81.00	41.00	●	●
6.300		81.00	41.00	●	
6.350	1/4	81.00	41.00	●	
6.400		81.00	41.00	○	○
6.500		81.00	41.00	●	●
6.600		83.00	43.00	●	●
6.700		83.00	43.00	●	
6.750	17/64	83.00	43.00	●	
6.800		83.00	43.00	●	○
6.900		83.00	43.00	●	
7.000		83.00	43.00	●	
7.100		87.00	45.00	●	○
7.140	9/32	87.00	45.00	●	
7.200		87.00	45.00	●	○
7.300		87.00	45.00	○	
7.400		87.00	45.00	●	●
7.500		87.00	45.00	●	
7.540	19/64	90.00	48.00	●	
7.600		90.00	48.00	●	
7.700		90.00	48.00	●	○
7.800		90.00	48.00	○	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1243	2474
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K/P	
Surface	S	F
Type	RT 100 U	RT 100 U
Drilling depth	5xD	5xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	122	122

$t_{max} = l_2 - 1{,}5 \times d_1$





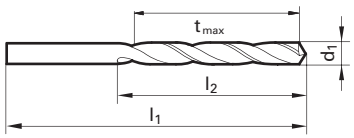


d1 mm	d1 inch	l1 mm	l2 mm	Availability	
7.900		90.00	48.00	○	
7.940	5/16	90.00	48.00	●	
8.000		90.00	48.00	●	○
8.100		96.00	53.00	○	○
8.200		96.00	53.00	●	○
8.300		96.00	53.00	○	
8.330	21/64	96.00	53.00	○	
8.400		96.00	53.00	○	
8.500		96.00	53.00	●	●
8.600		98.00	55.00	●	
8.700		98.00	55.00	●	○
8.730	11/32	98.00	55.00	●	
8.800		98.00	55.00	●	
8.900		98.00	55.00	●	
9.000		98.00	55.00	●	●
9.130	23/64	102.00	58.00	●	
9.200		102.00	58.00	●	○
9.300		102.00	58.00	●	○
9.400		102.00	58.00	○	
9.500		102.00	58.00	●	
9.520	3/8	105.00	60.00	●	
9.600		105.00	60.00	●	
9.700		105.00	60.00	●	●
9.800		105.00	60.00	●	○
9.900		105.00	60.00	○	
9.920	25/64	105.00	60.00	○	
10.000		105.00	60.00	●	○
10.100		112.00	66.00	●	
10.200		112.00	66.00	●	●
10.300		112.00	66.00	○	○
10.320	13/32	112.00	66.00	●	
10.400		112.00	66.00	●	●
10.500		112.00	66.00	○	●
10.600		114.00	68.00	○	○
10.700		114.00	68.00	●	
10.720	27/64	114.00	68.00	●	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1243	2474
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K/P	
Surface	S	F
Type	RT 100 U	RT 100 U
Drilling depth	5xD	5xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	122	122

$t_{max} = l_2 - 1{,}5 \times d_1$



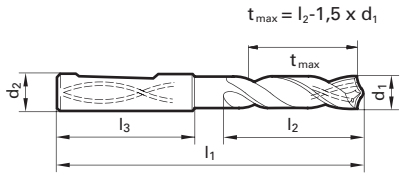




d1 mm	d1 inch	l1 mm	l2 mm	Availability	
10.800		114.00	68.00	○	○
10.900		114.00	68.00	○	○
11.000		114.00	68.00	●	○
11.100		118.00	71.00	○	
11.110	7/16	118.00	71.00	●	
11.400		118.00	71.00	○	
11.500		118.00	71.00	●	
11.600		121.00	73.00	○	●
11.700		121.00	73.00	●	●
11.800		121.00	73.00	○	○
11.900		121.00	73.00	○	
11.910	15/32	121.00	73.00	○	
12.000		121.00	73.00	●	○
12.500		135.00	76.00	●	
12.700	1/2	137.00	78.00	●	
13.000		137.00	78.00	●	●
13.500		144.00	84.00	●	
14.000		147.00	86.00	●	○
14.500		151.00	89.00	●	
15.000		153.00	91.00	●	○
15.500		157.00	94.00	●	
16.000		160.00	96.00	○	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability		
3.000		6.000	62.00	20.00	36.00	●	●	●
3.100		6.000	62.00	20.00	36.00		●	●
3.170	1/8	6.000	62.00	20.00	36.00		●	●
3.200		6.000	62.00	20.00	36.00		●	●
3.250		6.000	62.00	20.00	36.00		●	●
3.300		6.000	62.00	20.00	36.00	●	●	●
3.400		6.000	62.00	20.00	36.00	●	●	●
3.500		6.000	62.00	20.00	36.00		●	●
3.570	9/64	6.000	62.00	20.00	36.00		●	●
3.600		6.000	62.00	20.00	36.00		●	●
3.700		6.000	62.00	20.00	36.00		●	●
3.800		6.000	66.00	24.00	36.00		●	●
3.900		6.000	66.00	24.00	36.00		●	●
3.970	5/32	6.000	66.00	24.00	36.00		●	●
4.000		6.000	66.00	24.00	36.00	❍	●	●
4.040		6.000	66.00	24.00	36.00		●	
4.100		6.000	66.00	24.00	36.00		●	●
4.200		6.000	66.00	24.00	36.00		●	●
4.300		6.000	66.00	24.00	36.00		●	●
4.370	11/64	6.000	66.00	24.00	36.00		●	●
4.400		6.000	66.00	24.00	36.00		●	●
4.450		6.000	66.00	24.00	36.00		●	●
4.500		6.000	66.00	24.00	36.00		●	●
4.600		6.000	66.00	24.00	36.00		●	●
4.650		6.000	66.00	24.00	36.00		●	●
4.700		6.000	66.00	24.00	36.00		●	●
4.760	3/16	6.000	66.00	28.00	36.00		●	●
4.800		6.000	66.00	28.00	36.00		●	●
4.900		6.000	66.00	28.00	36.00		●	●
5.000		6.000	66.00	28.00	36.00	●	●	●
5.100		6.000	66.00	28.00	36.00		●	●
5.110		6.000	66.00	28.00	36.00		●	
5.160	13/64	6.000	66.00	28.00	36.00		●	●
5.200		6.000	66.00	28.00	36.00		●	●
5.300		6.000	66.00	28.00	36.00	●	●	●
5.400		6.000	66.00	28.00	36.00		●	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

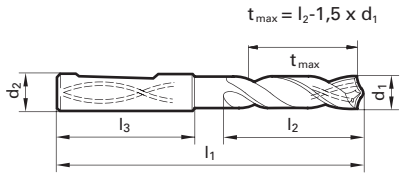
1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
			K/P			
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW



Availability						
○			●	●	●	●
			●	●	●	●
			●	●	●	●
		●	●	●	●	●
		○	●	●	●	●
		○	●	●	●	●
		●	●	●	●	●
●	●	●	●	●	●	●
●	●		●	●	●	●
●	●	●	●	●	●	●
	○		●	●	●	●
	○	●	●	●	●	●
●			●	●	●	●
			●	●	●	●
●	○	●	●	●	●	●
			●	●	●	●
	●	○	●	●	●	●
●	○		●	●	●	●
○	●		●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability		
5.410		6.000	66.00	28.00	36.00		●	
5.500		6.000	66.00	28.00	36.00	○	●	●
5.550		6.000	66.00	28.00	36.00		●	●
5.560	7/32	6.000	66.00	28.00	36.00		●	●
5.600		6.000	66.00	28.00	36.00	●	●	●
5.650		6.000	66.00	28.00	36.00		●	●
5.700		6.000	66.00	28.00	36.00		●	●
5.750		6.000	66.00	28.00	36.00		●	●
5.800		6.000	66.00	28.00	36.00	●	●	●
5.900		6.000	66.00	28.00	36.00		●	●
5.950	15/64	6.000	66.00	28.00	36.00		●	●
6.000		6.000	66.00	28.00	36.00	○	●	●
6.100		8.000	79.00	34.00	36.00	●	●	●
6.200		8.000	79.00	34.00	36.00	○	●	●
6.300		8.000	79.00	34.00	36.00	○	●	●
6.350	1/4	8.000	79.00	34.00	36.00		●	●
6.400		8.000	79.00	34.00	36.00	○	●	●
6.500		8.000	79.00	34.00	36.00		●	●
6.530		8.000	79.00	34.00	36.00		●	
6.600		8.000	79.00	34.00	36.00	○	●	●
6.700		8.000	79.00	34.00	36.00		●	●
6.750	17/64	8.000	79.00	34.00	36.00		●	●
6.800		8.000	79.00	34.00	36.00	●	●	●
6.900		8.000	79.00	34.00	36.00	○	●	●
7.000		8.000	79.00	34.00	36.00	●	●	●
7.100		8.000	79.00	41.00	36.00	○	●	●
7.140	9/32	8.000	79.00	41.00	36.00	○	●	●
7.200		8.000	79.00	41.00	36.00		●	●
7.300		8.000	79.00	41.00	36.00		●	●
7.400		8.000	79.00	41.00	36.00	●	●	●
7.450		8.000	79.00	41.00	36.00		●	●
7.500		8.000	79.00	41.00	36.00	○	●	●
7.540	19/64	8.000	79.00	41.00	36.00	●	●	●
7.550		8.000	79.00	41.00	36.00		●	
7.600		8.000	79.00	41.00	36.00	○	●	●
7.650		8.000	79.00	41.00	36.00		●	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
			K/P			
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW

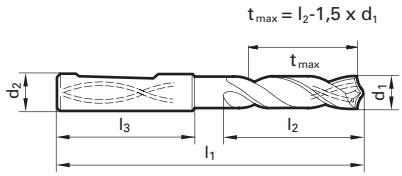


Availability

○	○	●	●	●	●	●
●			●	●	●	●
			●	●	●	●
		●	●	●	●	●
	○		●	●	●	●
●	●	●	●	●	●	●
●	●	○	●	●	●	●
			●	●	●	●
●	●		●	●	●	●
	○		●	●	●	●
○		●	●	●	●	●
●	○		●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	○	●	●	●	●
●	○		●	●	●	●
○		●	●	○	●	●
	○		●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability		
7.700		8.000	79.00	41.00	36.00		●	●
7.800		8.000	79.00	41.00	36.00	❍	●	●
7.900		8.000	79.00	41.00	36.00		●	●
7.940	5/16	8.000	79.00	41.00	36.00	❍	●	●
8.000		8.000	79.00	41.00	36.00	❍	●	●
8.100		10.000	89.00	47.00	40.00	●	●	●
8.200		10.000	89.00	47.00	40.00	●	●	●
8.300		10.000	89.00	47.00	40.00		●	●
8.330	21/64	10.000	89.00	47.00	40.00		●	●
8.400		10.000	89.00	47.00	40.00	❍	●	●
8.500		10.000	89.00	47.00	40.00	●	●	●
8.550		10.000	89.00	47.00	40.00		●	●
8.600		10.000	89.00	47.00	40.00	❍	●	●
8.700		10.000	89.00	47.00	40.00	●	●	●
8.730	11/32	10.000	89.00	47.00	40.00		●	●
8.800		10.000	89.00	47.00	40.00	❍	●	●
8.900		10.000	89.00	47.00	40.00		●	●
9.000		10.000	89.00	47.00	40.00	●	●	●
9.050		10.000	89.00	47.00	40.00		●	●
9.100		10.000	89.00	47.00	40.00		●	●
9.130	23/64	10.000	89.00	47.00	40.00		●	●
9.200		10.000	89.00	47.00	40.00	●	●	●
9.250		10.000	89.00	47.00	40.00		●	●
9.300		10.000	89.00	47.00	40.00		●	●
9.340		10.000	89.00	47.00	40.00		●	
9.400		10.000	89.00	47.00	40.00	●	●	●
9.500		10.000	89.00	47.00	40.00		●	●
9.520	3/8	10.000	89.00	47.00	40.00		●	●
9.550		10.000	89.00	47.00	40.00		●	●
9.600		10.000	89.00	47.00	40.00		●	●
9.700		10.000	89.00	47.00	40.00	●	●	●
9.800		10.000	89.00	47.00	40.00	❍	●	●
9.900		10.000	89.00	47.00	40.00	❍	●	●
9.920	25/64	10.000	89.00	47.00	40.00		●	●
10.000		10.000	89.00	47.00	40.00	●	●	●
10.100		12.000	102.00	55.00	45.00		●	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

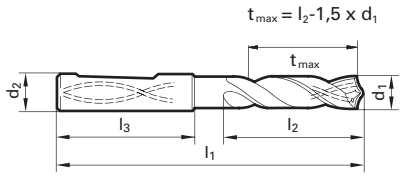
1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
			K/P			
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW



Availability						
●	●		●	●	●	●
			●	●	●	●
●	●	●	●	○	●	●
●	○	●	●	●	●	●
●	●	○	●	●	●	●
	○		●	●	●	●
○	●		●	●	●	●
●	●	●	●	●	●	●
		●	●	○	●	●
●	○		●	○	●	●
●		●	●	●	●	●
			●	●		
○	●		●	●	●	●
●	○		●	●	●	●
●	●	●	●	●	●	●
			●	●	●	●
●	●		●	●	●	●
○	○	○	●	●	●	●
●	○	○	●	●	●	●
			●	●	●	●
●	●	●	●	●	●	●
	●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123









d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability		
10.200		12.000	102.00	55.00	45.00	○	●	●
10.300		12.000	102.00	55.00	45.00	●	●	●
10.320	13/32	12.000	102.00	55.00	45.00		●	●
10.400		12.000	102.00	55.00	45.00		●	●
10.500		12.000	102.00	55.00	45.00	○	●	●
10.600		12.000	102.00	55.00	45.00	○	●	●
10.700		12.000	102.00	55.00	45.00	●	●	●
10.720	27/64	12.000	102.00	55.00	45.00	○	●	
10.800		12.000	102.00	55.00	45.00	○	●	●
10.900		12.000	102.00	55.00	45.00		●	●
11.000		12.000	102.00	55.00	45.00	●	●	●
11.100		12.000	102.00	55.00	45.00		●	●
11.110	7/16	12.000	102.00	55.00	45.00		●	●
11.200		12.000	102.00	55.00	45.00		●	●
11.300		12.000	102.00	55.00	45.00	○	●	●
11.400		12.000	102.00	55.00	45.00		●	●
11.500		12.000	102.00	55.00	45.00	○	●	●
11.510	29/64	12.000	102.00	55.00	45.00	○	●	
11.550		12.000	102.00	55.00	45.00			●
11.600		12.000	102.00	55.00	45.00		●	●
11.700		12.000	102.00	55.00	45.00		●	●
11.800		12.000	102.00	55.00	45.00	●	●	●
11.900		12.000	102.00	55.00	45.00		●	●
11.910	15/32	12.000	102.00	55.00	45.00	○	●	●
12.000		12.000	102.00	55.00	45.00	●	●	●
12.100		14.000	107.00	60.00	45.00	●	●	○
12.200		14.000	107.00	60.00	45.00		●	●
12.300	31/64	14.000	107.00	60.00	45.00	●	●	
12.400		14.000	107.00	60.00	45.00	●	○	○
12.500		14.000	107.00	60.00	45.00	○	●	●
12.600		14.000	107.00	60.00	45.00		●	
12.700	1/2	14.000	107.00	60.00	45.00	○	●	●
12.800		14.000	107.00	60.00	45.00		●	
12.900		14.000	107.00	60.00	45.00	●	●	
13.000		14.000	107.00	60.00	45.00	●	●	●
13.100	33/64	14.000	107.00	60.00	45.00			●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
K/P						
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW

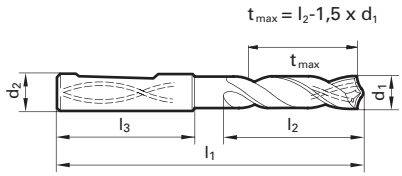


Availability

○	○	●	●	○	●	●
○	●	○	●	●	●	●
○	●		●	●	●	●
	●	●	●	●	●	●
●	●	●	●	●	●	●
			●	●	●	●
○	○		●	●	●	●
	●					
●	●	●	●	●	●	●
			●	●	●	●
●	●	●	●	●	●	●
	○		●	●	●	●
			●	●	●	●
●	○		●	●	●	●
○	○	●	●	●	●	●
	○		●	●	●	●
●	●	●	●	●	●	●
	○					
			●	●	●	●
			●	●	●	●
●	●	●	●	●	●	●
			●	●	●	●
	○		●	●	●	●
●	●	●	●	●	●	●
	●					
○	○	●	●	●	●	●
	●	●				
●		●	●	●	●	●
	●	○				
		○	●	●	●	●
			●	●	●	●
○	●	●	●	●	●	●
●						

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123









d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
13.200		14.000	107.00	60.00	45.00	●
13.300		14.000	107.00	60.00	45.00	● ●
13.400		14.000	107.00	60.00	45.00	●
13.490	17/32	14.000	107.00	60.00	45.00	●
13.500		14.000	107.00	60.00	45.00	○ ● ●
13.550		14.000	107.00	60.00	45.00	●
13.700		14.000	107.00	60.00	45.00	● ●
13.800		14.000	107.00	60.00	45.00	○
13.890	35/64	14.000	107.00	60.00	45.00	○ ●
13.900		14.000	107.00	60.00	45.00	●
14.000		14.000	107.00	60.00	45.00	● ● ●
14.200		16.000	115.00	65.00	48.00	● ●
14.290	9/16	16.000	115.00	65.00	48.00	● ●
14.300		16.000	115.00	65.00	48.00	○ ● ○
14.500		16.000	115.00	65.00	48.00	○ ● ●
14.680	37/64	16.000	115.00	65.00	48.00	● ●
14.700		16.000	115.00	65.00	48.00	○ ● ●
14.800		16.000	115.00	65.00	48.00	● ●
14.900		16.000	115.00	65.00	48.00	● ●
15.000		16.000	115.00	65.00	48.00	● ●
15.080	19/32	16.000	115.00	65.00	48.00	●
15.100		16.000	115.00	65.00	48.00	● ●
15.200		16.000	115.00	65.00	48.00	● ● ●
15.300		16.000	115.00	65.00	48.00	●
15.480	39/64	16.000	115.00	65.00	48.00	○ ●
15.500		16.000	115.00	65.00	48.00	● ● ●
15.550		16.000	115.00	65.00	48.00	●
15.600		16.000	115.00	65.00	48.00	○
15.700		16.000	115.00	65.00	48.00	● ●
15.800		16.000	115.00	65.00	48.00	●
15.870	5/8	16.000	115.00	65.00	48.00	●
15.900		16.000	115.00	65.00	48.00	● ●
16.000		16.000	115.00	65.00	48.00	● ●
16.100		18.000	123.00	73.00	48.00	● ● ●
16.200		18.000	123.00	73.00	48.00	● ●
16.270	41/64	18.000	123.00	73.00	48.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

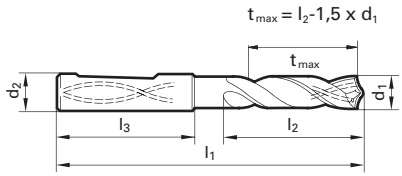
1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
			K/P			
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW



Availability						
❍			●	●	●	●
●	●	●	●	●	●	●
			●	●	●	●
❍	●	●	● ●	● ●	● ●	● ●
	❍		● ● ●	● ● ●	● ● ●	● ● ●
	●	●	●	●	●	●
			●	●	●	●
●	●	●	●	●	●	●
			● ●	● ●	● ●	● ●
❍	❍	●	●	❍	●	●
			●	●	●	●
	❍					
	❍	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123









d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
16.300		18.000	123.00	73.00	48.00	
16.500		18.000	123.00	73.00	48.00	● ● ●
16.670	21/32	18.000	123.00	73.00	48.00	●
16.700		18.000	123.00	73.00	48.00	●
16.900		18.000	123.00	73.00	48.00	○ ●
17.000		18.000	123.00	73.00	48.00	● ● ●
17.070	43/64	18.000	123.00	73.00	48.00	●
17.300		18.000	123.00	73.00	48.00	● ●
17.460	11/16	18.000	123.00	73.00	48.00	●
17.500		18.000	123.00	73.00	48.00	○ ● ●
17.550		18.000	123.00	73.00	48.00	●
17.700		18.000	123.00	73.00	48.00	●
17.860	45/64	18.000	123.00	73.00	48.00	●
17.900		18.000	123.00	73.00	48.00	● ●
18.000		18.000	123.00	73.00	48.00	● ● ●
18.260	23/32	20.000	131.00	79.00	50.00	●
18.300		20.000	131.00	79.00	50.00	● ●
18.500		20.000	131.00	79.00	50.00	● ●
18.700		20.000	131.00	79.00	50.00	● ●
18.900		20.000	131.00	79.00	50.00	●
19.000		20.000	131.00	79.00	50.00	○ ● ●
19.050	3/4	20.000	131.00	79.00	50.00	○ ●
19.250		20.000	131.00	79.00	50.00	●
19.300		20.000	131.00	79.00	50.00	●
19.446		20.000	131.00	79.00	50.00	●
19.450	49/64	20.000	131.00	79.00	50.00	
19.500		20.000	131.00	79.00	50.00	○ ● ●
19.550		20.000	131.00	79.00	50.00	●
19.600		20.000	131.00	79.00	50.00	
19.700		20.000	131.00	79.00	50.00	○ ●
19.840	25/32	20.000	131.00	79.00	50.00	●
19.900		20.000	131.00	79.00	50.00	● ●
20.000		20.000	131.00	79.00	50.00	● ● ●
20.500		25.000	146.00	84.00	56.00	
21.000		25.000	146.00	84.00	56.00	
21.500		25.000	146.00	84.00	56.00	

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

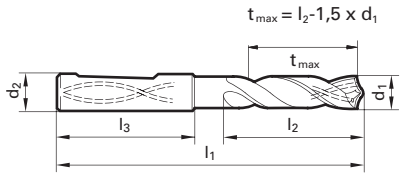
1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
			K/P			
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW



Availability						
●	●	●	● ●	● ●	● ●	● ●
	●	●	● ●	● ○	● ●	● ●
			●	●	●	●
	○	●	●	●	●	●
○	●	○	●	●	●	●
	○		●	●	●	●
	●		● ●	● ●	● ●	● ●
			●	●	●	●
	○		●	○	●	●
○						
	●	●	●	●	●	●
●	●					
○	●					

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1181	2477	2469
Standard		DIN 6537 K	
Tool material		Solid carbide	
Carbide grade		K/P	
Surface	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U
Drilling depth	3xD	3xD	3xD
Cutting direction	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7
Discount group	121	121	121
Techn. data page	122	123	123









d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
22.000		25.000	146.00	84.00	56.00	
22.500		25.000	153.00	91.00	56.00	
23.000		25.000	153.00	91.00	56.00	
24.000		25.000	153.00	91.00	56.00	
25.000	63/64	25.000	153.00	91.00	56.00	

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

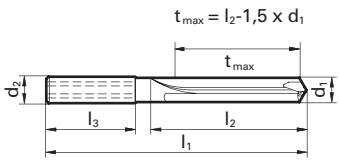
1660	1180	2468	8510	8610	8520	8620
DIN 6537 K						
Solid carbide						
			K/P			
S	S	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
3xD	3xD	3xD	3xD	3xD	3xD	3xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7
121	121	121	121	121	121	121
123	123	123	124	124	124	124
			NEW	NEW	NEW	NEW



Availability						
●	●					
	●					
	●					
	●					
	●					

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	768	6068
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	4xD	4xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	124	125



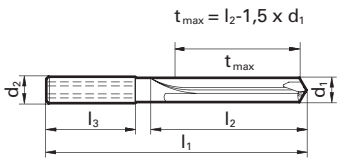




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
3.000		6.000	66.00	24.00	36.00	●	●
3.100		6.000	66.00	24.00	36.00	●	
3.200		6.000	66.00	24.00	36.00	●	●
3.300		6.000	66.00	24.00	36.00	●	❍
3.400		6.000	66.00	24.00	36.00	●	
3.500		6.000	66.00	24.00	36.00	●	●
3.600		6.000	66.00	24.00	36.00	●	
3.700		6.000	66.00	24.00	36.00	●	❍
3.800		6.000	74.00	30.00	36.00	●	
3.900		6.000	74.00	30.00	36.00	❍	❍
4.000		6.000	74.00	30.00	36.00	●	●
4.100		6.000	74.00	30.00	36.00	●	
4.200		6.000	74.00	30.00	36.00	●	❍
4.300		6.000	74.00	30.00	36.00	●	
4.400		6.000	74.00	30.00	36.00	●	
4.500		6.000	74.00	30.00	36.00	●	
4.600		6.000	74.00	30.00	36.00	●	
4.800		6.000	74.00	36.00	36.00	●	
4.900		6.000	74.00	36.00	36.00	●	
5.000		6.000	74.00	36.00	36.00	●	●
5.100		6.000	74.00	36.00	36.00	●	
5.160	13/64	6.000	74.00	36.00	36.00	●	❍
5.200		6.000	74.00	36.00	36.00	●	●
5.300		6.000	74.00	36.00	36.00	●	❍
5.400		6.000	74.00	36.00	36.00		❍
5.500		6.000	74.00	36.00	36.00	●	●
5.560	7/32	6.000	74.00	36.00	36.00	●	
5.600		6.000	74.00	36.00	36.00	●	
5.700		6.000	74.00	36.00	36.00	●	
5.800		6.000	74.00	36.00	36.00	●	❍
5.900		6.000	74.00	36.00	36.00	●	
6.000		6.000	74.00	36.00	36.00	●	❍
6.100		8.000	91.00	53.00	36.00	●	●
6.200		8.000	91.00	53.00	36.00	●	
6.300		8.000	91.00	53.00	36.00	●	●
6.350	1/4	8.000	91.00	53.00	36.00	●	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	768	6068
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	4xD	4xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	124	125



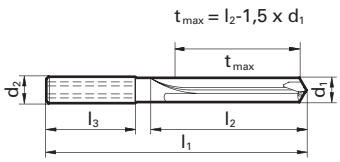




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
6.400		8.000	91.00	53.00	36.00	●	❍
6.500		8.000	91.00	53.00	36.00	●	
6.600		8.000	91.00	53.00	36.00	●	
6.700		8.000	91.00	53.00	36.00	●	
6.750	17/64	8.000	91.00	53.00	36.00	●	●
6.800		8.000	91.00	53.00	36.00	●	●
6.900		8.000	91.00	53.00	36.00	●	●
7.000		8.000	91.00	53.00	36.00	●	●
7.100		8.000	91.00	53.00	36.00	●	❍
7.140	9/32	8.000	91.00	53.00	36.00	●	●
7.200		8.000	91.00	53.00	36.00	●	
7.300		8.000	91.00	53.00	36.00	●	❍
7.400		8.000	91.00	53.00	36.00	●	
7.500		8.000	91.00	53.00	36.00	●	
7.540	19/64	8.000	91.00	53.00	36.00	●	●
7.600		8.000	91.00	53.00	36.00	●	
7.700		8.000	91.00	53.00	36.00	●	
7.800		8.000	91.00	53.00	36.00	●	●
7.900		8.000	91.00	53.00	36.00	●	
7.940	5/16	8.000	91.00	53.00	36.00	●	
8.000		8.000	91.00	53.00	36.00	●	
8.100		10.000	103.00	61.00	40.00	●	●
8.200		10.000	103.00	61.00	40.00	●	●
8.300		10.000	103.00	61.00	40.00	●	●
8.330	21/64	10.000	103.00	61.00	40.00	●	
8.400		10.000	103.00	61.00	40.00	●	
8.500		10.000	103.00	61.00	40.00	●	●
8.600		10.000	103.00	61.00	40.00	●	
8.700		10.000	103.00	61.00	40.00	●	●
8.730	11/32	10.000	103.00	61.00	40.00	●	❍
8.800		10.000	103.00	61.00	40.00	●	
8.900		10.000	103.00	61.00	40.00	●	
9.000		10.000	103.00	61.00	40.00	●	❍
9.100		10.000	103.00	61.00	40.00	●	
9.130	23/64	10.000	103.00	61.00	40.00	●	●
9.200		10.000	103.00	61.00	40.00	●	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	768	6068
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	4xD	4xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	124	125



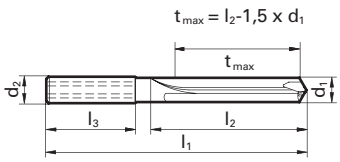




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
9.300		10.000	103.00	61.00	40.00	●	●
9.400		10.000	103.00	61.00	40.00	●	
9.500		10.000	103.00	61.00	40.00	●	
9.520	3/8	10.000	103.00	61.00	40.00	●	●
9.600		10.000	103.00	61.00	40.00	●	●
9.700		10.000	103.00	61.00	40.00	●	❍
9.800		10.000	103.00	61.00	40.00	●	
9.900		10.000	103.00	61.00	40.00	❍	
9.920	25/64	10.000	103.00	61.00	40.00	●	●
10.000		10.000	103.00	61.00	40.00	●	●
10.200		12.000	118.00	71.00	45.00	●	●
10.320	13/32	12.000	118.00	71.00	45.00	●	
10.500		12.000	118.00	71.00	45.00	●	●
10.720	27/64	12.000	118.00	71.00	45.00	●	●
11.000		12.000	118.00	71.00	45.00	●	●
11.110	7/16	12.000	118.00	71.00	45.00	●	❍
11.200		12.000	118.00	71.00	45.00	●	
11.500		12.000	118.00	71.00	45.00	●	❍
11.510	29/64	12.000	118.00	71.00	45.00	●	
11.910	15/32	12.000	118.00	71.00	45.00	●	
12.000		12.000	118.00	71.00	45.00	●	●
12.300	31/64	14.000	124.00	74.00	45.00	●	❍
12.500		14.000	124.00	74.00	45.00	●	❍
12.700	1/2	14.000	124.00	74.00	45.00	●	●
13.000		14.000	124.00	74.00	45.00	●	●
13.500		14.000	124.00	74.00	45.00	●	❍
14.000		14.000	124.00	74.00	45.00	●	●
14.500		16.000	133.00	83.00	48.00	●	
15.000		16.000	133.00	83.00	48.00	●	●
15.500		16.000	133.00	83.00	48.00	●	
16.000		16.000	133.00	83.00	48.00	●	●
16.500		18.000	143.00	93.00	48.00	●	❍
17.000		18.000	143.00	93.00	48.00	●	●
17.500		18.000	143.00	93.00	48.00	●	●
18.000		18.000	143.00	93.00	48.00	●	❍
18.500		20.000	153.00	101.00	50.00		●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	768	6068
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	4xD	4xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	124	125



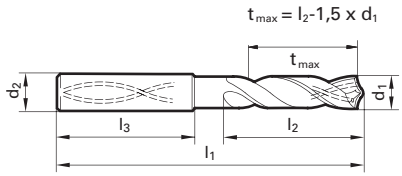




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
19.000		20.000	153.00	101.00	50.00	●	
19.500		20.000	153.00	101.00	50.00		●
20.000		20.000	153.00	101.00	50.00	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability			
3.000		6.000	66.00	28.00	36.00	○		●	●
3.100		6.000	66.00	28.00	36.00			●	●
3.170	1/8	6.000	66.00	28.00	36.00			●	●
3.200		6.000	66.00	28.00	36.00			●	●
3.250		6.000	66.00	28.00	36.00			●	●
3.300		6.000	66.00	28.00	36.00			●	●
3.400		6.000	66.00	28.00	36.00			●	●
3.500		6.000	66.00	28.00	36.00			●	●
3.570	9/64	6.000	66.00	28.00	36.00			●	●
3.600		6.000	66.00	28.00	36.00			●	●
3.700		6.000	66.00	28.00	36.00	○	○	●	●
3.800		6.000	74.00	36.00	36.00			●	●
3.900		6.000	74.00	36.00	36.00			●	●
3.970	5/32	6.000	74.00	36.00	36.00			●	●
4.000		6.000	74.00	36.00	36.00	●	●	●	●
4.040		6.000	74.00	36.00	36.00			●	
4.100		6.000	74.00	36.00	36.00		●	●	●
4.200		6.000	74.00	36.00	36.00		●	●	●
4.300		6.000	74.00	36.00	36.00	○	●	●	●
4.370	11/64	6.000	74.00	36.00	36.00		●	●	●
4.400		6.000	74.00	36.00	36.00		●	●	●
4.500		6.000	74.00	36.00	36.00	●	●	●	●
4.600		6.000	74.00	36.00	36.00		○	●	●
4.650		6.000	74.00	36.00	36.00	○	●	●	●
4.700		6.000	74.00	36.00	36.00	●	○	●	●
4.760	3/16	6.000	82.00	44.00	36.00		●	●	●
4.800		6.000	82.00	44.00	36.00	○	●	●	●
4.900		6.000	82.00	44.00	36.00		○	●	●
5.000		6.000	82.00	44.00	36.00	●	●	●	●
5.100		6.000	82.00	44.00	36.00		●	●	●
5.110		6.000	82.00	44.00	36.00			●	
5.160	13/64	6.000	82.00	44.00	36.00		○	●	●
5.200		6.000	82.00	44.00	36.00		●	●	●
5.300		6.000	82.00	44.00	36.00		○	●	●
5.400		6.000	82.00	44.00	36.00	○	●	●	●
5.410		6.000	82.00	44.00	36.00			●	

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

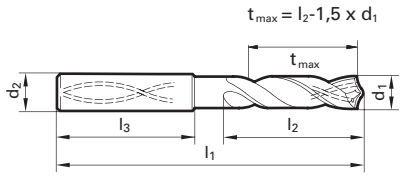
1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW



Availability								
●	●	○	●	●	●	●	●	●
○				●	●	●	●	●
●				●	●	●	●	●
○				●	●	●	●	●
●	●			●	●	●	●	●
○				●	●	●	●	●
○		●	○	●	●	●	●	●
○				●	●	●	●	●
○			○	●	●	○	●	●
●			○	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●				●	●	●	●	●
●	●	●	●	●	●	●	●	●
●				●	●	●	●	●
●	●			●	●	●	●	●
●				●	●	●	●	●
○				●	●	●	●	●
○				●	●	●	●	●
●	●	●		●	●	●	●	●
●				●	●	●	●	●
●	●	●	●	●	●	●	●	●
●			●	●	●	●	●	●
●	○		○	●	●	●	●	●
○	●		○	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability			
5.500		6.000	82.00	44.00	36.00		●	●	●
5.550		6.000	82.00	44.00	36.00			●	●
5.560	7/32	6.000	82.00	44.00	36.00		●	●	●
5.600		6.000	82.00	44.00	36.00		●	●	●
5.650		6.000	82.00	44.00	36.00			●	
5.700		6.000	82.00	44.00	36.00		●	●	●
5.800		6.000	82.00	44.00	36.00	❍	●	●	●
5.900		6.000	82.00	44.00	36.00		●	●	●
5.950	15/64	6.000	82.00	44.00	36.00		●	●	●
6.000		6.000	82.00	44.00	36.00	●	●	●	●
6.100		8.000	91.00	53.00	36.00	❍	●	●	●
6.200		8.000	91.00	53.00	36.00	❍	●	●	●
6.300		8.000	91.00	53.00	36.00	❍	●	●	●
6.350	1/4	8.000	91.00	53.00	36.00	●	●	●	●
6.400		8.000	91.00	53.00	36.00	❍	●	●	●
6.500		8.000	91.00	53.00	36.00	●	●	●	●
6.530		8.000	91.00	53.00	36.00			●	
6.600		8.000	91.00	53.00	36.00		●	●	●
6.700		8.000	91.00	53.00	36.00	❍	●	●	●
6.750	17/64	8.000	91.00	53.00	36.00		❍	●	●
6.800		8.000	91.00	53.00	36.00	❍	●	●	●
6.900		8.000	91.00	53.00	36.00		●	●	●
7.000		8.000	91.00	53.00	36.00	●	●	●	●
7.100		8.000	91.00	53.00	36.00	●	●	●	●
7.140	9/32	8.000	91.00	53.00	36.00		●	●	●
7.200		8.000	91.00	53.00	36.00		●	●	●
7.300		8.000	91.00	53.00	36.00	●	●	●	●
7.400		8.000	91.00	53.00	36.00		●	●	●
7.500		8.000	91.00	53.00	36.00	●	❍	●	●
7.540	19/64	8.000	91.00	53.00	36.00		●	●	●
7.550		8.000	91.00	53.00	36.00			●	
7.600		8.000	91.00	53.00	36.00		●	●	●
7.650		8.000	91.00	53.00	36.00			●	
7.700		8.000	91.00	53.00	36.00	●	●	●	●
7.800		8.000	91.00	53.00	36.00	●	●	●	●
7.900		8.000	91.00	53.00	36.00		❍	●	●

❍ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW

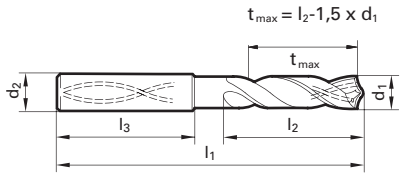


Availability

● ○ ●	●	●	●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ○ ●	●		●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ○ ●	●		●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ● ●	● ● ●	●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ● ●	●	●	●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ●	●	●	●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ○ ●	● ●		● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ● ●	● ●	●	○ ● ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ● ●	○ ●		●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
● ● ●	● ●	○ ●	○	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●
○ ○	○	●	○	●	●	●	●	●
● ○ ○	● ○	●	○ ●	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
7.940	5/16	8.000	91.00	53.00	36.00	● ● ●
8.000		8.000	91.00	53.00	36.00	● ● ● ●
8.100		10.000	103.00	61.00	40.00	● ● ●
8.200		10.000	103.00	61.00	40.00	○ ● ● ●
8.300		10.000	103.00	61.00	40.00	● ● ● ●
8.330	21/64	10.000	103.00	61.00	40.00	● ● ●
8.400		10.000	103.00	61.00	40.00	○ ● ● ●
8.500		10.000	103.00	61.00	40.00	● ● ● ●
8.600		10.000	103.00	61.00	40.00	○ ● ● ●
8.700		10.000	103.00	61.00	40.00	● ● ●
8.730	11/32	10.000	103.00	61.00	40.00	● ● ●
8.800		10.000	103.00	61.00	40.00	● ● ● ●
8.900		10.000	103.00	61.00	40.00	● ● ●
9.000		10.000	103.00	61.00	40.00	● ● ● ●
9.100		10.000	103.00	61.00	40.00	● ● ●
9.130	23/64	10.000	103.00	61.00	40.00	○ ● ●
9.200		10.000	103.00	61.00	40.00	○ ● ● ●
9.250		10.000	103.00	61.00	40.00	● ●
9.300		10.000	103.00	61.00	40.00	● ● ●
9.340		10.000	103.00	61.00	40.00	●
9.400		10.000	103.00	61.00	40.00	○ ● ● ●
9.500		10.000	103.00	61.00	40.00	○ ● ● ●
9.520	3/8	10.000	103.00	61.00	40.00	● ● ●
9.550		10.000	103.00	61.00	40.00	●
9.600		10.000	103.00	61.00	40.00	○ ● ●
9.700		10.000	103.00	61.00	40.00	● ● ●
9.800		10.000	103.00	61.00	40.00	○ ● ●
9.900		10.000	103.00	61.00	40.00	○ ● ●
9.920	25/64	10.000	103.00	61.00	40.00	● ● ●
10.000		10.000	103.00	61.00	40.00	○ ● ● ●
10.100		12.000	118.00	71.00	45.00	● ● ● ●
10.200		12.000	118.00	71.00	45.00	● ● ● ●
10.300		12.000	118.00	71.00	45.00	● ● ●
10.320	13/32	12.000	118.00	71.00	45.00	● ● ●
10.400		12.000	118.00	71.00	45.00	● ● ●
10.500		12.000	118.00	71.00	45.00	● ● ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

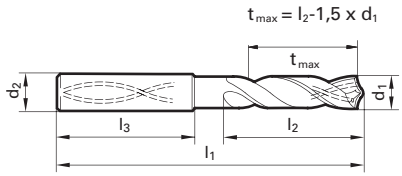
1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW



Availability								
●				●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●			●	●	●	●	●
●	●		●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●		○	●	●	●	●	●
○				●	●	●	●	●
●	○		●	●	●	●	●	●
○	●	●	●	●	●	●	●	●
○	○			●	●	●	●	●
○	○		○	●	●	●	●	●
○				●	●	●	●	●
●	○		○	●	●	●	●	●
●	○			●	●	●	●	●
○	●	●	●	●	●	●	●	●
○				●	●	●	●	●
●	○		○	●	●	●	●	●
○	●			●	●	●	●	●
●	○			●	●	●	●	●
●	●	●	●	●	●	●	●	●
○	●			●	●	●	●	●
●				●	●	●	●	●
●	●		●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
10.600		12.000	118.00	71.00	45.00	● ● ●
10.700		12.000	118.00	71.00	45.00	● ● ●
10.720	27/64	12.000	118.00	71.00	45.00	● ○
10.800		12.000	118.00	71.00	45.00	● ● ●
10.900		12.000	118.00	71.00	45.00	● ● ●
11.000		12.000	118.00	71.00	45.00	● ● ● ●
11.100		12.000	118.00	71.00	45.00	● ● ●
11.110	7/16	12.000	118.00	71.00	45.00	● ● ●
11.200		12.000	118.00	71.00	45.00	○ ● ● ●
11.300		12.000	118.00	71.00	45.00	○ ● ● ●
11.400		12.000	118.00	71.00	45.00	○ ● ●
11.450		12.000	118.00	71.00	45.00	
11.500		12.000	118.00	71.00	45.00	○ ● ● ●
11.510	29/64	12.000	118.00	71.00	45.00	● ●
11.600		12.000	118.00	71.00	45.00	● ● ●
11.700		12.000	118.00	71.00	45.00	● ● ●
11.800		12.000	118.00	71.00	45.00	○ ● ● ●
11.900		12.000	118.00	71.00	45.00	● ● ●
11.910	15/32	12.000	118.00	71.00	45.00	● ● ●
12.000		12.000	118.00	71.00	45.00	○ ● ● ●
12.100		14.000	124.00	77.00	45.00	● ● ●
12.200		14.000	124.00	77.00	45.00	● ● ●
12.300	31/64	14.000	124.00	77.00	45.00	○ ● ● ●
12.400		14.000	124.00	77.00	45.00	● ○ ●
12.500		14.000	124.00	77.00	45.00	● ● ●
12.600		14.000	124.00	77.00	45.00	● ●
12.700		14.000	124.00	77.00	45.00	● ● ●
12.800		14.000	124.00	77.00	45.00	● ●
12.900		14.000	124.00	77.00	45.00	●
13.000		14.000	124.00	77.00	45.00	● ● ● ●
13.100	33/64	14.000	124.00	77.00	45.00	● ●
13.200		14.000	124.00	77.00	45.00	● ●
13.300		14.000	124.00	77.00	45.00	●
13.400		14.000	124.00	77.00	45.00	●
13.490	17/32	14.000	124.00	77.00	45.00	●
13.500		14.000	124.00	77.00	45.00	● ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW

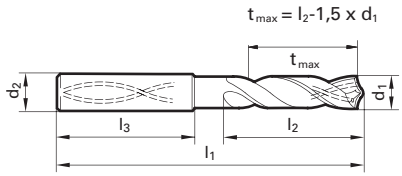


Availability

○	●			●	●	●	●	●
●	●		○	●	●	●	●	●
●	●	●	●	●	●	●	●	●
○	●		○	●	●	●	●	●
●	○	○		●	●	●	●	●
○		●		●	●	●	●	●
○			○	●	●	●	●	●
●	●		●	●	●	●	●	●
●				●	●	●	●	●
○	○		○	●	●	●	●	●
●				●	●	●	●	●
○	●	●	●	●	●	●	●	●
●			●	●	●	●	●	●
●				●	●	○	●	●
●	○			●	●	●	●	●
●	●			●	●	●	●	●
○	○			●				
●	●	●	●	●	●	●	●	●
●	●			●	●	●	●	●
				●				
●	●		●	●	●	○	●	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
13.600		14.000	124.00	77.00	45.00	● ●
13.700		14.000	124.00	77.00	45.00	○ ● ●
13.800		14.000	124.00	77.00	45.00	● ● ●
13.890	35/64	14.000	124.00	77.00	45.00	● ●
13.900		14.000	124.00	77.00	45.00	○ ● ○
14.000		14.000	124.00	77.00	45.00	● ● ● ●
14.100		16.000	133.00	83.00	48.00	○ ● ●
14.200		16.000	133.00	83.00	48.00	● ● ● ●
14.290	9/16	16.000	133.00	83.00	48.00	● ● ●
14.300		16.000	133.00	83.00	48.00	●
14.400		16.000	133.00	83.00	48.00	○
14.500		16.000	133.00	83.00	48.00	● ● ● ●
14.600		16.000	133.00	83.00	48.00	○
14.680	37/64	16.000	133.00	83.00	48.00	○ ●
14.700		16.000	133.00	83.00	48.00	○ ● ●
14.800		16.000	133.00	83.00	48.00	● ●
14.900		16.000	133.00	83.00	48.00	●
15.000		16.000	133.00	83.00	48.00	○ ● ● ●
15.080	19/32	16.000	133.00	83.00	48.00	●
15.100		16.000	133.00	83.00	48.00	● ●
15.200		16.000	133.00	83.00	48.00	● ● ●
15.300		16.000	133.00	83.00	48.00	● ●
15.400		16.000	133.00	83.00	48.00	○
15.480	39/64	16.000	133.00	83.00	48.00	● ●
15.500		16.000	133.00	83.00	48.00	○ ○ ● ●
15.600		16.000	133.00	83.00	48.00	●
15.700		16.000	133.00	83.00	48.00	● ●
15.800		16.000	133.00	83.00	48.00	● ● ●
15.870	5/8	16.000	133.00	83.00	48.00	● ●
15.900		16.000	133.00	83.00	48.00	●
16.000		16.000	133.00	83.00	48.00	○ ● ● ●
16.100		18.000	143.00	93.00	48.00	●
16.200		18.000	143.00	93.00	48.00	○
16.270	41/64	18.000	143.00	93.00	48.00	● ●
16.300		18.000	143.00	93.00	48.00	
16.400		18.000	143.00	93.00	48.00	○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW

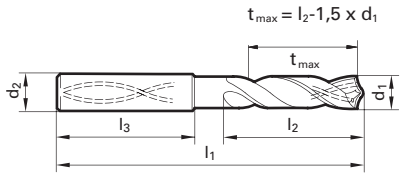


Availability

				●	●	●	●	●
	○			●				
●	●	●	●	●	●	●	●	●
	●		●	●				
				●	●	●	●	●
				●				
●	○	○	○	●	●	●	●	●
	○			●				
				●	●	○	●	●
				●				
●	●		●	●	●	●	●	●
				●				
				●	●	○	●	●
		○		●				
				●	●	●	●	●
				●				
●	●			●	●	●	●	●
				●				
				●		○		
				●				
●	●	●	●	●	●	●	●	●
					●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
16.500		18.000	143.00	93.00	48.00	● ● ●
16.600		18.000	143.00	93.00	48.00	●
16.670	21/32	18.000	143.00	93.00	48.00	●
16.700		18.000	143.00	93.00	48.00	● ●
16.800		18.000	143.00	93.00	48.00	●
16.900		18.000	143.00	93.00	48.00	●
17.000		18.000	143.00	93.00	48.00	○ ● ●
17.070	43/64	18.000	143.00	93.00	48.00	● ●
17.100		18.000	143.00	93.00	48.00	○
17.200		18.000	143.00	93.00	48.00	●
17.300		18.000	143.00	93.00	48.00	● ●
17.400		18.000	143.00	93.00	48.00	○
17.460	11/16	18.000	143.00	93.00	48.00	●
17.500		18.000	143.00	93.00	48.00	○ ● ● ●
17.600		18.000	143.00	93.00	48.00	○
17.700		18.000	143.00	93.00	48.00	● ●
17.800		18.000	143.00	93.00	48.00	○
17.860	45/64	18.000	143.00	93.00	48.00	●
17.900		18.000	143.00	93.00	48.00	○
18.000		18.000	143.00	93.00	48.00	● ● ●
18.100		20.000	153.00	101.00	50.00	○
18.200		20.000	153.00	101.00	50.00	● ●
18.260	23/32	20.000	153.00	101.00	50.00	●
18.300		20.000	153.00	101.00	50.00	●
18.400		20.000	153.00	101.00	50.00	○
18.500		20.000	153.00	101.00	50.00	○ ● ●
18.600		20.000	153.00	101.00	50.00	○ ○
18.650	47/64	20.000	153.00	101.00	50.00	●
18.700		20.000	153.00	101.00	50.00	○ ●
18.800		20.000	153.00	101.00	50.00	●
18.900		20.000	153.00	101.00	50.00	○ ●
19.000		20.000	153.00	101.00	50.00	○ ● ● ●
19.050	3/4	20.000	153.00	101.00	50.00	● ● ●
19.100		20.000	153.00	101.00	50.00	○
19.250		20.000	153.00	101.00	50.00	●
19.300		20.000	153.00	101.00	50.00	○ ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

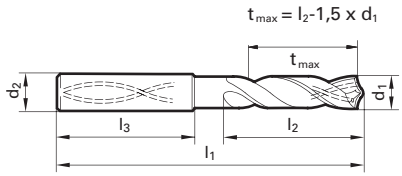
1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW



Availability								
●	○		●	●	●	●	●	●
				●				
					●	●	●	●
○	●	●	●	●	●	●	●	●
					●	●	●	●
●	●	●	●	●	●	●	●	●
○	●		●	●	●	●	●	●
				●	●	○	●	●
○				●	●	●	●	●
						○		
						●		
					●		●	●
					●	●	●	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	1663	1183	2479	2471
Standard	DIN 6537 L			
Tool material	Solid carbide			
Carbide grade	K/P			
Surface	S	S	F	F
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 U
Drilling depth	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7
Discount group	121	121	121	121
Techn. data page	125	125	125	125





d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
19.446		20.000	153.00	101.00	50.00	●
19.500		20.000	153.00	101.00	50.00	❍ ● ● ●
19.600		20.000	153.00	101.00	50.00	❍
19.700		20.000	153.00	101.00	50.00	❍ ●
19.800		20.000	153.00	101.00	50.00	●
19.840	25/32	20.000	153.00	101.00	50.00	●
19.900		20.000	153.00	101.00	50.00	❍
20.000		20.000	153.00	101.00	50.00	● ● ●
20.500		25.000	165.00	105.00	56.00	
21.000		25.000	165.00	105.00	56.00	
21.500		25.000	165.00	105.00	56.00	
22.000		25.000	165.00	105.00	56.00	
22.500		25.000	180.00	117.00	56.00	
23.500		25.000	180.00	117.00	56.00	
24.000		25.000	180.00	117.00	56.00	
24.500		25.000	180.00	117.00	56.00	
25.000		25.000	180.00	117.00	56.00	

❍ bright ◯ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

1662	1182	2478	2470	6501	8511	8611	8521	8621
DIN 6537 L								
Solid carbide								
				K/P				
S	S	F	F	F	a	a	Y	Y
RT 100 F	RT 100 F	RT 100 F	RT 100 F	RT 100 R	RT 100 VA	RT 100 VA	RT 100 HF	RT 100 HF
5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD	5xD
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
m7	m7	m7	m7	m7	m7	m7	m7	m7
121	121	121	121	165	121	121	121	121
126	126	126	126	126	127	127	127	127
					NEW	NEW	NEW	NEW



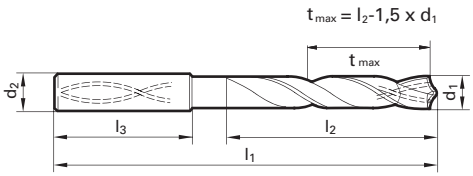
Availability								
				●	●	●	●	●
❍ ●	● ● ● ● ● ● ● ● ❍	●	●	●	●	❍	●	●
❍ ●								

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2711	4044	4045	6502	8522
Standard	Guhring std.				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 R	RT 100 HF
Drilling depth	7xD	7xD	7xD	7xD	7xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	165	121
Techn. data page	127	128	128	128	128

NEW





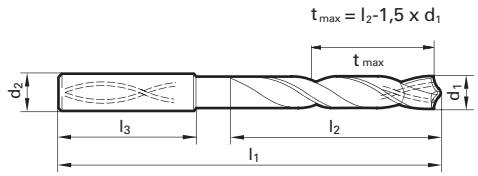
d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
3.000		6.000	70.00	30.00	36.00	● ● ● ●
3.100		6.000	70.00	30.00	36.00	● ● ●
3.170	1/8	6.000	70.00	30.00	36.00	● ● ●
3.200		6.000	70.00	30.00	36.00	● ● ●
3.250		6.000	70.00	30.00	36.00	● ● ● ●
3.300		6.000	70.00	30.00	36.00	● ● ● ●
3.400		6.000	75.00	35.50	36.00	● ● ● ●
3.500		6.000	75.00	35.50	36.00	● ● ● ●
3.570	9/64	6.000	75.00	35.50	36.00	● ● ●
3.600		6.000	75.00	35.50	36.00	● ● ●
3.700		6.000	75.00	35.50	36.00	● ● ● ●
3.800		6.000	75.00	37.50	36.00	● ● ●
3.900		6.000	75.00	37.50	36.00	● ● ●
3.970	5/32	6.000	75.00	37.50	36.00	● ● ●
4.000		6.000	75.00	37.50	36.00	● ● ● ●
4.040		6.000	75.00	37.50	36.00	●
4.100		6.000	75.00	37.50	36.00	● ● ●
4.200		6.000	75.00	37.50	36.00	○ ● ● ● ●
4.300		6.000	85.00	45.00	36.00	● ● ● ● ●
4.370	11/64	6.000	85.00	45.00	36.00	● ● ●
4.400		6.000	85.00	45.00	36.00	● ● ● ●
4.500		6.000	85.00	45.00	36.00	● ● ● ●
4.600		6.000	85.00	45.00	36.00	● ● ●
4.650		6.000	85.00	45.00	36.00	● ● ● ●
4.700		6.000	85.00	45.00	36.00	● ● ●
4.760	3/16	6.000	90.00	50.00	36.00	● ● ●
4.800		6.000	90.00	50.00	36.00	● ● ●
4.900		6.000	90.00	50.00	36.00	● ● ●
5.000		6.000	90.00	50.00	36.00	● ● ● ● ●
5.100		6.000	90.00	50.00	36.00	● ● ● ●
5.110		6.000	90.00	50.00	36.00	●
5.160	13/64	6.000	90.00	50.00	36.00	● ● ●
5.200		6.000	90.00	50.00	36.00	● ● ● ● ●
5.300		6.000	90.00	50.00	36.00	● ● ● ●
5.400		6.000	97.00	57.00	36.00	● ● ●
5.410		6.000	97.00	57.00	36.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2711	4044	4045	6502	8522
Standard	Guhring std.				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 R	RT 100 HF
Drilling depth	7xD	7xD	7xD	7xD	7xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	165	121
Techn. data page	127	128	128	128	128

NEW





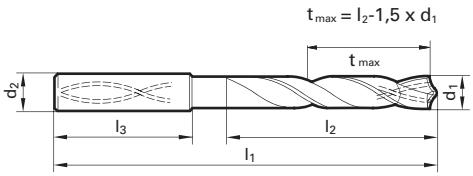
d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
5.500		6.000	97.00	57.00	36.00	● ● ● ● ●
5.550		6.000	97.00	57.00	36.00	● ● ●
5.560	7/32	6.000	97.00	57.00	36.00	● ●
5.600		6.000	97.00	57.00	36.00	● ● ●
5.700		6.000	97.00	57.00	36.00	● ● ●
5.800		6.000	97.00	57.00	36.00	● ● ● ●
5.900		6.000	97.00	57.00	36.00	● ● ●
5.950	15/64	6.000	97.00	57.00	36.00	● ●
6.000		6.000	97.00	57.00	36.00	● ● ● ● ●
6.100		8.000	106.00	66.00	36.00	● ● ●
6.200		8.000	106.00	66.00	36.00	● ● ●
6.300		8.000	106.00	66.00	36.00	● ● ●
6.350	1/4	8.000	106.00	66.00	36.00	● ● ●
6.400		8.000	106.00	66.00	36.00	● ●
6.500		8.000	106.00	66.00	36.00	❍ ● ● ● ●
6.530		8.000	106.00	66.00	36.00	●
6.600		8.000	106.00	66.00	36.00	● ● ● ●
6.700		8.000	106.00	66.00	36.00	● ● ●
6.750	17/64	8.000	106.00	66.00	36.00	● ● ●
6.800		8.000	106.00	66.00	36.00	● ● ● ● ●
6.900		8.000	116.00	76.00	36.00	● ● ● ●
7.000		8.000	116.00	76.00	36.00	● ● ● ● ●
7.100		8.000	116.00	76.00	36.00	● ● ● ●
7.140	9/32	8.000	116.00	76.00	36.00	● ●
7.200		8.000	116.00	76.00	36.00	● ● ●
7.300		8.000	116.00	76.00	36.00	● ● ● ●
7.400		8.000	116.00	76.00	36.00	● ● ● ●
7.500		8.000	116.00	76.00	36.00	❍ ● ● ● ●
7.540	19/64	8.000	116.00	76.00	36.00	● ●
7.600		8.000	116.00	76.00	36.00	● ● ●
7.700		8.000	116.00	76.00	36.00	● ● ●
7.800		8.000	116.00	76.00	36.00	● ● ● ●
7.900		8.000	116.00	76.00	36.00	● ●
7.940	5/16	8.000	116.00	76.00	36.00	● ●
8.000		8.000	116.00	76.00	36.00	● ● ● ● ●
8.100		10.000	131.00	87.00	40.00	● ● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2711	4044	4045	6502	8522
Standard	Guhring std.				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 R	RT 100 HF
Drilling depth	7xD	7xD	7xD	7xD	7xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	165	121
Techn. data page	127	128	128	128	128

NEW





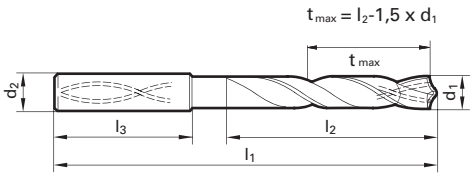
d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
8.200		10.000	131.00	87.00	40.00	● ● ●
8.300		10.000	131.00	87.00	40.00	● ●
8.330	21/64	10.000	131.00	87.00	40.00	● ●
8.400		10.000	131.00	87.00	40.00	● ● ●
8.500		10.000	131.00	87.00	40.00	● ● ● ● ●
8.600		10.000	131.00	87.00	40.00	○ ● ● ● ●
8.700		10.000	131.00	87.00	40.00	● ● ● ●
8.730	11/32	10.000	131.00	87.00	40.00	● ●
8.800		10.000	131.00	87.00	40.00	○ ● ● ● ●
8.900		10.000	131.00	87.00	40.00	● ●
9.000		10.000	131.00	87.00	40.00	● ● ● ● ●
9.100		10.000	139.00	95.00	40.00	○ ● ● ●
9.130	23/64	10.000	139.00	95.00	40.00	○ ●
9.200		10.000	139.00	95.00	40.00	○ ● ● ●
9.250		10.000	139.00	95.00	40.00	● ● ●
9.300		10.000	139.00	95.00	40.00	● ● ● ●
9.340		10.000	139.00	95.00	40.00	●
9.400		10.000	139.00	95.00	40.00	● ● ● ●
9.500		10.000	139.00	95.00	40.00	○ ● ● ● ●
9.520	3/8	10.000	139.00	95.00	40.00	● ● ●
9.600		10.000	139.00	95.00	40.00	● ● ●
9.700		10.000	139.00	95.00	40.00	○ ● ● ●
9.800		10.000	139.00	95.00	40.00	● ● ● ●
9.900		10.000	139.00	95.00	40.00	● ● ●
9.920	25/64	10.000	139.00	95.00	40.00	● ●
10.000		10.000	139.00	95.00	40.00	● ● ● ● ●
10.100		12.000	155.00	106.00	45.00	● ●
10.200		12.000	155.00	106.00	45.00	○ ● ● ● ●
10.300		12.000	155.00	106.00	45.00	● ● ●
10.320	13/32	12.000	155.00	106.00	45.00	● ●
10.400		12.000	155.00	106.00	45.00	● ● ●
10.500		12.000	155.00	106.00	45.00	● ● ● ● ●
10.600		12.000	155.00	106.00	45.00	● ●
10.700		12.000	155.00	106.00	45.00	● ●
10.720	27/64	12.000	155.00	106.00	45.00	● ●
10.800		12.000	155.00	106.00	45.00	● ● ● ●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2711	4044	4045	6502	8522
Standard	Guhring std.				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 R	RT 100 HF
Drilling depth	7xD	7xD	7xD	7xD	7xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	165	121
Techn. data page	127	128	128	128	128

NEW





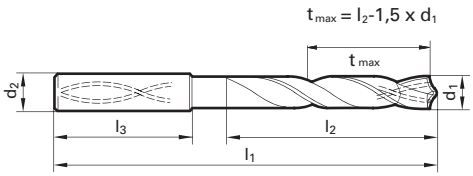
d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
10.900		12.000	155.00	106.00	45.00	● ● ●
11.000		12.000	155.00	106.00	45.00	● ● ● ● ●
11.100		12.000	163.00	114.00	45.00	● ●
11.110	7/16	12.000	163.00	114.00	45.00	● ●
11.200		12.000	163.00	114.00	45.00	● ● ●
11.300		12.000	163.00	114.00	45.00	● ● ●
11.400		12.000	163.00	114.00	45.00	● ● ●
11.500		12.000	163.00	114.00	45.00	❍ ● ● ● ●
11.510	29/64	12.000	163.00	114.00	45.00	●
11.600		12.000	163.00	114.00	45.00	● ●
11.700		12.000	163.00	114.00	45.00	● ●
11.800		12.000	163.00	114.00	45.00	● ● ●
11.900		12.000	163.00	114.00	45.00	● ●
11.910	15/32	12.000	163.00	114.00	45.00	● ●
12.000		12.000	163.00	114.00	45.00	❍ ● ● ● ●
12.100		14.000	182.00	133.00	45.00	● ● ●
12.200		14.000	182.00	133.00	45.00	● ● ● ● ●
12.300	31/64	14.000	182.00	133.00	45.00	❍ ●
12.400		14.000	182.00	133.00	45.00	●
12.500		14.000	182.00	133.00	45.00	● ● ● ● ●
12.600		14.000	182.00	133.00	45.00	●
12.700	1/2	14.000	182.00	133.00	45.00	● ● ●
12.800		14.000	182.00	133.00	45.00	●
12.900		14.000	182.00	133.00	45.00	●
13.000		14.000	182.00	133.00	45.00	● ● ● ● ●
13.100	33/64	14.000	182.00	133.00	45.00	● ● ● ●
13.300		14.000	182.00	133.00	45.00	●
13.400		14.000	182.00	133.00	45.00	●
13.490	17/32	14.000	182.00	133.00	45.00	●
13.500		14.000	182.00	133.00	45.00	❍ ● ● ● ●
13.700		14.000	182.00	133.00	45.00	●
13.800		14.000	182.00	133.00	45.00	● ●
13.890	35/64	14.000	182.00	133.00	45.00	●
13.900		14.000	182.00	133.00	45.00	●
14.000		14.000	182.00	133.00	45.00	● ● ● ● ●
14.100		16.000	204.00	152.00	48.00	❍ ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2711	4044	4045	6502	8522
Standard	Guhring std.				
Tool material	Solid carbide				
Carbide grade	K/P				
Surface	S	F	F	F	Y
Type	RT 100 U	RT 100 U	RT 100 U	RT 100 R	RT 100 HF
Drilling depth	7xD	7xD	7xD	7xD	7xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	m7	m7	m7	m7	m7
Discount group	121	121	121	165	121
Techn. data page	127	128	128	128	128

NEW

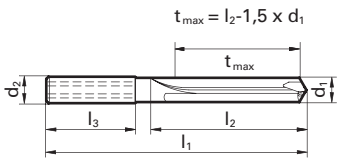




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
14.200		16.000	204.00	152.00	48.00	● ● ●
14.290	9/16	16.000	204.00	152.00	48.00	● ●
14.300		16.000	204.00	152.00	48.00	●
14.400		16.000	204.00	152.00	48.00	●
14.500		16.000	204.00	152.00	48.00	● ● ● ●
14.600		16.000	204.00	152.00	48.00	●
14.700		16.000	204.00	152.00	48.00	●
14.900		16.000	204.00	152.00	48.00	●
15.000		16.000	204.00	152.00	48.00	● ● ● ● ●
15.100		16.000	204.00	152.00	48.00	● ● ●
15.200		16.000	204.00	152.00	48.00	● ●
15.300		16.000	204.00	152.00	48.00	●
15.400		16.000	204.00	152.00	48.00	●
15.480	39/64	16.000	204.00	152.00	48.00	●
15.500		16.000	204.00	152.00	48.00	❍ ● ● ● ●
15.600		16.000	204.00	152.00	48.00	●
15.700		16.000	204.00	152.00	48.00	●
15.800		16.000	204.00	152.00	48.00	● ●
15.870	5/8	16.000	204.00	152.00	48.00	❍ ●
15.900		16.000	204.00	152.00	48.00	●
16.000		16.000	204.00	152.00	48.00	● ● ● ● ●
16.500		18.000	223.00	171.00	48.00	● ● ● ●
16.670	21/32	18.000	223.00	171.00	48.00	●
16.900		18.000	223.00	171.00	48.00	●
17.000		18.000	223.00	171.00	48.00	● ● ● ●
17.500		18.000	223.00	171.00	48.00	❍ ● ● ●
18.000		18.000	223.00	171.00	48.00	● ● ● ●
18.500		20.000	244.00	190.00	50.00	❍ ● ● ●
18.900		20.000	244.00	190.00	50.00	●
19.000		20.000	244.00	190.00	50.00	● ● ●
19.050	3/4	20.000	244.00	190.00	50.00	● ●
19.500		20.000	244.00	190.00	50.00	❍ ● ● ●
20.000		20.000	244.00	190.00	50.00	● ● ●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	769	6069
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	7xD	7xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	128	129



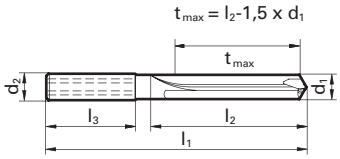




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
3.000		6.000	74.00	32.00	36.00	●	●
3.100		6.000	74.00	32.00	36.00	●	
3.200		6.000	74.00	32.00	36.00	●	●
3.300		6.000	74.00	32.00	36.00	●	❍
3.400		6.000	74.00	34.00	36.00	●	
3.500		6.000	74.00	34.00	36.00	●	●
3.600		6.000	74.00	34.00	36.00	●	❍
3.700		6.000	74.00	34.00	36.00	●	
3.800		6.000	97.00	45.00	36.00	●	❍
3.900		6.000	97.00	45.00	36.00	●	●
4.000		6.000	97.00	45.00	36.00	●	❍
4.100		6.000	97.00	45.00	36.00	●	
4.200		6.000	97.00	45.00	36.00	●	●
4.300		6.000	97.00	45.00	36.00	●	❍
4.400		6.000	97.00	45.00	36.00	●	●
4.500		6.000	97.00	45.00	36.00	●	●
4.700		6.000	97.00	45.00	36.00	●	
4.800		6.000	97.00	57.00	36.00	●	
4.900		6.000	97.00	57.00	36.00	●	
5.000		6.000	97.00	57.00	36.00	●	●
5.160	13/64	6.000	97.00	57.00	36.00	❍	❍
5.500		6.000	97.00	57.00	36.00	●	●
6.000		6.000	97.00	57.00	36.00	●	●
6.350	1/4	8.000	116.00	76.00	36.00	❍	
6.500		8.000	116.00	76.00	36.00	●	●
6.800		8.000	116.00	76.00	36.00	●	●
7.000		8.000	116.00	76.00	36.00	●	●
7.140	9/32	8.000	116.00	76.00	36.00	❍	●
7.500		8.000	116.00	76.00	36.00	●	
7.800		8.000	116.00	76.00	36.00	●	●
7.940	5/16	8.000	116.00	76.00	36.00	●	
8.000		8.000	116.00	76.00	36.00	●	●
8.330	21/64	10.000	139.00	95.00	40.00	●	●
8.500		10.000	139.00	95.00	40.00	●	●
8.730	11/32	10.000	139.00	95.00	40.00	●	●
9.000		10.000	139.00	95.00	40.00	●	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	769	6069
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	7xD	7xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	128	129



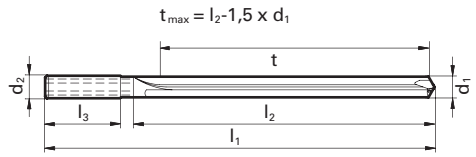




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
9.130	23/64	10.000	139.00	95.00	40.00	❍	●
9.500		10.000	139.00	95.00	40.00	●	●
9.520	3/8	10.000	139.00	95.00	40.00	●	●
10.000		10.000	139.00	95.00	40.00	●	●
10.200		12.000	163.00	114.00	45.00	●	●
10.320	13/32	12.000	163.00	114.00	45.00	●	●
10.500		12.000	163.00	114.00	45.00	●	●
10.720	27/64	12.000	163.00	114.00	45.00	●	❍
11.000		12.000	163.00	114.00	45.00	●	●
11.110	7/16	12.000	163.00	114.00	45.00	●	●
11.500		12.000	163.00	114.00	45.00	●	
11.510	29/64	12.000	163.00	114.00	45.00	●	●
12.000		12.000	163.00	114.00	45.00	●	●
12.300	31/64	14.000	182.00	133.00	45.00	●	❍
12.500		14.000	182.00	133.00	45.00	●	●
12.700	1/2	14.000	182.00	133.00	45.00	●	❍
13.000		14.000	182.00	133.00	45.00	●	●
13.500		14.000	182.00	133.00	45.00	●	●
14.000		14.000	182.00	133.00	45.00	●	●
14.500		16.000	204.00	152.00	48.00	●	●
15.000		16.000	204.00	152.00	48.00	●	●
15.500		16.000	204.00	152.00	48.00	●	●
16.000		16.000	204.00	152.00	48.00	●	●
16.500		18.000	223.00	171.00	48.00	●	●
17.000		18.000	223.00	171.00	48.00	●	●
17.500		18.000	223.00	171.00	48.00	●	
18.000		18.000	223.00	171.00	48.00	●	●
18.500		20.000	244.00	190.00	50.00	❍	●
19.000		20.000	244.00	190.00	50.00	●	
19.500		20.000	244.00	190.00	50.00	❍	❍
20.000		20.000	244.00	190.00	50.00	●	

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	770	6070
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	10xD	10xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	129	129



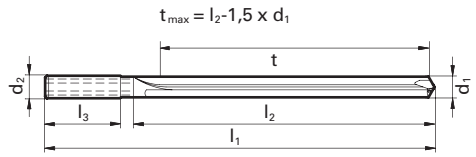




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
3.000		6.000	91.00	42.00	36.00	●	●
3.100		6.000	91.00	42.00	36.00	●	❍
3.300		6.000	91.00	42.00	36.00	●	●
3.500		6.000	91.00	48.00	36.00	●	●
3.600		6.000	91.00	48.00	36.00		●
3.700		6.000	91.00	48.00	36.00	●	
3.800		6.000	121.00	77.00	36.00	●	❍
3.900		6.000	121.00	77.00	36.00	●	
4.000		6.000	121.00	77.00	36.00	●	●
4.100		6.000	121.00	77.00	36.00	●	
4.200		6.000	121.00	77.00	36.00	●	
4.300		6.000	121.00	77.00	36.00	●	
4.400		6.000	121.00	77.00	36.00	●	●
4.500		6.000	121.00	77.00	36.00	●	
4.600		6.000	121.00	77.00	36.00	●	
4.700		6.000	121.00	77.00	36.00	❍	●
4.800		6.000	121.00	82.00	36.00	●	●
4.900		6.000	121.00	82.00	36.00	●	❍
5.000		6.000	121.00	82.00	36.00	●	●
5.160	13/64	6.000	121.00	82.00	36.00	●	
5.500		6.000	121.00	82.00	36.00	●	●
5.560	7/32	6.000	121.00	82.00	36.00	●	
6.000		6.000	121.00	82.00	36.00	●	●
6.350	1/4	8.000	146.00	106.00	36.00	●	●
6.500		8.000	146.00	106.00	36.00	●	❍
6.750	17/64	8.000	146.00	106.00	36.00	❍	
6.800		8.000	146.00	106.00	36.00	●	●
7.000		8.000	146.00	106.00	36.00	●	❍
7.140	9/32	8.000	146.00	106.00	36.00	●	●
7.500		8.000	146.00	106.00	36.00	●	●
7.800		8.000	146.00	106.00	36.00	●	●
7.940	5/16	8.000	146.00	106.00	36.00	●	●
8.000		8.000	146.00	106.00	36.00	●	●
8.330	21/64	10.000	175.00	130.00	40.00	●	●
8.500		10.000	175.00	130.00	40.00	●	●
8.730	11/32	10.000	175.00	130.00	40.00	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	770	6070
Standard	Guhring std.	
Tool material	Solid carbide	
Carbide grade	K	
Surface	◯	◯
Type	RT 150 GG	RT 150 GG
Drilling depth	10xD	10xD
Cutting direction	right-hand	right-hand
Tolerance	m7	m7
Discount group	121	121
Techn. data page	129	129





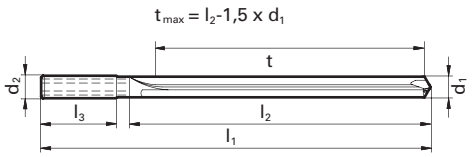


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability	
9.000		10.000	175.00	130.00	40.00	●	●
9.130	23/64	10.000	175.00	130.00	40.00		●
9.500		10.000	175.00	130.00	40.00	●	●
9.520	3/8	10.000	175.00	130.00	40.00	●	❍
10.000		10.000	175.00	130.00	40.00	●	
10.200		12.000	209.00	159.00	45.00	●	
10.320	13/32	12.000	209.00	159.00	45.00		●
10.500		12.000	209.00	159.00	45.00	●	●
10.720	27/64	12.000	209.00	159.00	45.00	●	
11.000		12.000	209.00	159.00	45.00	●	●
11.110	7/16	12.000	209.00	159.00	45.00		●
11.500		12.000	209.00	159.00	45.00	●	
11.510	29/64	12.000	209.00	159.00	45.00	❍	●
12.000		12.000	209.00	159.00	45.00	●	●
12.300		14.000	233.00	183.00	45.00	●	●
12.500		14.000	233.00	183.00	45.00	●	
12.700		14.000	233.00	183.00	45.00	●	❍
13.000		14.000	233.00	183.00	45.00	●	●
13.500		14.000	233.00	183.00	45.00	●	
14.000		14.000	233.00	183.00	45.00	●	●
14.500		16.000	260.00	207.00	48.00	●	
15.000		16.000	260.00	207.00	48.00	●	●
15.500		16.000	260.00	207.00	48.00	●	●
16.000		16.000	260.00	207.00	48.00	●	●
16.500		18.000	284.00	231.00	48.00	❍	
17.000		18.000	284.00	231.00	48.00	●	
17.500		18.000	284.00	231.00	48.00	●	●
18.000		18.000	284.00	231.00	48.00	●	❍
18.500		20.000	308.00	255.00	50.00	❍	●
19.000		20.000	308.00	255.00	50.00	●	
19.500		20.000	308.00	255.00	50.00		❍
20.000		20.000	308.00	255.00	50.00	●	

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	773
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K
Surface	◯
Type	RT 150 GN
Drilling depth	15xD
Cutting direction	right-hand
Tolerance	m7
Discount group	121
Techn. data page	129



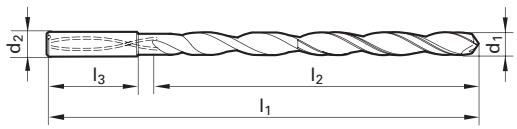


d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
5.000		6.000	145.00	105.00	36.00	●
6.000		6.000	145.00	105.00	36.00	●
8.000		8.000	180.00	137.00	36.00	●
9.000		10.000	217.00	170.00	40.00	●
10.000		10.000	217.00	170.00	40.00	●
11.000		12.000	258.00	205.00	45.00	●
12.000		12.000	258.00	205.00	45.00	●
14.000		14.000	290.00	236.00	45.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	6509
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	15xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	129

NEW



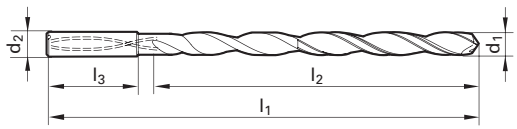


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
3.000		6.000	95.00	55.00	36.00	●
3.170	1/8	6.000	106.00	67.00	36.00	●
3.500		6.000	116.00	76.00	36.00	●
3.570	9/64	6.000	116.00	76.00	36.00	●
3.970	5/32	6.000	116.00	76.00	36.00	●
4.000		6.000	116.00	76.00	36.00	●
4.370	11/64	6.000	133.00	93.00	36.00	●
4.500		6.000	133.00	93.00	36.00	●
4.760	3/16	6.000	133.00	93.00	36.00	●
5.000		6.000	133.00	93.00	36.00	●
5.100		6.000	150.00	110.00	36.00	●
5.160	13/64	6.000	150.00	110.00	36.00	●
5.410		6.000	150.00	110.00	36.00	●
5.500		6.000	150.00	110.00	36.00	●
5.560	7/32	6.000	150.00	110.00	36.00	●
5.950	15/64	6.000	150.00	110.00	36.00	●
6.000		6.000	150.00	110.00	36.00	●
6.350	1/4	8.000	167.00	127.00	36.00	●
6.500		8.000	167.00	127.00	36.00	●
6.750	17/64	8.000	167.00	127.00	36.00	●
7.000		8.000	167.00	127.00	36.00	●
7.140	9/32	8.000	183.00	143.00	36.00	●
7.500		8.000	183.00	143.00	36.00	●
7.540	19/64	8.000	183.00	143.00	36.00	●
7.940	5/16	8.000	183.00	143.00	36.00	●
8.000		8.000	183.00	143.00	36.00	●
8.330	21/64	10.000	204.00	160.00	40.00	●
8.500		10.000	204.00	160.00	40.00	●
8.730	11/32	10.000	204.00	160.00	40.00	●
9.000		10.000	204.00	160.00	40.00	●
9.130	23/64	10.000	221.00	177.00	40.00	●
9.520	3/8	10.000	221.00	177.00	40.00	●
9.920	25/64	10.000	221.00	177.00	40.00	●
10.000		10.000	221.00	177.00	40.00	●
10.320	13/32	12.000	247.00	198.00	45.00	●
10.720	27/64	12.000	247.00	198.00	45.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6509
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	15xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	129

NEW

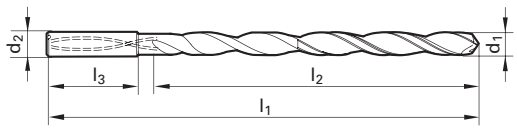




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
11.000		12.000	247.00	198.00	45.00	●
11.110	7/16	12.000	263.00	214.00	45.00	●
11.510	29/64	12.000	263.00	214.00	45.00	●
11.910	15/32	12.000	263.00	214.00	45.00	●
12.000		12.000	263.00	214.00	45.00	●
12.300	31/64	14.000	297.00	248.00	45.00	●
12.700	1/2	14.000	297.00	248.00	45.00	●
13.100	33/64	14.000	297.00	248.00	45.00	●
13.490	17/32	14.000	297.00	248.00	45.00	●
13.890	35/64	14.000	297.00	248.00	45.00	●
14.000		14.000	297.00	248.00	45.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	6511
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	20xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	130

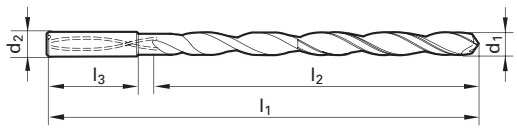




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
3.000		6.000	110.00	70.00	36.00	●
3.170	1/8	6.000	123.00	83.00	36.00	●
3.500		6.000	136.00	96.00	36.00	●
3.570		6.000	136.00	96.00	36.00	●
3.970	5/32	6.000	136.00	96.00	36.00	●
4.000		6.000	136.00	96.00	36.00	●
4.370		6.000	158.00	118.00	36.00	●
4.500		6.000	158.00	118.00	36.00	●
4.760	3/16	6.000	158.00	118.00	36.00	●
5.000		6.000	158.00	118.00	36.00	●
5.100		6.000	180.00	140.00	36.00	●
5.160		6.000	180.00	140.00	36.00	●
5.410		6.000	180.00	140.00	36.00	●
5.500		6.000	180.00	140.00	36.00	●
5.560	7/32	6.000	180.00	140.00	36.00	●
5.950		6.000	180.00	140.00	36.00	●
6.000		6.000	180.00	140.00	36.00	●
6.350	1/4	8.000	202.00	162.00	36.00	●
6.500		8.000	202.00	162.00	36.00	●
6.750		8.000	202.00	162.00	36.00	●
7.000		8.000	202.00	162.00	36.00	●
7.140	9/32	8.000	223.00	183.00	36.00	●
7.500		8.000	223.00	183.00	36.00	●
7.540		8.000	223.00	183.00	36.00	●
7.940		8.000	223.00	183.00	36.00	●
8.000		8.000	223.00	183.00	36.00	●
8.330		10.000	249.00	205.00	40.00	●
8.500		10.000	249.00	205.00	40.00	●
8.730		10.000	249.00	205.00	40.00	●
9.000		10.000	249.00	205.00	40.00	●
9.130		10.000	271.00	227.00	40.00	●
9.520		10.000	271.00	227.00	40.00	●
9.920	25/64	10.000	271.00	227.00	40.00	●
10.000		10.000	271.00	227.00	40.00	●
10.320		12.000	302.00	253.00	45.00	●
10.720		12.000	302.00	253.00	45.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6511
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	20xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	130

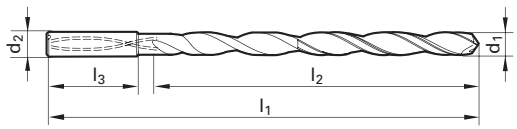




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
11.000		12.000	302.00	253.00	45.00	●
11.110		12.000	323.00	274.00	45.00	●
11.510		12.000	323.00	274.00	45.00	●
11.910		12.000	323.00	274.00	45.00	●
12.000		12.000	323.00	274.00	45.00	●
12.300	31/64	14.000	367.00	318.00	45.00	●
12.700		14.000	367.00	318.00	45.00	●
13.100	33/64	14.000	367.00	318.00	45.00	●
13.490	17/32	14.000	367.00	318.00	45.00	●
13.890	35/64	14.000	367.00	318.00	45.00	●
14.000		14.000	367.00	318.00	45.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	6512
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	25xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	130

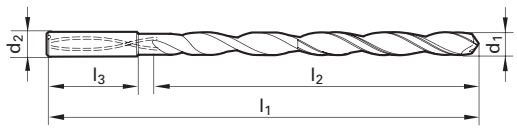




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
3.000		6.000	125.00	85.00	36.00	●
3.170	1/8	6.000	141.00	101.00	36.00	●
3.500		6.000	156.00	116.00	36.00	●
3.570		6.000	156.00	116.00	36.00	●
3.970	5/32	6.000	156.00	116.00	36.00	●
4.000		6.000	156.00	116.00	36.00	●
4.370		6.000	183.00	143.00	36.00	●
4.500		6.000	183.00	143.00	36.00	●
4.760	3/16	6.000	183.00	143.00	36.00	●
5.000		6.000	183.00	143.00	36.00	●
5.100		6.000	210.00	170.00	36.00	●
5.160		6.000	210.00	170.00	36.00	●
5.410		6.000	210.00	170.00	36.00	●
5.500		6.000	210.00	170.00	36.00	●
5.560	7/32	6.000	210.00	170.00	36.00	●
5.950		6.000	210.00	170.00	36.00	●
6.000		6.000	210.00	170.00	36.00	●
6.350	1/4	8.000	237.00	197.00	36.00	●
6.500		8.000	237.00	197.00	36.00	●
6.750		8.000	237.00	197.00	36.00	●
7.000		8.000	237.00	197.00	36.00	●
7.140	9/32	8.000	263.00	223.00	36.00	●
7.500		8.000	263.00	223.00	36.00	●
7.540		8.000	263.00	223.00	36.00	●
7.940		8.000	263.00	223.00	36.00	●
8.000		8.000	263.00	223.00	36.00	●
8.330		10.000	294.00	250.00	40.00	●
8.500		10.000	294.00	250.00	40.00	●
8.730		10.000	294.00	250.00	40.00	●
9.000		10.000	294.00	250.00	40.00	●
9.130		10.000	321.00	277.00	40.00	●
9.520		10.000	321.00	277.00	40.00	●
9.920	25/64	10.000	321.00	277.00	40.00	●
10.000		10.000	321.00	277.00	40.00	●
10.320	13/32	12.000	359.00	310.00	45.00	●
10.720		12.000	359.00	310.00	40.00	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6512
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	25xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	130

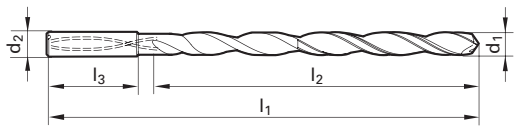




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
11.000		12.000	359.00	310.00	45.00	●
11.110		12.000	386.00	337.00	40.00	●
11.510	29/64	12.000	386.00	337.00	45.00	●
11.910	15/32	12.000	386.00	337.00	45.00	●
12.000		12.000	386.00	337.00	45.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	6513
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	30xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	130



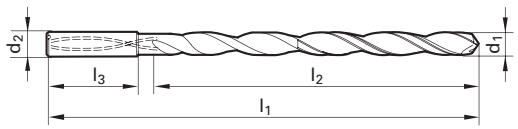


d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
3.000		6.000	140.00	100.00	36.00	●
3.170	1/8	6.000	158.00	118.00	36.00	●
3.500		6.000	176.00	136.00	36.00	●
3.570		6.000	176.00	136.00	36.00	●
3.970	5/32	6.000	176.00	136.00	36.00	●
4.000		6.000	176.00	136.00	36.00	●
4.370		6.000	208.00	168.00	36.00	●
4.500		6.000	208.00	168.00	36.00	●
4.760	3/16	6.000	208.00	168.00	36.00	●
5.000		6.000	208.00	168.00	36.00	●
5.100		6.000	240.00	200.00	36.00	●
5.160		6.000	240.00	200.00	36.00	●
5.410		6.000	240.00	200.00	36.00	●
5.500		6.000	240.00	200.00	36.00	●
5.560	7/32	6.000	240.00	200.00	36.00	●
5.950		6.000	240.00	200.00	36.00	●
6.000		6.000	240.00	200.00	36.00	●
6.350	1/4	8.000	272.00	232.00	36.00	●
6.500		8.000	272.00	232.00	36.00	●
6.750		8.000	272.00	232.00	36.00	●
7.000		8.000	272.00	232.00	36.00	●
7.140	9/32	8.000	303.00	263.00	36.00	●
7.500		8.000	303.00	263.00	36.00	●
7.540		8.000	303.00	263.00	36.00	●
7.940		8.000	303.00	263.00	36.00	●
8.000		8.000	303.00	263.00	36.00	●
8.330		10.000	339.00	295.00	40.00	●
8.500		10.000	339.00	295.00	40.00	●
8.730		10.000	339.00	295.00	40.00	●
9.000		10.000	339.00	295.00	40.00	●
9.130		10.000	371.00	327.00	40.00	●
9.520		10.000	371.00	327.00	40.00	●
9.920	25/64	10.000	371.00	327.00	40.00	●
10.000		10.000	371.00	327.00	40.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6514
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	A
Type	RT 100 T
Drilling depth	40xD
Cutting direction	right-hand
Tolerance	h7
Discount group	165
Techn. data page	130

NEW

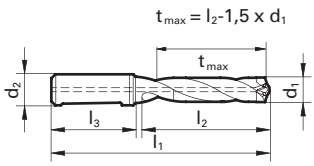




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
3.000		6.000	170.00	130.00	36.00	●
3.170	1/8	6.000	196.00	156.00	36.00	●
3.500		6.000	196.00	156.00	36.00	●
3.570	9/64	6.000	216.00	176.00	36.00	●
3.970	5/32	6.000	216.00	176.00	36.00	●
4.000		6.000	216.00	176.00	36.00	●
4.370	11/64	6.000	238.00	198.00	36.00	●
4.500		6.000	238.00	198.00	36.00	●
4.760	3/16	6.000	258.00	218.00	36.00	●
5.000		6.000	258.00	218.00	36.00	●
5.100		6.000	280.00	240.00	36.00	●
5.160	13/64	6.000	280.00	240.00	36.00	●
5.410		6.000	280.00	240.00	36.00	●
5.500		6.000	280.00	240.00	36.00	●
5.560	7/32	6.000	300.00	260.00	36.00	●
5.950	15/64	6.000	300.00	260.00	36.00	●
6.000		6.000	300.00	260.00	36.00	●
6.350	1/4	8.000	322.00	282.00	36.00	●
6.500		8.000	322.00	282.00	36.00	●
6.750	17/64	8.000	342.00	302.00	36.00	●
7.000		8.000	342.00	302.00	36.00	●
7.140	9/32	8.000	363.00	323.00	36.00	●
7.500		8.000	363.00	323.00	36.00	●
7.540	19/64	8.000	383.00	343.00	36.00	●
7.940	5/16	8.000	383.00	343.00	36.00	●
8.000		8.000	383.00	343.00	36.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1171
Standard	DIN 6538 K
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	3xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	130



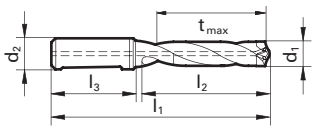


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
9.500		16.000	103.00	51.00	48.00	○
9.700		16.000	103.00	51.00	48.00	○
9.800		16.000	103.00	51.00	48.00	○
9.900		16.000	103.00	51.00	48.00	○
10.000		16.000	103.00	51.00	48.00	○
10.100		16.000	103.00	51.00	48.00	○
10.200		16.000	103.00	51.00	48.00	●
10.400		16.000	103.00	51.00	48.00	○
10.500		16.000	103.00	51.00	48.00	●
10.600		16.000	103.00	51.00	48.00	○
10.700		16.000	103.00	51.00	48.00	○
10.800		16.000	103.00	51.00	48.00	●
10.900		16.000	103.00	51.00	48.00	○
11.000		16.000	103.00	51.00	48.00	○
11.100		16.000	103.00	51.00	48.00	○
11.200		16.000	103.00	51.00	48.00	○
11.400		16.000	103.00	51.00	48.00	○
11.500		16.000	103.00	51.00	48.00	●
11.600		16.000	103.00	51.00	48.00	●
11.700		16.000	103.00	51.00	48.00	●
11.800		16.000	103.00	51.00	48.00	○
12.000		16.000	103.00	51.00	48.00	○
12.100		16.000	111.00	59.00	48.00	○
12.200		16.000	111.00	59.00	48.00	○
12.300	31/64	16.000	111.00	59.00	48.00	○
12.400		16.000	111.00	59.00	48.00	○
12.500		16.000	111.00	59.00	48.00	●
12.600		16.000	111.00	59.00	48.00	○
12.700	1/2	16.000	111.00	59.00	48.00	○
13.000		16.000	111.00	59.00	48.00	●
13.500		16.000	111.00	59.00	48.00	●
13.700		16.000	111.00	59.00	48.00	○
13.800		16.000	111.00	59.00	48.00	○
14.000		16.000	111.00	59.00	48.00	●
14.200		20.000	122.00	68.00	50.00	○
14.400		20.000	122.00	68.00	50.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1171
Standard	DIN 6538 K
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	3xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	130

$t_{max} = l_2\text{-}1{,}5 \times d_1$

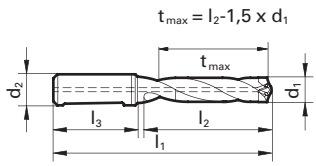




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
14.600		20.000	122.00	68.00	50.00	●
14.700		20.000	122.00	68.00	50.00	○
15.000		20.000	122.00	68.00	50.00	●
15.100		20.000	122.00	68.00	50.00	●
15.300		20.000	122.00	68.00	50.00	○
15.500		20.000	122.00	68.00	50.00	●
15.600		20.000	122.00	68.00	50.00	○
15.700		20.000	122.00	68.00	50.00	○
15.800		20.000	122.00	68.00	50.00	●
16.000		20.000	122.00	68.00	50.00	●
16.200		20.000	130.00	76.00	50.00	●
16.500		20.000	130.00	76.00	50.00	○
16.700		20.000	130.00	76.00	50.00	●
17.000		20.000	130.00	76.00	50.00	●
17.300		20.000	130.00	76.00	50.00	●
17.500		20.000	130.00	76.00	50.00	●
17.700		20.000	130.00	76.00	50.00	○
17.800		20.000	130.00	76.00	50.00	●
17.860	45/64	20.000	130.00	76.00	50.00	○
17.900		20.000	130.00	76.00	50.00	○
18.000		20.000	130.00	76.00	50.00	●
18.500		25.000	144.00	84.00	56.00	●
19.000		25.000	144.00	84.00	56.00	●
19.300		25.000	144.00	84.00	56.00	○
19.500		25.000	144.00	84.00	56.00	●
19.600		25.000	144.00	84.00	56.00	○
19.700		25.000	144.00	84.00	56.00	●
20.000		25.000	144.00	84.00	56.00	●
20.500		25.000	153.00	93.00	56.00	●
21.000		25.000	153.00	93.00	56.00	●
21.500		25.000	153.00	93.00	56.00	●
22.000		25.000	153.00	93.00	56.00	●
22.220	7/8	25.000	161.00	101.00	56.00	○
22.500		25.000	161.00	101.00	56.00	●
22.620	57/64	25.000	161.00	101.00	56.00	●
23.000		25.000	161.00	101.00	56.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1171
Standard	DIN 6538 K
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	3xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	130

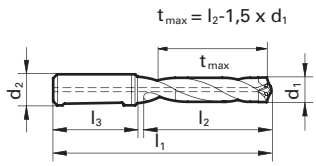




d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
23.500		25.000	161.00	101.00	56.00	○
24.000		25.000	161.00	101.00	56.00	●
24.500		32.000	174.00	110.00	60.00	●
25.000	63/64	32.000	174.00	110.00	60.00	●
25.500		32.000	174.00	110.00	60.00	○

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1172
Standard	DIN 6538 M
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	5xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	131



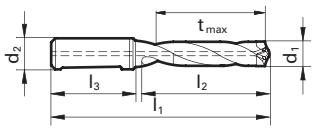


d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
9.800		16.000	127.00	75.00	48.00	○
10.000		16.000	127.00	75.00	48.00	●
10.200		16.000	127.00	75.00	48.00	●
10.500		16.000	127.00	75.00	48.00	●
10.600		16.000	127.00	75.00	48.00	○
10.700		16.000	127.00	75.00	48.00	○
10.800		16.000	127.00	75.00	48.00	○
11.500		16.000	127.00	75.00	48.00	●
11.900		16.000	127.00	75.00	48.00	○
12.000		16.000	127.00	75.00	48.00	●
12.300	31/64	16.000	139.00	87.00	48.00	○
12.500		16.000	139.00	87.00	48.00	●
12.700	1/2	16.000	139.00	87.00	48.00	●
12.900		16.000	139.00	87.00	48.00	○
13.000		16.000	139.00	87.00	48.00	○
13.100	33/64	16.000	139.00	87.00	48.00	●
13.500		16.000	139.00	87.00	48.00	●
13.700		16.000	139.00	87.00	48.00	○
13.900		16.000	139.00	87.00	48.00	○
14.000		16.000	139.00	87.00	48.00	●
14.500		20.000	154.00	100.00	50.00	○
14.600		20.000	154.00	100.00	50.00	○
15.000		20.000	154.00	100.00	50.00	●
15.200		20.000	154.00	100.00	50.00	○
15.500		20.000	154.00	100.00	50.00	●
15.700		20.000	154.00	100.00	50.00	○
16.000		20.000	154.00	100.00	50.00	●
16.200		20.000	166.00	112.00	50.00	●
16.500		20.000	166.00	112.00	50.00	●
16.600		20.000	166.00	112.00	50.00	○
16.700		20.000	166.00	112.00	50.00	●
16.800		20.000	166.00	112.00	50.00	●
17.000		20.000	166.00	112.00	50.00	●
17.200		20.000	166.00	112.00	50.00	○
17.300		20.000	166.00	112.00	50.00	○
17.500		20.000	166.00	112.00	50.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1172
Standard	DIN 6538 M
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	5xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	131

$t_{max} = l_2\text{-}1{,}5 \times d_1$

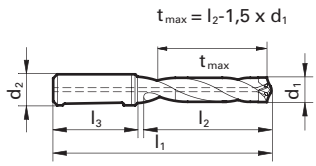




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
18.000		20.000	166.00	112.00	50.00	●
18.500		25.000	184.00	124.00	56.00	●
19.000		25.000	184.00	124.00	56.00	●
19.500		25.000	184.00	124.00	56.00	●
19.600		25.000	184.00	124.00	56.00	○
19.700		25.000	184.00	124.00	56.00	●
19.900		25.000	184.00	124.00	56.00	○
20.000		25.000	184.00	124.00	56.00	●
20.500		25.000	197.00	137.00	56.00	●
21.000		25.000	197.00	137.00	56.00	●
21.500		25.000	197.00	137.00	56.00	○
22.000		25.000	197.00	137.00	56.00	●
22.220	7/8	25.000	209.00	149.00	56.00	○
22.500		25.000	209.00	149.00	56.00	●
23.000		25.000	209.00	149.00	56.00	●
23.500		25.000	209.00	149.00	56.00	○
24.000		25.000	209.00	149.00	56.00	●
24.500		32.000	226.00	162.00	60.00	●
25.000	63/64	32.000	226.00	162.00	60.00	●
25.500		32.000	226.00	162.00	60.00	○

○ bright ◯ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1173
Standard	DIN 6538 L
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	7xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	131





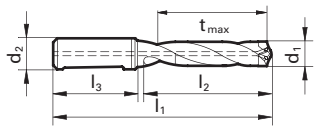
d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
9.600		16.000	151.00	99.00	48.00	○
9.700		16.000	151.00	99.00	48.00	○
10.000		16.000	151.00	99.00	48.00	●
10.200		16.000	151.00	99.00	48.00	●
10.400		16.000	151.00	99.00	48.00	○
11.000		16.000	151.00	99.00	48.00	●
11.500		16.000	151.00	99.00	48.00	●
11.700		16.000	151.00	99.00	48.00	○
11.800		16.000	151.00	99.00	48.00	●
12.000		16.000	151.00	99.00	48.00	●
12.200		16.000	167.00	115.00	48.00	○
12.400		16.000	167.00	115.00	48.00	○
12.500		16.000	167.00	115.00	48.00	●
12.700	1/2	16.000	167.00	115.00	48.00	●
13.000		16.000	167.00	115.00	48.00	●
13.500		16.000	167.00	115.00	48.00	●
14.000		16.000	167.00	115.00	48.00	●
14.500		20.000	186.00	132.00	50.00	●
15.000		20.000	186.00	132.00	50.00	●
15.500		20.000	186.00	132.00	50.00	○
15.700		20.000	186.00	132.00	50.00	●
15.800		20.000	186.00	132.00	50.00	○
16.000		20.000	186.00	132.00	50.00	●
16.500		20.000	202.00	148.00	50.00	●
17.000		20.000	202.00	148.00	50.00	●
17.200		20.000	202.00	148.00	50.00	○
17.460	11/16	20.000	202.00	148.00	50.00	○
17.500		20.000	202.00	148.00	50.00	●
18.000		20.000	202.00	148.00	50.00	●
18.500		25.000	224.00	164.00	56.00	●
19.000		25.000	224.00	164.00	56.00	●
19.200		25.000	224.00	164.00	56.00	○
20.000		25.000	224.00	164.00	56.00	●
21.000		25.000	241.00	181.00	56.00	●
22.000		25.000	241.00	181.00	56.00	●
22.500		25.000	257.00	197.00	56.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1173
Standard	DIN 6538 L
Tool material	Carbide
Carbide grade	P
Surface	S
Type	RT 80 U
Drilling depth	7xD
Cutting direction	right-hand
Tolerance	h7
Discount group	128
Techn. data page	131



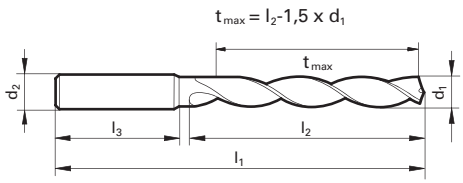
$t_{max} = l_2\text{-}1{,}5 \times d_1$



d1		d2	l1	l2	l3	Availability
mm	inch	mm	mm	mm	mm	
25.000	63/64	32.000	278.00	214.00	60.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2713
Standard	DIN 6537 L
Tool material	Solid carbide
Carbide grade	K
Surface	◯
Type	FT 200 G
Drilling depth	5xD
Cutting direction	right-hand
Tolerance	m7
Discount group	109
Techn. data page	131

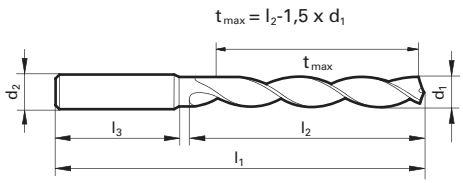




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
3.000		6.000	66.00	28.00	36.00	●
3.100		6.000	66.00	28.00	36.00	●
3.200		6.000	66.00	28.00	36.00	●
3.300		6.000	66.00	28.00	36.00	●
3.500		6.000	66.00	28.00	36.00	●
3.700		6.000	66.00	28.00	36.00	●
3.800		6.000	74.00	36.00	36.00	●
4.000		6.000	74.00	36.00	36.00	●
4.100		6.000	74.00	36.00	36.00	●
4.200		6.000	74.00	36.00	36.00	●
4.500		6.000	74.00	36.00	36.00	●
4.800		6.000	82.00	44.00	36.00	●
5.000		6.000	82.00	44.00	36.00	●
5.100		6.000	82.00	44.00	36.00	●
5.200		6.000	82.00	44.00	36.00	●
5.300		6.000	82.00	44.00	36.00	●
5.500		6.000	82.00	44.00	36.00	●
5.800		6.000	82.00	44.00	36.00	●
6.000		6.000	82.00	44.00	36.00	●
6.100		8.000	91.00	53.00	36.00	●
6.200		8.000	91.00	53.00	36.00	●
6.400		8.000	91.00	53.00	36.00	●
6.500		8.000	91.00	53.00	36.00	●
6.700		8.000	91.00	53.00	36.00	●
6.800		8.000	91.00	53.00	36.00	●
7.000		8.000	91.00	53.00	36.00	●
7.100		8.000	91.00	53.00	36.00	●
7.400		8.000	91.00	53.00	36.00	●
7.500		8.000	91.00	53.00	36.00	●
7.800		8.000	91.00	53.00	36.00	●
8.000		8.000	91.00	53.00	36.00	●
8.100		10.000	103.00	61.00	40.00	●
8.200		10.000	103.00	61.00	40.00	●
8.400		10.000	103.00	61.00	40.00	●
8.500		10.000	103.00	61.00	40.00	●
8.600		10.000	103.00	61.00	40.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2713
Standard	DIN 6537 L
Tool material	Solid carbide
Carbide grade	K
Surface	◯
Type	FT 200 G
Drilling depth	5xD
Cutting direction	right-hand
Tolerance	m7
Discount group	109
Techn. data page	131

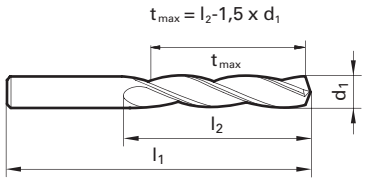




d1 mm	d1 inch	d2 mm	l1 mm	l2 mm	l3 mm	Availability
8.700		10.000	103.00	61.00	40.00	●
8.800		10.000	103.00	61.00	40.00	●
9.000		10.000	103.00	61.00	40.00	●
9.100		10.000	103.00	61.00	40.00	●
9.500		10.000	103.00	61.00	40.00	●
9.800		10.000	103.00	61.00	40.00	●
10.000		10.000	103.00	61.00	40.00	●
10.100		12.000	118.00	71.00	45.00	●
10.200		12.000	118.00	71.00	45.00	●
10.300		12.000	118.00	71.00	45.00	●
10.500		12.000	118.00	71.00	45.00	●
11.000		12.000	118.00	71.00	45.00	●
11.200		12.000	118.00	71.00	45.00	●
11.500		12.000	118.00	71.00	45.00	●
11.800		12.000	118.00	71.00	45.00	●
12.000		12.000	118.00	71.00	45.00	●
12.100		14.000	124.00	77.00	45.00	●
12.500		14.000	124.00	77.00	45.00	●
13.000		14.000	124.00	77.00	45.00	●
13.500		14.000	124.00	77.00	45.00	●
14.000		14.000	124.00	77.00	45.00	●
14.500		16.000	133.00	83.00	48.00	●
15.000		16.000	133.00	83.00	48.00	●
15.500		16.000	133.00	83.00	48.00	●
16.000		16.000	133.00	83.00	48.00	●
16.500		18.000	143.00	93.00	48.00	●
17.000		18.000	143.00	93.00	48.00	●
17.500		18.000	143.00	93.00	48.00	●
18.000		18.000	143.00	93.00	48.00	●
18.500		20.000	153.00	101.00	50.00	●
19.000		20.000	153.00	101.00	50.00	●
19.500		20.000	153.00	101.00	50.00	●
20.000		20.000	153.00	101.00	50.00	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	731	611	745	1025	1027
Standard	DIN 6539				
Tool material	Solid carbide				
Carbide grade	K	K/P	K10/K20	K	K10/K20
Surface	○	(S)	○	○	(S)
Type	GS 200 U	GS 200 U	GS 200 G	GS 200 G	GS 200 F
Drilling depth	5xD	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h7	h7	h7	h7	h7
Discount group	109	109	109	109	109
Techn. data page	131	131	132	132	132

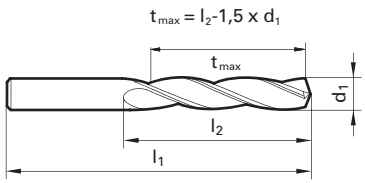




d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.000		46.00	22.00	● ● ● ●
3.100		49.00	24.00	● ●
3.200		49.00	24.00	● ● ●
3.300		49.00	24.00	● ●
3.400		52.00	27.00	● ●
3.500		52.00	27.00	● ●
3.570	9/64	52.00	27.00	❍ ❍
3.600		52.00	27.00	● ●
3.700		52.00	27.00	● ●
3.800		55.00	30.00	● ●
3.900		55.00	30.00	● ● ● ❍
3.970	5/32	55.00	30.00	● ●
4.000		55.00	30.00	● ● ● ●
4.100		55.00	30.00	● ●
4.200		55.00	30.00	● ● ●
4.300		58.00	32.00	● ●
4.370	11/64	58.00	32.00	❍ ❍
4.400		58.00	32.00	●
4.500		58.00	32.00	● ●
4.600		58.00	32.00	●
4.700		58.00	32.00	● ● ❍ ●
4.760	3/16	62.00	35.00	●
4.800		62.00	35.00	● ●
4.900		62.00	35.00	● ●
5.000		62.00	35.00	● ● ● ●
5.100		62.00	35.00	● ●
5.200		62.00	35.00	● ●
5.300		62.00	35.00	● ❍ ● ❍
5.400		66.00	39.00	● ●
5.500		66.00	39.00	● ● ❍
5.600		66.00	39.00	● ●
5.700		66.00	39.00	❍ ●
5.800		66.00	39.00	● ● ●
5.900		66.00	39.00	●
6.000		66.00	39.00	● ● ● ●
6.100		70.00	42.00	● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	731	611	745	1025	1027
Standard	DIN 6539				
Tool material	Solid carbide				
Carbide grade	K	K/P	K10/K20	K	K10/K20
Surface	○	Ⓢ	○	○	Ⓢ
Type	GS 200 U	GS 200 U	GS 200 G	GS 200 G	GS 200 F
Drilling depth	5xD	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h7	h7	h7	h7	h7
Discount group	109	109	109	109	109
Techn. data page	131	131	132	132	132

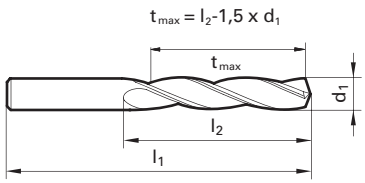




d1 mm	d1 inch	l1 mm	l2 mm	Availability
6.200		70.00	42.00	● ● ●
6.300		70.00	42.00	●
6.400		70.00	42.00	● ❍ ●
6.500		70.00	42.00	● ●
6.600		70.00	42.00	●
6.700		70.00	42.00	● ●
6.750	17/64	74.00	45.00	●
6.800		74.00	45.00	● ● ●
6.900		74.00	45.00	❍
7.000		74.00	45.00	● ● ● ●
7.100		74.00	45.00	●
7.200		74.00	45.00	●
7.300		74.00	45.00	❍ ●
7.400		74.00	45.00	●
7.500		74.00	45.00	● ●
7.600		79.00	48.00	●
7.700		79.00	48.00	● ●
7.800		79.00	48.00	● ●
7.940	5/16	79.00	48.00	❍
8.000		79.00	48.00	● ● ● ❍
8.100		79.00	48.00	● ●
8.200		79.00	48.00	●
8.300		79.00	48.00	●
8.330	21/64	79.00	48.00	❍
8.400		79.00	48.00	● ●
8.500		79.00	48.00	● ●
8.700		84.00	52.00	❍
8.800		84.00	52.00	❍ ●
8.900		84.00	52.00	❍
9.000		84.00	52.00	● ● ●
9.100		84.00	52.00	●
9.200		84.00	52.00	●
9.300		84.00	52.00	❍ ●
9.500		84.00	52.00	●
9.520	3/8	89.00	55.00	●
9.600		89.00	55.00	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	731	611	745	1025	1027
Standard	DIN 6539				
Tool material	Solid carbide				
Carbide grade	K	K/P	K10/K20	K	K10/K20
Surface	○	(S)	○	○	(S)
Type	GS 200 U	GS 200 U	GS 200 G	GS 200 G	GS 200 F
Drilling depth	5xD	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h7	h7	h7	h7	h7
Discount group	109	109	109	109	109
Techn. data page	131	131	132	132	132

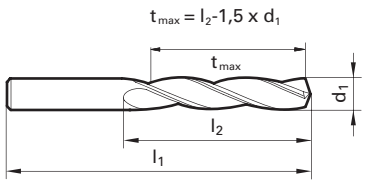




d1 mm	d1 inch	l1 mm	l2 mm	Availability
9.700		89.00	55.00	● ○ ●
9.800		89.00	55.00	●
9.900		89.00	55.00	●
10.000		89.00	55.00	● ● ● ●
10.200		89.00	55.00	● ● ●
10.300		89.00	55.00	●
10.320	13/32	89.00	55.00	○
10.400		89.00	55.00	●
10.500		89.00	55.00	● ● ○
10.700		95.00	60.00	●
10.720	27/64	95.00	60.00	● ○
10.800		95.00	60.00	●
11.000		95.00	60.00	● ● ●
11.110	7/16	95.00	60.00	●
11.200		95.00	60.00	●
11.300		95.00	60.00	●
11.500		95.00	60.00	● ●
11.510	29/64	95.00	60.00	○
11.600		95.00	60.00	●
11.700		95.00	60.00	●
11.800		95.00	60.00	●
11.910	15/32	102.00	65.00	●
12.000		102.00	65.00	● ● ●
12.100		102.00	65.00	●
12.200		102.00	65.00	●
12.500		102.00	65.00	● ○ ●
12.700	1/2	102.00	65.00	●
12.800		102.00	65.00	●
12.900		102.00	65.00	●
13.000		102.00	65.00	● ●
13.200		102.00	65.00	●
13.500		107.00	66.00	● ●
13.600		107.00	66.00	●
13.800		107.00	66.00	●
14.000		107.00	66.00	● ● ●
14.300		111.00	70.00	● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	731	611	745	1025	1027
Standard	DIN 6539				
Tool material	Solid carbide				
Carbide grade	K	K/P	K10/K20	K	K10/K20
Surface	○	(S)	○	○	(S)
Type	GS 200 U	GS 200 U	GS 200 G	GS 200 G	GS 200 F
Drilling depth	5xD	5xD	5xD	5xD	5xD
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h7	h7	h7	h7	h7
Discount group	109	109	109	109	109
Techn. data page	131	131	132	132	132

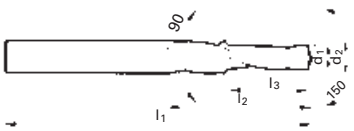




d1 mm	d1 inch	l1 mm	l2 mm	Availability
14.400		111.00	70.00	❍
14.500		111.00	70.00	●
15.000		111.00	70.00	●
15.500		115.00	73.00	●
15.870	5/8	115.00	73.00	❍
16.000		115.00	73.00	● ●
16.500		119.00	73.00	●
17.000		119.00	73.00	●
17.500		123.00	76.00	●
18.500		127.00	76.00	●
19.000		127.00	76.00	●
20.000		131.00	79.00	● ●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1032
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K
Surface	◯
Type	GS 200 G
Drilling depth	
Cutting direction	right-hand
Tolerance	
Discount group	109
Techn. data page	132



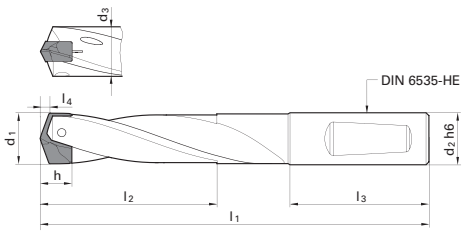


d2	d1	for threads	l1	l2	l3	Code no.	Availability
mm	mm		mm	mm	mm		
3.400	2.500	M 3	52.00	27.00	9.00	3.401	●
4.200	3.600		55.00	30.00	10.00	4.200	◯
4.500	3.300		58.00	32.00	11.00	4.501	●
5.500	4.200	M 5	66.00	39.00	14.00	5.501	●
5.500	4.700		66.00	39.00	14.00	5.500	◯
6.500	5.600		70.00	42.00	16.00	6.500	◯
6.600	5.000	M 6	70.00	42.00	16.00	6.601	●
6.800	5.800		74.00	45.00	18.00	6.800	●
9.000	6.800	M 8	84.00	52.00	22.00	9.001	●
9.700	8.300		89.00	55.00	25.00	9.700	◯
10.000	8.500		89.00	55.00	25.00	10.000	◯
11.000	8.500	M10	95.00	60.00	28.00	11.001	●
11.000	8.800	M10 X1,25	95.00	60.00	28.00	11.004	◯
11.000	9.400		95.00	60.00	28.00	11.000	●
13.500	10.200	M12	107.00	66.00	33.00	13.501	●
15.500	13.200		115.00	73.00	38.00	15.500	●
17.500	15.000	M16 X1	123.00	76.00	41.00	17.502	◯
20.000	15.500	M18	131.00	79.00	43.00	20.001	◯
20.000	16.000		131.00	79.00	43.00	20.004	◯

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**4106**
Standard	**Guhring std.**
Type	**HT 800 WP**
Drilling depth	**1,5xD**
Cooling	**axial**
Cutting direction	**right-hand**
Discount group	**140**
Techn. data page	**134**

NEW



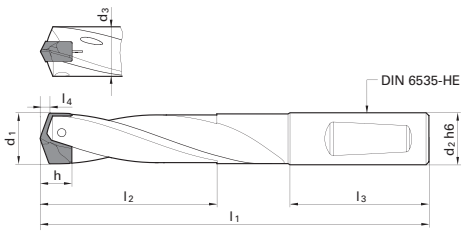


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
110	11,00-11,49	12.000	10.700	84.00	19.30	45.00	11.000	●
110	11,00-11,49	12.700	10.700	84.00	19.30	45.00	11.005	●
115	11,50-11,99	12.000	11.200	85.00	20.10	45.00	11.500	●
115	11,50-11,99	12.700	11.200	85.00	20.10	45.00	11.505	●
120	12,00-12,49	12.000	11.700	87.00	21.00	45.00	12.000	●
120	12,00-12,49	12.700	11.700	87.00	21.00	45.00	12.005	●
125	12,50-12,99	14.000	12.200	89.00	21.90	45.00	12.500	●
125	12,50-12,99	15.875	12.200	89.00	21.90	45.00	12.505	●
130	13,00-13,49	14.000	12.700	90.00	22.60	45.00	13.000	●
130	13,00-13,49	15.875	12.700	90.00	22.60	45.00	13.005	●
135	13,50-13,99	14.000	13.200	92.00	23.60	45.00	13.500	●
135	13,50-13,99	15.875	13.200	92.00	23.60	45.00	13.505	●
140	14,00-14,49	14.000	13.700	93.00	24.50	45.00	14.000	●
140	14,00-14,49	15.875	13.700	93.00	24.50	45.00	14.005	●
145	14,50-14,99	16.000	14.200	98.00	25.30	48.00	14.500	●
145	14,50-14,99	15.875	14.200	98.00	25.30	48.00	14.505	●
150	15,00-15,49	16.000	14.700	100.00	26.10	48.00	15.000	●
150	15,00-15,49	15.875	14.700	100.00	26.10	48.00	15.005	●
155	15,50-15,99	16.000	15.200	101.00	27.00	48.00	15.500	●
155	15,50-15,99	15.875	15.200	101.00	27.00	48.00	15.505	●
160	16,00-16,49	16.000	15.700	102.00	27.80	48.00	16.000	●
160	16,00-16,49	15.875	15.700	102.00	27.80	48.00	16.005	●
165	16,50-16,99	18.000	16.200	105.00	28.70	48.00	16.500	●
165	16,50-16,99	19.050	16.200	105.00	28.70	48.00	16.505	●
170	17,00-17,49	18.000	16.700	106.00	29.60	48.00	17.000	●
170	17,00-17,49	19.050	16.700	106.00	29.60	48.00	17.005	●
175	17,50-17,99	18.000	17.200	107.00	30.40	48.00	17.500	●
175	17,50-17,99	19.050	17.200	107.00	30.40	48.00	17.505	●
180	18,00-18,49	18.000	17.700	109.00	31.20	48.00	18.000	●
180	18,00-18,49	19.050	17.700	109.00	31.20	48.00	18.005	●
185	18,50-18,99	20.000	18.200	113.00	32.10	50.00	18.500	●
185	18,50-18,99	19.050	18.200	113.00	32.10	50.00	18.505	●
190	19,00-19,49	20.000	18.700	114.00	32.90	50.00	19.000	●
190	19,00-19,49	19.050	18.700	114.00	32.90	50.00	19.005	●
195	19,50-19,99	20.000	19.200	116.00	33.70	50.00	19.500	●
195	19,50-19,99	19.050	19.200	116.00	33.70	50.00	19.505	●
200	20,00-20,49	20.000	19.700	117.00	34.60	50.00	20.000	●
200	20,00-20,49	19.050	19.700	117.00	34.60	50.00	20.005	●
205	20,50-20,99	25.000	20.200	128.00	35.50	56.00	20.500	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**4106**
Standard	**Guhring std.**
Type	**HT 800 WP**
Drilling depth	**1,5xD**
Cooling	**axial**
Cutting direction	**right-hand**
Discount group	**140**
Techn. data page	**134**

NEW



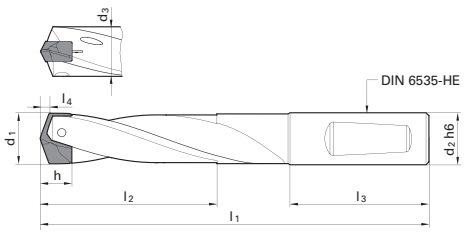


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
205	20,50-20,99	25.400	20.200	128.00	35.50	56.00	20.505	●
210	21,00-21,49	25.000	20.700	129.00	36.40	56.00	21.000	●
210	21,00-21,49	25.400	20.700	129.00	36.40	56.00	21.005	●
215	21,50-21,99	25.000	21.200	130.00	37.20	56.00	21.500	●
215	21,50-21,99	25.400	21.200	130.00	37.20	56.00	21.505	●
220	22,00-22,49	25.000	21.700	131.00	38.00	56.00	22.000	●
220	22,00-22,49	25.400	21.700	131.00	38.00	56.00	22.005	●
225	22,50-22,99	25.000	22.200	134.00	38.90	56.00	22.500	●
225	22,50-22,99	25.400	22.200	134.00	38.90	56.00	22.505	●
230	23,00-23,49	25.000	22.700	135.00	39.80	56.00	23.000	●
230	23,00-23,49	25.400	22.700	135.00	39.80	56.00	23.005	●
235	23,50-23,99	25.000	23.200	137.00	40.60	56.00	23.500	●
235	23,50-23,99	25.400	23.200	137.00	40.60	56.00	23.505	●
240	24,00-24,49	25.000	23.700	138.00	41.50	56.00	24.000	●
240	24,00-24,49	25.400	23.700	138.00	41.50	56.00	24.005	●
245	24,50-24,99	25.000	24.200	140.00	42.30	56.00	24.500	●
245	24,50-24,99	25.400	24.200	140.00	42.30	56.00	24.505	●
250	25,00-25,49	25.000	24.700	142.00	43.20	56.00	25.000	●
250	25,00-25,49	25.400	24.700	142.00	43.20	56.00	25.005	●
255	25,50-25,99	32.000	25.200	148.00	44.00	60.00	25.500	●
255	25,50-25,99	31.750	25.200	148.00	44.00	60.00	25.505	●
260	26,00-26,49	32.000	25.700	151.00	44.30	60.00	26.000	●
260	26,00-26,49	31.750	25.700	151.00	44.30	60.00	26.005	●
265	26,50-26,99	32.000	26.200	153.00	45.10	60.00	26.500	●
265	26,50-26,99	31.750	26.200	153.00	45.10	60.00	26.505	●
270	27,00-27,49	32.000	26.700	155.00	46.00	60.00	27.000	●
270	27,00-27,49	31.750	26.700	155.00	46.00	60.00	27.005	●
275	27,50-27,99	32.000	27.200	156.00	46.80	60.00	27.500	●
275	27,50-27,99	31.750	27.200	156.00	46.80	60.00	27.505	●
280	28,00-28,49	32.000	27.700	157.00	47.70	60.00	28.000	●
280	28,00-28,49	31.750	27.700	157.00	47.70	60.00	28.005	●
285	28,50-28,99	32.000	28.200	159.00	48.50	60.00	28.500	●
285	28,50-28,99	31.750	28.200	159.00	48.50	60.00	28.505	●
290	29,00-29,49	32.000	28.700	161.00	49.40	60.00	29.000	●
290	29,00-29,49	31.750	28.700	161.00	49.40	60.00	29.005	●
295	29,50-29,99	32.000	29.200	162.00	50.20	60.00	29.500	●
295	29,50-29,99	31.750	29.200	162.00	50.20	60.00	29.505	●
300	30,00-30,49	32.000	29.700	164.00	50.90	60.00	30.000	●
300	30,00-30,49	31.750	29.700	164.00	50.90	60.00	30.005	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	**4106**
Standard	**Guhring std.**
Type	**HT 800 WP**
Drilling depth	**1,5xD**
Cooling	**axial**
Cutting direction	**right-hand**
Discount group	**140**
Techn. data page	**134**

NEW



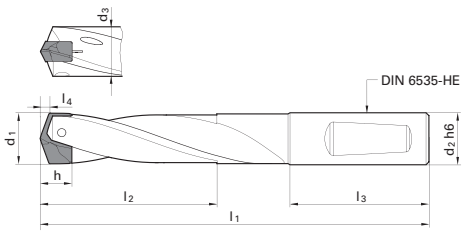


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
305	30,50-30,99	32.000	30.200	166.00	51.70	60.00	30.500	●
305	30,50-30,99	31.750	30.200	166.00	51.70	60.00	30.505	●
310	31,00-31,49	32.000	30.700	167.00	52.60	60.00	31.000	●
310	31,00-31,49	31.750	30.700	167.00	52.60	60.00	31.005	●
315	31,50-31,99	32.000	31.200	168.00	53.40	60.00	31.500	●
315	31,50-31,99	31.750	31.200	168.00	53.40	60.00	31.505	●
320	32,00-32,99	32.000	31.700	172.00	55.10	60.00	32.000	●
320	32,00-32,49	31.750	31.700	172.00	55.10	60.00	32.005	●
330	33,00-33,99	32.000	32.700	175.00	56.80	60.00	33.000	●
330	32,50-32,99	31.750	32.700	175.00	56.80	60.00	33.005	●
340	34,00-34,99	32.000	33.700	178.00	58.50	60.00	34.000	●
340	34,00-34,99	31.750	33.700	178.00	58.50	60.00	34.005	●
350	35,00-35,99	32.000	34.700	181.00	60.20	60.00	35.000	●
350	35,00-35,99	31.750	34.700	181.00	60.20	60.00	35.005	●
360	36,00-36,99	32.000	35.700	184.00	61.80	60.00	36.000	●
360	36,00-36,99	31.750	35.700	184.00	61.80	60.00	36.005	●
370	37,00-37,99	32.000	36.700	188.00	63.50	60.00	37.000	●
370	37,00-37,99	31.750	36.700	188.00	63.50	60.00	37.005	●
380	38,00-38,99	32.000	37.700	191.00	65.20	60.00	38.000	●
380	38,00-38,99	31.750	37.700	191.00	65.20	60.00	38.005	●
390	39,00-40,00	32.000	38.700	194.00	66.90	60.00	39.000	●
390	39,00-40,00	31.750	38.700	194.00	66.90	60.00	39.005	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4107
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	3xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



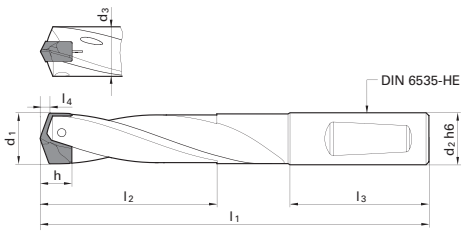


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
110	11,00-11,49	12.000	10.700	101.00	36.60	45.00	11.000	●
110	11,00-11,49	12.700	10.700	101.00	36.60	45.00	11.005	●
115	11,50-11,99	12.000	11.200	103.00	38.10	45.00	11.500	●
115	11,50-11,99	12.700	11.200	103.00	38.10	45.00	11.505	●
120	12,00-12,49	12.000	11.700	106.00	39.70	45.00	12.000	●
120	12,00-12,49	12.700	11.700	106.00	39.70	45.00	12.005	●
125	12,50-12,99	14.000	12.200	108.00	41.30	45.00	12.500	●
125	12,50-12,99	15.875	12.200	108.00	41.30	45.00	12.505	●
130	13,00-13,49	14.000	12.700	110.00	42.90	45.00	13.000	●
130	13,00-13,49	15.875	12.700	110.00	42.90	45.00	13.005	●
135	13,50-13,99	14.000	13.200	113.00	44.60	45.00	13.500	●
135	13,50-13,99	15.875	13.200	113.00	44.60	45.00	13.505	●
140	14,00-14,49	14.000	13.700	115.00	46.20	45.00	14.000	●
140	14,00-14,49	15.875	13.700	115.00	46.20	45.00	14.005	●
145	14,50-14,99	16.000	14.200	120.00	47.80	48.00	14.500	●
145	14,50-14,99	15.875	14.200	120.00	47.80	48.00	14.505	●
150	15,00-15,49	16.000	14.700	123.00	49.30	48.00	15.000	●
150	15,00-15,49	15.875	14.700	123.00	49.30	48.00	15.005	●
155	15,50-15,99	16.000	15.200	125.00	50.90	48.00	15.500	●
155	15,50-15,99	15.875	15.200	125.00	50.90	48.00	15.505	●
160	16,00-16,49	16.000	15.700	127.00	52.90	48.00	16.000	●
160	16,00-16,49	15.875	15.700	127.00	52.90	48.00	16.005	●
165	16,50-16,99	18.000	16.200	130.00	54.10	48.00	16.500	●
165	16,50-16,99	19.050	16.200	130.00	54.10	48.00	16.505	●
170	17,00-17,49	18.000	16.700	132.00	55.80	48.00	17.000	●
170	17,00-17,49	19.050	16.700	132.00	55.80	48.00	17.005	●
175	17,50-17,99	18.000	17.200	134.00	57.40	48.00	17.500	●
175	17,50-17,99	19.050	17.200	134.00	57.40	48.00	17.505	●
180	18,00-18,49	18.000	17.700	137.00	58.90	48.00	18.000	●
180	18,00-18,49	19.050	17.700	137.00	58.90	48.00	18.005	●
185	18,50-18,99	20.000	18.200	141.00	60.50	50.00	18.500	●
185	18,50-18,99	19.050	18.200	141.00	60.50	50.00	18.505	●
190	19,00-19,49	20.000	18.700	143.00	62.10	50.00	19.000	●
190	19,00-19,49	19.050	18.700	143.00	62.10	50.00	19.005	●
195	19,50-19,99	20.000	19.200	146.00	63.70	50.00	19.500	●
195	19,50-19,99	19.050	19.200	146.00	63.70	50.00	19.505	●
200	20,00-20,49	20.000	19.700	148.00	65.30	50.00	20.000	●
200	20,00-20,49	19.050	19.700	148.00	65.30	50.00	20.005	●
205	20,50-20,99	25.000	20.200	159.00	67.00	56.00	20.500	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4107
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	3xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



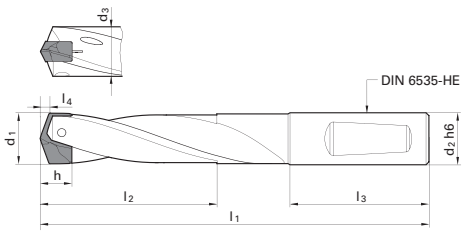


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
205	20,50-20,99	25.400	20.200	159.00	67.00	56.00	20.505	●
210	21,00-21,49	25.000	20.700	161.00	68.60	56.00	21.000	●
210	21,00-21,49	25.400	20.700	161.00	68.60	56.00	21.005	●
215	21,50-21,99	25.000	21.200	163.00	70.10	56.00	21.500	●
215	21,50-21,99	25.400	21.200	163.00	70.10	56.00	21.505	●
220	22,00-22,49	25.000	21.700	165.00	71.70	56.00	22.000	●
220	22,00-22,49	25.400	21.700	165.00	71.70	56.00	22.005	●
225	22,50-22,99	25.000	22.200	168.00	73.30	56.00	22.500	●
225	22,50-22,99	25.400	22.200	168.00	73.30	56.00	22.505	●
230	23,00-23,49	25.000	22.700	170.00	74.90	56.00	23.000	●
230	23,00-23,49	25.400	22.700	170.00	74.90	56.00	23.005	●
235	23,50-23,99	25.000	23.200	173.00	76.50	56.00	23.500	●
235	23,50-23,99	25.400	23.200	173.00	76.50	56.00	23.505	●
240	24,00-24,49	25.000	23.700	175.00	78.10	56.00	24.000	●
240	24,00-24,49	25.400	23.700	175.00	78.10	56.00	24.005	●
245	24,50-24,99	25.000	24.200	177.00	79.70	56.00	24.500	●
245	24,50-24,99	25.400	24.200	177.00	79.70	56.00	24.505	●
250	25,00-25,49	25.000	24.700	180.00	81.30	56.00	25.000	●
250	25,00-25,49	25.400	24.700	180.00	81.30	56.00	25.005	●
255	25,50-25,99	32.000	25.200	187.00	82.90	60.00	25.500	●
255	25,50-25,99	31.750	25.200	187.00	82.90	60.00	25.505	●
260	26,00-26,49	32.000	25.700	191.00	84.00	60.00	26.000	●
260	26,00-26,49	31.750	25.700	191.00	84.00	60.00	26.005	●
265	26,50-26,99	32.000	26.200	193.00	86.10	60.00	26.500	●
265	26,50-26,99	31.750	26.200	193.00	86.10	60.00	26.505	●
270	27,00-27,49	32.000	26.700	196.00	87.20	60.00	27.000	●
270	27,00-27,49	31.750	26.700	196.00	87.20	60.00	27.005	●
275	27,50-27,99	32.000	27.200	198.00	88.90	60.00	27.500	●
275	27,50-27,99	31.750	27.200	198.00	88.90	60.00	27.505	●
280	28,00-28,49	32.000	27.700	200.00	90.40	60.00	28.000	●
280	28,00-28,49	31.750	27.700	200.00	90.40	60.00	28.005	●
285	28,50-28,99	32.000	28.200	202.00	92.50	60.00	28.500	●
285	28,50-28,99	31.750	28.200	202.00	92.50	60.00	28.505	●
290	29,00-29,49	32.000	28.700	205.00	94.60	60.00	29.000	●
290	29,00-29,49	31.750	28.700	205.00	94.60	60.00	29.005	●
295	29,50-29,99	32.000	29.200	207.00	95.10	60.00	29.500	●
295	29,50-29,99	31.750	29.200	207.00	95.10	60.00	29.505	●
300	30,00-30,49	32.000	29.700	210.00	96.70	60.00	30.000	●
300	30,00-30,49	31.750	29.700	210.00	96.70	60.00	30.005	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4107
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	3xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



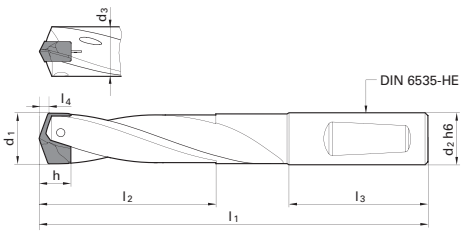


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
305	30,50-30,99	32.000	30.200	212.00	98.30	60.00	30.500	●
305	30,50-30,99	31.750	30.200	212.00	98.30	60.00	30.505	●
310	31,00-31,49	32.000	30.700	214.00	99.80	60.00	31.000	●
310	31,00-31,49	31.750	30.700	214.00	99.80	60.00	31.005	●
315	31,50-31,99	32.000	31.200	216.00	101.40	60.00	31.500	●
315	31,50-31,99	31.750	31.200	216.00	101.40	60.00	31.505	●
320	32,00-32,99	32.000	31.700	221.00	104.60	60.00	32.000	●
320	32,00-32,99	31.750	31.700	221.00	104.60	60.00	32.005	●
330	33,00-33,99	32.000	32.700	226.00	107.80	60.00	33.000	●
330	32,50-33,99	31.750	32.700	226.00	107.80	60.00	33.005	●
340	34,00-34,99	32.000	33.700	230.00	111.00	60.00	34.000	●
340	34,00-34,99	31.750	33.700	230.00	111.00	60.00	34.005	●
350	35,00-35,99	32.000	34.700	235.00	114.20	60.00	35.000	●
350	35,00-35,99	31.750	34.700	235.00	114.20	60.00	35.005	●
360	36,00-36,99	32.000	35.700	240.00	117.30	60.00	36.000	●
360	36,00-36,99	31.750	35.700	240.00	117.30	60.00	36.005	●
370	37,00-37,99	32.000	36.700	245.00	120.50	60.00	37.000	●
370	37,00-37,99	31.750	36.700	245.00	120.50	60.00	37.005	●
380	38,00-38,99	32.000	37.700	249.00	123.70	60.00	38.000	●
380	38,00-38,99	31.750	37.700	249.00	123.70	60.00	38.005	●
390	39,00-40,00	32.000	38.700	254.00	126.90	60.00	39.000	●
390	39,00-40,00	31.750	38.700	254.00	126.90	60.00	39.005	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4108
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	5xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



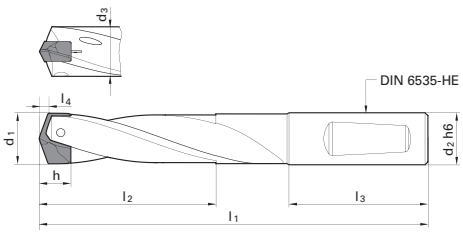


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
110	11,00-11,49	12.000	10.700	124.00	59.60	45.00	11.000	●
110	11,00-11,49	12.700	10.700	124.00	59.60	45.00	11.005	●
115	11,50-11,99	12.000	11.200	127.00	62.10	45.00	11.500	●
115	11,50-11,99	12.700	11.200	127.00	62.10	45.00	11.505	●
120	12,00-12,49	12.000	11.700	131.00	64.70	45.00	12.000	●
120	12,00-12,49	12.700	11.700	131.00	64.70	45.00	12.005	●
125	12,50-12,99	14.000	12.200	134.00	67.30	45.00	12.500	●
125	12,50-12,99	15.875	12.200	134.00	67.30	45.00	12.505	●
130	13,00-13,49	14.000	12.700	137.00	69.90	45.00	13.000	●
130	13,00-13,49	15.875	12.700	137.00	69.90	45.00	13.005	●
135	13,50-13,99	14.000	13.200	141.00	72.60	45.00	13.500	●
135	13,50-13,99	15.875	13.200	141.00	72.60	45.00	13.505	●
140	14,00-14,49	14.000	13.700	144.00	75.20	45.00	14.000	●
140	14,00-14,49	15.875	13.700	144.00	75.20	45.00	14.005	●
145	14,50-14,99	16.000	14.200	150.00	77.80	48.00	14.500	●
145	14,50-14,99	15.875	14.200	150.00	77.80	48.00	14.505	●
150	15,00-15,49	16.000	14.700	154.00	80.30	48.00	15.000	●
150	15,00-15,49	15.875	14.700	154.00	80.30	48.00	15.005	●
155	15,50-15,99	16.000	15.200	157.00	82.90	48.00	15.500	●
155	15,50-15,99	15.875	15.200	157.00	82.90	48.00	15.505	●
160	16,00-16,49	16.000	15.700	160.00	85.90	48.00	16.000	●
160	16,00-16,49	15.875	15.700	160.00	85.90	48.00	16.005	●
165	16,50-16,99	18.000	16.200	164.00	88.10	48.00	16.500	●
165	16,50-16,99	19.050	16.200	164.00	88.10	48.00	16.505	●
170	17,00-17,49	18.000	16.700	167.00	90.80	48.00	17.000	●
170	17,00-17,49	19.050	16.700	167.00	90.80	48.00	17.005	●
175	17,50-17,99	18.000	17.200	170.00	93.40	48.00	17.500	●
175	17,50-17,99	19.050	17.200	170.00	93.40	48.00	17.505	●
180	18,00-18,49	18.000	17.700	174.00	95.90	48.00	18.000	●
180	18,00-18,49	19.050	17.700	174.00	95.90	48.00	18.005	●
185	18,50-18,99	20.000	18.200	179.00	98.50	50.00	18.500	●
185	18,50-18,99	19.050	18.200	179.00	98.50	50.00	18.505	●
190	19,00-19,49	20.000	18.700	182.00	101.10	50.00	19.000	●
190	19,00-19,49	19.050	18.700	182.00	101.10	50.00	19.005	●
195	19,50-19,99	20.000	19.200	186.00	103.70	50.00	19.500	●
195	19,50-19,99	19.050	19.200	186.00	103.70	50.00	19.505	●
200	20,00-20,49	20.000	19.700	189.00	106.30	50.00	20.000	●
200	20,00-20,49	19.050	19.700	189.00	106.30	50.00	20.005	●
205	20,50-20,99	25.000	20.200	201.00	109.00	56.00	20.500	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4108
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	5xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



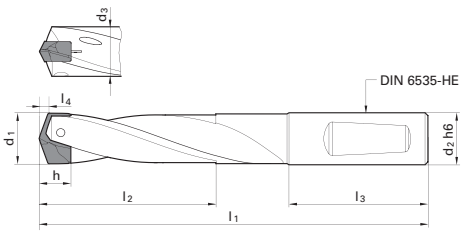


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
205	20,50-20,99	25.400	20.200	201.00	109.00	56.00	20.505	●
210	21,00-21,49	25.000	20.700	204.00	111.60	56.00	21.000	●
210	21,00-21,49	25.400	20.700	204.00	111.60	56.00	21.005	●
215	21,50-21,99	25.000	21.200	207.00	114.10	56.00	21.500	●
215	21,50-21,99	25.400	21.200	207.00	114.10	56.00	21.505	●
220	22,00-22,49	25.000	21.700	210.00	116.70	56.00	22.000	●
220	22,00-22,49	25.400	21.700	210.00	116.70	56.00	22.005	●
225	22,50-22,99	25.000	22.200	214.00	119.30	56.00	22.500	●
225	22,50-22,99	25.400	22.200	214.00	119.30	56.00	22.505	●
230	23,00-23,49	25.000	22.700	217.00	121.90	56.00	23.000	●
230	23,00-23,49	25.400	22.700	217.00	121.90	56.00	23.005	●
235	23,50-23,99	25.000	23.200	221.00	124.50	56.00	23.500	●
235	23,50-23,99	25.400	23.200	221.00	124.50	56.00	23.505	●
240	24,00-24,49	25.000	23.700	224.00	127.10	56.00	24.000	●
240	24,00-24,49	25.400	23.700	224.00	127.10	56.00	24.005	●
245	24,50-24,99	25.000	24.200	227.00	129.70	56.00	24.500	●
245	24,50-24,99	25.400	24.200	227.00	129.70	56.00	24.505	●
250	25,00-25,49	25.000	24.700	231.00	132.30	56.00	25.000	●
250	25,00-25,49	25.400	24.700	231.00	132.30	56.00	25.005	●
255	25,50-25,99	32.000	25.200	239.00	134.90	60.00	25.500	●
255	25,50-25,99	31.750	25.200	239.00	134.90	60.00	25.505	●
260	26,00-26,49	32.000	25.700	244.00	137.00	60.00	26.000	●
265	26,50-26,99	32.000	26.200	247.00	140.00	60.00	26.500	●
270	27,00-27,49	32.000	26.700	251.00	142.20	60.00	27.000	●
275	27,50-27,99	32.000	27.200	254.00	144.80	60.00	27.500	●
280	28,00-28,49	32.000	27.700	257.00	147.40	60.00	28.000	●
285	28,50-28,99	32.000	28.200	260.00	150.40	60.00	28.500	●
290	29,00-29,49	32.000	28.700	264.00	153.50	60.00	29.000	●
295	29,50-29,99	32.000	29.200	267.00	155.10	60.00	29.500	●
300	30,00-30,49	32.000	29.700	271.00	157.60	60.00	30.000	●
305	30,50-30,99	32.000	30.200	274.00	160.20	60.00	30.500	●
310	31,00-31,49	32.000	30.700	277.00	162.80	60.00	31.000	●
315	31,50-31,99	32.000	31.200	280.00	165.40	60.00	31.500	●
320	32,00-32,99	32.000	31.700	287.00	170.60	60.00	32.000	●
330	33,00-33,99	32.000	32.700	294.00	175.80	60.00	33.000	●
340	34,00-34,99	32.000	33.700	300.00	181.00	60.00	34.000	●
350	35,00-35,99	32.000	34.700	307.00	186.20	60.00	35.000	●
360	36,00-36,99	32.000	35.700	314.00	191.30	60.00	36.000	●
370	37,00-37,99	32.000	36.700	321.00	196.50	60.00	37.000	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4108
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	5xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



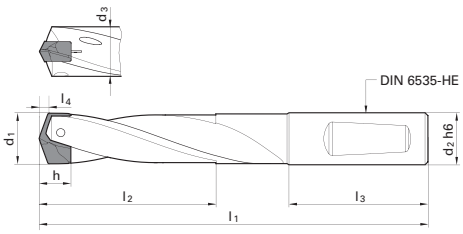


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
380	38,00-38,99	32.000	37.700	327.00	201.70	60.00	38.000	●
390	39,00-40,00	32.000	38.700	334.00	206.90	60.00	39.000	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	4109
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	7xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



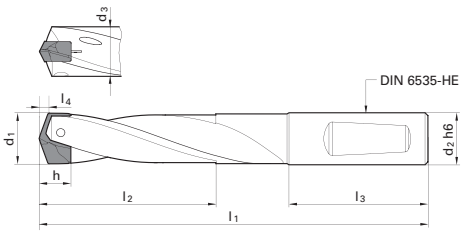


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
110	11,00-11,49	12.000	10.700	147.00	82.60	45.00	11.000	●
110	11,00-11,49	12.700	10.700	147.00	82.60	45.00	11.005	●
115	11,50-11,99	12.000	11.200	151.00	86.10	45.00	11.500	●
115	11,50-11,99	12.700	11.200	151.00	86.10	45.00	11.505	●
120	12,00-12,49	12.000	11.700	156.00	89.70	45.00	12.000	●
120	12,00-12,49	12.700	11.700	156.00	89.70	45.00	12.005	●
125	12,50-12,99	14.000	12.200	160.00	93.30	45.00	12.500	●
125	12,50-12,99	15.875	12.200	160.00	93.30	45.00	12.505	●
130	13,00-13,49	14.000	12.700	164.00	96.90	45.00	13.000	●
130	13,00-13,49	15.875	12.700	164.00	96.90	45.00	13.005	●
135	13,50-13,99	14.000	13.200	169.00	100.60	45.00	13.500	●
135	13,50-13,99	15.875	13.200	169.00	100.60	45.00	13.505	●
140	14,00-14,49	14.000	13.700	173.00	104.20	45.00	14.000	●
140	14,00-14,49	15.875	13.700	173.00	104.20	45.00	14.005	●
145	14,50-14,99	16.000	14.200	180.00	107.80	48.00	14.500	●
145	14,50-14,99	15.875	14.200	180.00	107.80	48.00	14.505	●
150	15,00-15,49	16.000	14.700	185.00	111.30	48.00	15.000	●
150	15,00-15,49	15.875	14.700	185.00	111.30	48.00	15.005	●
155	15,50-15,99	16.000	15.200	189.00	114.90	48.00	15.500	●
155	15,50-15,99	15.875	15.200	189.00	114.90	48.00	15.505	●
160	16,00-16,49	16.000	15.700	193.00	118.90	48.00	16.000	●
160	16,00-16,49	15.875	15.700	193.00	118.90	48.00	16.005	●
165	16,50-16,99	18.000	16.200	198.00	122.10	48.00	16.500	●
165	16,50-16,99	19.050	16.200	198.00	122.10	48.00	16.505	●
170	17,00-17,49	18.000	16.700	202.00	125.80	48.00	17.000	●
170	17,00-17,49	19.050	16.700	202.00	125.80	48.00	17.005	●
175	17,50-17,99	18.000	17.200	206.00	129.40	48.00	17.500	●
175	17,50-17,99	19.050	17.200	206.00	129.40	48.00	17.505	●
180	18,00-18,49	18.000	17.700	211.00	132.90	48.00	18.000	●
180	18,00-18,49	19.050	17.700	211.00	132.90	48.00	18.005	●
185	18,50-18,99	20.000	18.200	217.00	136.50	50.00	18.500	●
185	18,50-18,99	19.050	18.200	217.00	136.50	50.00	18.505	●
190	19,00-19,49	20.000	18.700	221.00	140.10	50.00	19.000	●
190	19,00-19,49	19.050	18.700	221.00	140.10	50.00	19.005	●
195	19,50-19,99	20.000	19.200	226.00	143.70	50.00	19.500	●
195	19,50-19,99	19.050	19.200	226.00	143.70	50.00	19.505	●
200	20,00-20,49	20.000	19.700	230.00	147.30	50.00	20.000	●
200	20,00-20,49	19.050	19.700	230.00	147.30	50.00	20.005	●
205	20,50-20,99	25.000	20.200	243.00	151.00	56.00	20.500	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4109
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	7xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



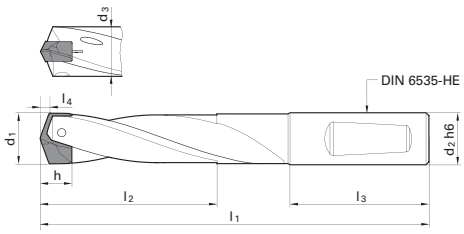


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
205	20,50-20,99	25.400	20.200	243.00	151.00	56.00	20.505	●
210	21,00-21,49	25.000	20.700	247.00	154.60	56.00	21.000	●
210	21,00-21,49	25.400	20.700	247.00	154.60	56.00	21.005	●
215	21,50-21,99	25.000	21.200	251.00	158.10	56.00	21.500	●
215	21,50-21,99	25.400	21.200	251.00	158.10	56.00	21.505	●
220	22,00-22,49	25.000	21.700	255.00	161.70	56.00	22.000	●
220	22,00-22,49	25.400	21.700	255.00	161.70	56.00	22.005	●
225	22,50-22,99	25.000	22.200	260.00	165.30	56.00	22.500	●
225	22,50-22,99	25.400	22.200	260.00	165.30	56.00	22.505	●
230	23,00-23,49	25.000	22.700	264.00	168.90	56.00	23.000	●
230	23,00-23,49	25.400	22.700	264.00	168.90	56.00	23.005	●
235	23,50-23,99	25.000	23.200	269.00	172.50	56.00	23.500	●
235	23,50-23,99	25.400	23.200	269.00	172.50	56.00	23.505	●
240	24,00-24,49	25.000	23.700	273.00	176.10	56.00	24.000	●
240	24,00-24,49	25.400	23.700	273.00	176.10	56.00	24.005	●
245	24,50-24,99	25.000	24.200	277.00	179.70	56.00	24.500	●
245	24,50-24,99	25.400	24.200	277.00	179.70	56.00	24.505	●
250	25,00-25,49	25.000	24.700	282.00	183.30	56.00	25.000	●
250	25,00-25,49	25.400	24.700	282.00	183.30	56.00	25.005	●
255	25,50-25,99	32.000	25.200	291.00	186.90	60.00	25.500	●
255	25,50-25,99	31.750	25.200	291.00	186.90	60.00	25.505	●
260	26,00-26,49	32.000	25.700	297.00	190.00	60.00	26.000	●
260	26,00-26,49	31.750	25.700	297.00	190.00	60.00	26.005	●
265	26,50-26,99	32.000	26.200	301.00	194.00	60.00	26.500	●
265	26,50-26,99	31.750	26.200	301.00	194.00	60.00	26.505	●
270	27,00-27,49	32.000	26.700	306.00	197.20	60.00	27.000	●
270	27,00-27,49	31.750	26.700	306.00	197.20	60.00	27.005	●
275	27,50-27,99	32.000	27.200	310.00	200.80	60.00	27.500	●
275	27,50-27,99	31.750	27.200	310.00	200.80	60.00	27.505	●
280	28,00-28,49	32.000	27.700	314.00	204.40	60.00	28.000	●
280	28,00-28,49	31.750	27.700	314.00	204.40	60.00	28.005	●
285	28,50-28,99	32.000	28.200	318.00	208.40	60.00	28.500	●
285	28,50-28,99	31.750	28.200	318.00	208.40	60.00	28.505	●
290	29,00-29,49	32.000	28.700	323.00	212.50	60.00	29.000	●
290	29,00-29,49	31.750	28.700	323.00	212.50	60.00	29.005	●
295	29,50-29,99	32.000	29.200	327.00	215.10	60.00	29.500	●
295	29,50-29,99	31.750	29.200	327.00	215.10	60.00	29.505	●
300	30,00-30,49	32.000	29.700	332.00	218.60	60.00	30.000	●
300	30,00-30,49	31.750	29.700	332.00	218.60	60.00	30.005	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4109
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	7xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



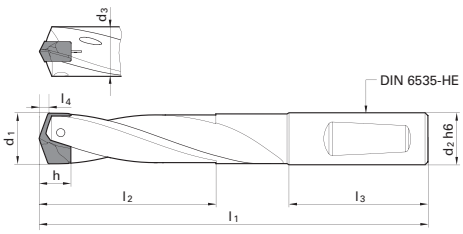


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
305	30,50-30,99	32.000	30.200	336.00	222.20	60.00	30.500	●
305	30,50-30,99	31.750	30.200	336.00	222.20	60.00	30.505	●
310	31,00-31,49	32.000	30.700	340.00	225.80	60.00	31.000	●
310	31,00-31,49	31.750	30.700	340.00	225.80	60.00	31.005	●
315	31,50-31,99	32.000	31.200	344.00	229.40	60.00	31.500	●
315	31,50-31,99	31.750	31.200	344.00	229.40	60.00	31.505	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4110
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	10xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW





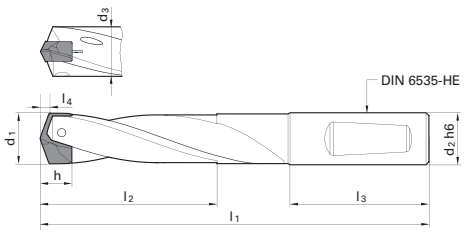
holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
110	11,00-11,49	12.000	10.700	182.00	117.10	45.00	11.000	●
110	11,00-11,49	12.700	10.700	182.00	117.10	45.00	11.005	●
115	11,50-11,99	12.000	11.200	187.00	122.10	45.00	11.500	●
115	11,50-11,99	12.700	11.200	187.00	122.10	45.00	11.505	●
120	12,00-12,49	12.000	11.700	194.00	127.20	45.00	12.000	●
120	12,00-12,49	12.700	11.700	194.00	127.20	45.00	12.005	●
125	12,50-12,99	14.000	12.200	199.00	132.30	45.00	12.500	●
125	12,50-12,99	15.875	12.200	199.00	132.30	45.00	12.505	●
130	13,00-13,49	14.000	12.700	205.00	137.50	45.00	13.000	●
130	13,00-13,49	15.875	12.700	205.00	137.50	45.00	13.005	●
135	13,50-13,99	14.000	13.200	211.00	142.50	45.00	13.500	●
135	13,50-13,99	15.875	13.200	211.00	142.50	45.00	13.505	●
140	14,00-14,49	14.000	13.700	217.00	147.70	45.00	14.000	●
140	14,00-14,49	15.875	13.700	217.00	147.70	45.00	14.005	●
145	14,50-14,99	16.000	14.200	225.00	152.80	48.00	14.500	●
145	14,50-14,99	15.875	14.200	225.00	152.80	48.00	14.505	●
150	15,00-15,49	16.000	14.700	232.00	157.80	48.00	15.000	●
150	15,00-15,49	15.875	14.700	232.00	157.80	48.00	15.005	●
155	15,50-15,99	16.000	15.200	237.00	162.90	48.00	15.500	●
155	15,50-15,99	15.875	15.200	237.00	162.90	48.00	15.505	●
160	16,00-16,49	16.000	15.700	243.00	168.00	48.00	16.000	●
160	16,00-16,49	15.875	15.700	243.00	168.00	48.00	16.005	●
165	16,50-16,99	18.000	16.200	249.00	170.00	48.00	16.500	●
165	16,50-16,99	19.050	16.200	249.00	170.00	48.00	16.505	●
170	17,00-17,49	18.000	16.700	255.00	178.30	48.00	17.000	●
170	17,00-17,49	19.050	16.700	255.00	178.30	48.00	17.005	●
175	17,50-17,99	18.000	17.200	260.00	183.50	48.00	17.500	●
175	17,50-17,99	19.050	17.200	260.00	183.50	48.00	17.505	●
180	18,00-18,49	18.000	17.700	267.00	188.40	48.00	18.000	●
180	18,00-18,49	19.050	17.700	267.00	188.40	48.00	18.005	●
185	18,50-18,99	20.000	18.200	274.00	193.50	50.00	18.500	●
185	18,50-18,99	19.050	18.200	274.00	193.50	50.00	18.505	●
190	19,00-19,49	20.000	18.700	280.00	198.70	50.00	19.000	●
190	19,00-19,49	19.050	18.700	280.00	198.70	50.00	19.005	●
195	19,50-19,99	20.000	19.200	286.00	203.70	50.00	19.500	●
195	19,50-19,99	19.050	19.200	286.00	203.70	50.00	19.505	●
200	20,00-20,49	20.000	19.700	292.00	208.90	50.00	20.000	●
200	20,00-20,49	19.050	19.700	292.00	208.90	50.00	20.005	●
205	20,50-20,99	25.000	20.200	306.00	214.00	56.00	20.500	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4110
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	10xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



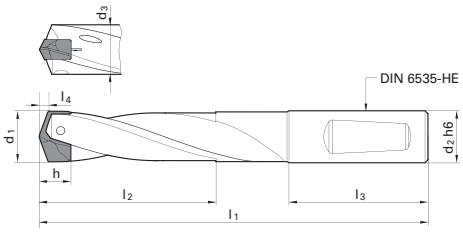


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
205	20,50-20,99	25.400	20.200	306.00	214.00	56.00	20.505	●
210	21,00-21,49	25.000	20.700	312.00	219.10	56.00	21.000	●
210	21,00-21,49	25.400	20.700	312.00	219.10	56.00	21.005	●
215	21,50-21,99	25.000	21.200	317.00	224.20	56.00	21.500	●
215	21,50-21,99	25.400	21.200	317.00	224.20	56.00	21.505	●
220	22,00-22,49	25.000	21.700	323.00	229.30	56.00	22.000	●
220	22,00-22,49	25.400	21.700	323.00	229.30	56.00	22.005	●
225	22,50-22,99	25.000	22.200	329.00	234.40	56.00	22.500	●
225	22,50-22,99	25.400	22.200	329.00	234.40	56.00	22.505	●
230	23,00-23,49	25.000	22.700	335.00	239.50	56.00	23.000	●
230	23,00-23,49	25.400	22.700	335.00	239.50	56.00	23.005	●
235	23,50-23,99	25.000	23.200	341.00	244.60	56.00	23.500	●
235	23,50-23,99	25.400	23.200	341.00	244.60	56.00	23.505	●
240	24,00-24,49	25.000	23.700	347.00	249.70	56.00	24.000	●
240	24,00-24,49	25.400	23.700	347.00	249.70	56.00	24.005	●
245	24,50-24,99	25.000	24.200	352.00	254.80	56.00	24.500	●
245	24,50-24,99	25.400	24.200	352.00	254.80	56.00	24.505	●
250	25,00-25,49	25.000	24.700	359.00	259.90	56.00	25.000	●
250	25,00-25,49	25.400	24.700	359.00	259.90	56.00	25.005	●
255	25,50-25,99	32.000	25.200	369.00	265.00	60.00	25.500	●
255	25,50-25,99	31.750	25.200	369.00	265.00	60.00	25.505	●
260	26,00-26,49	32.000	25.700	377.00	270.00	60.00	26.000	●
260	26,00-26,49	31.750	25.700	377.00	270.00	60.00	26.005	●
265	26,50-26,99	32.000	26.200	382.00	275.00	60.00	26.500	●
265	26,50-26,99	31.750	26.200	382.00	275.00	60.00	26.505	●
270	27,00-27,49	32.000	26.700	388.00	280.10	60.00	27.000	●
270	27,00-27,49	31.750	26.700	388.00	280.10	60.00	27.005	●
275	27,50-27,99	32.000	27.200	394.00	285.20	60.00	27.500	●
275	27,50-27,99	31.750	27.200	394.00	285.20	60.00	27.505	●
280	28,00-28,49	32.000	27.700	400.00	290.30	60.00	28.000	●
280	28,00-28,49	31.750	27.700	400.00	290.30	60.00	28.005	●
285	28,50-28,99	32.000	28.200	405.00	295.40	60.00	28.500	●
285	28,50-28,99	31.750	28.200	405.00	295.40	60.00	28.505	●
290	29,00-29,49	32.000	28.700	412.00	300.50	60.00	29.000	●
290	29,00-29,49	31.750	28.700	412.00	300.50	60.00	29.005	●
295	29,50-29,99	32.000	29.200	418.00	305.60	60.00	29.500	●
295	29,50-29,99	31.750	29.200	418.00	305.60	60.00	29.505	●
300	30,00-30,49	32.000	29.700	424.00	310.60	60.00	30.000	●
300	30,00-30,49	31.750	29.700	424.00	310.60	60.00	30.005	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	4110
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	10xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	134

NEW



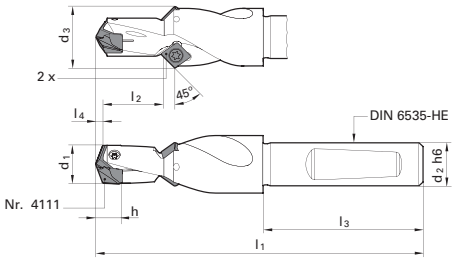


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
305	30,50-30,99	32.000	30.200	429.00	315.70	60.00	30.500	●
305	30,50-30,99	31.750	30.200	429.00	315.70	60.00	30.505	●
310	31,00-31,49	32.000	30.700	435.00	320.80	60.00	31.000	●
310	31,00-31,49	31.750	30.700	435.00	320.80	60.00	31.005	●
315	31,50-31,99	32.000	31.200	441.00	325.90	60.00	31.500	●
315	31,50-31,99	31.750	31.200	441.00	325.90	60.00	31.505	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	4105
Standard	Guhring std.
Type	HT 800 WP
Drilling depth	1xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	135

NEW



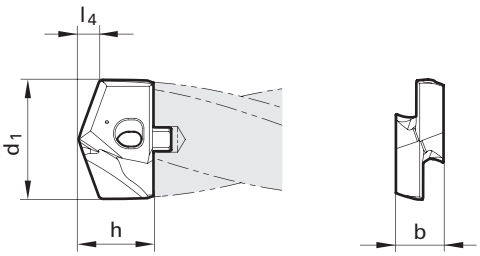


holder size	d1	d2 h6	d3	l1	l2 max.	l3	Code no.	Availability
	mm	mm	mm	mm	mm	mm		
110	11,00-11,99	12.000	17.000	81.00	12.00	45.00	11.000	●
110	11,00-11,99	12.700	17.000	81.00	12.00	45.00	11.005	●
120	12,00-12,99	12.000	18.000	84.00	13.00	45.00	12.000	●
120	12,00-12,99	12.700	18.000	84.00	13.00	45.00	12.005	●
130	13,00-13,99	14.000	18.000	86.00	14.00	45.00	13.000	●
130	13,00-13,99	15.875	18.000	86.00	14.00	48.00	13.005	●
140	14,00-15,99	16.000	18.000	93.00	16.00	48.00	14.000	●
140	14,00-15,99	15.875	18.000	93.00	16.00	48.00	14.005	●
160	16,00-17,99	18.000	20.000	99.00	18.00	48.00	16.000	●
160	16,00-17,99	19.050	20.000	99.00	18.00	50.00	16.005	●
180	18,00-19,99	20.000	22.000	106.00	20.00	50.00	18.000	●
180	18,00-19,99	19.050	22.000	106.00	20.00	50.00	18.005	●
200	20,00-21,99	25.000	24.000	117.00	22.00	56.00	20.000	●
200	20,00-21,99	25.400	24.000	117.00	22.00	56.00	20.005	●
220	22,00-23,99	25.000	26.000	122.00	24.00	56.00	22.000	●
220	22,00-23,99	25.400	26.000	122.00	24.00	56.00	22.005	●
240	24,00-25,99	25.000	28.000	128.00	26.00	56.00	24.000	●
240	24,00-25,99	25.400	28.000	128.00	26.00	56.00	24.005	●
260	26,00-27,99	32.000	32.000	142.00	28.00	60.00	26.000	●
260	26,00-27,99	31.750	32.000	142.00	28.00	60.00	26.005	●
280	28,00-29,99	32.000	34.000	147.00	30.00	60.00	28.000	●
280	28,00-29,99	31.750	34.000	147.00	30.00	60.00	28.005	●
300	30,00-31,99	32.000	38.000	152.00	32.00	60.00	30.000	●
300	30,00-31,99	31.750	38.000	152.00	32.00	60.00	30.005	●
320	32,00-35,99	32.000	42.000	163.00	36.00	60.00	32.000	●
320	32,00-35,99	31.750	42.000	163.00	36.00	60.00	32.005	●
360	36,00-40,00	32.000	46.000	173.00	40.00	60.00	36.000	●
360	36,00-40,00	31.750	46.000	173.00	40.00	60.00	36.005	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4112
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	F
Cutting direction	right-hand
Tolerance	h7
Discount group	141
Techn. data page	135

NEW





holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
110	11.000		2.10	4.500	7.50	11.000	●
110	11.200		2.10	4.500	7.50	11.200	●
115	11.500		2.10	4.500	7.50	11.500	●
115	11.510	29/64	2.10	4.500	7.50	11.510	●
115	11.700		2.20	4.500	7.50	11.700	●
115	11.800		2.20	4.500	7.50	11.800	●
115	11.910	15/32	2.20	4.500	7.50	11.910	●
120	12.000		2.20	5.000	7.70	12.000	●
120	12.100		2.30	5.000	7.70	12.100	●
120	12.200		2.30	5.000	7.70	12.200	●
120	12.300	31/64	2.30	5.000	7.70	12.300	●
125	12.500		2.30	5.000	7.70	12.500	●
125	12.600		2.30	5.000	7.70	12.600	●
125	12.700	1/2	2.40	5.000	7.70	12.700	●
125	12.800		2.40	5.000	7.70	12.800	●
125	12.900		2.40	5.000	7.70	12.900	●
130	13.000		2.40	5.500	8.50	13.000	●
130	13.100	33/64	2.40	5.500	8.50	13.100	●
130	13.490	17/32	2.50	5.500	8.50	13.490	●
135	13.500		2.50	5.500	8.50	13.500	●
135	13.600		2.50	5.500	8.50	13.600	●
135	13.700		2.50	5.500	8.50	13.700	●
135	13.800		2.60	5.500	8.50	13.800	●
135	13.890	35/64	2.60	5.500	8.50	13.890	●
140	14.000		2.60	6.000	9.60	14.000	●
140	14.100		2.60	6.000	9.60	14.100	●
140	14.290	9/16	2.70	6.000	9.60	14.290	●
140	14.400		2.70	6.000	9.60	14.400	●
145	14.500		2.70	6.000	9.60	14.500	●
145	14.600		2.70	6.000	9.60	14.600	●
145	14.680	37/64	2.70	6.000	9.60	14.680	●
145	14.700		2.70	6.000	9.60	14.700	●
145	14.800		2.70	6.000	9.60	14.800	●
150	15.000		2.80	6.000	9.80	15.000	●
150	15.080	19/32	2.80	6.000	9.80	15.080	●
150	15.100		2.80	6.000	9.80	15.100	●
150	15.200		2.80	6.000	9.80	15.200	●
150	15.300		2.80	6.000	9.80	15.300	●
150	15.480	39/64	2.90	6.000	9.80	15.480	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

4113	4114	4115
Guhring std.		
Solid carbide		
	K/P	
F	○	a
right-hand	right-hand	right-hand
m7	h7	h7
141	141	141
135	135	135
NEW	NEW	NEW



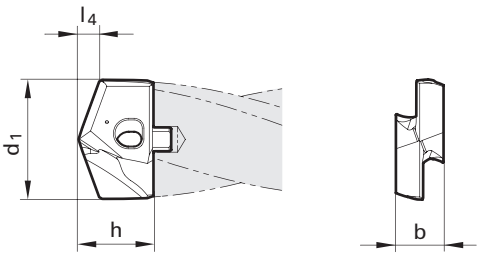




Availability		
●	●	●
●	●	●
●	●	●

Guhring no.	4112
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	F
Cutting direction	right-hand
Tolerance	h7
Discount group	141
Techn. data page	135

NEW





holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
155	15.500		2.90	6.000	9.80	15.500	●
155	15.600		2.90	6.000	9.80	15.600	●
155	15.700		2.90	6.000	9.80	15.700	●
155	15.800		2.90	6.000	9.80	15.800	●
155	15.870	5/8	2.90	6.000	9.80	15.870	●
160	16.000		3.00	7.000	11.00	16.000	●
160	16.270	41/64	3.00	7.000	11.00	16.270	●
165	16.500		3.10	7.000	11.00	16.500	●
165	16.670	21/32	3.10	7.000	11.00	16.670	●
170	17.000		3.10	7.000	11.00	17.000	●
170	17.070	43/64	3.20	7.000	11.00	17.070	●
170	17.460	11/16	3.20	7.000	11.00	17.460	●
175	17.500		3.20	7.000	11.00	17.500	●
175	17.600		3.30	7.000	11.00	17.600	●
175	17.860	45/64	3.30	7.000	11.00	17.860	●
180	18.000		3.30	8.000	12.60	18.000	●
180	18.260	23/32	3.40	8.000	12.60	18.260	●
185	18.500		3.40	8.000	12.60	18.500	●
185	18.650	47/64	3.40	8.000	12.60	18.650	●
190	19.000		3.50	8.000	12.60	19.000	●
190	19.050	3/4	3.50	8.000	12.60	19.050	●
190	19.250		3.60	8.000	12.60	19.250	●
190	19.450	49/64	3.60	8.000	12.60	19.450	●
195	19.500		3.60	8.000	12.60	19.500	●
195	19.600		3.60	8.000	12.60	19.600	●
195	19.840	25/32	3.70	8.000	12.60	19.840	●
200	20.000		3.70	9.000	13.90	20.000	●
200	20.240	51/64	3.70	9.000	13.90	20.240	●
205	20.500		3.80	9.000	13.90	20.500	●
205	20.640	13/16	3.80	9.000	13.90	20.640	●
210	21.000		3.90	9.000	13.90	21.000	●
210	21.030	53/64	3.90	9.000	13.90	21.030	●
210	21.100		3.90	9.000	13.90	21.100	●
210	21.430	27/32	3.90	9.000	13.90	21.430	●
215	21.500		4.00	9.000	13.90	21.500	●
215	21.830	55/64	4.00	9.000	13.90	21.830	●
220	22.000		4.10	10.000	15.30	22.000	●
220	22.220	7/8	4.10	10.000	15.30	22.220	●
225	22.500		4.10	10.000	15.30	22.500	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

4113	4114	4115
Guhring std.		
Solid carbide		
	K/P	
F	○	a
right-hand	right-hand	right-hand
m7	h7	h7
141	141	141
135	135	135
NEW	NEW	NEW





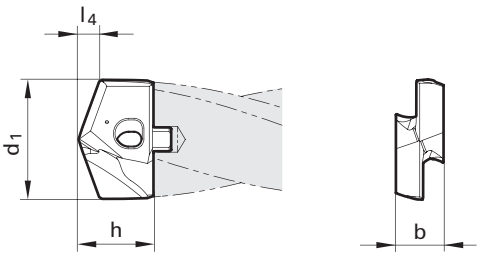


Availability		
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4112
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	F
Cutting direction	right-hand
Tolerance	h7
Discount group	141
Techn. data page	135

NEW





holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
225	22.620	57/64	4.20	10.000	15.30	22.620	●
230	23.000		4.20	10.000	15.30	23.000	●
230	23.020	29/32	4.20	10.000	15.30	23.020	●
230	23.420	59/64	4.30	10.000	15.30	23.420	●
235	23.500		4.30	10.000	15.30	23.500	●
235	23.810	15/16	4.40	10.000	15.30	23.810	●
240	24.000		4.40	11.000	15.80	24.000	●
240	24.100		4.40	11.000	15.80	24.100	●
240	24.210	61/64	4.50	11.000	15.80	24.210	●
245	24.500		4.50	11.000	15.80	24.500	●
245	24.610	31/32	4.50	11.000	15.80	24.610	●
250	25.000	63/64	4.60	11.000	15.80	25.000	●
250	25.400	1	4.70	11.000	15.80	25.400	●
255	25.500		4.70	11.000	15.80	25.500	●
255	25.670		4.70	11.000	15.80	25.670	●
255	25.700		4.70	11.000	15.80	25.700	●
255	25.810		4.70	11.000	15.80	25.810	●
260	26.000		4.80	12.000	20.00	26.000	●
260	26.190	1 1/32	4.80	12.000	20.00	26.190	●
260	26.500		4.90	12.000	20.00	26.500	●
260	26.590	1 3/64	4.90	12.000	20.00	26.590	●
270	27.000		5.00	12.000	20.00	27.000	●
270	27.500		5.10	12.000	20.00	27.500	●
270	27.700		5.10	12.000	20.00	27.700	●
270	27.780	1 3/32	5.10	12.000	20.00	27.780	●
280	28.000		5.10	13.000	20.70	28.000	●
280	28.180	1 7/64	5.20	13.000	20.70	28.180	●
280	28.500		5.20	13.000	20.70	28.500	●
280	28.580		5.30	13.000	20.70	28.580	●
290	29.000		5.30	13.000	20.70	29.000	●
290	29.370	1 5/32	5.40	13.000	20.70	29.370	●
290	29.500		5.40	13.000	20.70	29.500	●
290	29.770	1 11/64	5.50	13.000	20.70	29.770	●
300	30.000		5.50	14.000	22.30	30.000	●
300	30.160	1 3/16	5.50	14.000	22.30	30.160	●
300	30.500		5.60	14.000	22.30	30.500	●
300	30.960	1 7/32	5.70	14.000	22.30	30.960	●
310	31.000		5.70	14.000	22.30	31.000	●
310	31.500		5.80	14.000	22.30	31.500	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

4113	4114	4115
Guhring std.		
Solid carbide		
	K/P	
F	○	a
right-hand	right-hand	right-hand
m7	h7	h7
141	141	141
135	135	135
NEW	NEW	NEW





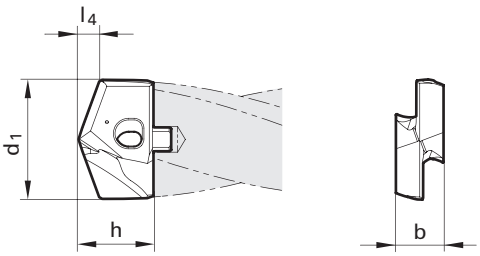


Availability		
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4112
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	F
Cutting direction	right-hand
Tolerance	h7
Discount group	141
Techn. data page	135

NEW





holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
310	31.750	1 1/4	5.80	14.000	22.30	31.750	●
320	32.000		5.90	15.000	23.10	32.000	●
320	32.500		6.00	15.000	23.10	32.500	●
320	32.540	1 9/32	6.00	15.000	23.10	32.540	●
320	32.940	1 19/6	6.00	15.000	23.10	32.940	●
330	33.000		6.10	15.000	23.10	33.000	●
330	33.340	1 5/16	6.10	15.000	23.10	33.340	●
330	33.500		6.10	15.000	23.10	33.500	●
340	34.000		6.20	15.000	23.10	34.000	●
340	34.130	1 11/3	6.30	15.000	23.10	34.130	●
340	34.500		6.30	15.000	23.10	34.500	●
340	34.930		6.40	15.000	23.10	34.930	●
350	35.000		6.40	15.000	23.10	35.000	●
350	35.500		6.50	15.000	23.10	35.500	●
350	35.720	1 13/3	6.60	15.000	23.10	35.720	●
360	36.000		6.60	16.000	23.90	36.000	●
360	36.500		6.70	16.000	23.90	36.500	●
360	36.510	1 7/16	6.70	16.000	23.90	36.510	●
370	37.000		6.80	16.000	23.90	37.000	●
370	37.310	1 15/3	6.80	16.000	23.90	37.310	●
370	37.500		6.90	16.000	23.90	37.500	●
380	38.000		7.00	16.000	23.90	38.000	●
380	38.100	1 1/2	7.00	16.000	23.90	38.100	●
380	38.460		7.00	16.000	23.90	38.460	●
380	38.500	1 33/6	7.10	16.000	23.90	38.500	●
390	39.000		7.10	16.000	23.90	39.000	●
390	39.500		7.20	16.000	23.90	39.500	●
400	40.000		7.30	16.000	23.90	40.000	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

4113	4114	4115
Guhring std.		
Solid carbide		
	K/P	
F	○	a
right-hand	right-hand	right-hand
m7	h7	h7
141	141	141
135	135	135
NEW	NEW	NEW





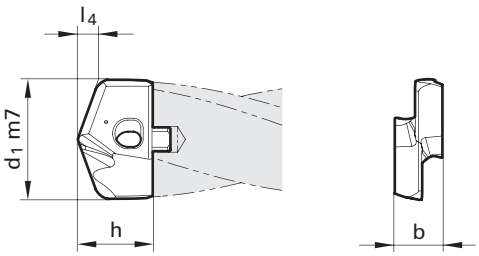


Availability		
●	●	●
●	●	●
●	●	●
●	●	●
●	●	
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4111
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	a
Cutting direction	right-hand
Tolerance	m7
Discount group	141
Techn. data page	136

NEW



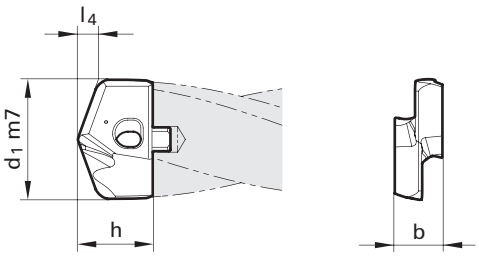


holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
110	11.000		1.80	4.500	7.20	11.000	●
110	11.200		1.80	4.500	7.20	11.200	●
110	11.500		1.90	4.500	7.20	11.500	●
110	11.510	29/64	1.90	4.500	7.20	11.510	●
110	11.700		1.90	4.500	7.20	11.700	●
110	11.800		1.90	4.500	7.20	11.800	●
110	11.910	15/32	1.90	4.500	7.20	11.910	●
120	12.000		1.90	5.000	7.40	12.000	●
120	12.100		2.00	5.000	7.40	12.100	●
120	12.200		2.00	5.000	7.40	12.200	●
120	12.300	31/64	2.00	5.000	7.40	12.300	●
120	12.500		2.00	5.000	7.40	12.500	●
120	12.600		2.00	5.000	7.40	12.600	●
120	12.700	1/2	2.10	5.000	7.40	12.700	●
120	12.800		2.10	5.000	7.40	12.800	●
120	12.900		2.10	5.000	7.40	12.900	●
130	13.000		2.10	5.500	8.20	13.000	●
130	13.100	33/64	2.10	5.500	8.20	13.100	●
130	13.490	17/32	2.20	5.500	8.20	13.490	●
130	13.500		2.20	5.500	8.20	13.500	●
130	13.600		2.20	5.500	8.20	13.600	●
130	13.700		2.20	5.500	8.20	13.700	●
130	13.800		2.20	5.500	8.20	13.800	●
130	13.890	35/64	2.20	5.500	8.20	13.890	●
140	14.000		2.30	6.000	9.40	14.000	●
140	14.100		2.30	6.000	9.40	14.100	●
140	14.290	9/16	2.30	6.000	9.40	14.290	●
140	14.400		2.30	6.000	9.40	14.400	●
140	14.500		2.30	6.000	9.40	14.500	●
140	14.600		2.40	6.000	9.40	14.600	●
140	14.680	37/64	2.40	6.000	9.40	14.680	●
140	14.700		2.40	6.000	9.40	14.700	●
140	14.800		2.40	6.000	9.40	14.800	●
150	15.000		2.40	6.000	9.40	15.000	●
150	15.080	19/32	2.40	6.000	9.40	15.080	●
150	15.100		2.40	6.000	9.40	15.100	●
150	15.200		2.40	6.000	9.40	15.200	●
150	15.300		2.50	6.000	9.40	15.300	●
150	15.480	39/64	2.50	6.000	9.40	15.480	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4111
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	a
Cutting direction	right-hand
Tolerance	m7
Discount group	141
Techn. data page	136

NEW



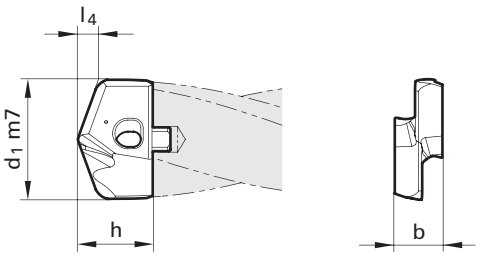


holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
150	15.500		2.50	6.000	9.40	15.500	●
150	15.600		2.50	6.000	9.40	15.600	●
150	15.700		2.50	6.000	9.40	15.700	●
150	15.800		2.50	6.000	9.40	15.800	●
150	15.870	5/8	2.60	6.000	9.40	15.870	●
160	16.000		2.60	7.000	10.60	16.000	●
160	16.270	41/64	2.60	7.000	10.60	16.270	●
160	16.500		2.70	7.000	10.60	16.500	●
160	16.670	21/32	2.70	7.000	10.60	16.670	●
170	17.000		2.70	7.000	10.60	17.000	●
170	17.070	43/64	2.70	7.000	10.60	17.070	●
170	17.460	11/16	2.80	7.000	10.60	17.460	●
170	17.500		2.80	7.000	10.60	17.500	●
170	17.600		2.80	7.000	10.60	17.600	●
170	17.860	45/64	2.90	7.000	10.60	17.860	●
180	18.000		2.90	8.000	12.10	18.000	●
180	18.260	23/32	2.90	8.000	12.10	18.260	●
180	18.500		3.00	8.000	12.10	18.500	●
180	18.650	47/64	3.00	8.000	12.10	18.650	●
190	19.000		3.00	8.000	12.10	19.000	●
190	19.050	3/4	3.10	8.000	12.10	19.050	●
190	19.450	49/64	3.10	8.000	12.10	19.450	●
190	19.500		3.10	8.000	12.10	19.500	●
190	19.600		3.10	8.000	12.10	19.600	●
190	19.840	25/32	3.20	8.000	12.10	19.840	●
200	20.000		3.20	9.000	13.30	20.000	●
200	20.240	51/64	3.20	9.000	13.30	20.240	●
200	20.500		3.30	9.000	13.30	20.500	●
200	20.640	13/16	3.30	9.000	13.30	20.640	●
210	21.000		3.40	9.000	13.30	21.000	●
210	21.030	53/64	3.40	9.000	13.30	21.030	●
210	21.100		3.40	9.000	13.30	21.100	●
210	21.430	27/32	3.40	9.000	13.30	21.430	●
210	21.500		3.40	9.000	13.30	21.500	●
210	21.830	55/64	3.50	9.000	13.30	21.830	●
220	22.000		3.50	10.000	14.80	22.000	●
220	22.220	7/8	3.60	10.000	14.80	22.220	●
220	22.500		3.60	10.000	14.80	22.500	●
220	22.620	57/64	3.60	10.000	14.80	22.620	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	4111
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	a
Cutting direction	right-hand
Tolerance	m7
Discount group	141
Techn. data page	136

NEW



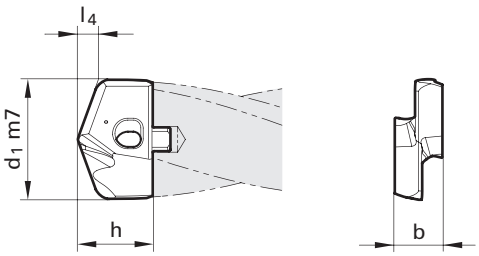


holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
230	23.000		3.70	10.000	14.80	23.000	●
230	23.020	29/32	3.70	10.000	14.80	23.020	●
230	23.420	59/64	3.70	10.000	14.80	23.420	●
230	23.500		3.80	10.000	14.80	23.500	●
230	23.810	15/16	3.80	10.000	14.80	23.810	●
240	24.000		3.80	11.000	15.30	24.000	●
240	24.100		3.80	11.000	15.30	24.100	●
240	24.210	61/64	3.90	11.000	15.30	24.210	●
240	24.500		3.90	11.000	15.30	24.500	●
240	24.610	31/32	3.90	11.000	15.30	24.610	●
250	25.000	63/64	4.00	11.000	15.30	25.000	●
250	25.400	1	4.10	11.000	15.30	25.400	●
250	25.500		4.10	11.000	15.30	25.500	●
250	25.700		4.00	11.000	15.30	25.700	●
260	26.000		4.10	12.000	19.40	26.000	●
260	26.190	1 1/32	4.10	12.000	19.40	26.190	●
260	26.500		4.20	12.000	19.40	26.500	●
260	26.590	1 3/64	4.20	12.000	19.40	26.590	●
270	27.000		4.30	12.000	19.40	27.000	●
270	27.500		4.30	12.000	19.40	27.500	●
270	27.700		4.30	12.000	19.40	27.700	●
270	27.780	1 3/32	4.30	12.000	19.40	27.780	●
280	28.000		4.40	13.000	20.10	28.000	●
280	28.180		4.40	13.000	20.10	28.180	●
280	28.500		4.50	13.000	20.10	28.500	●
280	28.580		4.50	13.000	20.10	28.580	●
290	29.000		4.60	13.000	20.10	29.000	●
290	29.370	1 5/32	4.60	13.000	20.10	29.370	●
290	29.500		4.60	13.000	20.10	29.500	●
300	30.000		4.70	14.000	21.70	30.000	●
300	30.160	1 3/16	4.70	14.000	21.70	30.160	●
300	30.500		4.80	14.000	21.70	30.500	●
300	30.960		4.80	14.000	21.70	30.960	●
310	31.000		4.90	14.000	21.70	31.000	●
310	31.500		4.90	14.000	21.70	31.500	●
310	31.750	1 1/4	4.90	14.000	21.70	31.750	●
320	32.000		5.00	15.000	22.40	32.000	●
320	32.500		5.10	15.000	22.40	32.500	●
320	32.540	1 9/32	5.10	15.000	22.40	32.540	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	4111
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	a
Cutting direction	right-hand
Tolerance	m7
Discount group	141
Techn. data page	136

NEW

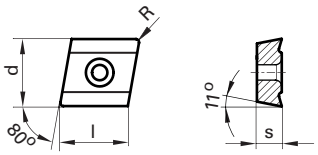




holder size	d1		l4	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
330	33.000		5.20	15.000	22.40	33.000	●
330	33.340	1 5/16	5.20	15.000	22.40	33.340	●
330	33.500		5.30	15.000	22.40	33.500	●
340	34.000		5.40	15.000	22.40	34.000	●
340	34.130	1 11/32	5.40	15.000	22.40	34.130	●
340	34.500		5.40	15.000	22.40	34.500	●
340	34.930		5.40	15.000	22.40	34.930	●
350	35.000		5.50	15.000	22.40	35.000	●
350	35.500		5.60	15.000	22.40	35.500	●
350	35.720		5.60	15.000	22.40	35.720	●
360	36.000		5.70	16.000	23.20	36.000	●
360	36.500		5.70	16.000	23.20	36.500	●
360	36.510		5.70	16.000	23.20	36.510	●
370	37.000		5.80	16.000	23.20	37.000	●
370	37.310	1 15/32	5.80	16.000	23.20	37.310	●
370	37.500		5.90	16.000	23.20	37.500	●
380	38.000		6.00	16.000	23.20	38.000	●
380	38.100	1 1/2	6.00	16.000	23.20	38.100	●
380	38.500	1 33/64	6.10	16.000	23.20	38.500	●
390	39.000		6.20	16.000	23.20	39.000	●
390	39.500		6.20	16.000	23.20	39.500	●
400	40.000		6.20	16.000	23.20	40.000	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	7635
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	AL
Surface	◯
Cutting direction	right-hand
Discount group	142
	136

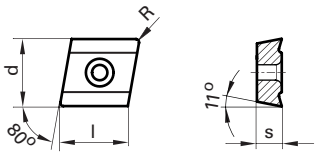




ISO standard	d	s	R	l	Code no.	Availability
	mm	mm	mm	mm		
CPGT0502	5.560	2.380	0.40	5.64	52.040	●
CPGT0602	6.350	2.380	0.40	6.45	62.040	●
CPGT09T3	9.525	3.970	0.80	9.67	93.080	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	7645
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	P
Surface	S
Cutting direction	right-hand
Discount group	142
	136

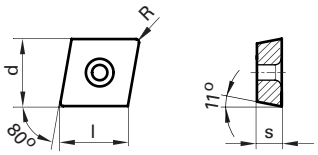




ISO standard	d	s	R	l	Code no.	Availability
	mm	mm	mm	mm		
CPGT0502	5.560	2.380	0.40	5.64	52.040	●
CPGT0602	6.350	2.380	0.40	6.45	62.040	●
CPGT09T3	9.525	3.970	0.80	9.67	93.080	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	7632
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K
Surface	A
Cutting direction	neutral
Discount group	142
	136



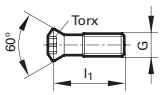


ISO standard	d	s	R	l	Code no.	Availability
	mm	mm	mm	mm		
CPGW0502	5.560	2.380	0.40	5.64	52.040	●
CPGW0602	6.350	2.380	0.40	6.45	62.040	●
CPGW09T3	9.525	3.970	0.80	9.67	93.080	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**6128**
Standard	**Guhring std.**
Discount group	**122**
Techn. data page	

for countersinking inserts

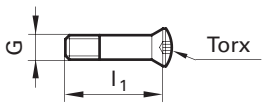


G	l1	Torx	Code no.	Availability
	mm			
M 2	5.50	T6	2.000	●
M 2,5	5.30	T7	2.500	●
M 4 X9,5	9.50	T15	4.006	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**4071**
Standard	**Guhring std.**
Discount group	**140**
Techn. data page	

for drilling inserts





G	l1	Torx	Code no.	Availability
	mm			
M 2,2	9.50	T7	2.200	●
M 2,2	10.50	T7	2.201	●
M 2,5	11.40	T8	2.500	●
M 3	12.10	T9	3.000	●
M 3	13.10	T9	3.001	●
M 3,5	14.25	T10	3.500	●
M 4	16.00	T15	4.000	●
M 4,5	18.00	T15	4.500	●
M 5	19.75	T20	5.000	●
M 5	21.75	T20	5.001	●
M 5	23.40	T20	5.003	●
M 6	27.00	T25	6.000	●
M 6	28.50	T25	6.001	●
M 6	32.50	T25	6.002	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**4915**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	



Type	Drive	l1	Torque	Code no.	Availability
		mm			
A	1/4	160.00	0,8...2	2.000	●
A	1/4	160.00	2...8	8.000	●
A	1/4	200.00	0,4...14	14.000	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**4917**
Standard	**Guhring std.**
Discount group	**140**
Techn. data page	



Torx	Drive	l1	Code no.	Availability
		mm		
T7	1/4	25.00	7.000	●
T8	1/4	25.00	8.000	●
T9	1/4	25.00	9.000	●
T10	1/4	25.00	10.000	●
T15	1/4	25.00	15.000	●
T20	1/4	25.00	20.000	●
T25	1/2	55.00	25.000	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

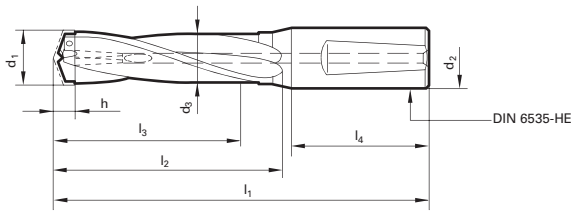
Guhring no.	**1612**
Standard	**Guhring std.**
Discount group	**140**
Techn. data page	



Torx	Code no.	Availability
T6	6.000	●
T7	7.000	●
T7	7.001	●
T8	8.001	●
T9	9.001	●
T10	10.001	●
T15	15.000	●
T15	15.001	●
T20	20.001	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	5242
Standard	Guhring std.
Type	RT 800 WP
Drilling depth	3xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	136

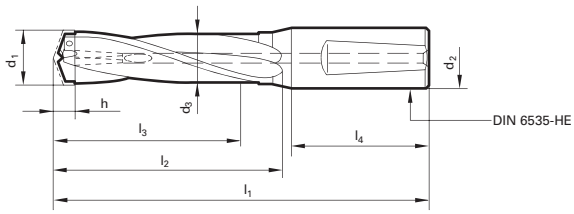




holder size	d1	d2 h6	d3	l1	l2	l3	l4	Code no.	Availability
	mm	mm	mm	mm	mm	mm	mm		
0.1	16,00-17,00	20.000	15.700	130.00	74.40	54.00	50.00	17.000	●
0.1	16,00-17,00	19.050	15.700	130.00	74.40	54.00	50.00	17.005	●
0.2	17,01-17,99	20.000	16.700	130.00	74.60	54.00	50.00	17.990	●
0.2	17,01-17,99	19.050	16.700	130.00	74.60	54.00	50.00	17.995	●
1.1	18,00-19,00	20.000	17.700	138.00	82.70	60.00	50.00	19.000	●
1.1	18,00-19,00	19.050	17.700	138.00	82.70	60.00	50.00	19.005	●
1.2	19,01-20,00	20.000	18.700	138.00	82.90	60.00	50.00	20.000	●
1.2	19,01-20,00	19.050	18.700	138.00	82.90	60.00	50.00	20.005	●
2.1	20,01-21,00	25.000	19.700	153.00	91.60	66.00	56.00	21.000	●
2.1	20,01-21,00	25.400	19.700	153.00	91.60	66.00	56.00	21.005	●
2.2	21,01-22,50	25.000	20.700	153.00	91.80	66.00	56.00	22.500	●
2.2	21,01-22,50	25.400	20.700	153.00	91.80	66.00	56.00	22.505	●
3.1	22,51-24,00	25.000	22.200	161.00	99.40	72.00	56.00	24.000	●
3.1	22,51-24,00	25.400	22.200	161.00	99.40	72.00	56.00	24.005	●
3.2	24,01-25,50	25.000	23.700	170.00	108.70	78.00	56.00	25.500	●
3.2	24,01-25,50	25.400	23.700	170.00	108.70	78.00	56.00	25.505	●
4.1	25,51-27,50	32.000	25.200	182.00	116.00	84.00	60.00	27.500	●
4.1	25,51-27,50	31.750	25.200	182.00	116.00	84.00	60.00	27.505	●
4.2	27,51-29,50	32.000	27.200	190.00	124.40	90.00	60.00	29.500	●
4.2	27,51-29,50	31.750	27.200	190.00	124.40	90.00	60.00	29.505	●
5.1	29,51-32,00	32.000	29.200	198.00	131.60	96.00	60.00	32.000	●
5.1	29,51-32,00	31.750	29.200	198.00	131.60	96.00	60.00	32.005	●
5.2	32,01-34,50	32.000	31.700	206.00	140.10	102.00	60.00	34.500	●
5.2	32,01-34,50	31.750	31.700	206.00	140.10	102.00	60.00	34.505	●
6.1	34,51-37,50	32.000	34.000	218.00	151.10	114.00	60.00	37.500	●
6.1	34,51-37,50	31.750	34.000	218.00	151.10	114.00	60.00	37.505	●
6.2	37,51-40,50	32.000	37.000	231.00	163.70	120.00	60.00	40.500	●
6.2	37,51-40,50	31.750	37.000	231.00	163.70	120.00	60.00	40.505	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	5243
Standard	Guhring std.
Type	RT 800 WP
Drilling depth	5xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	137

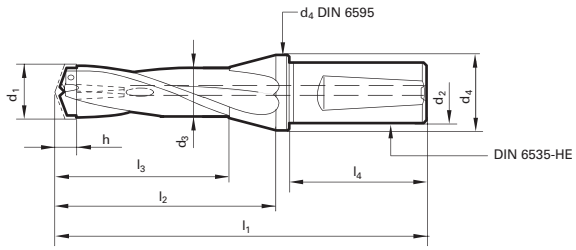




holder size	d1	d2 h6	d3	l1	l2	l3	l4	Code no.	Availability
	mm	mm	mm	mm	mm	mm	mm		
0.1	16,00-17,00	20.000	15.700	166.00	110.40	90.00	50.00	17.000	●
0.1	16,00-17,00	19.050	15.700	166.00	110.40	90.00	50.00	17.005	●
0.2	17,01-17,99	20.000	16.700	166.00	110.60	90.00	50.00	17.990	●
0.2	17,01-17,99	19.050	16.700	166.00	110.60	90.00	50.00	17.995	●
1.1	18,00-19,00	20.000	17.700	178.00	122.70	100.00	50.00	19.000	●
1.1	18,00-19,00	19.050	17.700	178.00	122.70	100.00	50.00	19.005	●
1.2	19,01-20,00	20.000	18.700	178.00	122.90	100.00	50.00	20.000	●
1.2	19,01-20,00	19.050	18.700	178.00	122.90	100.00	50.00	20.005	●
2.1	20,01-21,00	25.000	19.700	197.00	135.60	110.00	56.00	21.000	●
2.1	20,01-21,00	25.400	19.700	197.00	135.60	110.00	56.00	21.005	●
2.2	21,01-22,50	25.000	20.700	197.00	135.80	110.00	56.00	22.500	●
2.2	21,01-22,50	25.400	20.700	197.00	135.80	110.00	56.00	22.505	●
3.1	22,51-24,00	25.000	22.200	209.00	147.40	120.00	56.00	24.000	●
3.1	22,51-24,00	25.400	22.200	209.00	147.40	120.00	56.00	24.005	●
3.2	24,01-25,50	25.000	23.700	222.00	160.70	130.00	56.00	25.500	●
3.2	24,01-25,50	25.400	23.700	222.00	160.70	130.00	56.00	25.505	●
4.1	25,51-27,50	32.000	25.200	238.00	172.00	140.00	60.00	27.500	●
4.1	25,51-27,50	31.750	25.200	238.00	172.00	140.00	60.00	27.505	●
4.2	27,51-29,50	32.000	27.200	250.00	184.40	150.00	60.00	29.500	●
4.2	27,51-29,50	31.750	27.200	250.00	184.40	150.00	60.00	29.505	●
5.1	29,51-32,00	32.000	29.200	262.00	195.60	160.00	60.00	32.000	●
5.1	29,51-32,00	31.750	29.200	262.00	195.60	160.00	60.00	32.005	●
5.2	32,01-34,50	32.000	31.700	274.00	208.10	170.00	60.00	34.500	●
5.2	32,01-34,50	31.750	31.700	274.00	208.10	170.00	60.00	34.505	●
6.1	34,51-37,50	32.000	34.000	292.00	225.10	190.00	60.00	37.500	●
6.1	34,51-37,50	31.750	34.000	292.00	225.10	190.00	60.00	37.505	●
6.2	37,51-40,50	32.000	37.000	311.00	243.70	200.00	60.00	40.500	●
6.2	37,51-40,50	31.750	37.000	311.00	243.70	200.00	60.00	40.505	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	5248
Standard	Guhring std.
Type	RT 800 WP
Drilling depth	7xD
Cooling	axial
Cutting direction	right-hand
Discount group	140
Techn. data page	137

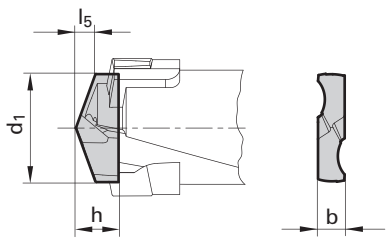




holder size	d1	d2 h6	d3	d4	l1	l2	l3	l4	Code no.	Availability
	mm	mm	mm	mm	mm	mm	mm	mm		
0.1	16,00-17,00	20.000	15.700	25.000	202.00	146.40	126.00	50.00	17.000	●
0.1	16,00-17,00	19.050	15.700	25.000	202.00	146.40	126.00	50.00	17.005	●
0.2	17,01-17,99	20.000	16.700	25.000	202.00	146.60	126.00	50.00	17.990	●
0.2	17,01-17,99	19.050	16.700	25.000	202.00	146.60	126.00	50.00	17.995	●
1.1	18,00-19,00	20.000	17.700	25.000	218.00	162.70	140.00	50.00	19.000	●
1.1	18,00-19,00	19.050	17.700	25.000	218.00	162.70	140.00	50.00	19.005	●
1.2	19,01-20,00	20.000	18.700	25.000	218.00	162.90	140.00	50.00	20.000	●
1.2	19,01-20,00	19.050	18.700	25.000	218.00	162.90	140.00	50.00	20.005	●
2.1	20,01-21,00	25.000	19.700	31.000	241.00	179.60	154.00	56.00	21.000	●
2.1	20,01-21,00	25.400	19.700	31.000	241.00	179.60	154.00	56.00	21.005	●
2.2	21,01-22,50	25.000	20.700	31.000	241.00	179.80	154.00	56.00	22.500	●
2.2	21,01-22,50	25.400	20.700	31.000	241.00	179.80	154.00	56.00	22.505	●
3.1	22,51-24,00	25.000	22.200	31.000	257.00	195.40	168.00	56.00	24.000	●
3.1	22,51-24,00	25.400	22.200	31.000	257.00	195.40	168.00	56.00	24.005	●
3.2	24,01-25,50	25.000	23.700	31.000	274.00	212.70	182.00	56.00	25.500	●
3.2	24,01-25,50	25.400	23.700	31.000	274.00	212.70	182.00	56.00	25.505	●
4.1	25,51-27,50	32.000	25.200	38.000	294.00	228.00	196.00	60.00	27.500	●
4.1	25,51-27,50	31.750	25.200	38.000	294.00	228.00	196.00	60.00	27.505	●
4.2	27,51-29,50	32.000	27.200	38.000	310.00	244.40	210.00	60.00	29.500	●
4.2	27,51-29,50	31.750	27.200	38.000	310.00	244.40	210.00	60.00	29.505	●
5.1	29,51-32,00	32.000	29.200	38.000	326.00	259.60	224.00	60.00	32.000	●
5.1	29,51-32,00	31.750	29.200	38.000	326.00	259.60	224.00	60.00	32.005	●
5.2	32,01-34,50	32.000	31.700	38.000	342.00	276.10	238.00	60.00	34.500	●
5.2	32,01-34,50	31.750	31.700	38.000	342.00	276.10	238.00	60.00	34.505	●
6.1	34,51-37,50	32.000	34.000	38.000	366.00	299.10	266.00	60.00	37.500	●
6.1	34,51-37,50	31.750	34.000	38.000	366.00	299.10	266.00	60.00	37.505	●
6.2	37,51-40,50	32.000	37.000	40.500	391.00	323.70	280.00	60.00	40.500	●
6.2	37,51-40,50	31.750	37.000	40.500	391.00	323.70	280.00	60.00	40.505	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2747
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K
Surface	◯
Cutting direction	right-hand
Tolerance	
Discount group	141
Techn. data page	137

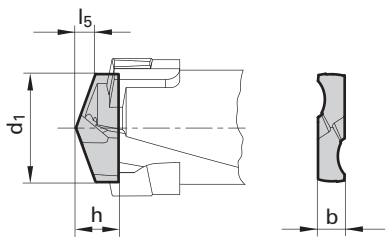




holder size	d1 h7		l5	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
0.1	16.000		3.00	4.500	8.00	16.000	●
0.1	16.500		3.10	4.500	8.00	16.500	●
0.1	17.000		3.10	4.500	8.00	17.000	●
0.2	17.070	43/64	3.20	4.500	8.00	17.070	●
0.2	17.500		3.20	4.500	8.00	17.500	●
0.2	17.860	45/64	3.30	4.500	8.00	17.860	●
1.1	18.000		3.30	5.000	8.00	18.000	●
1.1	18.260	23/32	3.40	5.000	8.00	18.260	●
1.1	18.650	47/64	3.40	5.000	8.00	18.650	●
1.1	19.000		3.50	5.000	8.00	19.000	●
1.2	19.050	3/4	3.50	5.000	8.00	19.050	●
1.2	19.250		3.60	5.000	8.00	19.250	●
1.2	19.450	49/64	3.60	5.000	8.00	19.450	●
1.2	19.500		3.60	5.000	8.00	19.500	●
1.2	19.840	25/32	3.70	5.000	8.00	19.840	●
1.2	20.000		3.70	5.000	8.00	20.000	●
2.1	20.500		3.80	5.500	8.80	20.500	●
2.1	20.640	13/16	3.80	5.500	8.80	20.640	●
2.1	21.000		3.90	5.500	8.80	21.000	●
2.2	21.030	53/64	3.90	5.500	8.80	21.030	●
2.2	21.430	27/32	3.90	5.500	8.80	21.430	●
2.2	21.830	55/64	4.00	5.500	8.80	21.830	●
2.2	22.000		4.10	5.500	8.80	22.000	●
2.2	22.220	7/8	4.10	5.500	8.80	22.220	●
3.1	23.420	59/64	4.30	6.300	10.00	23.420	●
3.1	23.500		4.30	6.300	10.00	23.500	●
3.1	24.000		4.40	6.300	10.00	24.000	●
3.2	24.210	61/64	4.50	6.300	10.00	24.210	●
3.2	24.500		4.50	6.300	10.00	24.500	●
3.2	25.000	63/64	4.60	6.300	10.00	25.000	●
3.2	25.500		4.70	6.300	10.00	25.500	●
4.1	26.000		4.80	7.300	11.60	26.000	●
4.1	26.500		4.90	7.300	11.60	26.500	●
4.1	27.000		5.00	7.300	11.60	27.000	●
4.1	27.500		5.10	7.300	11.60	27.500	●
4.2	28.000		5.10	7.300	11.60	28.000	●
5.1	30.000		5.50	8.500	13.60	30.000	●
5.1	30.500		5.60	8.500	13.60	30.500	●
5.1	31.000		5.70	8.500	13.60	31.000	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2747
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K
Surface	◯
Cutting direction	right-hand
Tolerance	
Discount group	141
Techn. data page	137

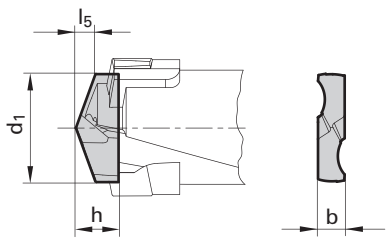




holder size	d1 h7		l5	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
5.1	31.500		5.80	8.500	13.60	31.500	●
5.1	32.000		5.90	8.500	13.60	32.000	●
5.2	32.500		6.00	8.500	13.60	32.500	●
5.2	33.000		6.10	8.500	13.60	33.000	●
5.2	33.500		6.10	8.500	13.60	33.500	●
5.2	34.000		6.20	8.500	13.60	34.000	●
5.2	34.500		6.30	8.500	13.60	34.500	●
6.1	35.000		6.40	10.000	16.00	35.000	●
6.1	36.000		6.60	10.000	16.00	36.000	●
6.1	37.000		6.80	10.000	16.00	37.000	●
6.2	39.000		7.10	10.000	16.00	39.000	●
6.2	40.000		7.30	10.000	16.00	40.000	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	2485
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	F
Cutting direction	right-hand
Tolerance	
Discount group	141
Techn. data page	137

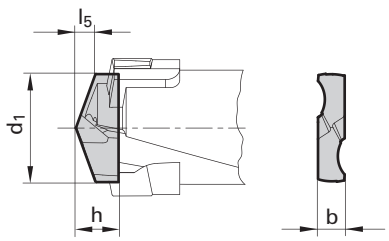




holder size	d1 h7		l5	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
0.1	16.000		3.00	4.500	8.00	16.000	●
0.1	16.270	41/64	3.00	4.500	8.00	16.270	●
0.1	16.500		3.10	4.500	8.00	16.500	●
0.1	16.670	21/32	3.10	4.500	8.00	16.670	●
0.1	17.000		3.10	4.500	8.00	17.000	●
0.2	17.070	43/64	3.20	4.500	8.00	17.070	●
0.2	17.460	11/16	3.20	4.500	8.00	17.460	●
0.2	17.500		3.20	4.500	8.00	17.500	●
0.2	17.860	45/64	3.30	4.500	8.00	17.860	●
1.1	18.000		3.30	5.000	8.00	18.000	●
1.1	18.260	23/32	3.40	5.000	8.00	18.260	●
1.1	18.500		3.40	5.000	8.00	18.500	●
1.1	18.650	47/64	3.40	5.000	8.00	18.650	●
1.1	19.000		3.50	5.000	8.00	19.000	●
1.2	19.050	3/4	3.50	5.000	8.00	19.050	●
1.2	19.250		3.60	5.000	8.00	19.250	●
1.2	19.450	49/64	3.60	5.000	8.00	19.450	●
1.2	19.500		3.60	5.000	8.00	19.500	●
1.2	19.840	25/32	3.70	5.000	8.00	19.840	●
1.2	20.000		3.70	5.000	8.00	20.000	●
2.1	20.240	51/64	3.70	5.500	8.80	20.240	●
2.1	20.500		3.80	5.500	8.80	20.500	●
2.1	20.640	13/16	3.80	5.500	8.80	20.640	●
2.1	21.000		3.90	5.500	8.80	21.000	●
2.2	21.030	53/64	3.90	5.500	8.80	21.030	●
2.2	21.430	27/32	3.90	5.500	8.80	21.430	●
2.2	21.500		4.00	5.500	8.80	21.500	●
2.2	21.830	55/64	4.00	5.500	8.80	21.830	●
2.2	22.000		4.10	5.500	8.80	22.000	●
2.2	22.220	7/8	4.10	5.500	8.80	22.220	●
2.2	22.500		4.10	5.500	8.80	22.500	●
3.1	22.620	57/64	4.20	6.300	10.00	22.620	●
3.1	23.000		4.20	6.300	10.00	23.000	●
3.1	23.020	29/32	4.20	6.300	10.00	23.020	●
3.1	23.420	59/64	4.30	6.300	10.00	23.420	●
3.1	23.500		4.30	6.300	10.00	23.500	●
3.1	23.810	15/16	4.40	6.300	10.00	23.810	●
3.1	24.000		4.40	6.300	10.00	24.000	●
3.2	24.210	61/64	4.50	6.300	10.00	24.210	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	2485
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	F
Cutting direction	right-hand
Tolerance	
Discount group	141
Techn. data page	137

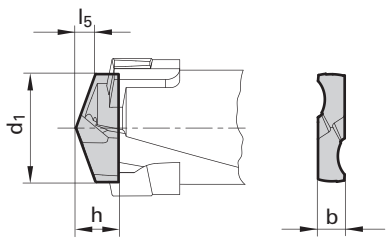




holder size	d1 h7		l5	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
3.2	24.500		4.50	6.300	10.00	24.500	●
3.2	24.610	31/32	4.50	6.300	10.00	24.610	●
3.2	25.000	63/64	4.60	6.300	10.00	25.000	●
3.2	25.400	1	4.70	6.300	10.00	25.400	●
3.2	25.500		4.70	6.300	10.00	25.500	●
4.1	26.000		4.80	7.300	11.60	26.000	●
4.1	26.500		4.90	7.300	11.60	26.500	●
4.1	27.000		5.00	7.300	11.60	27.000	●
4.1	27.500		5.10	7.300	11.60	27.500	●
4.2	28.000		5.10	7.300	11.60	28.000	●
4.2	28.500		5.20	7.300	11.60	28.500	●
4.2	29.000		5.30	7.300	11.60	29.000	●
4.2	29.500		5.40	7.300	11.60	29.500	●
5.1	30.000		5.50	8.500	13.60	30.000	●
5.1	30.500		5.60	8.500	13.60	30.500	●
5.1	31.000		5.70	8.500	13.60	31.000	●
5.1	31.500		5.80	8.500	13.60	31.500	●
5.1	32.000		5.90	8.500	13.60	32.000	●
5.2	32.500		6.00	8.500	13.60	32.500	●
5.2	33.000		6.10	8.500	13.60	33.000	●
5.2	33.500		6.10	8.500	13.60	33.500	●
5.2	34.000		6.20	8.500	13.60	34.000	●
5.2	34.500		6.30	8.500	13.60	34.500	●
6.1	35.000		6.40	10.000	16.00	35.000	●
6.1	36.000		6.60	10.000	16.00	36.000	●
6.1	37.000		6.80	10.000	16.00	37.000	●
6.1	37.500		6.90	10.000	16.00	37.500	●
6.2	38.000		7.00	10.000	16.00	38.000	●
6.2	39.000		7.10	10.000	16.00	39.000	●
6.2	40.000		7.30	10.000	16.00	40.000	●
6.2	40.500		7.40	10.000	16.00	40.500	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1047
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	S
Cutting direction	right-hand
Tolerance	
Discount group	141
Techn. data page	137

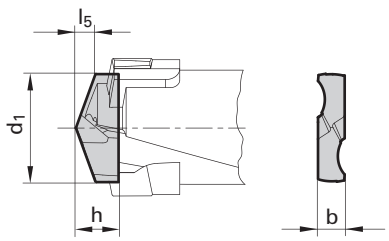




holder size	d1 h7		l5	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
0.1	16.000		3.00	4.500	8.00	16.000	●
0.1	16.270	41/64	3.00	4.500	8.00	16.270	●
0.1	16.500		3.10	4.500	8.00	16.500	●
0.1	16.670	21/32	3.10	4.500	8.00	16.670	●
0.1	17.000		3.10	4.500	8.00	17.000	●
0.2	17.070	43/64	3.20	4.500	8.00	17.070	●
0.2	17.460	11/16	3.20	4.500	8.00	17.460	●
0.2	17.500		3.20	4.500	8.00	17.500	●
0.2	17.860	45/64	3.30	4.500	8.00	17.860	●
1.1	18.000		3.30	5.000	8.00	18.000	●
1.1	18.260	23/32	3.40	5.000	8.00	18.260	●
1.1	18.500		3.40	5.000	8.00	18.500	●
1.1	18.650	47/64	3.40	5.000	8.00	18.650	●
1.1	19.000		3.50	5.000	8.00	19.000	●
1.2	19.050	3/4	3.50	5.000	8.00	19.050	●
1.2	19.250		3.60	5.000	8.00	19.250	●
1.2	19.450	49/64	3.60	5.000	8.00	19.450	●
1.2	19.500		3.60	5.000	8.00	19.500	●
1.2	19.840	25/32	3.70	5.000	8.00	19.840	●
1.2	20.000		3.70	5.000	8.00	20.000	●
2.1	20.240	51/64	3.70	5.500	8.80	20.240	●
2.1	20.500		3.80	5.500	8.80	20.500	●
2.1	20.640	13/16	3.80	5.500	8.80	20.640	●
2.1	21.000		3.90	5.500	8.80	21.000	●
2.2	21.030	53/64	3.90	5.500	8.80	21.030	●
2.2	21.430	27/32	3.90	5.500	8.80	21.430	●
2.2	21.500		4.00	5.500	8.80	21.500	●
2.2	21.830	55/64	4.00	5.500	8.80	21.830	●
2.2	22.000		4.10	5.500	8.80	22.000	●
2.2	22.220	7/8	4.10	5.500	8.80	22.220	●
2.2	22.500		4.10	5.500	8.80	22.500	●
3.1	22.620	57/64	4.20	6.300	10.00	22.620	●
3.1	23.000		4.20	6.300	10.00	23.000	●
3.1	23.020	29/32	4.20	6.300	10.00	23.020	●
3.1	23.420	59/64	4.30	6.300	10.00	23.420	●
3.1	23.500		4.30	6.300	10.00	23.500	●
3.1	23.810	15/16	4.40	6.300	10.00	23.810	●
3.1	24.000		4.40	6.300	10.00	24.000	●
3.2	24.210	61/64	4.50	6.300	10.00	24.210	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1047
Standard	Guhring std.
Tool material	Solid carbide
Carbide grade	K/P
Surface	S
Cutting direction	right-hand
Tolerance	
Discount group	141
Techn. data page	137

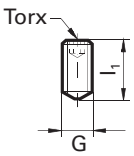




holder size	d1 h7		l5	b	h	Code no.	Availability
	mm	inch	mm	mm	mm		
3.2	24.500		4.50	6.300	10.00	24.500	●
3.2	24.610	31/32	4.50	6.300	10.00	24.610	●
3.2	25.000	63/64	4.60	6.300	10.00	25.000	●
3.2	25.400	1	4.70	6.300	10.00	25.400	●
3.2	25.500		4.70	6.300	10.00	25.500	●
4.1	26.000		4.80	7.300	11.60	26.000	●
4.1	26.500		4.90	7.300	11.60	26.500	●
4.1	27.000		5.00	7.300	11.60	27.000	●
4.1	27.500		5.10	7.300	11.60	27.500	●
4.2	28.000		5.10	7.300	11.60	28.000	●
4.2	28.500		5.20	7.300	11.60	28.500	●
4.2	29.000		5.30	7.300	11.60	29.000	●
4.2	29.500		5.40	7.300	11.60	29.500	●
5.1	30.000		5.50	8.500	13.60	30.000	●
5.1	30.500		5.60	8.500	13.60	30.500	●
5.1	31.000		5.70	8.500	13.60	31.000	●
5.1	31.500		5.80	8.500	13.60	31.500	●
5.1	32.000		5.90	8.500	13.60	32.000	●
5.2	32.500		6.00	8.500	13.60	32.500	●
5.2	33.000		6.10	8.500	13.60	33.000	●
5.2	33.500		6.10	8.500	13.60	33.500	●
5.2	34.000		6.20	8.500	13.60	34.000	●
5.2	34.500		6.30	8.500	13.60	34.500	●
6.1	35.000		6.40	10.000	16.00	35.000	●
6.1	36.000		6.60	10.000	16.00	36.000	●
6.1	37.000		6.80	10.000	16.00	37.000	●
6.1	37.500		6.90	10.000	16.00	37.500	●
6.2	38.000		7.00	10.000	16.00	38.000	●
6.2	39.000		7.10	10.000	16.00	39.000	●
6.2	40.000		7.30	10.000	16.00	40.000	●
6.2	40.500		7.40	10.000	16.00	40.500	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**1071**
Standard	**Guhring std.**
Discount group	**140**
Techn. data page	





G	l1	Torx	Code no.	Availability
	mm			
M 3 X0,35	7.00	T6	3.000	●
M 3 X0,35	6.00	T6	3.006	●
M 3,5X0,35	8.00	T7	3.500	●
M 4 X0,5	9.00	T8	4.000	●
M 4,5X0,5	10.00	T8	4.500	●
M 5 X0,5	11.00	T10	5.000	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**4915**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	



Type	Drive	l1	Torque	Code no.	Availability
		mm			
A	1/4	160.00	1...5	5.001	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	**4917**
Standard	**Guhring std.**
Discount group	**140**
Techn. data page	



Torx	Drive	l1	Code no.	Availability
		mm		
T6	1/4	25.00	6.000	●
T8	1/4	25.00	8.000	●
T10	1/4	25.00	10.000	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**1612**
Standard	**Guhring std.**
Discount group	**140**
Techn. data page	

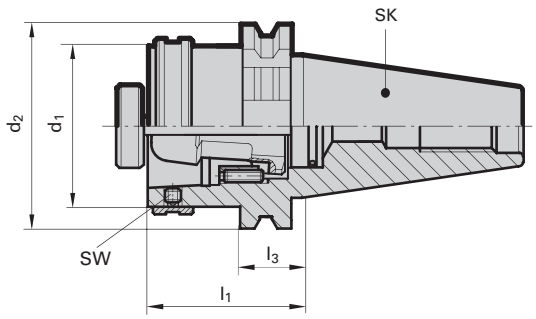


Torx	Code no.	Availability
T6	6.000	●
T8	8.000	●
T10	10.000	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

ISO taper holder (DIN 69871, form AD)/HSK-C

Guhring no.	**4512**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	**138**

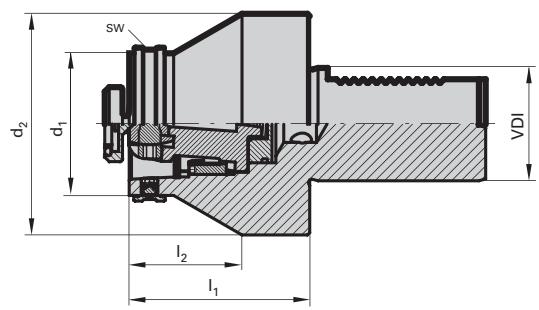




ISO taper size	HSK-C d1	d2	l1	l3	SW		Code no.	Availability
	mm	mm	mm	mm		kg		
40	63	63.5	70	19.05	5.0	1.38	40,063	●
50	63	97.5	40	19.05	5.0	2.73	50,063	●
50	80	97.5	70	19.05	6.0	3.70	50,080	●
50	100	97.5	100	19.05	8.0	4.90	50,100	●
60	100	155.0	40	19.05	8.0	9.70	60,100	●

Holder with straight shank (VDI) to DIN 69880-1/HSK-C

Guhring no.	**4510**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	**138**



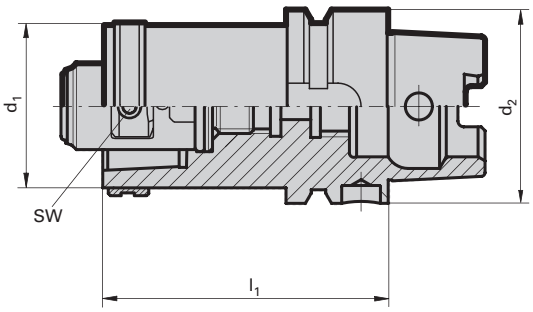


VDI size	HSK-C d1	d2	l1	l2	SW		Code no.	Availability
	mm	mm	mm	mm		kg		
40	63	83	80	50	5	2.38	40,063	●
50	63	98	80	50	5	4.21	50,063	●
50	80	98	100	70	6	5.00	50,080	●
60	80	123	100	62	6	8.10	60,080	●
60	100	123	125	87	8	9.70	60,100	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Reductions HSK-C/HSK-A

Guhring no.	**4355**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	**138**

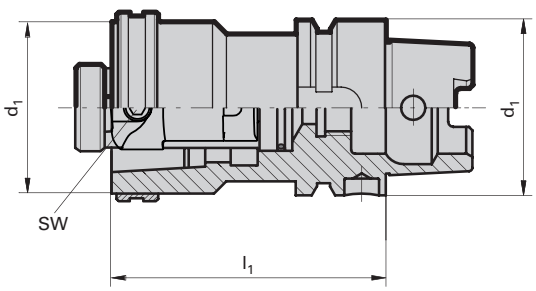




HSK-C	HSK-A		SW		Code no.	Availability
d1	d2	l1				
mm	mm	mm		kg		
63	80	100	5	2.69	63,080	●
63	100	100	5	3.31	63,100	●
80	100	120	6	5.13	80,100	●

Extensions HSK-C/HSK-A

Guhring no.	**4549**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	**138**

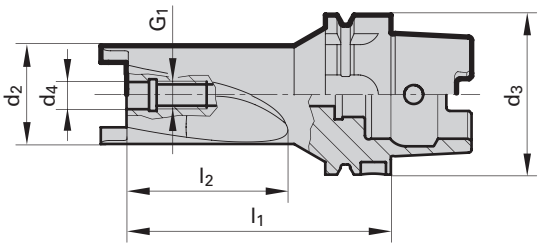




HSK-C	HSK-A		SW		Code no.	Availability
d1	d2	l1				
mm	mm	mm		kg		
63	63	100	4	1.84	100,063	●
63	63	140	5	2.30	140,063	●
80	80	120	4	3.90	120,080	●
80	80	160	6	5.40	160,080	●
100	100	140	5	7.80	140,100	●
100	100	200	6	10.54	200,100	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

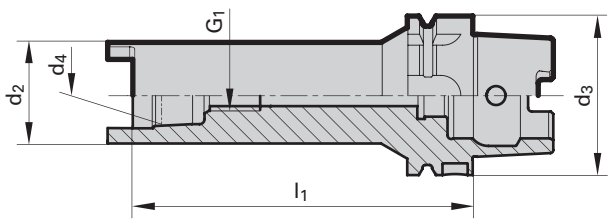
Guhring no.	**4142**
Standard	**Guhring std.**
Flute	**15° spiral**
Discount group	**114**
Techn. data page	**139**





for holder size	d2 mm	HSK-A d3 mm	d4 mm	l1 mm	l2 mm	G1	kg	Code no.	Availability
400-490	38.7	63	10.5	105	65	M10	1.2	63,105	●
400-490	38.7	63	10.5	180	140	M10	1.5	63,180	●
520/560	50.7	63	12.5	120	88	M12	1.6	63,120	●
520/560	50.7	63	12.5	210	178	M12	2.4	63,210	●

Guhring no.	**4144**
Standard	**Guhring std.**
Flute	**without**
Discount group	**114**
Techn. data page	**141**

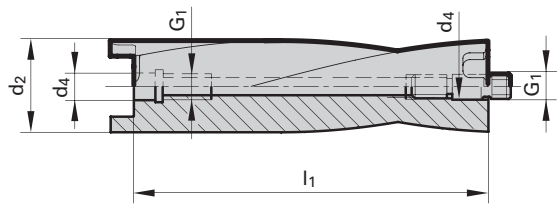




for holder size	d2 mm	HSK-A d3 mm	d4 mm	l1 mm	G1	kg	Code no.	Availability
600/650	40	63	24	135	M14	1.6	63,135	●
600/650	40	63	24	240	M14	2.6	63,240	●
700-800	48	80	30	160	M16	2.8	80,160	●
700-800	48	80	30	290	M16	4.5	80,290	●
850-950	58	100	38	180	M16	4.8	100,180	●
850-950	58	100	38	330	M16	7.8	100,330	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

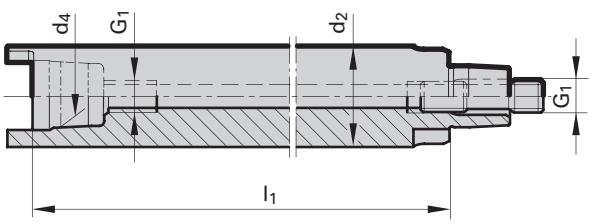
Guhring no.	4148
Standard	Guhring std.
Flute	15° spiral
Discount group	114
Techn. data page	139





for holder size	d2 mm	d4 mm	l1 mm	G1	kg	Code no.	Availability
400-490	38.7	10.5	150	M10	0.8	10,150	●
520/560	50.7	12.5	180	M12	1.7	12,180	●

Guhring no.	4149
Standard	Guhring std.
Flute	without
Discount group	114
Techn. data page	141

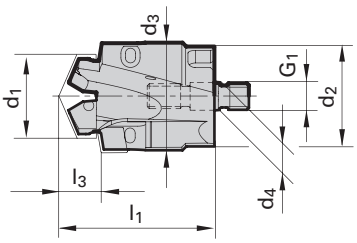




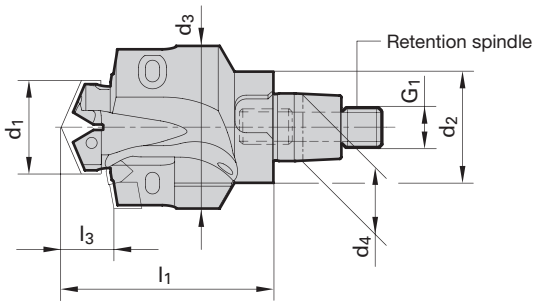
for holder size	d2 mm	d4 mm	l1 mm	G1	kg	Code no.	Availability
600/650	40	24	210	M14	1.9	40,210	●
700-800	48	30	255	M16	3.3	48,255	●
850-950	58	38	300	M16	5.7	58,300	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

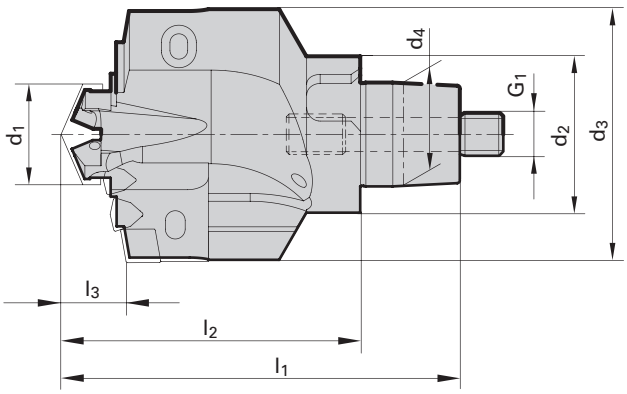
Guhring no.	**4150**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	**143**











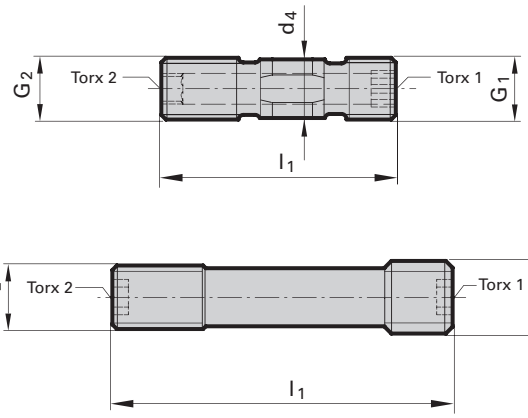


for holder size	d1 mm	Cartridge with index. inserts	d2 mm	d3 mm	d4 mm	l1 mm	l2 mm	l3 mm	G1	kg	Code no.	Availability
400	27	1	38.7	38.7	10.5	–	60	14	M10	0.20	40,043	●
430	30	1	38.7	41.7	10.5	–	60	15	M10	0.22	43,046	●
460	28	1	38.7	44.7	10.5	–	60	15	M10	0.22	46,049	●
490	31	1	38.7	47.7	10.5	–	60	16	M10	0.24	49,052	●
520	34	1	50.7	50.7	12.5	–	70	18	M12	0.39	52,056	●
560	27	2	50.7	54.5	12.5	–	70	17	M12	0.41	56,060	●
600	32	2	40.0	58.5	24.0	99	75	18	M14	0.63	60,065	●
650	32	2	40.0	63.5	24.0	104	80	19	M14	0.73	65,070	●
700	32	2	48.0	68.5	30.0	115	85	20	M16	0.98	70,075	●
750	32	3	48.0	73.5	30.0	130	100	23	M16	1.21	75,080	●
800	32	3	48.0	78.5	30.0	130	100	23	M16	1.24	80,085	●
850	34	3	58.0	83.5	38.0	142	105	21	M16	1.70	85,090	●
900	32	3	58.0	88.5	38.0	147	110	25	M16	1.90	90,095	●
950	34	3	58.0	93.5	38.0	147	110	23	M16	2.10	95,100	●

C TiCN · Cb Carbo · D Cristall · F FIRE/nanoFIRE · P AlCrN · S TiN · S+ TiN+ · M MolyGlide · Y Signum

Retention spindles (Torx-Screws)

Guhring no.	**4164**
Standard	**Guhring std.**
Discount group	

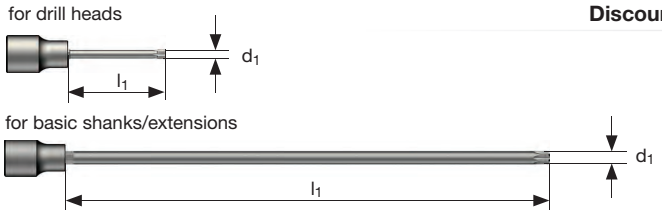




für Träger-Größe	d4 mm	l1 mm	Torx 1	Torx 12	G1	G2	Code no.	Availability
400-490	10.5	38	T40	T30	M10	M10x1	40,052	●
520/560	12.5	45	T45	T30	M12	M12x1	52,060	●
600/650	–	55	T45	T45	M14	M14x1	60,070	●
700-800	–	65	T45	T45	M16	M14x1	70,085	●
850-950	–	75	T45	T45	M16	M14x1	85,100	●

Torx driver sockets (retention spindles)

Guhring no.	**4188**
Discount group	**114**



suitable for	Torx d1	l1 mm	Code no.	Availability
drill heads	T30	60	30,060	●
basic shanks/ extensions	T30	210	30,210	●
	T40	180	40,180	●
drill heads	T45	105	45,105	●
basic shanks/ extensions	T45	300	45,300	●

Torque key

Guhring no.	**4915**
Discount group	**114**

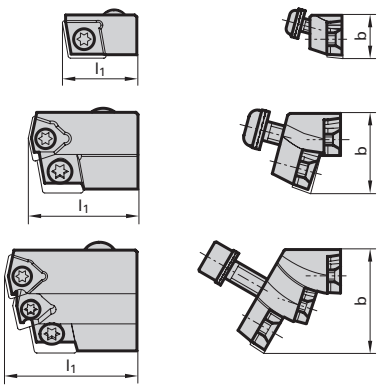


suitable for	Type	Drive	l1 mm	Torque Nm	Code no.	Availability
drill heads, basic shanks and extensions	C	1/2" ■	480	20-200	200,00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

Cartridges for indexable inserts

Guhring no.	**4160**
Standard	**Guhring std.**
Discount group	**114**
Techn. data page	**139**

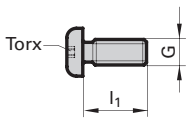




for holder size	for insert no.	b mm	l1 mm	Code no.	Availability
400/430	1	11,0	19.5	40,046	●
460-520	1	14,0	23.6	46,056	●
560/600	2	18,2	25.4	56,065	●
650	2	21,0	25.4	65,070	●
700	2	23,9	29.4	70,075	●
750	3	23,3	35.5	75,080	●
800/850	3	26,0	39.0	80,090	●
900/950	3	30,2	39.0	90,100	●

Clamping screws for interchangeable inserts

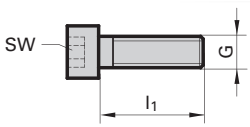
Guhring no.	**4189**
Discount group	**114**



for holder size	l1 mm	G	Torx	Code no.	Availability
400/430	9.4	M3.5	T10	3,500	●
460-520	10.0	M4	T15	4,000	●
560 / 600 / 650	12.0	M4.5	T15	4,500	●

Fastening screw for cartridges

Guhring no.	**4907**
Standard	**DIN EN ISO 4762**
Discount group	**114**

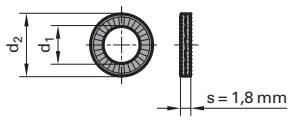


for holder size	l1 mm	G	SW	Code no.	Availability
700	16	M5	SW4	5,161	●
750	14	M6	SW5	6,140	●
800/850	16	M6	SW5	6,161	●
900/950	20	M6	SW5	6,201	●

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Serrated lock washers (Nord-Lock®)

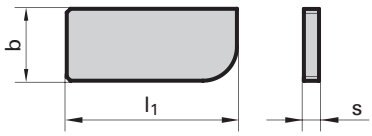
Guhring no.	**4104**
Standard	**Guhring std.**
Discount group	**114**



for holder size	d1 mm	d2 mm	Code no.	Availability
400/430	3,9	7,6	3,500	●
460-520	4,4	7,6	4,000	●
560	5,4	9,0	5,000	●
700	5,4	9,0	5,000	●
750-950	6,5	10,8	6,000	●

Distance piece (sets)

Guhring no.	**4168**
Standard	**Guhring std.**
Discount group	**114**

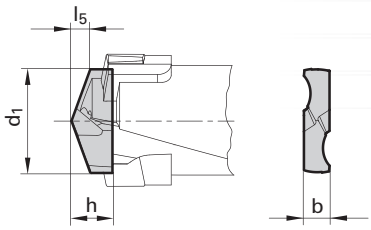


for holder size	l1 mm	b mm	thickness and quantity (2x) s mm	Code no.	Availability
400/430	18,5	8,5	0,5/1,0/1,5	40,046	●
460-520	22,5	9,5	0,5/1,0/1,5/2,0	46,056	●
560 / 600 / 650	22,5	11,0	0,5/1,0/1,5/2,0	56,070	●
700	26,5	11,5	0,5/1,0/1,5/2,0	70,075	●
750	33,0	13,5	0,5/1,0/1,5/2,0	75,080	●
800/850	36,5	13,5	0,5/1,0/1,5/2,0	80,090	●
900/950	36,0	15,0	0,5/1,0/1,5/2,0	90,100	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

Central interchangeable inserts

Guhring no.	2747	1047	2485
Standard	Guhring std.	Guhring std.	Guhring std.
Tool material	Solid carbide	Solid carbide	Solid carbide
Carbide grade	K	K/P	K/P
Surface finish	○	S	F
Discount group	141	141	141
Techn. data page	142	142	142

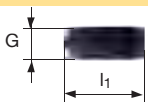




for insert size	d1 h7 mm	l5 mm	b mm	h mm	Availability		
400/560	27.00	4.9	7.3	11.6	●	●	●
460	28.00	5.1	7.3	11.6	●	●	●
430	30.00	5.5	8.5	13.6	●	●	●
490	31.00	5.6	8.5	13.6	●	●	●
600-800/900	32.00	5.8	8.5	13.6	●	●	●
520 / 850 / 950	34.00	6.2	8.5	13.6	●	●	●

Clamping screws for central interchangeable inserts

Guhring no.	1071
Discount group	140



for insert size	G	l1 mm	Torx	Code no.	Availability
400/460/560	M4x0.5	9.00	T8	4,000	●
430/490/600-950	M4.5x0.5	10.00	T8	4,500	●

Torque key

Guhring no.	4915
Discount group	114



Type	Drive	l1 mm	Torque Nm	Code no.	Availability
A	1/4“	160	1-5	5,001	●

Torx-Bits

Guhring no.	4917
Discount group	140



for Torx	Drive	l1 mm	Code no.	Availability
T8	1/4“ ⬢	25	8,000	●

Torx Screwdriver

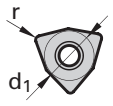
Guhring no.	1612
Discount group	140

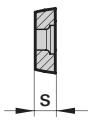


for Torx	Code no.	Availability
T8	8,001	●

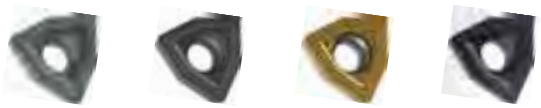
Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Indexable inserts LTT (internal)



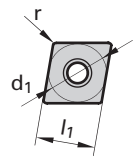


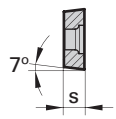
Guhring no.	4170	4171	4172	4173
Standard	Guhring std.	Guhring std.	Guhring std.	Guhring std.
Tool material	Solid carbide	Solid carbide	Solid carbide	Solid carbide
Carbide grade	N10	K10	P25	P40
Surface finish	○	○	S	A
Discount group	142	142	142	142
Techn. data page	142	142	142	142



Insert size / Größe	Insert description	d1 mm	r mm	s mm	Code no.	Availability			
05	LTT05T304	8.0	0.4	3.80	53,040	●			●
05	LTT05T308	8.0	0.8	3.80	53,080		●	●	
06	LTT06T304	10.0	0.4	3.80	63,040	●			●
06	LTT06T308	10.0	0.8	3.80	63,080		●	●	

CCHX indexable inserts (external)





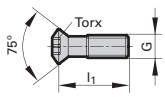
Guhring no.	4179	4180	4181	4182
Standard	Guhring std.	Guhring std.	Guhring std.	Guhring std.
Tool material	Solid carbide	Solid carbide	Solid carbide	Solid carbide
Carbide grade	N15	K10	P25	M35
Surface finish	○	S	S	S
Discount group	142	142	142	142
Techn. data page	142	142	142	142

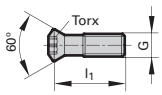


Insert size / Größe	Insert description	d1 mm	r mm	s mm	l1 mm	Code no.	Availability			
09	CCHX09T308	9.525	0.8	3.97	9.35	93,080	●	●	●	●
12	CCHX120408	12.700	0.8	4.76	12.50	124,080	●	●	●	●

Clamping screws with 75°/60° countersink head

Guhring no.	4166	6128
Coutersink angle	75°	60°
Discount group	114	122





for insert size	for holder size	Insert no.	l1 mm	G	Torx size	Code no.	Availability	
05	500/600	2	7.4	M2.5	T8	2,500	●	
05	750-850	4	7.4	M2.5	T8	2,500	●	
06	650/700	2	7.3	M3.5	T10	3,500	●	
06	900/950	4	7.3	M3.5	T10	3,500	●	
09	400/430	2	7.3	M3.5	T10	3,500	●	
09	560-650, 750	2	7.3	M3.5	T10	3,500	●	
12	460-520, 700	2	7.5	M4.5	T15	4,501		●
12	800-950	2	7.5	M4.5	T15	4,501		●

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA



EXCLUSIVELINE

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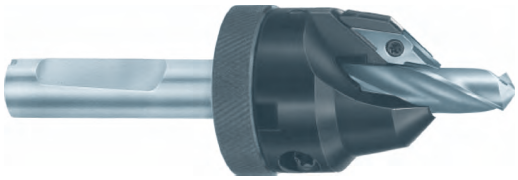
FR 90 chamfer collar

Techn. data page 133

Guhring no.

Discount group



Size	Ø-range	d1	d2	d3	d4	l1	l2	l4	l5	G	M
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1	5.0	5.0	27	8	30.0	27.5	23.8	37	49	M5	12x1
2	>5- 6.0		28	9	30.0	27.5	23.8			M5	12x1
3	>6- 7.0	6.8	29	10	30.0	27.5	23.8	37	49	M5	12x1
4	>7- 8.0		30	11	30.0	27.5	23.8			M5	12x1
5	>8- 9.0	8.5	31	13	34.0	31.7	27.3	41	53	M5	18x1
6	>9- 10.0		32	14	34.0	31.7	27.3			M5	18x1
7	>10-11.0	10.2	33	15	34.0	32.1	27.3	41	53	M5	18x1
8	>11-12.0		34	16	34.0	32.1	27.3			M5	18x1
10	>13-14.0	14.0	38	19	40.0	37.6	31.8	47	59	M6	24x1,5
11	>14-15.0		39	20	40.0	37.6	31.8			M6	24x1,5
12	>15-16.0	15.5	40	21	40.0	37.6	31.8	47	59	M6	24x1,5
13	>16-17.0		42	23	43.0	43.5	36.8			M6	30x1,5
14	>17-18.0		43	24	43.0	43.5	36.8			M6	30x1,5

Indexable inserts

Guhring no.	1156	1056
Standard	Guhring std.	Guhring std.
Tool material	Solid carbide	Solid carbide
Carbide grade	K	K/P
Surface finish	○	Ⓢ
Discount group	142	142



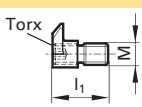


Ø-range	Code no.	Availability	
>4-12,0	4,012	●	●
>12-20,0	12,020	●	●

Adjusting element

Guhring no. 4072

Discount group 140



pour size	M	Torx	l1 mm	Code no.	Availability
1-14	M4	T8	9.0	4,010	●

Clamping piece

Guhring no. 1055

Discount group 140



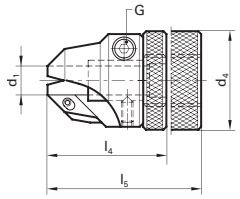
Ø-range d1	G	Code no.	Availability
>4-12.0	M2.5	4,012	●
>12-20.0	M2.5	12,020	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ AlTiN SuperA

Complete

1052

140

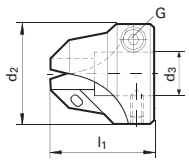


Code no.	Availability
1,050	❍
3,068	●
5,085	❍
7,102	●
10,140	❍
12,155	❍

Collars

145

140

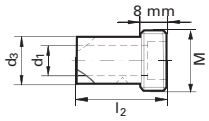


Code no.	Availability
1,050	❍
2,060	❍
3,070	❍
4,080	❍
5,090	❍
6,100	❍
7,110	❍
8,120	❍
10,140	❍
11,150	❍
12,160	❍
13,170	❍
14,180	❍

Clamp. sleeves

1053

140

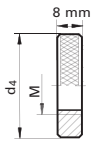


Code no.	Availability
1,050	❍
3,068	❍
5,085	❍
7,102	❍
10,140	❍
12,155	❍

Adjustment rings

1054

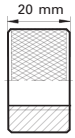
140



Code no. Größe 8	Availability
4,080	❍
4,080	❍
4,080	❍
4,080	❍
8,080	❍
8,080	❍
8,080	❍
8,080	❍
12,080	❍
12,080	❍
12,080	❍
14,080	❍
14,080	❍

1054

140



Code no. Größe 20	Availability
4,200	❍
4,200	❍
4,200	❍
4,200	❍
8,200	❍
8,200	❍
8,200	❍
8,200	❍
12,200	❍
12,200	❍
12,200	❍
14,200	❍
14,200	❍

Screwdriver

Guhring no. **1612**

Discount group **140**



pour size	pour Torx	Code no.	Availability
1-14	T8	8,000	●

Clamping screw

Guhring no. **1072**

Discount group **140**



pour size	G	l1 mm	Torx/SW	Code no.	Availability
1-14	M2.5	6.0	T8	2,500	●
1-14	M5	15.0	SW4	5,000	●
1-14	M6	16.0	SW5	6,000	●

T-handle hexagonal spanner

Guhring no. **4912**

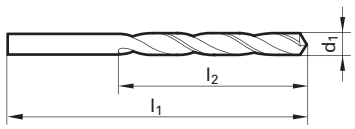
Discount group **114**



SW	Code no.	Availability
4	4,000	●
5	5,000	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.200		19.00	2.50	● ● ● ●
0.210		19.00	2.50	● ○
0.220		19.00	2.50	● ○
0.230		19.00	2.50	●
0.240		19.00	2.50	● ○ ○
0.250		19.00	3.00	● ● ● ○
0.260		19.00	3.00	●
0.270		19.00	3.00	● ○
0.280		19.00	3.00	● ○ ○
0.290		19.00	3.00	● ○ ○
0.300		19.00	3.00	● ● ● ● ○
0.310		19.00	4.00	● ●
0.320		19.00	4.00	● ○ ●
0.330		19.00	4.00	● ○
0.340		19.00	4.00	● ○ ○ ● ○
0.350		19.00	4.00	● ● ● ●
0.360		19.00	4.00	● ○ ○
0.370		19.00	4.00	● ○
0.380		19.00	4.00	●
0.390		20.00	5.00	● ○ ○
0.400	1/64	20.00	5.00	● ● ● ● ○ ○
0.410		20.00	5.00	● ○ ○ ● ○
0.415		20.00	5.00	○
0.420		20.00	5.00	● ○ ○ ○
0.430		20.00	5.00	● ○ ○
0.440		20.00	5.00	● ○ ○
0.450		20.00	5.00	● ● ● ● ● ○
0.460		20.00	5.00	● ● ○ ●
0.470		20.00	5.00	● ● ○
0.480		20.00	5.00	● ● ○ ○
0.490		22.00	6.00	● ○ ○
0.500		22.00	6.00	● ● ● ● ● ○
0.510		22.00	6.00	● ○ ○
0.520		22.00	6.00	● ● ● ○
0.525		22.00	6.00	○
0.530		22.00	6.00	● ● ○ ○ ○
0.540		24.00	7.00	● ● ○
0.550		24.00	7.00	● ● ● ● ●
0.560		24.00	7.00	● ○ ○ ○

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

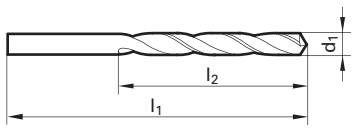
240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
○	>Ø 2,36	>Ø 2,36	○	S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147



Availability									
●									
●						❍			
●									
●									
●									
●									
●									
●									
●									
●						❍			
●						❍			
●						❍			
●									
●									
●						❍			
●									
●									
●						❍			

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.570		24.00	7.00	● ● ● ●
0.575		24.00	7.00	
0.580		24.00	7.00	● ● ❍
0.590		24.00	7.00	● ❍ ❍
0.600		24.00	7.00	● ● ● ● ● ●
0.610		26.00	8.00	● ● ● ● ❍
0.620		26.00	8.00	● ● ● ● ❍ ❍
0.630		26.00	8.00	● ❍
0.640		26.00	8.00	● ❍ ● ● ●
0.650		26.00	8.00	● ● ● ● ●
0.660		26.00	8.00	● ● ● ❍ ● ❍
0.670		26.00	8.00	● ● ● ❍
0.675		28.00	9.00	❍
0.680		28.00	9.00	● ● ● ❍
0.690		28.00	9.00	● ❍ ❍
0.700		28.00	9.00	● ● ● ● ● ●
0.710		28.00	9.00	● ● ● ● ❍
0.720		28.00	9.00	● ● ● ❍ ❍ ●
0.730		28.00	9.00	● ● ● ❍ ●
0.740		28.00	9.00	● ● ● ❍ ❍
0.750		28.00	9.00	● ● ● ● ● ❍
0.760		30.00	10.00	● ● ❍
0.770		30.00	10.00	● ● ❍ ❍
0.775		30.00	10.00	❍
0.780		30.00	10.00	● ● ❍ ❍
0.790	1/32	30.00	10.00	● ● ● ● ❍
0.800		30.00	10.00	● ● ● ● ● ●
0.810		30.00	10.00	● ● ● ● ● ●
0.820		30.00	10.00	● ● ❍ ❍
0.825		30.00	10.00	❍
0.830		30.00	10.00	● ● ●
0.840		30.00	10.00	● ● ● ● ❍
0.850		30.00	10.00	● ● ● ● ● ❍
0.860		32.00	11.00	● ❍ ● ● ❍ ❍
0.870		32.00	11.00	● ● ❍ ●
0.880		32.00	11.00	● ● ❍ ❍ ❍
0.890		32.00	11.00	● ● ● ❍
0.900		32.00	11.00	● ● ● ● ● ❍
0.910		32.00	11.00	● ● ● ●

❍ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

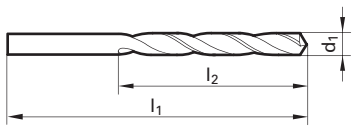
240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	>Ø 2,36	>Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147



Availability									
●				●		❍			
	●			●		●			
				●					
				❍					
				●					
						❍			
				●		❍			
	●			●		●			
	●			●					
				●					
				●		❍			
				●					
	●			●		●			
				●					
				●					
				●					
				●					
	●			●		❍			

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.920		32.00	11.00	● ● ●
0.930		32.00	11.00	● ● ●
0.940		32.00	11.00	● ○
0.950		32.00	11.00	● ● ● ● ● ○
0.960		34.00	12.00	● ● ● ●
0.970		34.00	12.00	● ● ● ● ○ ○
0.980		34.00	12.00	● ○ ● ○
0.990		34.00	12.00	● ● ● ● ○
1.000		34.00	12.00	● ● ● ● ● ●
1.010		34.00	12.00	● ● ○
1.020		34.00	12.00	● ● ● ● ○ ○
1.030		34.00	12.00	● ● ●
1.040		34.00	12.00	● ● ● ○
1.050		34.00	12.00	● ● ● ● ● ○
1.060		34.00	12.00	● ● ●
1.070		36.00	14.00	● ● ● ● ○
1.080		36.00	14.00	● ● ● ●
1.090		36.00	14.00	● ○
1.100		36.00	14.00	● ● ● ● ● ●
1.110		36.00	14.00	● ○ ○
1.120		36.00	14.00	● ● ● ● ○ ○
1.130		36.00	14.00	● ○ ● ○
1.140		36.00	14.00	● ● ○
1.150		36.00	14.00	● ● ● ● ● ●
1.160		36.00	14.00	● ● ○
1.165		36.00	14.00	○
1.170		36.00	14.00	● ● ○
1.180		36.00	14.00	● ● ○ ●
1.190	3/64	38.00	16.00	● ● ● ●
1.200		38.00	16.00	● ● ● ● ● ●
1.210		38.00	16.00	● ○ ● ○ ●
1.220		38.00	16.00	● ● ● ● ● ○
1.230		38.00	16.00	● ● ○
1.240		38.00	16.00	● ○ ○
1.250		38.00	16.00	● ● ● ● ● ○
1.260		38.00	16.00	● ○
1.270		38.00	16.00	● ● ● ● ●
1.280		38.00	16.00	● ● ● ○
1.290		38.00	16.00	● ● ○

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	>Ø 2,36	>Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

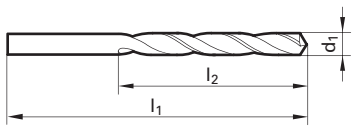


Availability

				●		❍			
	●			●		●			
	●			●					
	●	●		●	●	●		●	●
	●			●					
	●			●	●	❍			
	●			●		●			
	●			●	●	❍			
	●			●	●	❍			
	●			●		●		●	❍
				●		❍			
				●					
	●			●	●	❍			
	●			●	●	❍			
	●			●	●	●		●	
	●			●					
	❍								
	●			●					
	●			●	●	●			
				❍					
				●					

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36	○	○	>Ø 6,00	○	○
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
1.300		38.00	16.00	● ● ● ● ● ○
1.305		38.00	16.00	
1.310		38.00	16.00	● ○
1.320		38.00	16.00	● ● ● ○ ○
1.330		40.00	18.00	● ● ●
1.340		40.00	18.00	●
1.350		40.00	18.00	● ● ● ●
1.360		40.00	18.00	●
1.370		40.00	18.00	● ●
1.380		40.00	18.00	● ● ● ○ ○
1.390		40.00	18.00	● ●
1.400		40.00	18.00	● ● ● ● ● ●
1.410		40.00	18.00	● ○
1.420		40.00	18.00	● ● ● ● ●
1.430		40.00	18.00	● ● ● ●
1.440		40.00	18.00	● ● ○
1.450		40.00	18.00	● ● ● ● ● ●
1.460		40.00	18.00	●
1.465		40.00	18.00	○
1.470		40.00	18.00	● ● ●
1.480		40.00	18.00	● ● ○ ○
1.485		40.00	18.00	
1.490		40.00	18.00	● ● ○
1.500		40.00	18.00	● ● ● ● ● ●
1.510		43.00	20.00	● ● ●
1.520		43.00	20.00	● ● ● ○ ○ ○
1.530		43.00	20.00	● ● ● ○
1.540		43.00	20.00	● ○ ● ○
1.550		43.00	20.00	● ● ● ● ● ○
1.560		43.00	20.00	● ○
1.570		43.00	20.00	● ● ○
1.580		43.00	20.00	● ○ ○ ○
1.590	1/16	43.00	20.00	● ● ○ ●
1.600		43.00	20.00	● ● ● ● ● ○
1.610		43.00	20.00	● ● ○ ○
1.620		43.00	20.00	● ● ● ○
1.630		43.00	20.00	● ● ○ ○ ○
1.640		43.00	20.00	● ●
1.650		43.00	20.00	● ● ● ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

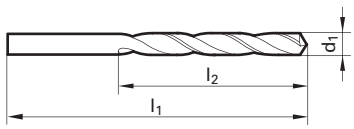
240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	◔ >Ø 2,36	◔ >Ø 2,36	○	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓕ	Ⓕ
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147



Availability									
	● ○	●		●	●	●	○	●	●
	●			● ● ○	●	○			
	●	●		●	●				
	●	●		●	●	●	○	●	
				● ●		○			
	● ○	●		● ●	●	○			
				● ●					
		○ ○		●					
	●	●		●	●	●	●	●	●
	● ● ●			● ● ●	●	○			
	● ●	●		● ● ○	●	○	○		
	● ● ●	○ ●		● ●	●	● ●	○		
	● ● ● ●	●		● ● ● ●	● ● ●	○	○		○
	●	●		● ●	●	○	○		

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





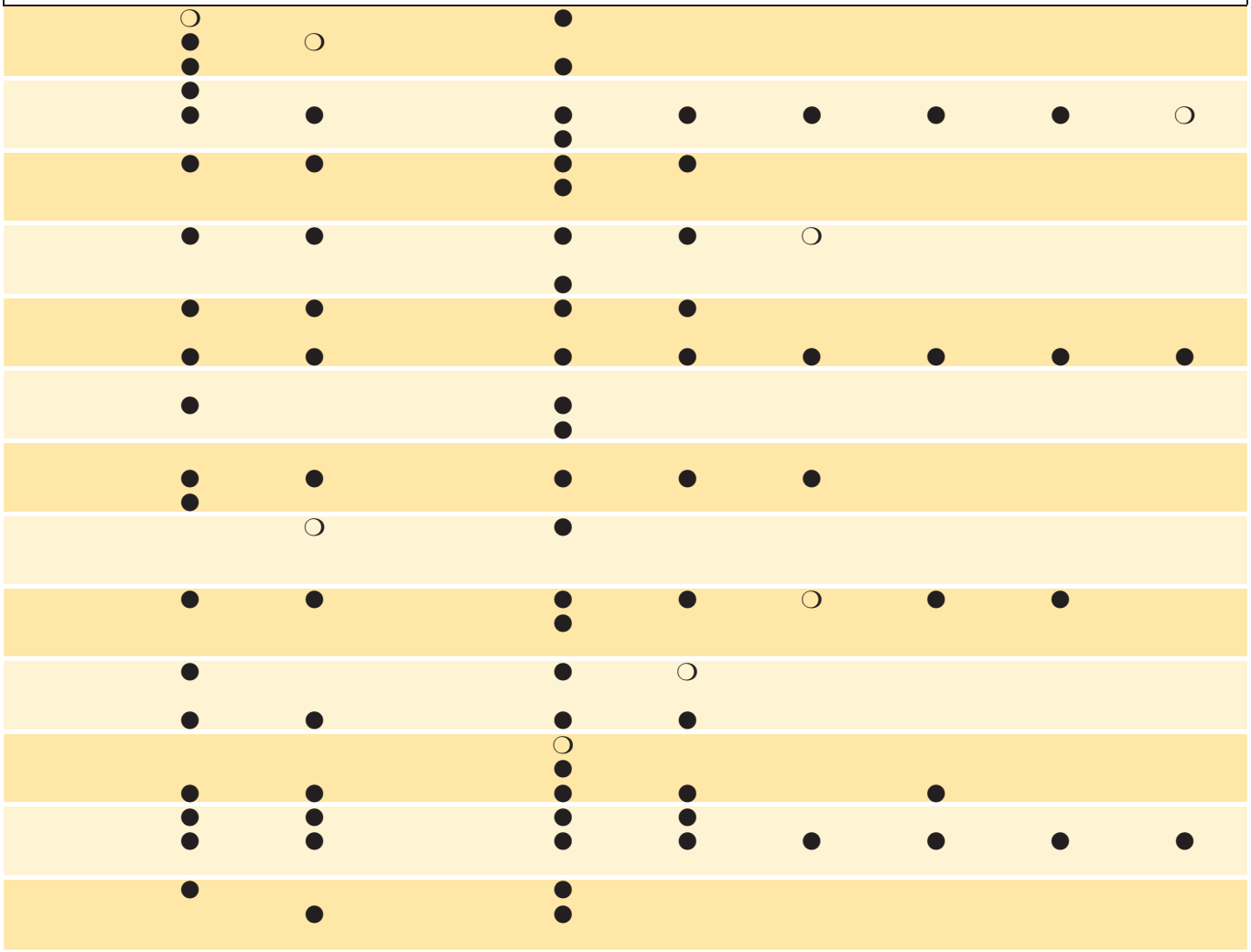
d1 mm	d1 inch	l1 mm	l2 mm	Availability
1.660		43.00	20.00	● ● ●
1.670		43.00	20.00	● ● ● ○
1.680		43.00	20.00	● ○ ● ●
1.690		43.00	20.00	●
1.700		43.00	20.00	● ● ● ● ● ○
1.710		46.00	22.00	● ○
1.720		46.00	22.00	● ● ● ○
1.730		46.00	22.00	● ● ○ ○
1.740		46.00	22.00	● ○
1.750		46.00	22.00	● ● ● ● ● ○
1.760		46.00	22.00	● ○
1.770		46.00	22.00	● ● ○
1.780		46.00	22.00	● ● ○ ● ●
1.790		46.00	22.00	● ○
1.800		46.00	22.00	● ● ● ● ● ●
1.810		46.00	22.00	● ●
1.820		46.00	22.00	● ● ● ● ○
1.830		46.00	22.00	● ● ●
1.840		46.00	22.00	● ○
1.850		46.00	22.00	● ● ● ● ● ○
1.860		46.00	22.00	● ○
1.870		46.00	22.00	● ● ●
1.880		46.00	22.00	● ○
1.890		46.00	22.00	● ○
1.900		46.00	22.00	● ● ● ● ● ○
1.910		49.00	24.00	●
1.920		49.00	24.00	● ● ○ ○
1.930		49.00	24.00	● ● ○ ○
1.940		49.00	24.00	● ○
1.950		49.00	24.00	● ● ● ● ○ ○
1.960		49.00	24.00	● ○ ○
1.970		49.00	24.00	● ○ ○
1.980	5/64	49.00	24.00	● ● ● ● ○
1.990		49.00	24.00	●
2.000		49.00	24.00	● ● ● ● ● ●
2.010		49.00	24.00	● ● ●
2.020		49.00	24.00	● ○ ●
2.030		49.00	24.00	● ● ● ●
2.040		49.00	24.00	● ● ● ○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
	>Ø 2,36	>Ø 2,36		S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

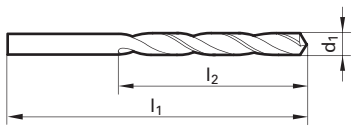


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36	○	○	>Ø 6,00	○	○
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.050		49.00	24.00	● ● ● ● ●
2.060		49.00	24.00	● ● ● ○ ○
2.070		49.00	24.00	● ●
2.080		49.00	24.00	● ○ ● ●
2.090		49.00	24.00	●
2.100		49.00	24.00	● ● ● ● ●
2.110		49.00	24.00	●
2.120		49.00	24.00	● ● ● ○
2.130		53.00	27.00	●
2.140		53.00	27.00	● ○
2.150		53.00	27.00	● ● ● ● ○ ●
2.170		53.00	27.00	●
2.180		53.00	27.00	● ● ●
2.200		53.00	27.00	● ● ● ● ● ○
2.210		53.00	27.00	●
2.220		53.00	27.00	● ● ●
2.230		53.00	27.00	● ● ●
2.240		53.00	27.00	● ○ ○
2.250		53.00	27.00	● ● ● ● ○ ●
2.260		53.00	27.00	● ●
2.270		53.00	27.00	● ● ● ○
2.280		53.00	27.00	● ○
2.290		53.00	27.00	● ○
2.300		53.00	27.00	● ● ● ● ● ●
2.320		53.00	27.00	● ● ● ○ ○ ○
2.330		53.00	27.00	●
2.340		53.00	27.00	● ○
2.350		53.00	27.00	● ● ● ● ● ○
2.360		53.00	27.00	● ○
2.370		57.00	30.00	● ○
2.380	3/32	57.00	30.00	● ● ○ ● ○ ○
2.390		57.00	30.00	● ○
2.400		57.00	30.00	● ● ● ● ●
2.420		57.00	30.00	● ○ ○
2.430		57.00	30.00	●
2.440		57.00	30.00	●
2.450		57.00	30.00	● ● ● ● ● ○
2.460		57.00	30.00	●
2.470		57.00	30.00	● ● ○ ○

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	◔ >Ø 2,36	◔ >Ø 2,36	○	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓕ	Ⓕ
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

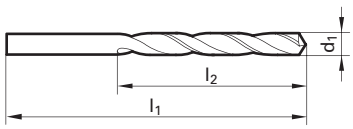


Availability

	●	●		●	●	●			
	○	○		●	●				
	●	●		●	●	○	○	●	●
	●	●		●	●	○			
	●			●	○	○			
	●	●		●	●		○	○	●
	●	●		●	●		○		
	●	●		●	●	●	●	●	
	●								
	●	●		●	●				
	●	○	○	●	●	○			
	●	●		●	●	○	○		
	●	●	●	●	●	●	●	●	●
	●								
	●			●	●				
	●			●	●	●			

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.480		57.00	30.00	● ● ○
2.490		57.00	30.00	● ● ○
2.500		57.00	30.00	● ● ● ● ● ●
2.510		57.00	30.00	●
2.520		57.00	30.00	● ● ●
2.530		57.00	30.00	● ● ● ● ● ○
2.540		57.00	30.00	●
2.550		57.00	30.00	● ● ● ● ● ○
2.570		57.00	30.00	● ● ○ ● ○
2.580		57.00	30.00	● ●
2.590		57.00	30.00	○
2.600		57.00	30.00	● ● ● ● ● ●
2.610		57.00	30.00	●
2.620		57.00	30.00	● ○
2.630		57.00	30.00	●
2.640		57.00	30.00	● ● ●
2.650		57.00	30.00	● ● ● ● ● ●
2.660		61.00	33.00	● ○
2.670		61.00	33.00	● ●
2.680		61.00	33.00	● ○
2.700		61.00	33.00	● ● ● ● ● ○
2.710		61.00	33.00	● ○ ○
2.720		61.00	33.00	●
2.730		61.00	33.00	● ● ●
2.750		61.00	33.00	● ● ● ● ● ○
2.760		61.00	33.00	●
2.780	7/64	61.00	33.00	● ● ● ●
2.790		61.00	33.00	●
2.800		61.00	33.00	● ● ● ● ● ○
2.820		61.00	33.00	● ● ● ○
2.830		61.00	33.00	● ● ●
2.840		61.00	33.00	●
2.850		61.00	33.00	● ● ● ○
2.870		61.00	33.00	● ●
2.880		61.00	33.00	● ●
2.900		61.00	33.00	● ● ● ● ● ●
2.910		61.00	33.00	● ○
2.920		61.00	33.00	●
2.930		61.00	33.00	● ● ○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
○	>Ø 2,36	>Ø 2,36	○	S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

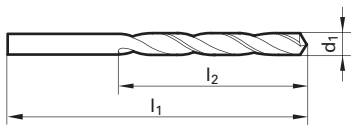


Availability

●	○		●	●		●		●	
●	●		●	●		●	○		
●	●	●	●	●					
●	●	○	●	●	○	○			
●	●	○	●	●		●	●	●	
●	●	○	●	●		○			
●	●		●	●					
●	●	●	●	●		●	●	●	
●		○	●	●		○			
●	●	○	●	●		●			
●	●	○	●	●		○	○		
●	●	○	●	●	○	●	●	●	●
●		○	●	●		○			
●	●	○	●	●		○			
●	●	●	●	●		●		○	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36	○	○	>Ø 6,00	○	○
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.940		61.00	33.00	●
2.950		61.00	33.00	● ● ● ● ○
2.960		61.00	33.00	●
2.970		61.00	33.00	● ● ○ ●
2.980		61.00	33.00	●
2.990		61.00	33.00	●
3.000		61.00	33.00	● ● ● ● ● ●
3.010		65.00	36.00	● ●
3.020		65.00	36.00	● ● ○ ○
3.030		65.00	36.00	● ● ● ○ ●
3.040		65.00	36.00	● ○
3.050		65.00	36.00	● ● ● ● ● ○
3.060		65.00	36.00	● ○
3.070		65.00	36.00	● ● ○ ○ ●
3.080		65.00	36.00	● ○
3.100		65.00	36.00	● ● ● ● ● ●
3.120		65.00	36.00	● ●
3.130		65.00	36.00	● ●
3.150		65.00	36.00	● ● ● ● ●
3.160		65.00	36.00	● ○
3.170	1/8	65.00	36.00	● ● ● ● ○ ○
3.175		65.00	36.00	○
3.180		65.00	36.00	● ○
3.200		65.00	36.00	● ● ● ● ● ●
3.220		65.00	36.00	● ● ●
3.230		65.00	36.00	●
3.240		65.00	36.00	○
3.250		65.00	36.00	● ● ● ● ● ○
3.260		65.00	36.00	● ● ○ ●
3.270		65.00	36.00	○
3.280		65.00	36.00	○ ○
3.300		65.00	36.00	● ● ● ● ● ●
3.320		65.00	36.00	● ○ ●
3.330		65.00	36.00	○ ○
3.340		65.00	36.00	○ ○
3.350		65.00	36.00	● ● ● ● ●
3.360		70.00	39.00	○
3.370		70.00	39.00	● ○
3.380		70.00	39.00	● ○ ○ ○ ●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
○	>Ø 2,36	>Ø 2,36	○	S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

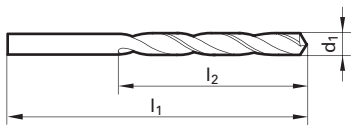


Availability

	●	●	❍	●	●	●	●		
	●								
●	●	●	●	●	●	●	●	●	●
		❍		●					
	●			●					
	●	●	●	●	●	❍	●		
	●								
●	●	●		●	●	●	●	●	●
	●	●		●					
	●	●	●	●	●	❍	❍		
		❍							
●	●	●	●	●	●	●	●	●	●
	●			●	●				
	●	●	●	●	●	❍	❍		
	●								

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.400		70.00	39.00	● ● ● ● ● ●
3.410		70.00	39.00	○
3.420		70.00	39.00	●
3.430		70.00	39.00	○
3.450		70.00	39.00	● ● ● ● ○ ●
3.470		70.00	39.00	○ ● ○
3.500		70.00	39.00	● ● ● ● ● ●
3.520		70.00	39.00	● ● ○
3.530		70.00	39.00	○
3.550		70.00	39.00	● ● ● ● ○ ○
3.570	9/64	70.00	39.00	● ● ○ ○
3.580		70.00	39.00	○
3.600		70.00	39.00	● ● ● ● ○
3.610		70.00	39.00	○
3.620		70.00	39.00	● ○
3.630		70.00	39.00	○
3.650		70.00	39.00	● ● ● ● ○ ●
3.660		70.00	39.00	●
3.680		70.00	39.00	●
3.700		70.00	39.00	● ● ● ● ● ○
3.710		70.00	39.00	○
3.720		70.00	39.00	○
3.725		70.00	39.00	●
3.730		70.00	39.00	● ○ ○
3.750		70.00	39.00	● ● ● ○ ○
3.800		75.00	43.00	● ● ● ● ○
3.820		75.00	43.00	● ○
3.830		75.00	43.00	○ ● ○
3.850		75.00	43.00	● ● ● ○
3.860		75.00	43.00	● ○
3.870		75.00	43.00	○ ○ ○
3.880		75.00	43.00	●
3.900		75.00	43.00	● ● ● ● ○ ●
3.910		75.00	43.00	● ● ○ ○
3.920		75.00	43.00	● ○
3.930		75.00	43.00	●
3.940		75.00	43.00	○
3.950		75.00	43.00	● ● ● ○ ○
3.960		75.00	43.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	◔ >Ø 2,36	◔ >Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

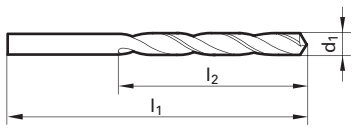


Availability

●	●	●	●	●	●	●	○	●	●
	●	●	●	●	●		○		
●	●	●	○	●	●	●		●	●
	●	●	●	●					
	●	●	○	●	●	○	○		
	○								
●	●	●	●	●	●		○	●	●
		●	●	●	●				
	●	●	○	●	●				
●	●					●			
	●	●	●	●	●	○	●	○	●
		○		●					
	●	●	○	●	●				
●	●	●	○	●	●	●	●	●	
	●		○	●	●				
	●		●	●	○	○			

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36	○	○	>Ø 6,00	○	○
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.970	5/32	75.00	43.00	● ● ● ○ ○
3.980		75.00	43.00	●
3.990		75.00	43.00	●
4.000		75.00	43.00	● ● ● ● ● ●
4.010		75.00	43.00	●
4.020		75.00	43.00	● ●
4.030		75.00	43.00	● ● ○ ○
4.040		75.00	43.00	● ● ● ○
4.050		75.00	43.00	● ● ● ● ● ○
4.060		75.00	43.00	● ○
4.070		75.00	43.00	● ● ●
4.080		75.00	43.00	●
4.090		75.00	43.00	● ●
4.100		75.00	43.00	● ● ● ● ● ○
4.120		75.00	43.00	● ○
4.130		75.00	43.00	○
4.150		75.00	43.00	● ● ● ●
4.200		75.00	43.00	● ● ● ● ● ●
4.210		75.00	43.00	
4.220		75.00	43.00	● ● ○
4.250		75.00	43.00	● ● ● ● ○ ○
4.270		80.00	47.00	●
4.280		80.00	47.00	○ ○
4.300		80.00	47.00	● ● ● ● ● ●
4.320		80.00	47.00	●
4.350		80.00	47.00	● ● ● ○ ○
4.370	11/64	80.00	47.00	● ● ○ ○ ○
4.380		80.00	47.00	○
4.390		80.00	47.00	● ○ ○
4.400		80.00	47.00	● ● ● ● ● ●
4.420		80.00	47.00	● ○
4.450		80.00	47.00	● ● ○ ○
4.500		80.00	47.00	● ● ● ● ● ●
4.520		80.00	47.00	● ○ ○
4.530		80.00	47.00	● ○
4.550		80.00	47.00	● ● ○ ○
4.570		80.00	47.00	● ○
4.600		80.00	47.00	● ● ● ● ● ○
4.620		80.00	47.00	● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
	>Ø 2,36	>Ø 2,36		S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

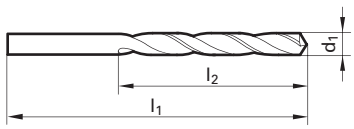


Availability

○	●		○	●	●	○			
	●	○		●	●				
●	●	●	●	●	●	●	●	●	●
	●	●		●	●				
	●			●	●				
				○					
	●			●	○				
●	●	●	○	●	●	●	●	●	
	●			●					
●	●	●	●	●	●	●		●	●
	○								
	●			●	●		○		
	●	●	●	●	●				
●	●	●	○	●	●	●	●	●	●
		●		●					
	●	●	○	●	●	○			
	●		○	●	●				
●	●		○	●	●	○	●	●	○
	●	●		●	●				
●	●	●	●	●	●	●	●	●	
	●		○	●					
	●		○	●	●				
●	●	●	○	●	●			○	
	●	●	○	●	●				

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
4.650		80.00	47.00	● ● ● ○ ○
4.680		80.00	47.00	○
4.700		80.00	47.00	● ● ● ● ○
4.720		80.00	47.00	○
4.730		80.00	47.00	●
4.750		80.00	47.00	● ● ● ○ ○
4.760	3/16	86.00	52.00	● ● ● ●
4.770		86.00	52.00	○
4.800		86.00	52.00	● ● ● ● ●
4.830		86.00	52.00	●
4.850		86.00	52.00	● ● ● ● ○ ○
4.860		86.00	52.00	●
4.870		86.00	52.00	○
4.900		86.00	52.00	● ● ● ● ○
4.920		86.00	52.00	● ○
4.930		86.00	52.00	○ ○
4.950		86.00	52.00	● ● ○ ● ○
4.970		86.00	52.00	● ○
4.980		86.00	52.00	● ●
5.000		86.00	52.00	● ● ● ● ● ●
5.020		86.00	52.00	● ○
5.025		86.00	52.00	○
5.030		86.00	52.00	● ●
5.050		86.00	52.00	● ● ● ●
5.060		86.00	52.00	● ○
5.080		86.00	52.00	● ○
5.100		86.00	52.00	● ● ● ● ● ●
5.110		86.00	52.00	● ●
5.120		86.00	52.00	●
5.150		86.00	52.00	● ● ○
5.160	13/64	86.00	52.00	● ● ● ○
5.180		86.00	52.00	● ○
5.190		86.00	52.00	○
5.200		86.00	52.00	● ● ● ● ● ●
5.220		86.00	52.00	● ○
5.250		86.00	52.00	● ● ● ● ○
5.260		86.00	52.00	○
5.300		86.00	52.00	● ● ● ● ●
5.310		93.00	57.00	● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
○	>Ø 2,36	>Ø 2,36	○	S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

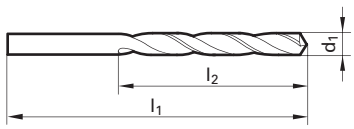


Availability

●	●	●	○	●		●			
	●			●					
●	●	●	○	●	●	○	○		
●	●		●	●	●	○	●	○	●
	●	○	○	●	●				
●	●	○	○ ○	●	●	●	○	●	●
	●		○	●					
●	●	○	○	●	●	●	●	●	●
	●			●					
●	●	●		●	●	○			
●	●		○	●	●	○	●	●	●
	●			●					
	●	●		●	●	○	○		
●	●	●	○	●	●	●	●	●	
	●			●					
●	●	●	○	●	●	●	○	●	
	●			●					

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
5.350		93.00	57.00	●
5.400		93.00	57.00	● ● ● ● ○ ●
5.410		93.00	57.00	●
5.420		93.00	57.00	○
5.450		93.00	57.00	● ● ● ○ ○
5.500		93.00	57.00	● ● ● ● ● ●
5.520		93.00	57.00	○
5.550		93.00	57.00	● ● ○
5.560	7/32	93.00	57.00	● ● ○ ● ○
5.600		93.00	57.00	● ● ● ● ○
5.610		93.00	57.00	● ○
5.620		93.00	57.00	○
5.630		93.00	57.00	○
5.650		93.00	57.00	● ○ ○
5.700		93.00	57.00	● ● ● ●
5.750		93.00	57.00	● ● ● ●
5.790		93.00	57.00	● ●
5.800		93.00	57.00	● ● ● ● ● ○
5.850		93.00	57.00	● ● ○ ○ ○
5.900		93.00	57.00	● ● ● ○ ● ●
5.920		93.00	57.00	●
5.930		93.00	57.00	●
5.940		93.00	57.00	● ○
5.950	15/64	93.00	57.00	● ● ○ ○ ○
5.960		93.00	57.00	○
5.970		93.00	57.00	●
5.980		93.00	57.00	●
5.990		93.00	57.00	○
6.000		93.00	57.00	● ● ● ● ● ●
6.030		101.00	63.00	● ○
6.040		101.00	63.00	●
6.050		101.00	63.00	● ● ● ● ○
6.080		101.00	63.00	●
6.100		101.00	63.00	● ● ● ● ● ○
6.120		101.00	63.00	○
6.130		101.00	63.00	○
6.150		101.00	63.00	● ● ● ○ ○
6.170		101.00	63.00	●
6.200		101.00	63.00	● ● ● ● ● ●

○ bright ◯ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	>Ø 2,36	>Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

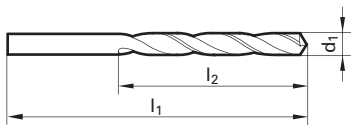


Availability

●	● ● ●	●		● ●	● ●	● ○	○	○	○
●	● ●	●		● ●	●	●	●	●	
	● ●	● ●		● ●	● ●	○			
●	● ● ●	● ●	○	● ●	● ●	●	●	●	○
●	● ●	●		● ●	●	○	○	○	●
● ○	● ● ●	● ○		● ● ●	● ● ●		●	●	●
● ○	● ● ●	● ○		● ● ●	●	●	○	○	
	● ●	●		○ ●	● ●	○			
●	●	●		●	●	●	●	●	●
○	● ●			● ●	● ●				
●	●	●		●	●	●		●	●
●	● ●	●		● ●	● ●	●		●	○

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
6.210		101.00	63.00	○
6.220		101.00	63.00	●
6.250		101.00	63.00	● ● ● ○
6.300		101.00	63.00	● ● ● ● ○
6.350	1/4	101.00	63.00	● ● ○ ● ○
6.380		101.00	63.00	○
6.400		101.00	63.00	● ● ● ● ●
6.450		101.00	63.00	● ● ○ ○ ○
6.500		101.00	63.00	● ● ● ● ●
6.530		101.00	63.00	● ● ● ○
6.550		101.00	63.00	● ○ ○ ○
6.570		101.00	63.00	○
6.600		101.00	63.00	● ● ● ● ○
6.630		101.00	63.00	● ○ ○
6.650		101.00	63.00	● ● ○
6.700		101.00	63.00	● ● ● ● ○ ○
6.750	17/64	109.00	69.00	● ● ● ○
6.800		109.00	69.00	● ● ● ● ○
6.810		109.00	69.00	
6.830		109.00	69.00	
6.850		109.00	69.00	● ●
6.880		109.00	69.00	○
6.900		109.00	69.00	● ● ● ● ○ ○
6.910		109.00	69.00	○
6.950		109.00	69.00	● ○ ○
7.000		109.00	69.00	● ● ● ● ● ●
7.020		109.00	69.00	
7.030		109.00	69.00	● ○
7.040		109.00	69.00	● ○
7.050		109.00	69.00	● ● ○
7.070		109.00	69.00	●
7.100		109.00	69.00	● ● ● ● ○ ○
7.130		109.00	69.00	○
7.140	9/32	109.00	69.00	● ● ○ ○
7.150		109.00	69.00	● ○
7.200		109.00	69.00	● ● ● ● ●
7.220		109.00	69.00	○ ○
7.250		109.00	69.00	● ● ● ○
7.290		109.00	69.00	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	◐ >Ø 2,36	◐ >Ø 2,36	○	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓕ	Ⓕ
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

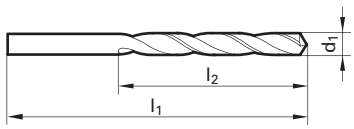


Availability

	●	◐		●	●	◐			
●	●	●		●	●	◐		●	
●	●	●		●	●		◐	●	
	●	●		●	●		●	●	
	●			●	●				
●	●	●		●	●	●		◐	◐
	●			●	●				
●	●	◐		●	●	●			
	●	●		●	●				
				●					
	●	●		●	●	◐		◐	
●	●	●		●	●	●	◐	●	●
	●			●	●				
	◐								
●	●			●	●		◐	●	◐
	●	●		●	●	◐	◐		
●	●	●		●	●	◐		●	●
	●			●					
	◐								

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
7.300		109.00	69.00	● ● ● ● ●
7.320		109.00	69.00	●
7.350		109.00	69.00	● ● ● ❍
7.370		109.00	69.00	●
7.400		109.00	69.00	● ● ● ● ● ●
7.450		109.00	69.00	● ❍ ❍
7.490		109.00	69.00	❍ ● ❍
7.500		109.00	69.00	● ● ● ● ❍
7.520		117.00	75.00	❍
7.540	19/64	117.00	75.00	● ● ❍ ❍
7.550		117.00	75.00	● ❍ ❍
7.580		117.00	75.00	
7.600		117.00	75.00	● ● ● ❍ ❍
7.650		117.00	75.00	●
7.670		117.00	75.00	●
7.700		117.00	75.00	● ● ● ●
7.750		117.00	75.00	● ● ❍
7.800		117.00	75.00	● ● ● ● ❍
7.850		117.00	75.00	● ● ❍
7.900		117.00	75.00	● ● ● ● ❍ ❍
7.940	5/16	117.00	75.00	● ● ● ●
7.950		117.00	75.00	●
7.980		117.00	75.00	●
8.000		117.00	75.00	● ● ● ● ● ●
8.030		117.00	75.00	● ❍
8.050		117.00	75.00	● ● ❍ ❍
8.100		117.00	75.00	● ● ● ● ●
8.130		117.00	75.00	●
8.150		117.00	75.00	●
8.200		117.00	75.00	● ● ● ● ●
8.250		117.00	75.00	● ● ❍
8.300		117.00	75.00	● ● ● ● ❍
8.330	21/64	117.00	75.00	● ● ❍
8.350		117.00	75.00	●
8.400		117.00	75.00	● ● ● ❍
8.430		117.00	75.00	●
8.450		117.00	75.00	● ❍ ●
8.500		117.00	75.00	● ● ● ● ●
8.550		125.00	81.00	●

❍ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

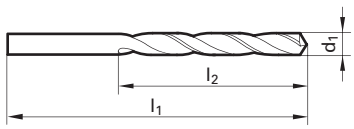
240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
○	>Ø 2,36	>Ø 2,36	○	S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147



Availability									
	●	●		●	●	❍		❍	❍
	● ●	●		● ● ●	● ●	❍	❍	❍	❍
●	● ●	●		● ●	● ●	❍		●	
	●	❍		●	●	❍	❍		
	● ❍								
	●	❍		●	●			●	
	●	❍		●	●			●	
●	● ● ●	●		● ●	● ●			●	
●	●			●	●		❍		
	● ●	❍ ❍		● ●	● ●	❍ ❍		❍	❍
	●	●		●	●	●		●	●
	● ●	●		● ●	❍ ●			●	❍
●	●			●	●			❍	
❍ ●	● ● ●	❍		● ● ●	●			❍	
●	● ●	●		● ●	● ●			●	❍
●	●	●		●	●	●	●	●	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36	○	○	>Ø 6,00	○	○
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	205	206	207	208	209	210
8.600		125.00	81.00	●	●	●	○	●	○
8.610		125.00	81.00	●			○		
8.650		125.00	81.00	●			○		
8.700		125.00	81.00	●	●	●	●		●
8.730	11/32	125.00	81.00	●	●	○			
8.750		125.00	81.00	●	○	●			○
8.800		125.00	81.00	●	●	●		○	
8.840		125.00	81.00	○		○			
8.850		125.00	81.00	●					
8.900		125.00	81.00	●	●	●			
8.950		125.00	81.00	●					
9.000		125.00	81.00	●	●	●	●	●	
9.050		125.00	81.00	●			○		
9.090		125.00	81.00	●		○			
9.100		125.00	81.00	●	●	●	●	●	
9.130	23/64	125.00	81.00	●	●	●	○		
9.150		125.00	81.00	●					
9.200		125.00	81.00	●	●	●	●		●
9.250		125.00	81.00	●	●	●		○	
9.300		125.00	81.00	●	●	●	●		
9.340		125.00	81.00	●		○			
9.350		125.00	81.00	●					○
9.400		125.00	81.00	●	●	●	○	○	○
9.450		125.00	81.00	●					
9.500		125.00	81.00	●	●	●	●	○	○
9.510		133.00	87.00	○					
9.520	3/8	133.00	87.00	●	●	●			
9.550		133.00	87.00						
9.560		133.00	87.00						
9.570		133.00	87.00	○					
9.580		133.00	87.00	●					
9.600		133.00	87.00	●	●	●	○		
9.650		133.00	87.00	●					○
9.700		133.00	87.00	●	●	●	○		○
9.750		133.00	87.00	●			○	○	○
9.800		133.00	87.00	●	●	●		○	○
9.850		133.00	87.00	●				○	
9.900		133.00	87.00	●	●	●	●		
9.920	25/64	133.00	87.00	●	○	●	○		

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
	>Ø 2,36	>Ø 2,36		S	S	S	S	F	F
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

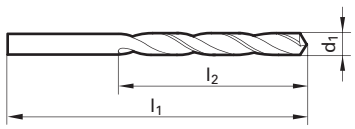


Availability

●	● ●			● ●	● ●		❍	❍	
●	● ● ●	● ●		● ● ●	●	❍		●	❍
●	● ●	●		● ● ●	● ●	❍		●	●
❍ ●	● ●	●		● ●	● ●			● ●	❍
● ●	● ● ●			● ● ●	● ●	❍			❍
	● ●	❍		● ●	● ❍	❍	❍		
❍ ❍	● ● ●			● ● ●	● ●				
❍	● ●	❍		●	●	❍		●	❍
●	● ●	●		● ●	● ●	❍	❍ ❍	●	
	● ●			❍ ●					
●	● ●	❍		● ●	●	❍		❍	❍
❍	● ● ●	●		● ● ●	● ●	●	❍	❍ ●	●
	● ●			● ●	● ●	●		●	

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
9.950		133.00	87.00	●
10.000		133.00	87.00	● ● ● ● ● ●
10.050		133.00	87.00	● ●
10.060		133.00	87.00	
10.080		133.00	87.00	● ● ❍
10.100		133.00	87.00	● ● ● ●
10.150		133.00	87.00	● ●
10.200		133.00	87.00	● ● ● ● ● ●
10.250		133.00	87.00	● ● ●
10.260		133.00	87.00	● ❍
10.300		133.00	87.00	● ● ❍
10.320	13/32	133.00	87.00	● ●
10.350		133.00	87.00	●
10.400		133.00	87.00	● ●
10.450		133.00	87.00	●
10.490		133.00	87.00	❍
10.500		133.00	87.00	● ● ● ● ● ●
10.550		133.00	87.00	
10.600		133.00	87.00	● ●
10.700		142.00	94.00	● ● ❍
10.720	27/64	142.00	94.00	● ● ❍
10.750		142.00	94.00	● ❍ ❍
10.800		142.00	94.00	● ● ●
10.900		142.00	94.00	● ● ❍
11.000		142.00	94.00	● ● ● ●
11.050		142.00	94.00	●
11.100		142.00	94.00	● ● ❍ ❍
11.110	7/16	142.00	94.00	● ● ❍
11.150		142.00	94.00	●
11.200		142.00	94.00	● ● ●
11.250		142.00	94.00	● ❍
11.300		142.00	94.00	●
11.350		142.00	94.00	❍
11.400		142.00	94.00	● ● ❍
11.500		142.00	94.00	● ● ● ● ● ❍
11.510	29/64	142.00	94.00	● ● ❍ ❍
11.520		142.00	94.00	●
11.600		142.00	94.00	● ❍
11.650		142.00	94.00	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	>Ø 2,36	>Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

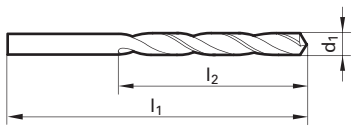


Availability

●	●	●		●	●	●		●	
●	●			●				❍	
●	●	●		●	●	❍	❍	❍	●
	●	●		●	●	❍		●	❍
	●	●		●				●	
●	●	❍		❍	●				
❍	●	●		●	●			❍	❍
❍	●	●		●		❍			
●	●			●	●	●		●	
❍	●	●		●	●			❍	
	●			●				●	
●	●			●	●	●		●	❍
	●			●	●				

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
11.700		142.00	94.00	● ● ●
11.750		142.00	94.00	● ○
11.800		142.00	94.00	● ● ●
11.900		151.00	101.00	● ○ ● ○
11.910	15/32	151.00	101.00	● ●
11.950		151.00	101.00	○
12.000		151.00	101.00	● ● ● ● ●
12.050		151.00	101.00	● ○
12.100		151.00	101.00	● ● ● ○ ●
12.150		151.00	101.00	○
12.200		151.00	101.00	● ● ● ○ ●
12.250		151.00	101.00	● ○ ○
12.300	31/64	151.00	101.00	● ● ● ○
12.400		151.00	101.00	●
12.500		151.00	101.00	● ● ● ● ○
12.600		151.00	101.00	● ● ○
12.650		151.00	101.00	●
12.700	1/2	151.00	101.00	● ● ● ○ ○
12.750		151.00	101.00	● ○ ○
12.800		151.00	101.00	● ● ○ ○ ○ ○
12.850		151.00	101.00	●
12.900		151.00	101.00	● ●
13.000		151.00	101.00	● ● ● ●
13.030		151.00	101.00	○
13.100	33/64	151.00	101.00	● ● ○
13.200		151.00	101.00	● ● ● ○
13.250		160.00	108.00	● ○
13.300		160.00	108.00	● ○
13.400		160.00	108.00	● ○
13.490	17/32	160.00	108.00	●
13.500		160.00	108.00	● ● ● ○
13.530		160.00	108.00	○
13.600		160.00	108.00	● ○
13.700		160.00	108.00	● ○
13.750		160.00	108.00	● ○
13.800		160.00	108.00	● ● ● ○
13.890	35/64	160.00	108.00	●
13.900		160.00	108.00	●
14.000		160.00	108.00	● ● ● ● ○

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	◐ >Ø 2,36	◐ >Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

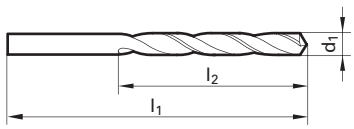


Availability

	●	❍	●					❍	❍
	●	❍	●		●			❍	
●	●		●		●	●			●
	●		●		●				●
	●	●	●						
	●	❍	●		●	❍			
	●	●	●		●	●			
	●		●		●				
❍	●		●		●			❍	
	●	❍	●					❍	
	●		●		●				
●	●		●		●			●	
	●		●		●				
❍	●		●		●				
	●		●			❍			
	●								
	●		●		●				
	●		●		●			●	

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36	○	○	>Ø 6,00	○	○
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





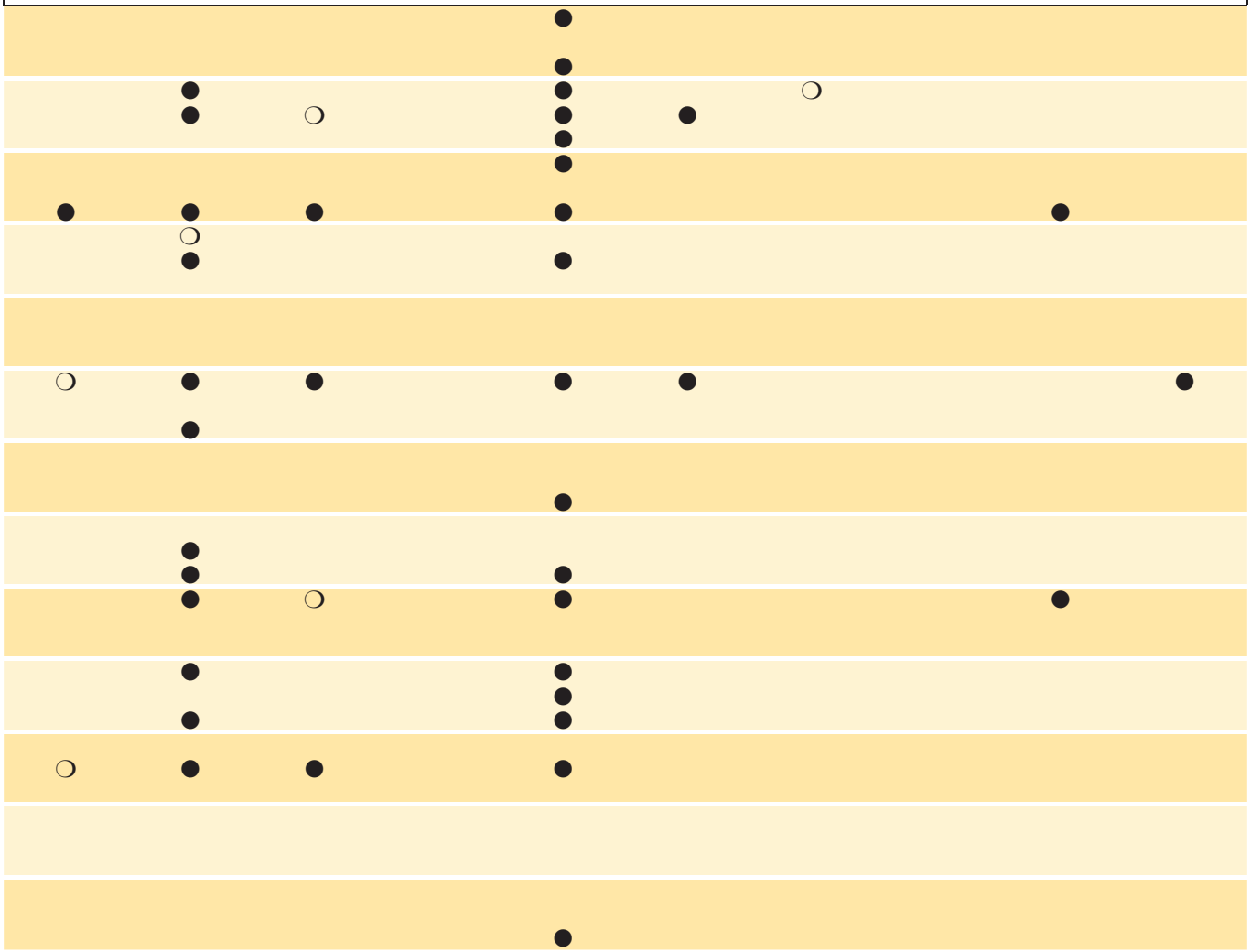
d1 mm	d1 inch	l1 mm	l2 mm	Availability					
14.100		169.00	114.00	●					
14.150		169.00	114.00				❍		
14.200		169.00	114.00	●				❍	
14.250		169.00	114.00	●					
14.290	9/16	169.00	114.00	●					
14.300		169.00	114.00	●				❍	
14.400		169.00	114.00	●				❍	
14.450		169.00	114.00	❍					
14.500		169.00	114.00	●	●	●		❍	●
14.600		169.00	114.00	●					
14.680	37/64	169.00	114.00	●					
14.700		169.00	114.00	●		❍	●		
14.750		169.00	114.00	●					
14.800		169.00	114.00	●			❍		
14.900		169.00	114.00	●			❍		
15.000		169.00	114.00	●	●	●	●		❍
15.050		178.00	120.00				❍		
15.080	19/32	178.00	120.00	●					
15.100		178.00	120.00	●	❍			❍	
15.200		178.00	120.00	●					
15.250		178.00	120.00	●					
15.300		178.00	120.00	●				❍	
15.400		178.00	120.00	●					
15.480	39/64	178.00	120.00	●					
15.500		178.00	120.00	●	●		●	❍	❍
15.600		178.00	120.00	●		●	❍		
15.700		178.00	120.00	●			❍		
15.750		178.00	120.00	●			❍		
15.800		178.00	120.00	●			❍		
15.870	5/8	178.00	120.00	●			❍		
15.900		178.00	120.00	●					
16.000		178.00	120.00	●	●	●	●	●	❍
16.100		184.00	125.00	●					
16.200		184.00	125.00	●					❍
16.250		184.00	125.00	●					
16.270	41/64	184.00	125.00	●					
16.300		184.00	125.00	●					
16.400		184.00	125.00	●					
16.500		184.00	125.00	●		●			

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	◔ >Ø 2,36	◔ >Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147

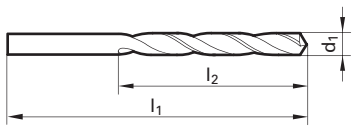


Availability



● TiCN ● Carbo ● Cristall ● FIRE/nanoFIRE ● AlCrN ● TiN ● TiN+ ● MolyGlide ● Signum

Guhring no.	205	206	207	208	209	210
Standard	DIN 338					
Tool material	HSS					
Surface	>Ø 2,36			>Ø 6,00		
Type	N	H	W	N	H	W
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	130	134	134	134	134	138
Techn. data page	144	144	144	144	144	145





d1 mm	d1 inch	l1 mm	l2 mm	Availability
16.600		184.00	125.00	●
16.670	21/32	184.00	125.00	●
16.700		184.00	125.00	●
16.750		184.00	125.00	●
16.800		184.00	125.00	●
16.900		184.00	125.00	●
17.000		184.00	125.00	● ● ● ❍ ❍
17.070	43/64	191.00	130.00	●
17.200		191.00	130.00	●
17.250		191.00	130.00	● ❍
17.300		191.00	130.00	● ❍
17.400		191.00	130.00	●
17.460	11/16	191.00	130.00	●
17.500		191.00	130.00	● ❍ ❍ ❍
17.600		191.00	130.00	● ❍
17.700		191.00	130.00	●
17.750		191.00	130.00	●
17.800		191.00	130.00	●
17.860	45/64	191.00	130.00	●
17.900		191.00	130.00	❍
18.000		191.00	130.00	● ● ● ● ❍ ❍
18.100		198.00	135.00	●
18.200		198.00	135.00	●
18.400		198.00	135.00	●
18.500		198.00	135.00	●
18.600		198.00	135.00	●
18.650	47/64	198.00	135.00	●
18.750		198.00	135.00	●
18.800		198.00	135.00	❍
19.000		198.00	135.00	● ● ❍
19.050	3/4	205.00	140.00	● ❍
19.100		205.00	140.00	●
19.200		205.00	140.00	●
19.250		205.00	140.00	●
19.500		205.00	140.00	● ❍ ❍
19.600		205.00	140.00	●
19.750		205.00	140.00	●
19.800		205.00	140.00	❍
20.000		205.00	140.00	● ● ● ● ❍ ❍

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

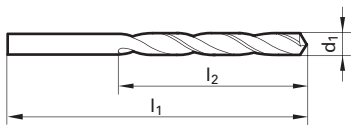
240	549	550	560	651	652	664	665	2456	2457
DIN 338									
HSS									
●	>Ø 2,36	>Ø 2,36	○	(S)	(S)	(S)	(S)	(F)	(F)
N	GT 100	GT 100	N	N	GT 100	N	GT 100	N	GT 100
right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
132	136	138	138	131	137	139	139	135	137
145	145	145	145	146	146	146	146	146	147



Availability									
				●					
				●					
				○					
				●					
				●					
				●					
				○ ●					

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00			>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.200		19.00	2.50	● ●
0.210		19.00	2.50	●
0.220		19.00	2.50	●
0.230		19.00	2.50	●
0.250		19.00	3.00	●
0.260		19.00	3.00	●
0.270		19.00	3.00	●
0.280		19.00	3.00	●
0.300		19.00	3.00	● ●
0.310		19.00	4.00	●
0.320		19.00	4.00	●
0.330		19.00	4.00	●
0.340		19.00	4.00	❍
0.350		19.00	4.00	●
0.360		19.00	4.00	● ●
0.370		19.00	4.00	●
0.380		19.00	4.00	● ❍
0.390		20.00	5.00	● ❍
0.400	1/64	20.00	5.00	● ●
0.410		20.00	5.00	●
0.420		20.00	5.00	●
0.430		20.00	5.00	●
0.440		20.00	5.00	● ●
0.450		20.00	5.00	● ●
0.460		20.00	5.00	●
0.470		20.00	5.00	●
0.480		20.00	5.00	● ●
0.490		22.00	6.00	●
0.500		22.00	6.00	● ❍ ● ●
0.510		22.00	6.00	❍
0.520		22.00	6.00	●
0.530		22.00	6.00	● ● ●
0.540		24.00	7.00	●
0.550		24.00	7.00	● ●
0.560		24.00	7.00	● ●
0.570		24.00	7.00	● ●
0.580		24.00	7.00	● ●
0.590		24.00	7.00	● ❍
0.600		24.00	7.00	● ❍ ● ●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

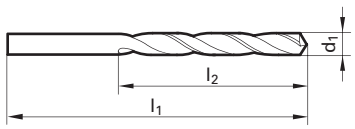
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
					●			●
								●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	305	308	605	608	622	657
0.610		26.00	8.00	●		●			
0.620		26.00	8.00	●	○				
0.630		26.00	8.00		○				
0.640		26.00	8.00	●		●			
0.650		26.00	8.00	●	○	●			●
0.660		26.00	8.00	●					
0.670		26.00	8.00	●					
0.680		28.00	9.00	●					
0.700		28.00	9.00	●	●	●			●
0.710		28.00	9.00	●		●			
0.720		28.00	9.00	●		●			
0.730		28.00	9.00	●					
0.740		28.00	9.00	●					
0.750		28.00	9.00	●	○	●			●
0.760		30.00	10.00	○		●			
0.770		30.00	10.00	●					
0.780		30.00	10.00	●	○				
0.790	1/32	30.00	10.00	●					
0.800		30.00	10.00	●	●	●			●
0.810		30.00	10.00	●		●			
0.820		30.00	10.00	●	○	●			
0.830		30.00	10.00	●		●			
0.840		30.00	10.00	●		●			
0.850		30.00	10.00	●		●			●
0.860		32.00	11.00	●		●			
0.870		32.00	11.00	●		●			
0.880		32.00	11.00	●		●			○
0.887		32.00	11.00			●			
0.890		32.00	11.00	●		●			
0.900		32.00	11.00	●		●			●
0.910		32.00	11.00	●	○	●			
0.920		32.00	11.00	●	○	●			●
0.930		32.00	11.00	●	●				
0.940		32.00	11.00	●		●			●
0.950		32.00	11.00	●	○	●			●
0.960		34.00	12.00	●					
0.970		34.00	12.00	●					
0.980		34.00	12.00	●	●	●			
0.990		34.00	12.00	●		●			

Availability

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

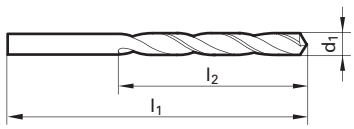
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
					●			
								●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00			>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	305	308	605	608	622	657
1.000		34.00	12.00	●	●	●		●	●
1.010		34.00	12.00	●					
1.020		34.00	12.00	●	●	●		❍	
1.025		34.00	12.00			❍			
1.030		34.00	12.00	●	❍				
1.040		34.00	12.00	●		❍		●	
1.050		34.00	12.00	●	❍	●		●	●
1.070		36.00	14.00	●		●		●	
1.080		36.00	14.00	●	❍	●			
1.090		36.00	14.00	●		●		●	
1.100		36.00	14.00	●	●	●		●	●
1.120		36.00	14.00	●					
1.130		36.00	14.00	●				●	
1.140		36.00	14.00	●		●			
1.150		36.00	14.00	●	❍	●		●	●
1.160		36.00	14.00	●		●			
1.170		36.00	14.00	●					
1.180		36.00	14.00	●	❍	●		●	●
1.190	3/64	38.00	16.00	●	●	●		●	●
1.200		38.00	16.00	●	●	●		●	●
1.210		38.00	16.00	●	❍	●			●
1.220		38.00	16.00	●		●			
1.230		38.00	16.00	●	❍	●			
1.250		38.00	16.00	●		●		●	●
1.260		38.00	16.00	❍					
1.270		38.00	16.00					●	
1.280		38.00	16.00	●					
1.290		38.00	16.00	●		●			
1.300		38.00	16.00	●	●	●	●	●	●
1.310		38.00	16.00	●					
1.320		38.00	16.00	●	❍	●	❍	●	❍
1.330		40.00	18.00	●	❍				
1.350		40.00	18.00	●	●	●	●	●	●
1.360		40.00	18.00	●					
1.370		40.00	18.00	●					
1.380		40.00	18.00	●					
1.390		40.00	18.00			●			●
1.400		40.00	18.00	●	●	●	●	●	●
1.410		40.00	18.00	●					

Availability

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

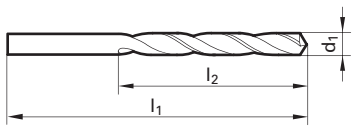
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●			●	●	●	●		●
●								
○								
●								
●								
●			●	●	●	●	○	●
●								
●								
●					○			
●			●	●	●	●	●	●
●			●	●	●	●	○	●
●								
●								
●			●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00			>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	305	308	605	608	622	657
1.420		40.00	18.00	●					
1.430		40.00	18.00	●	●			●	
1.440		40.00	18.00	●				●	
1.450		40.00	18.00	●	●	●		●	●
1.460		40.00	18.00	●		●			
1.470		40.00	18.00	●	○				
1.480		40.00	18.00	●	○				
1.490		40.00	18.00	●	○				
1.500		40.00	18.00	●	●	●		●	●
1.510		43.00	20.00	●	○	●		●	●
1.520		43.00	20.00	●	●	●			●
1.530		43.00	20.00	●		●			
1.540		43.00	20.00	●					
1.550		43.00	20.00	●	●	●		●	●
1.560		43.00	20.00	●					
1.570		43.00	20.00	●		●			
1.580		43.00	20.00	●					
1.590	1/16	43.00	20.00	●	●	●		●	●
1.600		43.00	20.00	●	●	●	●	●	●
1.610		43.00	20.00	●	○	●		●	●
1.620		43.00	20.00	●	○	●	○		●
1.630		43.00	20.00						
1.640		43.00	20.00	●			○		
1.650		43.00	20.00	●	●	●		●	●
1.660		43.00	20.00	●					
1.670		43.00	20.00	●					
1.680		43.00	20.00	●	○	●			
1.700		43.00	20.00	●	○	●	○	●	●
1.710		46.00	22.00	●					
1.720		46.00	22.00	●	○				
1.730		46.00	22.00	●		●			
1.740		46.00	22.00	●					
1.750		46.00	22.00	●	●	●			●
1.760		46.00	22.00	●					
1.780		46.00	22.00	●	○	●		●	●
1.790		46.00	22.00	●					
1.800		46.00	22.00	●	○	●	○	●	●
1.810		46.00	22.00	●					
1.820		46.00	22.00	●		●			

Availability

○ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

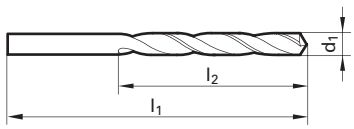
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●								
●								
●			●	●	●	●	●	●
●					○			
●								
●					●			●
●			●	●	●	●	●	●
●								
●					○			
●			●	●	●	●	●	●
●								
●			●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
1.830		46.00	22.00	● ●
1.840		46.00	22.00	●
1.850		46.00	22.00	● ● ● ● ●
1.860		46.00	22.00	●
1.900		46.00	22.00	● ● ● ❍ ● ●
1.910		49.00	24.00	●
1.920		49.00	24.00	●
1.930		49.00	24.00	● ● ● ●
1.950		49.00	24.00	● ● ● ❍ ● ●
1.960		49.00	24.00	● ❍
1.970		49.00	24.00	● ●
1.980	5/64	49.00	24.00	● ❍ ● ● ●
1.990		49.00	24.00	● ● ●
2.000		49.00	24.00	● ● ● ● ● ●
2.010		49.00	24.00	●
2.020		49.00	24.00	● ●
2.030		49.00	24.00	● ●
2.040		49.00	24.00	● ●
2.050		49.00	24.00	● ❍ ● ● ●
2.060		49.00	24.00	● ❍ ●
2.080		49.00	24.00	● ❍ ● ●
2.100		49.00	24.00	● ● ● ● ●
2.120		49.00	24.00	●
2.150		53.00	27.00	● ● ● ● ● ●
2.180		53.00	27.00	● ● ● ●
2.200		53.00	27.00	● ● ● ● ●
2.230		53.00	27.00	●
2.250		53.00	27.00	● ❍ ● ● ●
2.260		53.00	27.00	● ● ● ● ●
2.300		53.00	27.00	● ● ● ● ●
2.320		53.00	27.00	● ●
2.350		53.00	27.00	● ● ● ● ●
2.370		57.00	30.00	● ❍ ● ●
2.380	3/32	57.00	30.00	● ● ● ● ●
2.400		57.00	30.00	● ❍ ● ❍ ● ●
2.420		57.00	30.00	●
2.440		57.00	30.00	● ● ●
2.450		57.00	30.00	● ● ●
2.470		57.00	30.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

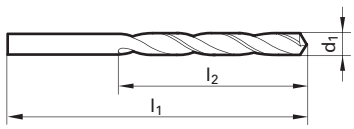
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●								
●			●	●	●	●	❍	●
●								
●					●			❍
●			●	●	●	●	●	●
●					❍			
●			●	●	●	●	●	●
●			●	●	●	●	●	●
●			●	●	❍ ●	●	●	●
●					❍			
●			●	●	●	●		●
●								

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.490		57.00	30.00	● ○ ●
2.500		57.00	30.00	● ● ● ● ● ●
2.520		57.00	30.00	● ○ ●
2.530		57.00	30.00	● ● ● ● ●
2.550		57.00	30.00	● ● ● ● ●
2.580		57.00	30.00	● ●
2.600		57.00	30.00	● ● ● ○ ● ●
2.640		57.00	30.00	● ○ ●
2.650		57.00	30.00	● ● ●
2.700		61.00	33.00	● ○ ● ● ●
2.710		61.00	33.00	● ○ ● ●
2.750		61.00	33.00	● ● ● ○ ● ●
2.780	7/64	61.00	33.00	● ● ● ● ●
2.790		61.00	33.00	● ○ ○ ●
2.800		61.00	33.00	● ● ● ○ ● ●
2.810		61.00	33.00	●
2.820		61.00	33.00	● ○ ● ● ●
2.850		61.00	33.00	● ● ●
2.870		61.00	33.00	● ○ ● ●
2.890		61.00	33.00	○
2.900		61.00	33.00	● ○ ● ● ●
2.920		61.00	33.00	●
2.950		61.00	33.00	● ○ ● ● ●
2.970		61.00	33.00	●
3.000		61.00	33.00	● ● ● ● ● ●
3.020		65.00	36.00	●
3.030		65.00	36.00	● ○ ●
3.050		65.00	36.00	● ○ ● ○ ● ●
3.100		65.00	36.00	● ○ ● ● ●
3.150		65.00	36.00	● ● ● ● ●
3.170	1/8	65.00	36.00	● ● ● ● ●
3.200		65.00	36.00	● ○ ● ● ●
3.250		65.00	36.00	● ● ● ●
3.260		65.00	36.00	● ● ● ●
3.300		65.00	36.00	● ● ● ● ● ●
3.320		65.00	36.00	○
3.330		65.00	36.00	○
3.350		65.00	36.00	● ○ ● ○ ●
3.400		70.00	39.00	● ○ ● ● ● ●

○ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

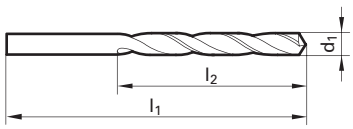
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●			●	●	●	●	●	●
●								
●			●	●	●	●		●
●			●	●	●	●	●	●
●					○			
●					●			○
●			●	●	●	●	●	●
●								
●			●	●	●	●	●	●
●								
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	○	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●		●	●	●	●	○	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.420		70.00	39.00	○
3.450		70.00	39.00	● ● ● ●
3.500		70.00	39.00	● ● ● ● ●
3.530		70.00	39.00	● ○
3.550		70.00	39.00	● ● ●
3.570	9/64	70.00	39.00	● ● ● ○
3.600		70.00	39.00	● ● ● ●
3.650		70.00	39.00	● ● ○ ● ●
3.660		70.00	39.00	● ○ ●
3.700		70.00	39.00	● ● ● ○ ● ●
3.730		70.00	39.00	● ●
3.750		70.00	39.00	● ● ●
3.790		75.00	43.00	○
3.800		75.00	43.00	● ● ● ● ●
3.850		75.00	43.00	●
3.860		75.00	43.00	● ○ ●
3.900		75.00	43.00	● ○ ● ○ ● ●
3.910		75.00	43.00	● ● ●
3.920		75.00	43.00	○
3.950		75.00	43.00	●
3.970	5/32	75.00	43.00	● ● ● ● ●
3.980		75.00	43.00	○ ●
3.990		75.00	43.00	● ○ ●
4.000		75.00	43.00	● ● ● ● ● ●
4.020		75.00	43.00	● ●
4.030		75.00	43.00	
4.040		75.00	43.00	● ○ ● ●
4.050		75.00	43.00	● ● ● ● ●
4.070		75.00	43.00	●
4.090		75.00	43.00	● ○ ●
4.100		75.00	43.00	● ● ● ●
4.120		75.00	43.00	●
4.150		75.00	43.00	● ○ ● ●
4.170		75.00	43.00	●
4.200		75.00	43.00	● ● ● ● ●
4.220		75.00	43.00	● ○ ● ●
4.250		75.00	43.00	● ● ● ○ ● ●
4.300		80.00	47.00	● ○ ● ○ ● ●
4.330		80.00	47.00	○

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150

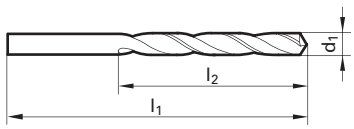


Availability

●	●	●	●	●	●	●	●	●
●	○		○		●			
●	○	○	●	●	●	●	○	●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	○	●
●	○	●			●			●
●	●	●	●	●	●	●	●	●
●	●	●						
●	●	○	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	○	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
4.350		80.00	47.00	○ ● ●
4.370	11/64	80.00	47.00	● ○ ○ ● ●
4.390		80.00	47.00	● ○ ●
4.400		80.00	47.00	● ● ● ○ ● ●
4.450		80.00	47.00	● ●
4.500		80.00	47.00	● ● ● ○ ● ●
4.550		80.00	47.00	● ● ●
4.570		80.00	47.00	● ○ ○ ●
4.600		80.00	47.00	● ● ● ●
4.620		80.00	47.00	● ○ ●
4.650		80.00	47.00	● ● ● ●
4.700		80.00	47.00	● ● ● ○ ● ●
4.750		80.00	47.00	● ● ●
4.760	3/16	86.00	52.00	● ● ● ● ●
4.790		86.00	52.00	○
4.800		86.00	52.00	● ○ ● ○ ● ●
4.830		86.00	52.00	○
4.850		86.00	52.00	● ● ●
4.900		86.00	52.00	● ● ● ○ ● ●
4.920		86.00	52.00	● ○ ●
4.950		86.00	52.00	●
4.980		86.00	52.00	● ●
5.000		86.00	52.00	● ● ● ● ● ●
5.020		86.00	52.00	●
5.030		86.00	52.00	●
5.050		86.00	52.00	● ● ●
5.060		86.00	52.00	● ○ ●
5.100		86.00	52.00	● ● ● ● ●
5.110		86.00	52.00	● ● ● ● ○
5.150		86.00	52.00	● ○
5.160	13/64	86.00	52.00	● ○ ● ● ●
5.180		86.00	52.00	● ○ ●
5.200		86.00	52.00	● ● ● ○ ● ●
5.220		86.00	52.00	● ● ●
5.250		86.00	52.00	● ● ●
5.300		86.00	52.00	● ● ● ● ●
5.310		93.00	57.00	● ○ ● ●
5.400		93.00	57.00	● ○ ● ○ ● ●
5.410		93.00	57.00	● ○ ○ ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

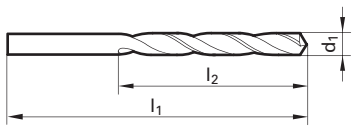
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●	❍	●			●			
●		❍	●	●	●	●		●
●	●	●	●	●	●	●	●	●
●		❍	●	●	●	●		●
●	●	❍	●	●	●	●	❍	●
●	❍	●			●			●
●	●	❍	●	●	●	●	●	●
●	● ❍	❍ ❍	●	●	●	●	●	●
●	❍ ●	❍ ●	●	●	●	●	●	●
●					❍			
●	●	●	●	●	●	●		●
●		●			●			●
●	●	●	●	●	●	●	●	●
●	●	❍	●	●	●	●		●
●	❍	●	●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
5.450		93.00	57.00	○ ●
5.500		93.00	57.00	● ● ●
5.550		93.00	57.00	● ○ ● ○
5.560	7/32	93.00	57.00	● ● ● ● ●
5.570		93.00	57.00	○
5.580		93.00	57.00	○
5.600		93.00	57.00	● ● ○ ● ●
5.610		93.00	57.00	● ○ ○ ● ●
5.650		93.00	57.00	●
5.700		93.00	57.00	● ○ ● ● ● ●
5.750		93.00	57.00	● ● ○
5.790		93.00	57.00	○ ●
5.800		93.00	57.00	● ● ● ○ ● ●
5.850		93.00	57.00	○
5.900		93.00	57.00	● ● ● ○ ● ●
5.940		93.00	57.00	○ ○ ●
5.950	15/64	93.00	57.00	● ○ ● ● ●
5.990		93.00	57.00	○
6.000		93.00	57.00	● ● ● ● ● ●
6.040		101.00	63.00	● ●
6.050		101.00	63.00	● ● ●
6.080		101.00	63.00	○
6.100		101.00	63.00	● ● ● ● ●
6.150		101.00	63.00	● ○ ●
6.200		101.00	63.00	● ● ● ● ●
6.250		101.00	63.00	● ○ ●
6.300		101.00	63.00	● ○ ● ○ ● ●
6.350	1/4	101.00	63.00	● ● ● ● ●
6.400		101.00	63.00	● ○ ● ● ●
6.450		101.00	63.00	● ○
6.500		101.00	63.00	● ● ● ● ●
6.530		101.00	63.00	● ○ ●
6.600		101.00	63.00	● ○ ● ○ ● ●
6.630		101.00	63.00	● ●
6.650		101.00	63.00	●
6.700		101.00	63.00	● ○ ● ● ●
6.750	17/64	109.00	69.00	● ○ ● ● ●
6.760		109.00	69.00	○
6.800		109.00	69.00	● ● ○ ● ●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

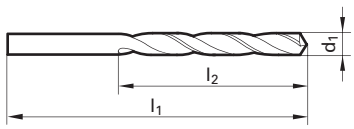
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●	●	●	●	●	●	●	●	●
●	●	●			●			
●		●	●	●	●	●	○	●
●	●	○	○	●	○	●	●	●
○								
●		●	●	●	●	●	●	●
●	●	○	●	●	●	●		●
●		○			○			●
●	●	●	●	●	●	●	●	●
●	●	○	●	●	●	●	●	●
●	●		●	●	●	●		●
●	●	○	●	●	●		●	●
●	○	●			●			●
●	○	○	●	●		●	●	●
●		●	●	●	●	●	●	●
●		●						
●	○	○	●	●	●	●	●	●
●	●	○	●	●	●	●	●	●
●					●			●
●	○		●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
6.850		109.00	69.00	●
6.900		109.00	69.00	● ● ○ ● ●
6.950		109.00	69.00	●
7.000		109.00	69.00	● ● ● ● ● ●
7.030		109.00	69.00	● ●
7.040		109.00	69.00	○
7.050		109.00	69.00	●
7.100		109.00	69.00	● ● ○ ● ●
7.140	9/32	109.00	69.00	● ○ ● ●
7.200		109.00	69.00	● ● ● ●
7.250		109.00	69.00	●
7.300		109.00	69.00	● ● ○ ● ●
7.370		109.00	69.00	● ○ ●
7.400		109.00	69.00	● ● ● ○ ● ●
7.450		109.00	69.00	●
7.490		109.00	69.00	○ ○ ●
7.500		109.00	69.00	● ○ ● ○ ● ●
7.540	19/64	117.00	75.00	● ○ ● ● ○
7.600		117.00	75.00	● ○ ● ○ ● ●
7.670		117.00	75.00	● ○ ●
7.700		117.00	75.00	● ○ ● ○ ● ●
7.750		117.00	75.00	● ●
7.800		117.00	75.00	● ● ○ ● ●
7.900		117.00	75.00	● ● ● ○ ● ●
7.940	5/16	117.00	75.00	● ● ● ●
8.000		117.00	75.00	● ● ● ● ● ●
8.030		117.00	75.00	● ○ ●
8.040		117.00	75.00	○
8.050		117.00	75.00	●
8.100		117.00	75.00	● ● ○ ● ●
8.150		117.00	75.00	●
8.200		117.00	75.00	● ● ● ●
8.250		117.00	75.00	●
8.300		117.00	75.00	● ● ● ● ●
8.330	21/64	117.00	75.00	● ○ ● ●
8.400		117.00	75.00	● ● ○ ● ●
8.430		117.00	75.00	● ○ ●
8.500		117.00	75.00	● ● ● ●
8.550		125.00	81.00	○ ○

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

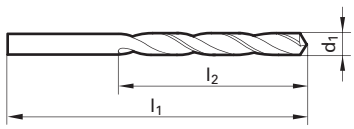
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●								
●	●	●	●	●		○	●	●
●		○	●	●	●			●
●		○		●	●	●	●	●
●	○	●	●	●	●	●	○	●
●		○	●	●	●	●	●	●
●		○		●	○		○	○
●		○	●	●		●	●	●
●	●	●	●	●	●	●	●	●
●	●	○	●	●	●	○	●	●
●								
●	○	○	●	●	●	●	●	●
●	○	○	●	●	●	●		●
●	○	○	●	●	●	●	○	○
●	●	●	●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00	○	○	>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
8.600		125.00	81.00	● ○ ● ● ● ●
8.610		125.00	81.00	● ○ ●
8.700		125.00	81.00	● ○ ● ● ●
8.730	11/32	125.00	81.00	● ○ ● ● ●
8.750		125.00	81.00	● ○
8.800		125.00	81.00	● ○ ● ○ ● ●
8.840		125.00	81.00	● ○ ●
8.900		125.00	81.00	● ● ● ●
9.000		125.00	81.00	● ● ● ● ●
9.090		125.00	81.00	○ ○ ○
9.100		125.00	81.00	● ○ ● ○ ● ●
9.130	23/64	125.00	81.00	● ○ ● ●
9.200		125.00	81.00	● ○ ● ○ ○ ●
9.250		125.00	81.00	●
9.300		125.00	81.00	● ○ ● ○ ● ●
9.340		125.00	81.00	● ○ ●
9.400		125.00	81.00	● ○ ● ● ●
9.500		125.00	81.00	● ● ● ○ ● ●
9.520	3/8	133.00	87.00	● ● ● ● ●
9.530		133.00	87.00	
9.580		133.00	87.00	○ ○ ○
9.600		133.00	87.00	● ○ ● ● ●
9.650		133.00	87.00	○
9.700		133.00	87.00	● ○ ● ● ●
9.750		133.00	87.00	●
9.800		133.00	87.00	● ● ● ● ●
9.850		133.00	87.00	●
9.900		133.00	87.00	● ○ ● ● ●
9.920	25/64	133.00	87.00	● ○ ○ ● ○
10.000		133.00	87.00	● ● ● ● ●
10.050		133.00	87.00	●
10.080		133.00	87.00	● ○ ●
10.100		133.00	87.00	● ● ● ●
10.200		133.00	87.00	● ○ ● ● ●
10.250		133.00	87.00	● ●
10.260		133.00	87.00	○ ○ ○
10.300		133.00	87.00	● ● ● ●
10.320	13/32	133.00	87.00	● ○ ● ● ●
10.400		133.00	87.00	● ● ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

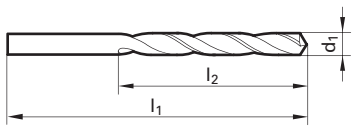
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●		●	●	●	●	●		●
●	○	○	●	●	●	●		●
●		○			●			●
●		●	●	●	●	●	●	●
	○	○	○	●			●	●
●	●	○	●	●	●	●	●	●
	○	○	●	●			●	●
●		○			○			○
●		○	●	●	●	○		●
●				●	●		○	●
●			●	●	●		○	●
●	●	○	●	●	●	●	●	●
●	○	○						
●	○	○	○	●	●	●	○	●
●	●	●	●	●	●	●	●	●
●		○	●		●	●	●	
●	●	○			●	●		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00			>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
10.490		133.00	87.00	● ○
10.500		133.00	87.00	● ● ● ●
10.600		133.00	87.00	● ● ●
10.700		142.00	94.00	● ● ●
10.720	27/64	142.00	94.00	● ○ ● ●
10.750		142.00	94.00	●
10.800		142.00	94.00	● ○ ● ● ●
10.900		142.00	94.00	● ●
11.000		142.00	94.00	● ● ● ● ●
11.100		142.00	94.00	● ● ●
11.110	7/16	142.00	94.00	● ● ● ●
11.200		142.00	94.00	● ○ ● ● ●
11.250		142.00	94.00	●
11.300		142.00	94.00	● ● ○
11.400		142.00	94.00	● ○ ●
11.500		142.00	94.00	● ○ ● ● ●
11.510	29/64	142.00	94.00	● ○ ● ●
11.600		142.00	94.00	● ● ●
11.700		142.00	94.00	● ● ●
11.750		142.00	94.00	● ○ ●
11.800		142.00	94.00	● ● ●
11.900		151.00	101.00	● ●
11.910	15/32	151.00	101.00	● ○ ● ○
12.000		151.00	101.00	● ● ● ●
12.050		151.00	101.00	○
12.100		151.00	101.00	● ● ●
12.200		151.00	101.00	● ●
12.250		151.00	101.00	● ○
12.300	31/64	151.00	101.00	● ○ ● ●
12.400		151.00	101.00	●
12.500		151.00	101.00	● ○ ● ● ●
12.600		151.00	101.00	●
12.700	1/2	151.00	101.00	● ● ● ● ●
12.750		151.00	101.00	●
12.800		151.00	101.00	● ● ●
12.900		151.00	101.00	●
13.000		151.00	101.00	● ● ● ●
13.100	33/64	151.00	101.00	● ●
13.200		151.00	101.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

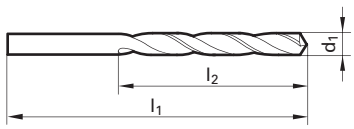
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
●		❍	● ❍	●	●	●	●	●
❍	❍	❍						
●		❍			●			
●		❍	❍				❍	
●		❍	●	●	●	●	●	●
●		❍	●		●			
●	❍	❍	●				❍	
			●					
●		❍	●	●	●	●	●	●
			●		●			❍
●		❍						
			●					
●	❍		●		●			●
●	❍	❍	●	●	●	●	●	●
					●			●
●			●	●	●		●	●
					●		❍	
❍								
●			●	●	●	●	●	●
					●			●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	305	308	605	608	622	657
Standard	DIN 338					
Tool material	HSCO					
Surface	>Ø 2,36	>Ø 6,00			>Ø 2,36	S
Type	N	N	Ti	Ti	GT 100	Ti
Cutting direction	right-hand	left-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	134	138	134	138	136	135
Techn. data page	147	147	147	147	148	148





d1 mm	d1 inch	l1 mm	l2 mm	Availability
13.300		160.00	108.00	●
13.400		160.00	108.00	●
13.490	17/32	160.00	108.00	●
13.500		160.00	108.00	● ● ● ●
13.600		160.00	108.00	●
13.700		160.00	108.00	●
13.750		160.00	108.00	● ❍
13.800		160.00	108.00	● ● ●
13.890	35/64	160.00	108.00	❍ ●
13.900		160.00	108.00	●
13.970		160.00	108.00	●
14.000		160.00	108.00	● ❍ ● ● ●
14.100		169.00	114.00	●
14.150		169.00	114.00	❍
14.200		169.00	114.00	●
14.290	9/16	169.00	114.00	● ●
14.300		169.00	114.00	❍
14.500		169.00	114.00	● ❍ ● ●
14.600		169.00	114.00	❍
14.680	37/64	169.00	114.00	●
15.000		169.00	114.00	● ●
15.100		178.00	120.00	●
15.250		178.00	120.00	●
15.480	39/64	178.00	120.00	●
15.500		178.00	120.00	● ●
15.750		178.00	120.00	●
15.870	5/8	178.00	120.00	●
16.000		178.00	120.00	● ● ●
16.200		184.00	125.00	❍
16.500		184.00	125.00	● ❍ ●
16.670	21/32	184.00	125.00	●
17.000		184.00	125.00	● ●
17.460	11/16	191.00	130.00	●
17.500		191.00	130.00	● ●
18.000		191.00	130.00	● ❍ ●
18.500		198.00	135.00	● ❍
19.000		198.00	135.00	● ●
19.500		205.00	140.00	●
20.000		205.00	140.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

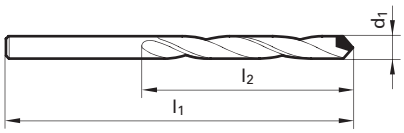
658	1221	1223	1260	2047	2458	2459	2997	1146
DIN 338								
HSCO								M42
S	C	A	○	●	F	F	S	○
GT 100	GT 100	GT 100	VA	P2000	Ti	GT 100	N	N
right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8
137	137	137	134	134	135	137	135	138
148	148	148	149	149	149	149	149	150



Availability								
					●			
●								●
○								
●					●	●	●	●
					●			
●					●			
●					●			●
								●
								○
								●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	710	732	2464
Standard		Guhring std.	
Tool material	Carbide	Solid carbide	
Surface	○	○	F
Type	Duro 150	N	N
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h7	h7
Discount group	102	102	102
Techn. data page	150	150	150





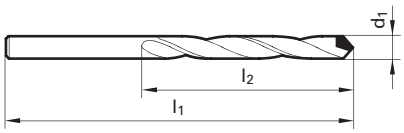




d1		l1	l2	Availability	
mm	inch	mm	mm		
1.000		34.00	12.00	●	●
1.020		34.00	12.00	●	●
1.040		34.00	12.00	●	●
1.070		36.00	14.00	●	●
1.090		36.00	14.00	●	●
1.100		36.00	14.00	●	●
1.180		36.00	14.00	●	●
1.190	3/64	38.00	16.00	●	●
1.200		38.00	16.00	●	●
1.300		38.00	16.00	●	●
1.320		38.00	16.00	●	●
1.400		40.00	18.00	●	●
1.500		40.00	18.00	●	●
1.510		43.00	20.00	●	●
1.590	1/16	43.00	20.00	●	●
1.600		43.00	20.00	●	●
1.610		43.00	20.00	●	●
1.700		43.00	20.00	●	●
1.780		46.00	22.00	●	●
1.800		46.00	22.00	●	●
1.850		46.00	22.00	●	●
1.900		46.00	22.00	●	●
1.930		49.00	24.00	●	●
1.980	5/64	49.00	24.00	●	●
1.990		49.00	24.00	●	●
2.000		49.00	24.00	●	●
2.060		49.00	24.00	●	●
2.080		49.00	24.00	●	●
2.100		49.00	24.00	●	●
2.180		53.00	27.00	●	●
2.200		53.00	27.00	●	●
2.260		53.00	27.00	●	●
2.300		53.00	27.00	●	●
2.370		57.00	30.00	●	●
2.380	3/32	57.00	30.00	●	●
2.400		57.00	30.00	●	●
2.440		57.00	30.00	●	●
2.490		57.00	30.00	●	●
2.500		57.00	30.00	●	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	710	732	2464
Standard		Guhring std.	
Tool material	Carbide	Solid carbide	
Surface	○	○	F
Type	Duro 150	N	N
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h7	h7
Discount group	102	102	102
Techn. data page	150	150	150

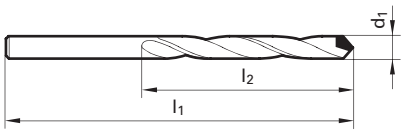




d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.530		57.00	30.00	● ●
2.580		57.00	30.00	● ●
2.600		57.00	30.00	● ●
2.640		57.00	30.00	● ●
2.700		61.00	33.00	● ● ●
2.710		61.00	33.00	● ●
2.780	7/64	61.00	33.00	● ●
2.790		61.00	33.00	● ●
2.800		61.00	33.00	● ●
2.820		61.00	33.00	● ●
2.870		61.00	33.00	● ●
2.900		61.00	33.00	● ●
2.950		61.00	33.00	● ●
3.000		61.00	33.00	● ● ●
3.050		65.00	36.00	● ●
3.100		65.00	36.00	◐ ● ●
3.170	1/8	65.00	36.00	● ●
3.200		65.00	36.00	● ●
3.260		65.00	36.00	● ●
3.300		65.00	36.00	● ● ●
3.400		70.00	39.00	● ● ●
3.450		70.00	39.00	● ●
3.500		70.00	39.00	● ● ●
3.570	9/64	70.00	39.00	● ●
3.600		70.00	39.00	● ●
3.660		70.00	39.00	● ●
3.700		70.00	39.00	● ●
3.730		70.00	39.00	● ●
3.800		75.00	43.00	● ●
3.860		75.00	43.00	● ●
3.900		75.00	43.00	● ●
3.910		75.00	43.00	● ●
3.970	5/32	75.00	43.00	● ●
3.990		75.00	43.00	● ●
4.000		75.00	43.00	● ● ●
4.040		75.00	43.00	● ●
4.090		75.00	43.00	● ●
4.100		75.00	43.00	● ●
4.200		75.00	43.00	● ● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	710	732	2464
Standard		Guhring std.	
Tool material	Carbide	Solid carbide	
Surface	○	○	F
Type	Duro 150	N	N
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h7	h7
Discount group	102	102	102
Techn. data page	150	150	150





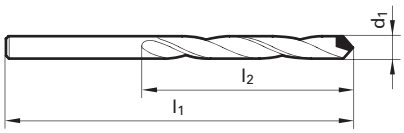




d1		l1	l2	Availability		
mm	inch	mm	mm			
4.220		75.00	43.00		●	●
4.300		80.00	47.00		●	●
4.370	11/64	80.00	47.00		●	●
4.390		80.00	47.00		●	●
4.400		80.00	47.00		●	●
4.500		80.00	47.00	●	●	●
4.570		80.00	47.00		●	●
4.600		80.00	47.00		●	●
4.620		80.00	47.00		●	●
4.700		80.00	47.00	❍	●	●
4.760	3/16	86.00	52.00		●	●
4.800		86.00	52.00		●	●
4.850		86.00	52.00		●	●
4.900		86.00	52.00		●	●
4.920		86.00	52.00		●	●
4.980		86.00	52.00		●	●
5.000		86.00	52.00	●	●	●
5.060		86.00	52.00		●	●
5.100		86.00	52.00	●	●	●
5.110		86.00	52.00		●	●
5.160	13/64	86.00	52.00		●	●
5.180		86.00	52.00		●	●
5.200		86.00	52.00		●	●
5.220		86.00	52.00		●	●
5.300		86.00	52.00	●	●	●
5.310		93.00	57.00		●	●
5.400		93.00	57.00		●	●
5.410		93.00	57.00		●	●
5.500		93.00	57.00	●	●	●
5.560	7/32	93.00	57.00		●	●
5.600		93.00	57.00		●	●
5.610		93.00	57.00		●	●
5.700		93.00	57.00		●	●
5.790		93.00	57.00		●	●
5.800		93.00	57.00		●	●
5.900		93.00	57.00		●	●
5.940		93.00	57.00		●	●
5.950	15/64	93.00	57.00		●	●
6.000		93.00	57.00	●	●	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	710	732	2464
Standard		Guhring std.	
Tool material	Carbide	Solid carbide	
Surface	○	○	F
Type	Duro 150	N	N
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h7	h7
Discount group	102	102	102
Techn. data page	150	150	150

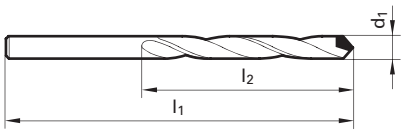




d1 mm	d1 inch	l1 mm	l2 mm	Availability		
6.040		101.00	63.00		●	●
6.100		101.00	63.00		●	●
6.150		101.00	63.00		●	●
6.200		101.00	63.00		●	●
6.250		101.00	63.00		●	●
6.300		101.00	63.00	●	●	●
6.350	1/4	101.00	63.00		●	❍
6.400		101.00	63.00		●	●
6.500		101.00	63.00	●	●	●
6.530		101.00	63.00		●	●
6.600		101.00	63.00		●	●
6.630		101.00	63.00		●	●
6.700		101.00	63.00	●	●	●
6.750	17/64	109.00	69.00		●	●
6.800		109.00	69.00	●	●	●
6.900		109.00	69.00		●	●
7.000		109.00	69.00	●	●	●
7.030		109.00	69.00		●	●
7.100		109.00	69.00	❍	●	●
7.140	9/32	109.00	69.00		●	●
7.200		109.00	69.00	●	●	●
7.300		109.00	69.00		●	●
7.370		109.00	69.00		●	●
7.400		109.00	69.00	❍	●	●
7.490		109.00	69.00		●	●
7.500		109.00	69.00	●	●	●
7.540	19/64	117.00	75.00		●	●
7.600		117.00	75.00		●	●
7.670		117.00	75.00		●	●
7.700		117.00	75.00		●	●
7.800		117.00	75.00		●	●
7.900		117.00	75.00		●	●
7.940	5/16	117.00	75.00		●	●
8.000		117.00	75.00	●	●	●
8.030		117.00	75.00		●	●
8.100		117.00	75.00		●	●
8.200		117.00	75.00		●	●
8.300		117.00	75.00		●	●
8.330	21/64	117.00	75.00		●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	710	732	2464
Standard		Guhring std.	
Tool material	Carbide	Solid carbide	
Surface	○	○	F
Type	Duro 150	N	N
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h7	h7
Discount group	102	102	102
Techn. data page	150	150	150

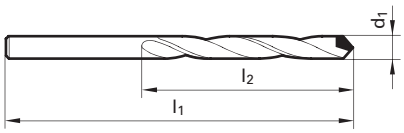




d1 mm	d1 inch	l1 mm	l2 mm	Availability
8.400		117.00	75.00	● ●
8.430		117.00	75.00	● ●
8.500		117.00	75.00	● ● ●
8.600		125.00	81.00	● ●
8.610		125.00	81.00	● ●
8.700		125.00	81.00	● ●
8.730	11/32	125.00	81.00	● ●
8.800		125.00	81.00	● ●
8.840		125.00	81.00	● ●
8.900		125.00	81.00	● ●
9.000		125.00	81.00	● ● ●
9.090		125.00	81.00	● ●
9.100		125.00	81.00	● ●
9.130	23/64	125.00	81.00	● ●
9.200		125.00	81.00	● ●
9.300		125.00	81.00	● ●
9.340		125.00	81.00	● ●
9.400		125.00	81.00	● ●
9.500		125.00	81.00	● ● ●
9.520	3/8	133.00	87.00	● ●
9.580		133.00	87.00	● ●
9.600		133.00	87.00	● ●
9.700		133.00	87.00	● ●
9.800		133.00	87.00	● ●
9.900		133.00	87.00	● ●
9.920	25/64	133.00	87.00	● ●
10.000		133.00	87.00	● ● ●
10.080		133.00	87.00	● ●
10.200		133.00	87.00	● ● ○
10.260		133.00	87.00	● ●
10.300		133.00	87.00	● ●
10.320	13/32	133.00	87.00	● ●
10.490		133.00	87.00	● ●
10.500		133.00	87.00	● ●
10.720	27/64	142.00	94.00	● ●
11.000		142.00	94.00	● ● ●
11.110	7/16	142.00	94.00	● ○
11.500		142.00	94.00	● ○
11.510	29/64	142.00	94.00	● ●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	710	732	2464
Standard		Guhring std.	
Tool material	Carbide	Solid carbide	
Surface	○	○	F
Type	Duro 150	N	N
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h7	h7
Discount group	102	102	102
Techn. data page	150	150	150





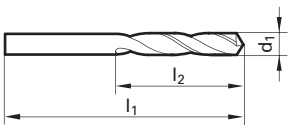




d1		l1	l2	Availability		
mm	inch	mm	mm			
11.910	15/32	151.00	101.00		●	●
12.000		151.00	101.00	●	●	●
12.300	31/64	151.00	101.00		●	●
12.500		151.00	101.00	●		
12.700	1/2	151.00	101.00		●	●
13.000		151.00	101.00	●		
14.000		160.00	108.00	●		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





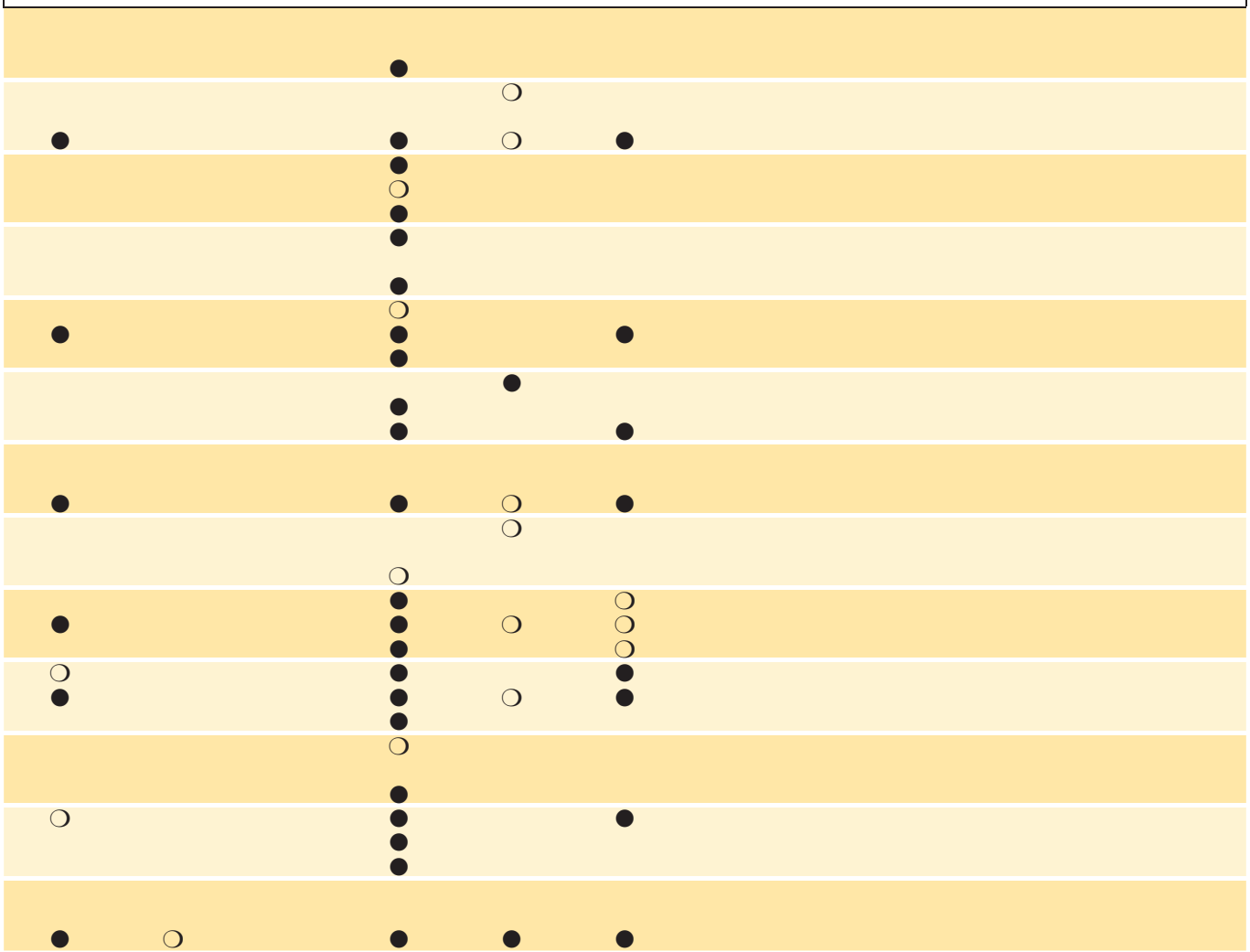
d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.320		19.00	2.00	○
0.350		19.00	2.00	◐
0.400	1/64	19.00	2.50	●
0.450		19.00	2.50	
0.480		19.00	2.50	◐
0.500		20.00	3.00	● ○
0.510		20.00	3.00	
0.520		20.00	3.00	
0.550		21.00	3.50	● ○
0.570		21.00	3.50	
0.575		21.00	3.50	◐
0.580		21.00	3.50	○
0.590		21.00	3.50	
0.600		21.00	3.50	● ●
0.610		22.00	4.00	
0.620		22.00	4.00	○
0.640		22.00	4.00	
0.650		22.00	4.00	● ○
0.660		22.00	4.00	◐
0.690		23.00	4.50	◐
0.700		23.00	4.50	● ●
0.710		23.00	4.50	
0.720		23.00	4.50	●
0.730		23.00	4.50	
0.740		23.00	4.50	○
0.750		23.00	4.50	● ○ ●
0.780		24.00	5.00	
0.790	1/32	24.00	5.00	●
0.800		24.00	5.00	● ●
0.810		24.00	5.00	◐
0.820		24.00	5.00	●
0.825		24.00	5.00	◐
0.840		24.00	5.00	
0.850		24.00	5.00	● ○
0.860		25.00	5.50	
0.870		25.00	5.50	
0.875		25.00	5.50	○
0.890		25.00	5.50	● ◐
0.900		25.00	5.50	● ● ●

○ bright ◐ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S	○	M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

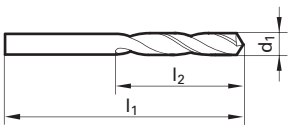


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





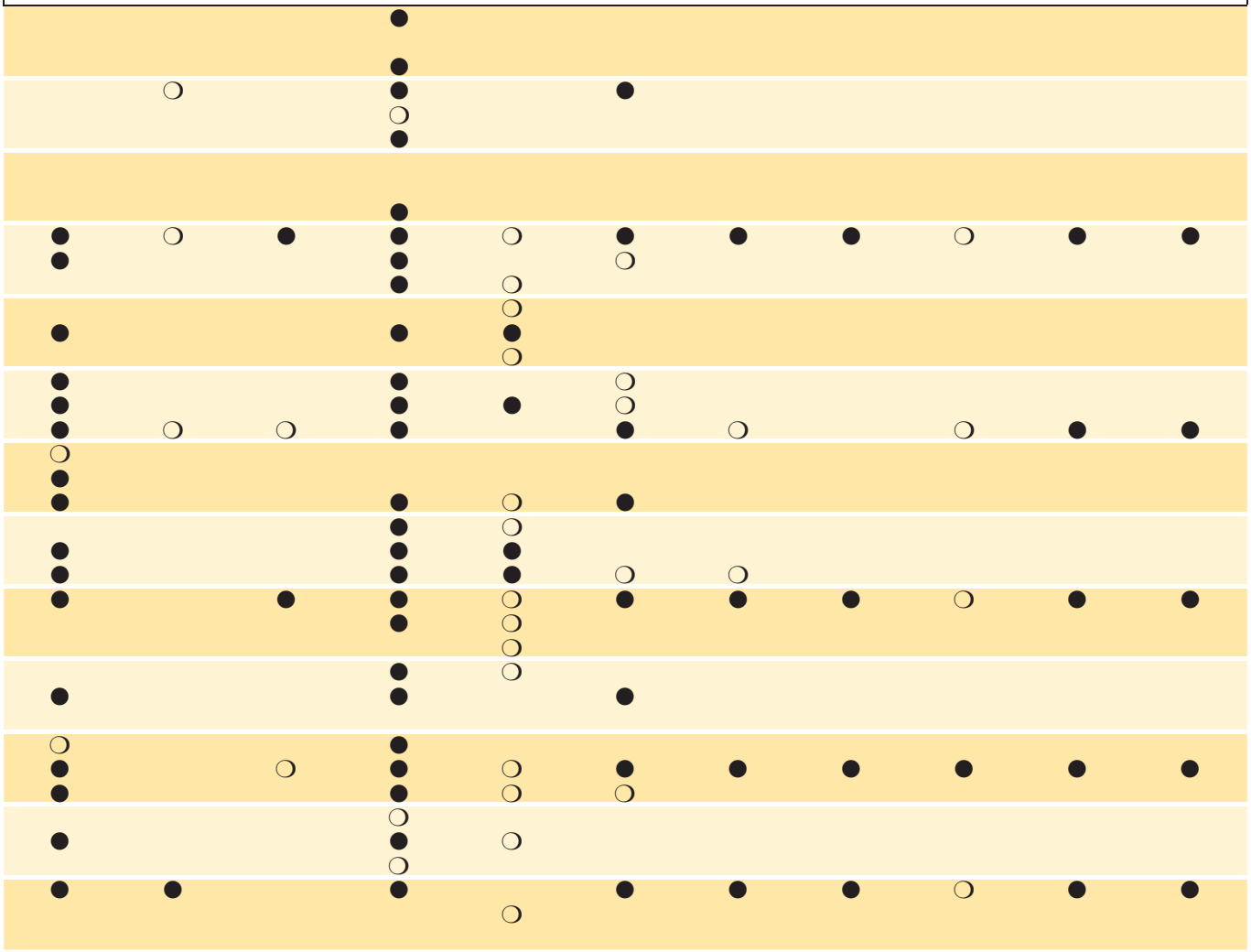
d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.910		25.00	5.50	
0.930		25.00	5.50	●
0.940		25.00	5.50	
0.950		25.00	5.50	● ❍ ●
0.960		26.00	6.00	
0.970		26.00	6.00	❍
0.975		26.00	6.00	●
0.980		26.00	6.00	●
0.990		26.00	6.00	
1.000		26.00	6.00	● ● ● ● ❍ ● ●
1.020		26.00	6.00	● ❍ ● ●
1.030		26.00	6.00	❍ ❍
1.040		26.00	6.00	❍ ❍ ❍ ●
1.050		26.00	6.00	● ❍ ●
1.060		26.00	6.00	❍
1.070		28.00	7.00	● ● ● ❍
1.090		28.00	7.00	● ● ● ❍
1.100		28.00	7.00	● ● ● ● ❍ ● ●
1.110		28.00	7.00	❍
1.120		28.00	7.00	●
1.150		28.00	7.00	● ● ❍ ❍ ● ●
1.170		28.00	7.00	
1.180		28.00	7.00	● ❍ ● ●
1.190	3/64	30.00	8.00	● ❍ ❍ ❍ ❍ ❍ ● ❍
1.200		30.00	8.00	● ● ● ● ● ❍ ● ●
1.210		30.00	8.00	
1.220		30.00	8.00	❍
1.230		30.00	8.00	
1.250		30.00	8.00	● ● ● ● ❍
1.260		30.00	8.00	❍
1.280		30.00	8.00	●
1.300		30.00	8.00	● ● ● ● ❍ ● ●
1.320		30.00	8.00	● ● ● ●
1.330		32.00	9.00	●
1.350		32.00	9.00	● ● ❍ ❍ ●
1.370		32.00	9.00	
1.400		32.00	9.00	● ● ● ● ❍ ● ●
1.420		32.00	9.00	
1.430		32.00	9.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

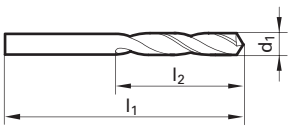


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	223	224	225	226	227	228	552	553
1.450		32.00	9.00	●			❍		❍	●	●
1.470		32.00	9.00								
1.480		32.00	9.00	●							
1.500		32.00	9.00	●	●	●	●	●	❍	●	●
1.510		34.00	10.00	●			❍			●	❍
1.520		34.00	10.00	●							
1.530		34.00	10.00							●	
1.540		34.00	10.00					❍			
1.550		34.00	10.00	●	●		●			●	●
1.570		34.00	10.00	❍							
1.580		34.00	10.00				❍				
1.590	1/16	34.00	10.00	●	❍	❍	●	❍	❍	●	❍
1.600		34.00	10.00	●	●	●	●		❍	●	●
1.610		34.00	10.00	●			●			●	❍
1.620		34.00	10.00		●						
1.630		34.00	10.00								
1.650		34.00	10.00	●			❍			●	●
1.670		34.00	10.00				❍				
1.680		34.00	10.00								
1.700		34.00	10.00	●	●	●	●	●	❍	●	●
1.720		36.00	11.00	●			●				
1.730		36.00	11.00	❍						❍	
1.740		36.00	11.00	❍							
1.750		36.00	11.00	●			●			●	●
1.770		36.00	11.00	❍							
1.780		36.00	11.00	●	●		❍			●	❍
1.800		36.00	11.00	●	●	●	●	●	❍	●	●
1.810		36.00	11.00				❍				
1.820		36.00	11.00							●	
1.830		36.00	11.00								
1.850		36.00	11.00	●	●		❍			●	●
1.900		36.00	11.00	●	●	●	●	❍	❍	●	●
1.930		38.00	12.00	●			●			❍	❍
1.940		38.00	12.00				❍				
1.950		38.00	12.00	●	●		●	❍		●	●
1.970		38.00	12.00	●							
1.980	5/64	38.00	12.00	●	❍	❍	●	❍	❍	●	❍
1.990		38.00	12.00	●			❍			●	❍
2.000		38.00	12.00	●	●	●	●		❍	●	●

Availability

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

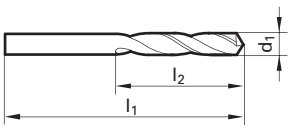
653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S	○	M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154



Availability										
●			● ●	● ●	●					
● ●	○	○	● ●	● ○	● ●	●	●	●	●	●
●			●	● ○	●					
			●		●					
●			●	○	●	○	○			
● ● ●	○		● ● ●	○ ○ ○	● ● ●		●	○	●	●
●			● ●	●						
●			●	○	●	●	●	○	●	●
●			●							
● ●	●	●	● ●	○ ○	● ●	●		○	●	●
			● ●							
● ● ●		●	● ● ●	○ ○ ○	● ● ●	●	●	○	●	●
●			● ●	●	●					
● ● ●	●	○	● ● ●	● ○	● ● ○	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





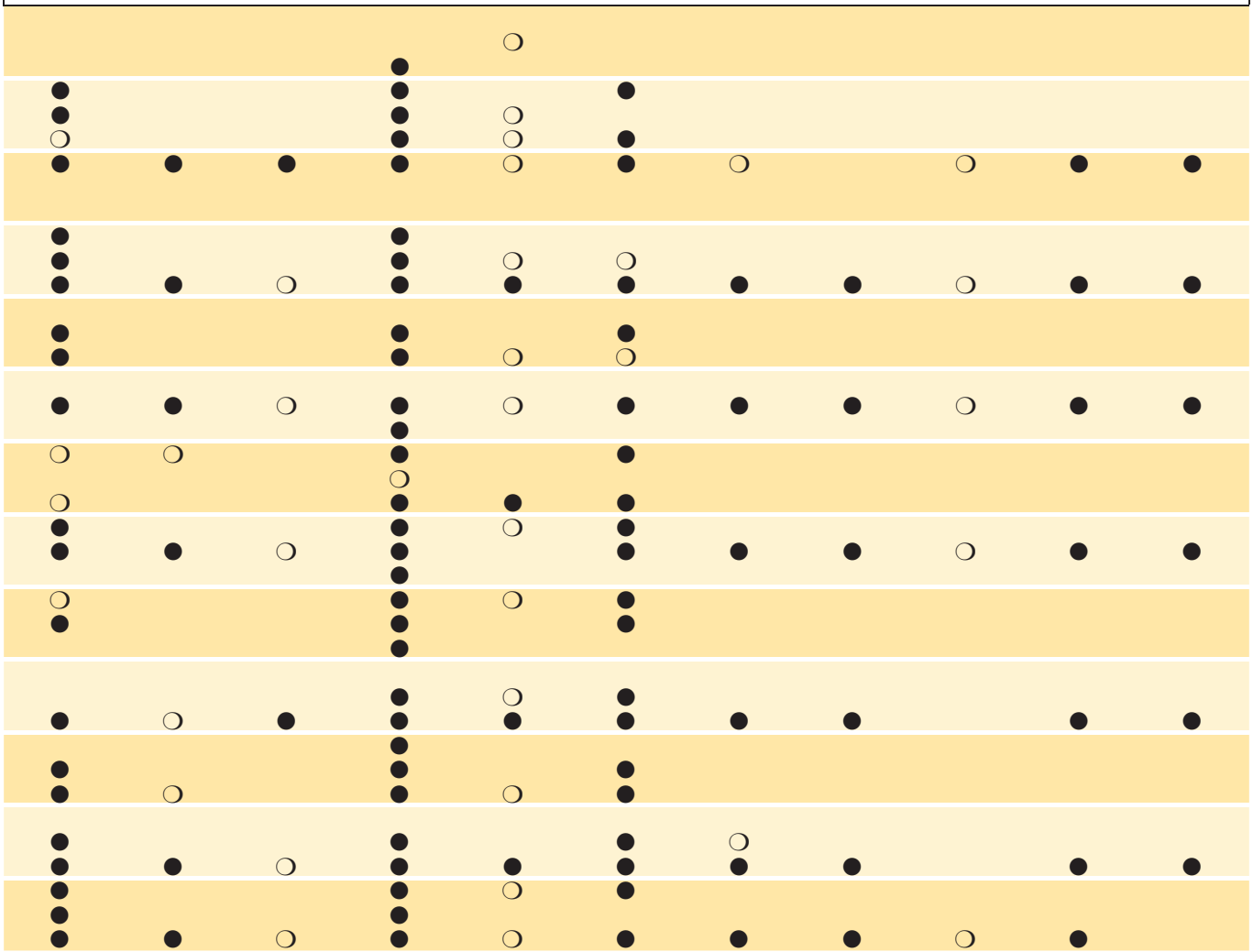
d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.010		38.00	12.00	○
2.020		38.00	12.00	● ●
2.030		38.00	12.00	
2.050		38.00	12.00	● ● ● ● ●
2.060		38.00	12.00	● ○ ● ○
2.080		38.00	12.00	● ○ ● ○
2.100		38.00	12.00	● ● ● ● ○ ○ ● ●
2.120		38.00	12.00	●
2.130		40.00	13.00	●
2.150		40.00	13.00	● ○ ●
2.180		40.00	13.00	● ○ ● ○
2.200		40.00	13.00	● ● ● ● ○ ○ ● ●
2.220		40.00	13.00	● ●
2.250		40.00	13.00	● ● ○ ● ●
2.260		40.00	13.00	● ● ● ●
2.270		40.00	13.00	○
2.300		40.00	13.00	● ● ● ● ● ○ ● ●
2.320		40.00	13.00	●
2.350		40.00	13.00	● ● ● ○ ● ●
2.360		40.00	13.00	○
2.370		43.00	14.00	● ○ ○ ○ ●
2.380	3/32	43.00	14.00	● ● ● ○ ○ ○ ● ○
2.400		43.00	14.00	● ● ● ● ● ○ ● ●
2.420		43.00	14.00	○ ○ ○
2.440		43.00	14.00	● ○ ● ●
2.450		43.00	14.00	● ○ ● ●
2.470		43.00	14.00	○
2.480		43.00	14.00	● ●
2.490		43.00	14.00	● ● ● ●
2.500		43.00	14.00	● ● ● ● ● ● ● ●
2.520		43.00	14.00	● ○
2.530		43.00	14.00	● ● ○ ● ●
2.550		43.00	14.00	● ● ● ● ● ●
2.570		43.00	14.00	○
2.580		43.00	14.00	● ○ ○ ● ●
2.600		43.00	14.00	● ● ● ● ○ ○ ● ●
2.640		43.00	14.00	● ○ ● ○
2.650		43.00	14.00	● ○ ● ● ●
2.700		46.00	16.00	● ● ● ● ○ ○ ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

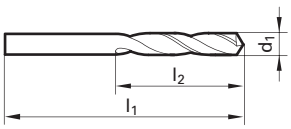


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





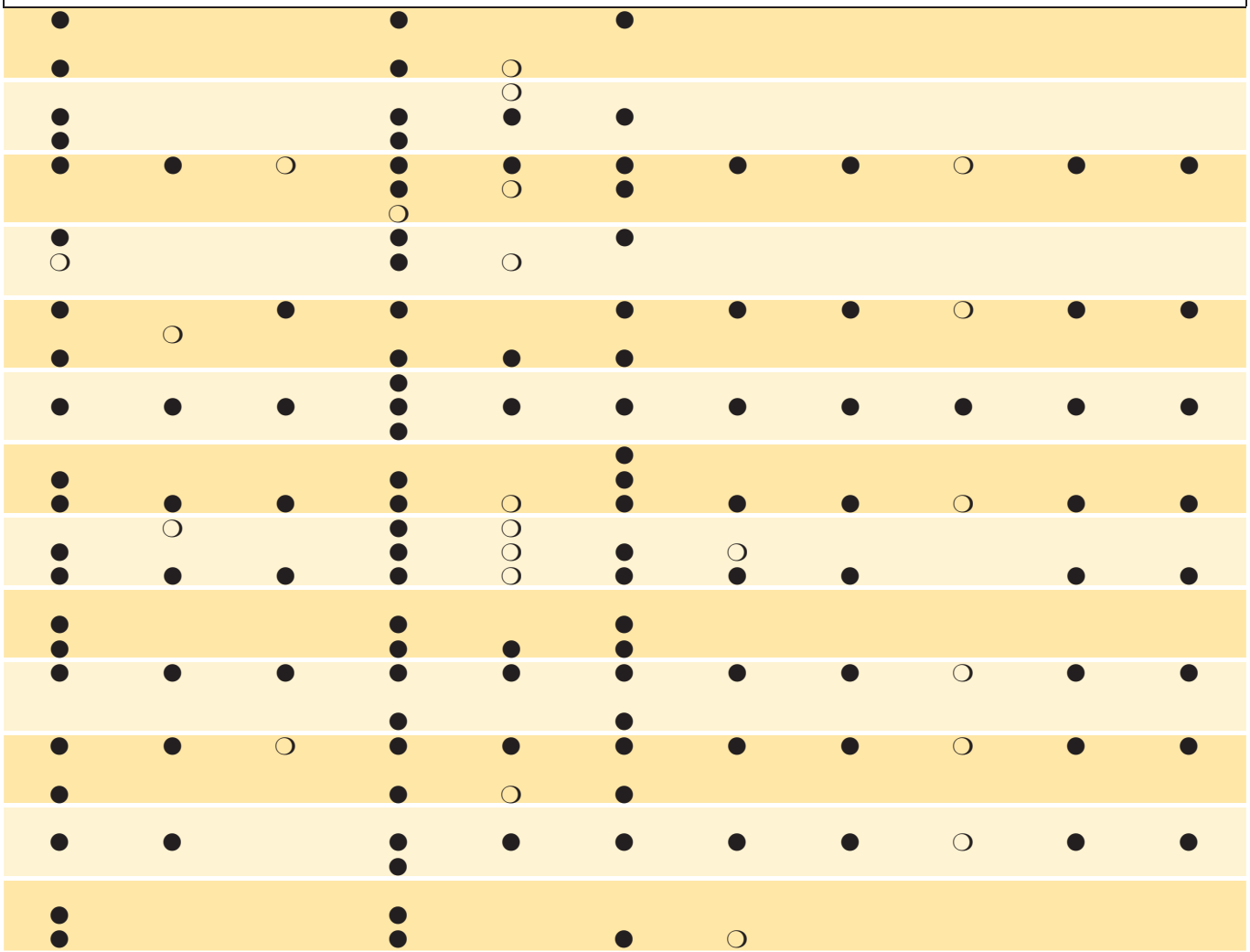
d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.710		46.00	16.00	● ○ ○ ● ●
2.720		46.00	16.00	○
2.750		46.00	16.00	● ○ ● ●
2.770		46.00	16.00	
2.780	7/64	46.00	16.00	● ○ ○ ● ○ ○ ● ●
2.790		46.00	16.00	● ○ ● ●
2.800		46.00	16.00	● ● ● ● ○ ○ ● ●
2.820		46.00	16.00	● ○ ● ○
2.830		46.00	16.00	
2.850		46.00	16.00	● ○ ● ●
2.870		46.00	16.00	○ ● ● ●
2.880		46.00	16.00	○
2.900		46.00	16.00	● ● ● ● ● ○ ● ●
2.920		46.00	16.00	○ ○
2.950		46.00	16.00	● ● ● ○
2.970		46.00	16.00	●
3.000		46.00	16.00	● ● ● ● ● ● ●
3.020		49.00	18.00	● ○
3.030		49.00	18.00	
3.050		49.00	18.00	● ● ● ● ●
3.100		49.00	18.00	● ● ● ● ● ○ ● ●
3.150		49.00	18.00	● ● ○ ● ●
3.170	1/8	49.00	18.00	● ○ ● ○ ○ ○ ● ●
3.200		49.00	18.00	● ● ● ● ○ ● ● ●
3.230		49.00	18.00	●
3.250		49.00	18.00	● ● ● ● ●
3.260		49.00	18.00	● ● ○
3.300		49.00	18.00	● ● ● ● ● ● ●
3.330		49.00	18.00	●
3.350		49.00	18.00	● ● ○ ● ●
3.400		52.00	20.00	● ● ● ● ● ● ●
3.420		52.00	20.00	○
3.450		52.00	20.00	● ● ● ●
3.480		52.00	20.00	○
3.500		52.00	20.00	● ● ● ● ● ● ●
3.520		52.00	20.00	
3.530		52.00	20.00	○
3.550		52.00	20.00	● ○ ● ●
3.570	9/64	52.00	20.00	● ● ○ ○ ○ ● ○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

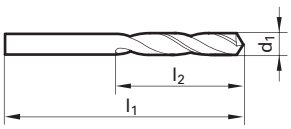


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





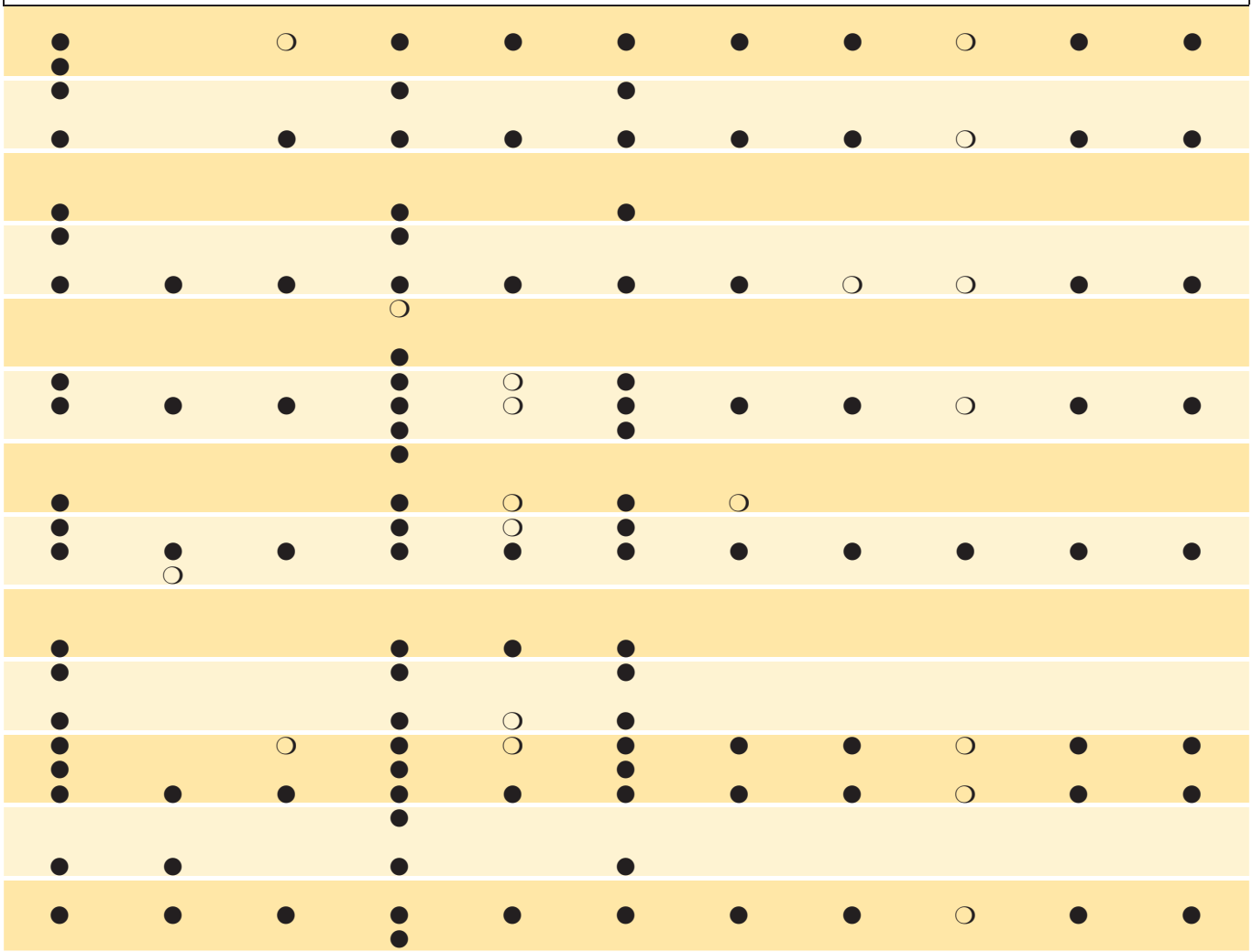
d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.580		52.00	20.00	○
3.600		52.00	20.00	● ● ● ○ ● ● ●
3.650		52.00	20.00	● ○ ● ● ●
3.660		52.00	20.00	● ● ●
3.680		52.00	20.00	●
3.700		52.00	20.00	● ● ● ● ○ ○ ● ●
3.710		52.00	20.00	○
3.720		52.00	20.00	○
3.730		52.00	20.00	○ ● ● ○
3.750		52.00	20.00	● ● ●
3.770		55.00	22.00	○
3.800		55.00	22.00	● ● ● ● ● ● ●
3.830		55.00	22.00	
3.840		55.00	22.00	○
3.850		55.00	22.00	● ● ● ● ●
3.860		55.00	22.00	● ○ ● ○
3.900		55.00	22.00	● ○ ○ ○ ● ●
3.910		55.00	22.00	● ○ ● ○
3.950		55.00	22.00	● ○ ● ○
3.960		55.00	22.00	●
3.970	5/32	55.00	22.00	● ○ ○ ○ ○ ○ ● ○
3.990		55.00	22.00	● ○ ● ○
4.000		55.00	22.00	● ● ● ● ● ● ● ●
4.020		55.00	22.00	● ○
4.030		55.00	22.00	○
4.033		55.00	22.00	○
4.040		55.00	22.00	● ○ ● ○
4.050		55.00	22.00	● ● ● ○
4.080		55.00	22.00	●
4.090		55.00	22.00	● ● ●
4.100		55.00	22.00	● ● ● ● ● ○ ● ●
4.150		55.00	22.00	● ● ● ●
4.200		55.00	22.00	● ● ● ● ● ● ● ●
4.220		55.00	22.00	● ○ ● ●
4.230		55.00	22.00	○
4.250		55.00	22.00	● ● ○ ○ ● ●
4.290		58.00	24.00	○
4.300		58.00	24.00	● ● ● ● ● ● ● ●
4.350		58.00	24.00	○ ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

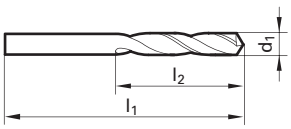


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





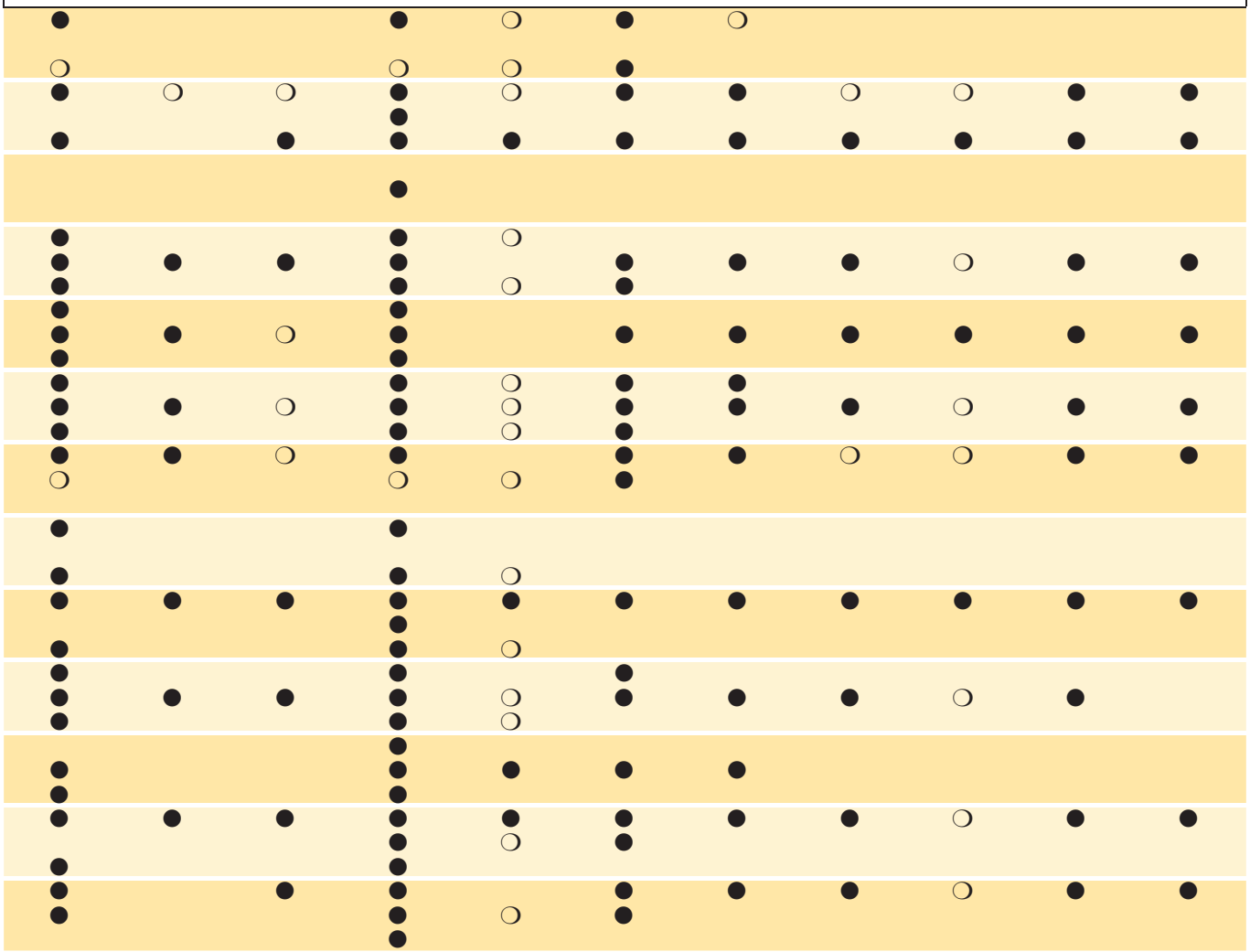
d1 mm	d1 inch	l1 mm	l2 mm	Availability
4.370	11/64	58.00	24.00	● ○ ● ● ○ ○ ● ●
4.380		58.00	24.00	○
4.390		58.00	24.00	○ ○ ○
4.400		58.00	24.00	● ● ● ● ○ ● ●
4.450		58.00	24.00	● ● ○ ● ●
4.500		58.00	24.00	● ● ● ● ● ● ● ●
4.520		58.00	24.00	○
4.550		58.00	24.00	● ● ●
4.560		58.00	24.00	○
4.570		58.00	24.00	● ○ ● ○
4.600		58.00	24.00	● ● ● ● ● ○ ● ●
4.620		58.00	24.00	● ○ ● ○
4.650		58.00	24.00	● ● ●
4.700		58.00	24.00	● ● ○ ● ● ●
4.750		58.00	24.00	● ○ ● ○
4.760	3/16	62.00	26.00	● ● ● ● ○ ○ ● ○
4.800		62.00	26.00	● ○ ● ● ○ ● ● ●
4.850		62.00	26.00	● ● ● ○
4.900		62.00	26.00	● ○ ● ● ○ ● ●
4.920		62.00	26.00	● ○ ● ○
4.930		62.00	26.00	○
4.950		62.00	26.00	● ● ● ○
4.970		62.00	26.00	○
4.980		62.00	26.00	● ○ ● ○
5.000		62.00	26.00	● ● ● ● ● ● ●
5.020		62.00	26.00	●
5.050		62.00	26.00	● ● ●
5.060		62.00	26.00	● ● ○
5.100		62.00	26.00	● ● ● ● ● ● ● ●
5.110		62.00	26.00	● ● ● ●
5.150		62.00	26.00	● ● ○
5.160	13/64	62.00	26.00	● ○ ○ ○ ● ○
5.180		62.00	26.00	● ○ ● ○
5.200		62.00	26.00	● ● ● ● ○ ● ●
5.220		62.00	26.00	● ○ ● ○
5.250		62.00	26.00	● ● ●
5.300		62.00	26.00	● ● ● ○ ● ● ●
5.310		66.00	28.00	● ○ ●
5.350		66.00	28.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

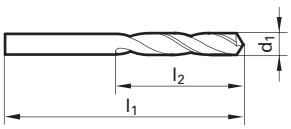


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	223	224	225	226	227	228	552	553
5.400		66.00	28.00	●	●		○	○	○	●	
5.410		66.00	28.00	●			●			●	
5.450		66.00	28.00	●			○				
5.500		66.00	28.00	●	●	●	●	●		●	●
5.520		66.00	28.00								
5.550		66.00	28.00	●							
5.560	7/32	66.00	28.00	○	●	●	○	○	○	●	●
5.600		66.00	28.00	●	●		●	●	○	●	●
5.610		66.00	28.00	○			○			●	●
5.620		66.00	28.00				●				
5.700		66.00	28.00	●	●	●	●	○	○	●	●
5.750		66.00	28.00	●			●				
5.790		66.00	28.00	○			○			●	●
5.800		66.00	28.00	●	●		●	○	○	●	●
5.850		66.00	28.00								
5.900		66.00	28.00	●	○	●	●	○	○	●	●
5.940		66.00	28.00	●			○			●	○
5.950	15/64	66.00	28.00	●	○	●	○	○	○	●	○
6.000		66.00	28.00	●	●	●	●			●	●
6.040		70.00	31.00	○			○			●	
6.050		70.00	31.00	●							●
6.100		70.00	31.00	●	●	●		●	○	●	●
6.150		70.00	31.00	●			●		○	●	○
6.170		70.00	31.00				○				
6.200		70.00	31.00	●	●	●	●	○		●	●
6.250		70.00	31.00	●			○			●	●
6.300		70.00	31.00	●		●	●			●	
6.320		70.00	31.00								
6.350	1/4	70.00	31.00	●	●	●	●	○	○	●	○
6.400		70.00	31.00	●	●	●	●	○		●	○
6.450		70.00	31.00	●							
6.500		70.00	31.00	●	●	●	●	●	○	●	●
6.530		70.00	31.00	●		●				●	●
6.540		70.00	31.00				●				
6.550		70.00	31.00	●			●				
6.570		70.00	31.00				○				
6.600		70.00	31.00	●	●	●	●	●		●	●
6.630		70.00	31.00	●			○			●	●
6.700		70.00	31.00	●			●		○	●	●

Availability

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

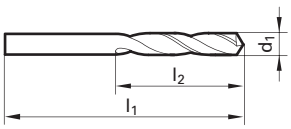


Availability

●	○	●	●	○	●	●	●	○	●	
●		●	●	●	●	●	●	○	●	●
●	●		●	○	●	●	●	○	●	●
●	●	○	●	○	●	●		○	●	
●	●	●	●	●	●	●	●	●	●	
●	●	●	●	○	●	●	●		●	
●	●	●	●	○	●	●	●	●	●	●
●	●	●	●	●	●	●	●	○	●	●
●	●	○	●	●	●	●	●	○	●	●
●		○	●	●	●		○	○	●	
●			●	○	●	●	●	○	○	
●	●		●	●	●	●	●	○	●	●
			●							
●		●	●	○	●	●	●	○	●	●
●	○	●	●		●	●	●	○		

TiCN · Carbo · Cristall · FIRE/nanoFIRE · AlCrN · TiN · TiN+ · MolyGlide · Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	Availability							
6.750	17/64	74.00	34.00	●				●	○	○	●	○
6.760		74.00	34.00	○								
6.800		74.00	34.00	●	●	●		●		○	●	●
6.850		74.00	34.00	●								
6.900		74.00	34.00	●	○	●		●		○	●	●
6.920		74.00	34.00					○				
6.950		74.00	34.00	●								
7.000		74.00	34.00	●	●	●		●	●	○	●	●
7.030		74.00	34.00	○				○			●	○
7.050		74.00	34.00	●								
7.100		74.00	34.00	●		●		●			●	
7.140	9/32	74.00	34.00	●	●	●		●	○	○	●	○
7.150		74.00	34.00	●								
7.200		74.00	34.00	●				●	○		●	
7.250		74.00	34.00	●				○				
7.300		74.00	34.00	●		●		●	○		●	●
7.350		74.00	34.00					●				
7.370		74.00	34.00	●				○			●	●
7.400		74.00	34.00	●				●		○	●	●
7.450		74.00	34.00	●				●				
7.490		74.00	34.00	●				○			●	○
7.500		74.00	34.00	●	●	●		●	○	○	●	○
7.540	19/64	79.00	37.00	●	○	○		○	○	○	●	○
7.550		79.00	37.00	○				○				
7.600		79.00	37.00	●		●					●	○
7.670		79.00	37.00	●							●	○
7.700		79.00	37.00	●				●			●	○
7.750		79.00	37.00	●	●			●	○			
7.800		79.00	37.00	●		○		○		○	●	
7.850		79.00	37.00	●								
7.900		79.00	37.00	●				○	○		●	
7.940	5/16	79.00	37.00	●	●	●			○	○	●	○
8.000		79.00	37.00	●	●	●		●			●	●
8.030		79.00	37.00	●	●			○			●	
8.050		79.00	37.00	●								
8.100		79.00	37.00	●	●			●			●	
8.150		79.00	37.00	●								
8.200		79.00	37.00	●		●		●			●	●
8.250		79.00	37.00	●								

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

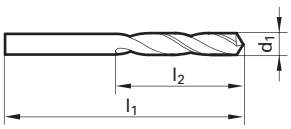


Availability

●			●	●	●	●				
●	●	●	●	●	●	●	●		●	●
			●							
●	❍		●	❍	●	●		❍	●	●
●			●	●	●	●	●	❍	●	●
			●	❍						
			●	❍						
●		●	●	❍	●		❍	❍		
●			●	●	●	❍				
●			●		●	❍	●	❍	❍	
●			●							
●		❍	●	❍	●	●	❍	❍	●	
			●							
●			●	❍	●					
●		●	●		●	●	❍	❍	●	
			❍	❍	●					
●	●	●	●	❍	●	●	●	❍	●	❍
●			●	❍	●	❍				
			●							
●			●	●	●			❍	●	●
●			●							
●		●	●	❍			❍	❍		❍
●		❍	●	❍	●	●	❍	●	●	●
❍	●		●	❍	●		●	❍		
●			●		●	❍				
●	●		●	❍	●	●	●	●	●	●
●			●	●						
			●							
●		❍	●		●	●		❍	●	
			●							
●		❍	●		●	●		❍	●	
●			●							

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





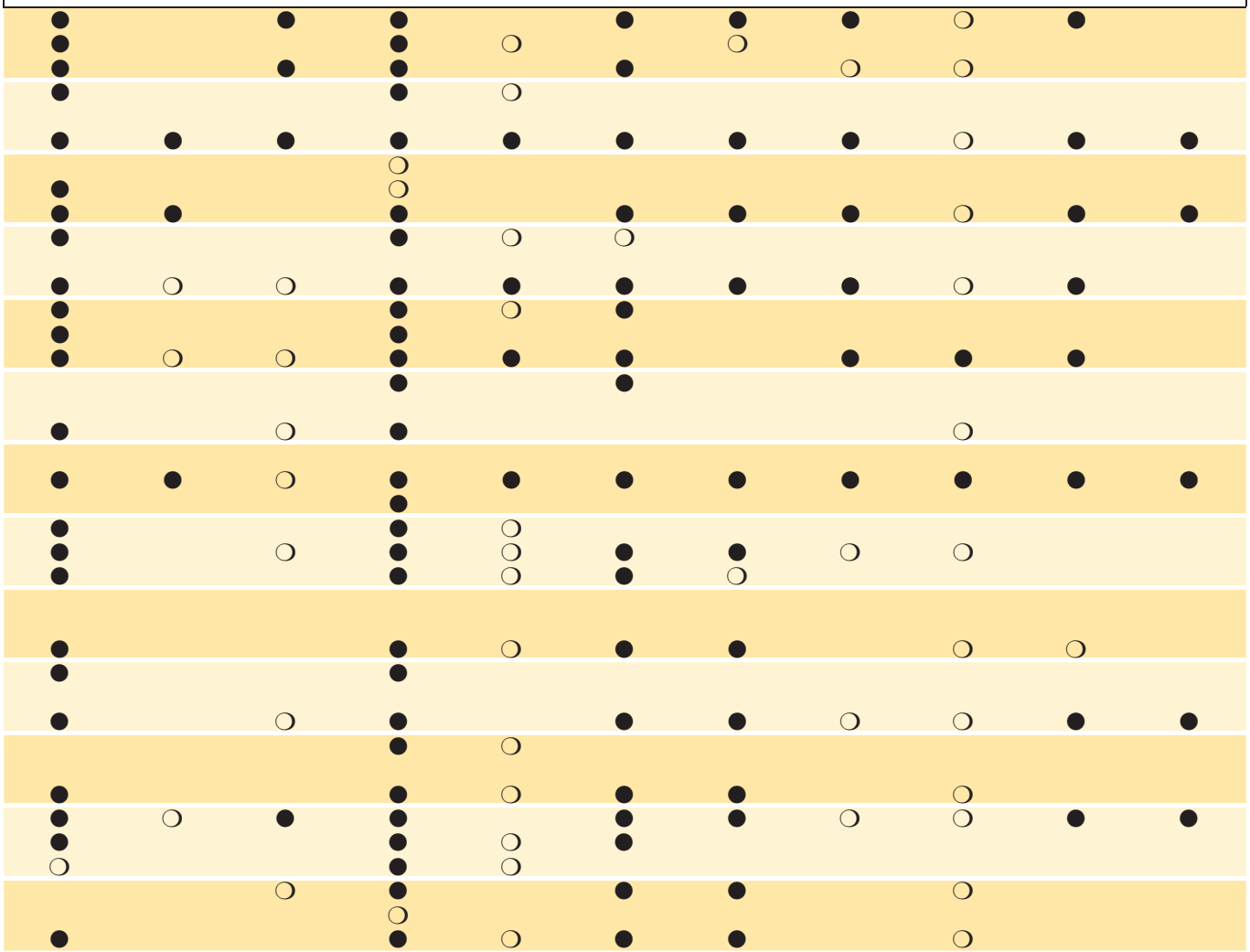
d1 mm	d1 inch	l1 mm	l2 mm	Availability
8.300		79.00	37.00	● ● ● ○ ● ●
8.330	21/64	79.00	37.00	● ● ○ ○ ○ ○ ● ○
8.400		79.00	37.00	● ● ● ● ○ ●
8.430		79.00	37.00	● ○ ● ●
8.450		79.00	37.00	●
8.500		79.00	37.00	● ● ● ● ● ● ●
8.520		84.00	40.00	
8.550		84.00	40.00	●
8.600		84.00	40.00	● ● ● ●
8.610		84.00	40.00	● ● ●
8.650		84.00	40.00	●
8.700		84.00	40.00	● ● ●
8.730	11/32	84.00	40.00	● ● ○ ○ ○ ● ○
8.750		84.00	40.00	●
8.800		84.00	40.00	● ○ ○ ● ○
8.840		84.00	40.00	● ○ ● ○
8.850		84.00	40.00	○
8.900		84.00	40.00	● ○ ○ ●
8.950		84.00	40.00	●
9.000		84.00	40.00	● ● ● ● ○ ● ○
9.050		84.00	40.00	●
9.090		84.00	40.00	○ ○ ● ○
9.100		84.00	40.00	● ● ●
9.130	23/64	84.00	40.00	● ○ ○ ○ ○ ● ○
9.150		84.00	40.00	● ○
9.160		84.00	40.00	○
9.200		84.00	40.00	● ● ○ ●
9.250		84.00	40.00	●
9.270		84.00	40.00	○
9.300		84.00	40.00	● ● ●
9.340		84.00	40.00	● ● ● ○
9.350		84.00	40.00	● ○
9.400		84.00	40.00	● ○ ● ○
9.500		84.00	40.00	● ● ● ○ ○ ● ○
9.520	3/8	89.00	43.00	● ○ ● ● ○ ○ ● ○
9.580		89.00	43.00	● ○ ● ○
9.600		89.00	43.00	● ● ● ○
9.650		89.00	43.00	●
9.700		89.00	43.00	● ○ ● ●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

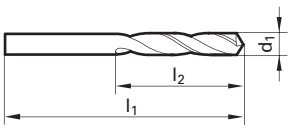


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





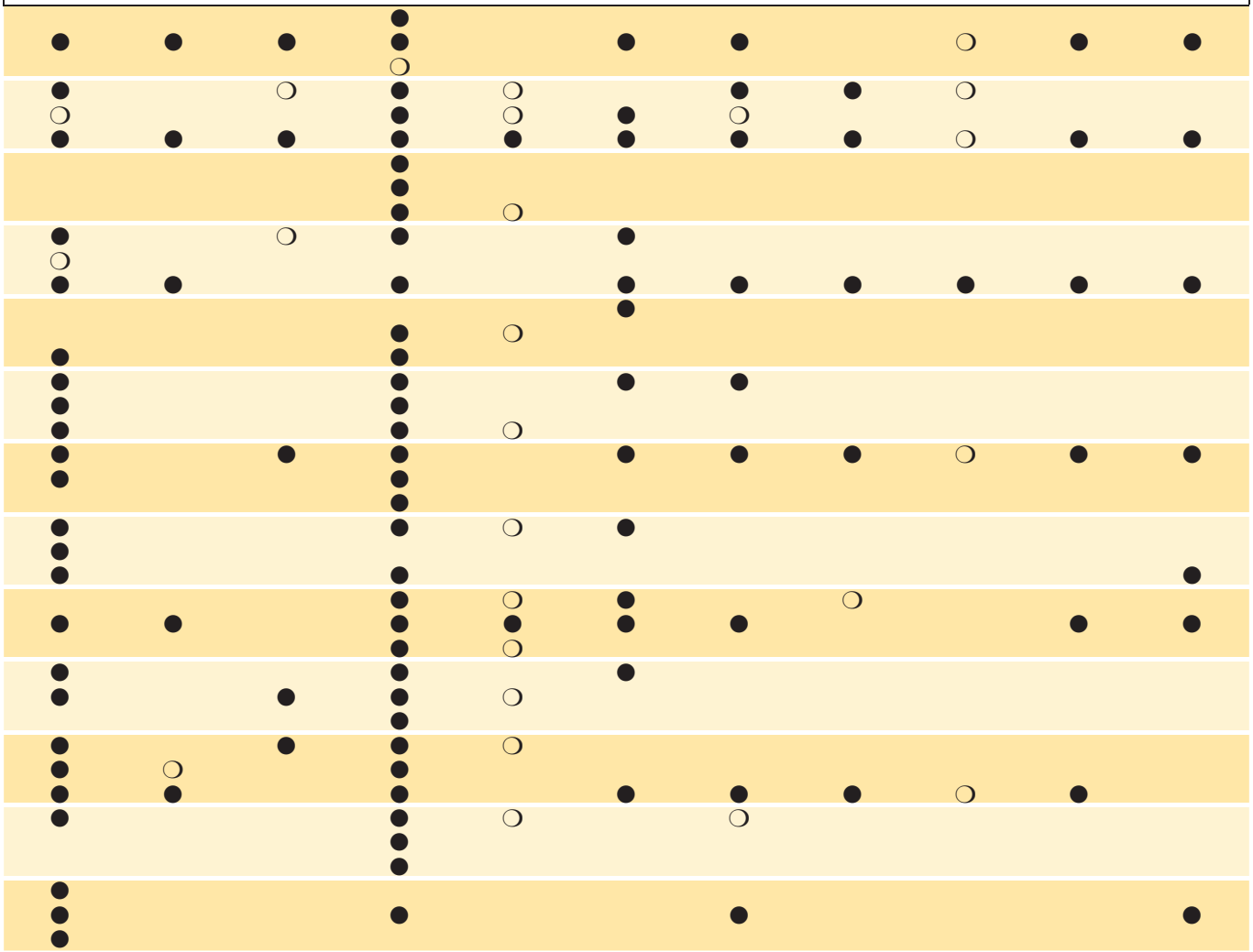
d1 mm	d1 inch	l1 mm	l2 mm	Availability
9.750		89.00	43.00	● ○
9.800		89.00	43.00	● ○ ● ●
9.850		89.00	43.00	●
9.900		89.00	43.00	● ○ ● ○
9.920	25/64	89.00	43.00	● ○ ○ ○ ○ ● ○
10.000		89.00	43.00	● ● ● ● ● ● ●
10.040		89.00	43.00	
10.050		89.00	43.00	● ●
10.080		89.00	43.00	● ○ ●
10.100		89.00	43.00	● ● ●
10.150		89.00	43.00	● ●
10.200		89.00	43.00	● ● ● ●
10.250		89.00	43.00	●
10.260		89.00	43.00	● ● ○
10.300		89.00	43.00	● ○ ●
10.320	13/32	89.00	43.00	● ● ○ ○ ○ ● ○
10.400		89.00	43.00	● ●
10.490		89.00	43.00	● ○ ○ ○
10.500		89.00	43.00	● ● ● ● ● ● ●
10.600		89.00	43.00	● ○ ○
10.700		95.00	47.00	● ○ ○
10.720	27/64	95.00	47.00	● ● ○ ○ ○ ● ○
10.750		95.00	47.00	●
10.800		95.00	47.00	● ● ●
10.900		95.00	47.00	● ○
11.000		95.00	47.00	● ● ● ● ● ● ●
11.100		95.00	47.00	● ○
11.110	7/16	95.00	47.00	● ● ● ● ○ ○ ● ○
11.200		95.00	47.00	● ○ ●
11.250		95.00	47.00	● ●
11.300		95.00	47.00	● ●
11.400		95.00	47.00	● ●
11.500		95.00	47.00	● ● ● ○ ● ●
11.510	29/64	95.00	47.00	● ○ ○ ● ○
11.600		95.00	47.00	●
11.700		95.00	47.00	●
11.750		95.00	47.00	● ○
11.800		95.00	47.00	● ● ● ○
11.900		102.00	51.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

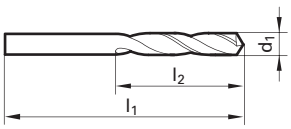


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	223	224	225	226	227	228	552	553
11.910	15/32	102.00	51.00	○	●			○	○	●	○
12.000		102.00	51.00	●	●	●	●			●	○
12.050		102.00	51.00	●							
12.100		102.00	51.00	●		○					
12.150		102.00	51.00	●							
12.200		102.00	51.00	●			●				
12.250		102.00	51.00	●							
12.300	31/64	102.00	51.00	●				○	○	●	○
12.350		102.00	51.00	●							
12.400		102.00	51.00	●						●	
12.450		102.00	51.00				○				
12.500		102.00	51.00	●	●	●	●		○	●	○
12.600		102.00	51.00	●							
12.700	1/2	102.00	51.00	●		●	●		○	●	○
12.750		102.00	51.00	●							
12.800		102.00	51.00	●		●			○		○
12.900		102.00	51.00	●			○			●	
13.000		102.00	51.00	●	●	●	●		○	●	○
13.100	33/64	102.00	51.00	●						●	○
13.200		102.00	51.00	●			○				
13.250		107.00	54.00	●			○				
13.300		107.00	54.00	●							
13.400		107.00	54.00	●							
13.490	17/32	107.00	54.00	●						●	○
13.500		107.00	54.00	●				○	○	●	○
13.600		107.00	54.00	●							
13.620		107.00	54.00		○						
13.700		107.00	54.00	●							
13.750		107.00	54.00	●			○				○
13.800		107.00	54.00	●							
13.890	35/64	107.00	54.00	●			○			●	○
14.000		107.00	54.00	●	●	●	●		●	●	●
14.050		111.00	56.00				○				
14.100		111.00	56.00	●							
14.200		111.00	56.00	●			●				
14.250		111.00	56.00	●			○				○
14.290	9/16	111.00	56.00	●			●			●	○
14.300		111.00	56.00	●							
14.400		111.00	56.00	●							

Availability

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

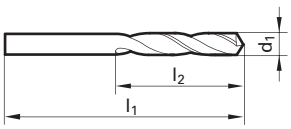


Availability

○ ●			● ●	○ ●	●	●	●	○	●	●
●			●		●					
●		●	●		●					
●		○	●	○	●	●				
				○						
●	●		●		●	●		○	●	●
●	○	○	● ●		●	●				
●		●	● ● ●		●	●				
●	●		●	○	●	●		○	●	●
● ○						●				
●					●	○				
●	○	○	● ● ●	○		●				●
●			●							
● ● ●			● ●	○	●	●				●
●			●							
●			●		●					

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





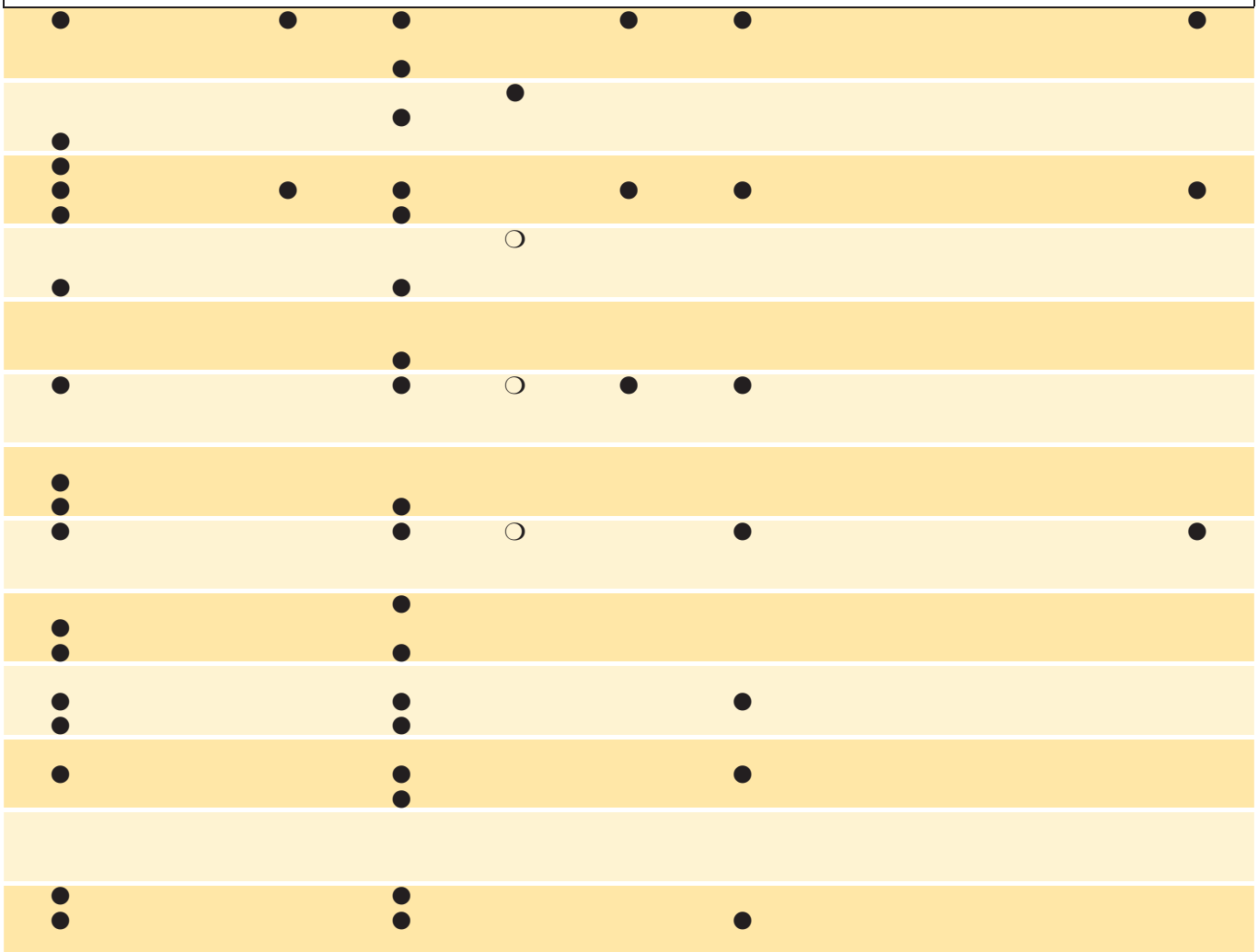
d1 mm	d1 inch	l1 mm	l2 mm	Availability
14.500		111.00	56.00	● ● ● ● ○ ● ○
14.600		111.00	56.00	●
14.680	37/64	111.00	56.00	● ○ ○
14.700		111.00	56.00	○ ○ ○
14.750		111.00	56.00	●
14.800		111.00	56.00	●
14.900		111.00	56.00	●
15.000		111.00	56.00	● ● ● ● ● ○ ● ○
15.080	19/32	115.00	58.00	● ○ ○
15.100		115.00	58.00	●
15.200		115.00	58.00	● ●
15.250		115.00	58.00	●
15.300		115.00	58.00	●
15.400		115.00	58.00	●
15.480	39/64	115.00	58.00	● ○ ● ○
15.500		115.00	58.00	● ○ ● ○
15.600		115.00	58.00	● ○
15.700		115.00	58.00	● ○
15.750		115.00	58.00	● ○
15.800		115.00	58.00	
15.870	5/8	115.00	58.00	● ● ○
16.000		115.00	58.00	● ● ● ● ● ○
16.100		119.00	60.00	●
16.150		119.00	60.00	●
16.200		119.00	60.00	● ○
16.250		119.00	60.00	●
16.270	41/64	119.00	60.00	● ● ○
16.300		119.00	60.00	●
16.500		119.00	60.00	● ● ○ ●
16.670	21/32	119.00	60.00	● ●
16.750		119.00	60.00	●
17.000		119.00	60.00	● ● ● ● ○
17.070	43/64	123.00	62.00	● ○ ● ○
17.100		123.00	62.00	●
17.200		123.00	62.00	●
17.250		123.00	62.00	●
17.460	11/16	123.00	62.00	● ● ○
17.500		123.00	62.00	● ○
17.600		123.00	62.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154

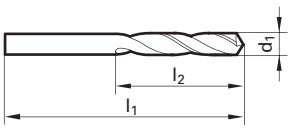


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	Availability
17.750		123.00	62.00	● ○
17.860	45/64	123.00	62.00	● ● ○
18.000		123.00	62.00	● ● ● ● ○ ● ●
18.100		127.00	64.00	●
18.200		127.00	64.00	●
18.250		127.00	64.00	●
18.260	23/32	127.00	64.00	● ● ○
18.500		127.00	64.00	● ○ ○
18.650	47/64	127.00	64.00	● ○
18.750		127.00	64.00	●
19.000		127.00	64.00	● ● ● ○
19.050	3/4	131.00	66.00	● ○ ○ ○ ○
19.100		131.00	66.00	●
19.250		131.00	66.00	●
19.450	49/64	131.00	66.00	○
19.500		131.00	66.00	● ○
19.750		131.00	66.00	○
19.840	25/32	131.00	66.00	○ ○ ● ○
20.000		131.00	66.00	● ● ○ ● ● ○
20.100		136.00	68.00	●
20.240	51/64	136.00	68.00	●
20.250		136.00	68.00	●
20.500		136.00	68.00	●
20.640	13/16	136.00	68.00	● ○
20.750		136.00	68.00	●
20.800		136.00	68.00	●
21.000		136.00	68.00	● ● ● ○
21.030	53/64	136.00	68.00	○
21.250		141.00	70.00	○
21.430	27/32	141.00	70.00	●
21.500		141.00	70.00	●
21.750		141.00	70.00	○
21.830	55/64	141.00	70.00	○ ○
22.000		141.00	70.00	● ●
22.200		141.00	70.00	○
22.220	7/8	141.00	70.00	●
22.400		141.00	70.00	○
22.500		146.00	72.00	● ●
22.620	57/64	146.00	72.00	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

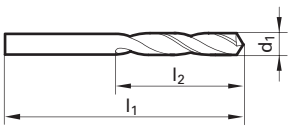
653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S	○	M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154



Availability										
● ○			○ ●			●				
○										
○ ● ●			● ●			●				
● ●			● ●			●				
			●							
●			●	○ ○						
●			●			●				
● ●			● ● ●							
●			●							
●										
●			● ●							
● ○				○						

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	Availability
23.000		146.00	72.00	● ●
23.020	29/32	146.00	72.00	●
23.420	59/64	146.00	72.00	❍
23.500		146.00	72.00	●
23.810	15/16	151.00	75.00	●
24.000		151.00	75.00	● ● ❍
24.210	61/64	151.00	75.00	●
24.500		151.00	75.00	●
24.610	31/32	151.00	75.00	●
25.000	63/64	151.00	75.00	● ●
25.400	1	156.00	78.00	● ●
25.500		156.00	78.00	❍
26.000		156.00	78.00	●
26.190	1 1/32	156.00	78.00	❍
26.500		156.00	78.00	●
26.590	1 3/64	162.00	81.00	❍
26.990	1 1/16	162.00	81.00	❍
27.000		162.00	81.00	●
27.380	1 5/64	162.00	81.00	❍
27.500		162.00	81.00	●
28.000		162.00	81.00	●
28.500		168.00	84.00	
28.570	1 1/8	168.00	84.00	●
29.000		168.00	84.00	● ❍
29.370	1 5/32	168.00	84.00	●
29.500		168.00	84.00	
30.000		168.00	84.00	●
30.160	1 3/16	174.00	87.00	
30.960	1 7/32	174.00	87.00	❍ ❍
31.000		174.00	87.00	●
31.500		174.00	87.00	●
31.750	11/4	180.00	90.00	❍
32.000		180.00	90.00	●
32.150	1 17/64	180.00	90.00	❍
32.940	1 19/64	180.00	90.00	❍
33.000		180.00	90.00	❍ ❍
34.500		186.00	93.00	❍
34.920	1 3/8	186.00	93.00	❍
35.000		186.00	93.00	

❍ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

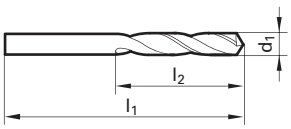
653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S		M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154



Availability										
●			●							
●				○						
●			●	○						
●			●							
●			●	○						
○			●							
			●	○						
				○						
○			●							
○										
○										
○										
●										
○										
				○						
				○						
				○						

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	223	224	225	226	227	228	552	553
Standard	DIN 1897							
Tool material	HSS							
Surface	>Ø 2,36			>Ø 6,00			<Ø 2,36 >Ø 16,0	<Ø 2,36 >Ø 16,0
Type	N	H	W	N	H	W	GT 80	GT 80
Cutting direction	right-hand	right-hand	right-hand	left-hand	left-hand	left-hand	right-hand	left-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	138	134	138	138	136	138
Techn. data page	150	151	151	151	151	151	152	152





d1 mm	d1 inch	l1 mm	l2 mm	Availability
36.000		193.00	96.00	❍
37.000		193.00	96.00	❍
39.500		200.00	100.00	❍
40.000		200.00	100.00	❍ ❍
44.000		214.00	108.00	❍
44.450	13/4	214.00	108.00	❍
45.000		214.00	108.00	❍
48.000		228.00	116.00	❍ ❍
50.000		228.00	116.00	❍

❍ bright ❍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

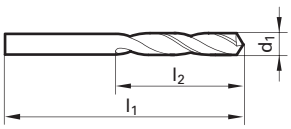
653	672	2460	329	330	659	1228	1261	2048	2461	2498
DIN 1897										
HSS			HSCO							
S	S	F	>Ø 2,36	>Ø 6,00	S	S	○	M	F	F
N	N	N	GV 120	GV 120	GV 120	GT 80	VA	P2000	GV 120	GT 80
right-hand	left-hand	right-hand	right-hand	left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
133	139	133	134	138	135	137	138	135	135	137
152	152	152	153	153	153	153	153	154	154	154



Availability
❍

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1259	515	730	2463
Standard	DIN 1897		DIN 6539	
Tool material	M42	HSS-E-PM	Solid carbide	
Surface	○	F	○	F
Type	N	GT 500	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h7	h7
Discount group	138	115	102	102
Techn. data page	154	154	155	155

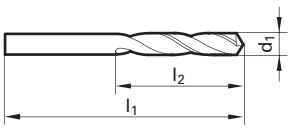




d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.500		20.00	3.00	●
0.600		21.00	3.50	●
0.700		23.00	4.50	●
0.800		24.00	5.00	●
0.900		25.00	5.50	●
1.000		26.00	6.00	● ● ● ●
1.020		26.00	6.00	● ● ●
1.040		26.00	6.00	● ● ●
1.070		28.00	7.00	● ● ●
1.090		28.00	7.00	● ● ●
1.100		28.00	7.00	● ● ● ●
1.180		28.00	7.00	● ● ●
1.190	3/64	30.00	8.00	● ● ●
1.200		30.00	8.00	● ● ● ●
1.300		30.00	8.00	● ● ● ●
1.320		30.00	8.00	● ● ●
1.400		32.00	9.00	● ● ● ●
1.500		32.00	9.00	● ● ● ●
1.510		34.00	10.00	● ● ●
1.590	1/16	34.00	10.00	● ● ●
1.600		34.00	10.00	● ● ● ●
1.610		34.00	10.00	● ● ●
1.700		34.00	10.00	● ● ● ●
1.780		36.00	11.00	● ● ●
1.800		36.00	11.00	● ● ● ●
1.850		36.00	11.00	● ● ●
1.900		36.00	11.00	● ● ● ●
1.930		38.00	12.00	● ● ●
1.980	5/64	38.00	12.00	○ ● ●
1.990		38.00	12.00	● ● ●
2.000		38.00	12.00	● ● ● ●
2.060		38.00	12.00	● ● ●
2.080		38.00	12.00	● ● ●
2.100		38.00	12.00	● ● ● ●
2.180		40.00	13.00	● ● ●
2.200		40.00	13.00	● ● ● ●
2.250		40.00	13.00	● ●
2.260		40.00	13.00	● ● ●
2.300		40.00	13.00	● ● ● ●

○ bright ◐ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1259	515	730	2463
Standard	DIN 1897		DIN 6539	
Tool material	M42	HSS-E-PM	Solid carbide	
Surface	○	(F)	○	(F)
Type	N	GT 500	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h7	h7
Discount group	138	115	102	102
Techn. data page	154	154	155	155







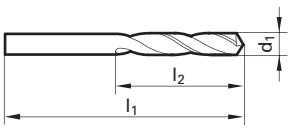




d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.370		43.00	14.00	
2.380	3/32	43.00	14.00	○
2.400		43.00	14.00	●
2.440		43.00	14.00	
2.490		43.00	14.00	
2.500		43.00	14.00	●
2.530		43.00	14.00	
2.580		43.00	14.00	
2.600		43.00	14.00	●
2.640		43.00	14.00	
2.700		46.00	16.00	●
2.710		46.00	16.00	
2.780	7/64	46.00	16.00	●
2.790		46.00	16.00	
2.800		46.00	16.00	●
2.820		46.00	16.00	
2.870		46.00	16.00	
2.900		46.00	16.00	●
2.950		46.00	16.00	
3.000		46.00	16.00	●
3.050		49.00	18.00	
3.100		49.00	18.00	●
3.170	1/8	49.00	18.00	●
3.200		49.00	18.00	●
3.260		49.00	18.00	
3.300		49.00	18.00	●
3.400		52.00	20.00	●
3.450		52.00	20.00	
3.500		52.00	20.00	●
3.570	9/64	52.00	20.00	
3.600		52.00	20.00	●
3.660		52.00	20.00	
3.700		52.00	20.00	●
3.730		52.00	20.00	
3.800		55.00	22.00	●
3.860		55.00	22.00	
3.900		55.00	22.00	●
3.910		55.00	22.00	
3.970	5/32	55.00	22.00	○

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	1259	515	730	2463
Standard	DIN 1897		DIN 6539	
Tool material	M42	HSS-E-PM	Solid carbide	
Surface	○	F	○	F
Type	N	GT 500	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h7	h7
Discount group	138	115	102	102
Techn. data page	154	154	155	155







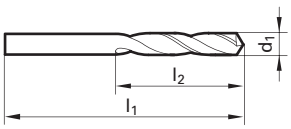




d1 mm	d1 inch	l1 mm	l2 mm	Availability			
3.990		55.00	22.00		●	●	●
4.000		55.00	22.00	●	●	●	●
4.040		55.00	22.00		●	●	●
4.090		55.00	22.00		●		●
4.100		55.00	22.00	●	●	●	●
4.200		55.00	22.00	●	●	●	●
4.220		55.00	22.00		●	●	●
4.300		58.00	24.00	●	●	●	●
4.370	11/64	58.00	24.00	❍	●	●	❍
4.390		58.00	24.00		●	●	●
4.400		58.00	24.00	●	●	●	●
4.500		58.00	24.00	●	●	●	●
4.570		58.00	24.00		●	●	●
4.600		58.00	24.00	●	●	●	●
4.620		58.00	24.00		●	●	●
4.650		58.00	24.00		●		
4.700		58.00	24.00	●	●	●	●
4.760	3/16	62.00	26.00	●	●	●	●
4.800		62.00	26.00	●	●	●	●
4.850		62.00	26.00		●	●	●
4.900		62.00	26.00	●	●	●	●
4.920		62.00	26.00		●	●	●
4.980		62.00	26.00		●	●	●
5.000		62.00	26.00	●	●	●	●
5.060		62.00	26.00		●	●	●
5.100		62.00	26.00	●	●	●	●
5.110		62.00	26.00		●	●	●
5.160	13/64	62.00	26.00		●	●	●
5.180		62.00	26.00		●	●	●
5.200		62.00	26.00	●	●	●	●
5.220		62.00	26.00		●	●	●
5.300		62.00	26.00	●	●	●	●
5.310		66.00	28.00		●	●	●
5.400		66.00	28.00	●	●	●	●
5.410		66.00	28.00		●	●	●
5.500		66.00	28.00	●	●	●	●
5.560	7/32	66.00	28.00	●	●	●	●
5.600		66.00	28.00	●	●	●	●
5.610		66.00	28.00		●		●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1259	515	730	2463
Standard	DIN 1897		DIN 6539	
Tool material	M42	HSS-E-PM	Solid carbide	
Surface	○	F	○	F
Type	N	GT 500	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h7	h7
Discount group	138	115	102	102
Techn. data page	154	154	155	155







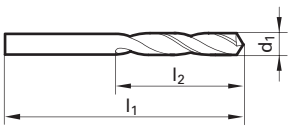




d1 mm	d1 inch	l1 mm	l2 mm	Availability			
5.700		66.00	28.00	○	●	●	●
5.790		66.00	28.00		●	●	●
5.800		66.00	28.00	●	●	●	●
5.900		66.00	28.00		●	●	●
5.940		66.00	28.00		●	●	●
5.950	15/64	66.00	28.00	●	●	●	●
6.000		66.00	28.00	●	●	●	●
6.040		70.00	31.00		●	●	●
6.100		70.00	31.00	●	●	●	●
6.150		70.00	31.00		●	●	●
6.200		70.00	31.00	●	●	●	●
6.250		70.00	31.00		●	●	●
6.300		70.00	31.00	●	●	●	●
6.350	1/4	70.00	31.00	●	●	●	●
6.400		70.00	31.00	●	●	●	●
6.500		70.00	31.00	●	●	●	●
6.530		70.00	31.00		●	●	●
6.600		70.00	31.00	●	●	●	●
6.630		70.00	31.00		●	●	●
6.700		70.00	31.00	●	●	●	●
6.750	17/64	74.00	34.00		●	●	●
6.800		74.00	34.00	●	●	●	●
6.900		74.00	34.00	●	●	●	●
7.000		74.00	34.00	●	●	●	●
7.030		74.00	34.00		●	●	●
7.100		74.00	34.00	●	●	●	●
7.140	9/32	74.00	34.00	○	●	●	●
7.200		74.00	34.00	●	●	●	●
7.300		74.00	34.00	●	●	●	●
7.370		74.00	34.00		●	●	●
7.400		74.00	34.00	●	●	●	●
7.490		74.00	34.00		●	●	
7.500		74.00	34.00	●	●	●	●
7.540	19/64	79.00	37.00	○	●	●	●
7.600		79.00	37.00	●	●	●	●
7.670		79.00	37.00		●	●	●
7.700		79.00	37.00	●	●	●	●
7.800		79.00	37.00	●	●	●	●
7.900		79.00	37.00	●	●	●	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	1259	515	730	2463
Standard	DIN 1897		DIN 6539	
Tool material	M42	HSS-E-PM	Solid carbide	
Surface	○	F	○	F
Type	N	GT 500	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h7	h7
Discount group	138	115	102	102
Techn. data page	154	154	155	155

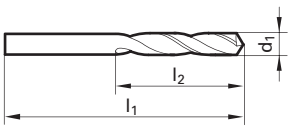




d1 mm	d1 inch	l1 mm	l2 mm	Availability			
7.940	5/16	79.00	37.00	●	●	●	●
8.000		79.00	37.00	●	●	●	●
8.030		79.00	37.00		●	●	●
8.100		79.00	37.00	●	●	●	●
8.200		79.00	37.00	●	●	●	●
8.300		79.00	37.00	●	●	●	●
8.330	21/64	79.00	37.00	❍	●	●	●
8.400		79.00	37.00		●	●	●
8.430		79.00	37.00		●	●	●
8.500		79.00	37.00	●	●	●	●
8.600		84.00	40.00	●		●	●
8.610		84.00	40.00		●	●	●
8.700		84.00	40.00	●		●	●
8.730	11/32	84.00	40.00		●	●	●
8.800		84.00	40.00		●	●	●
8.840		84.00	40.00		●	●	●
8.900		84.00	40.00		●	●	●
9.000		84.00	40.00	●	●	●	●
9.090		84.00	40.00		●	●	●
9.100		84.00	40.00			●	●
9.130	23/64	84.00	40.00		●	●	●
9.200		84.00	40.00		❍	●	●
9.300		84.00	40.00	●	●	●	●
9.340		84.00	40.00		●	●	●
9.350		84.00	40.00		❍		
9.400		84.00	40.00	●	❍	●	●
9.500		84.00	40.00	●	●	●	●
9.520	3/8	89.00	43.00		●	●	●
9.580		89.00	43.00		●	●	●
9.600		89.00	43.00		●	●	●
9.700		89.00	43.00		●	●	●
9.800		89.00	43.00	❍	●	●	●
9.900		89.00	43.00	●		●	●
9.920	25/64	89.00	43.00		●	●	●
10.000		89.00	43.00	●	●	●	●
10.080		89.00	43.00		●	●	●
10.200		89.00	43.00		●	●	●
10.260		89.00	43.00		●	●	●
10.300		89.00	43.00			●	●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1259	515	730	2463
Standard	DIN 1897		DIN 6539	
Tool material	M42	HSS-E-PM	Solid carbide	
Surface	○	F	○	F
Type	N	GT 500	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h7	h7
Discount group	138	115	102	102
Techn. data page	154	154	155	155







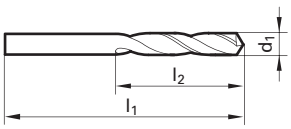




d1 mm	d1 inch	l1 mm	l2 mm	Availability			
10.320	13/32	89.00	43.00		●	●	●
10.490		89.00	43.00		●	●	●
10.500		89.00	43.00	●	●	●	●
10.720	27/64	95.00	47.00		●	●	●
11.000		95.00	47.00	●	●	●	●
11.110	7/16	95.00	47.00		●	●	○
11.500		95.00	47.00	●	●	●	○
11.510	29/64	95.00	47.00	○	○	●	●
11.700		95.00	47.00			●	
11.800		95.00	47.00		○		
11.910	15/32	102.00	51.00		●	●	○
12.000		102.00	51.00	●	●	●	●
12.300	31/64	102.00	51.00		●	●	●
12.500		102.00	51.00	●	●	●	
12.700	1/2	102.00	51.00	○	●	●	●
13.000		102.00	51.00	○	●	●	●
13.100	33/64	102.00	51.00		●		
13.490	17/32	107.00	54.00		●	●	●
13.500		107.00	54.00		●		
14.000		107.00	54.00		●	●	●
14.290	9/16	111.00	56.00		●	●	●
15.000		111.00	56.00	●		●	●
15.870	5/8	115.00	58.00	○			
16.000		115.00	58.00			●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	702
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Tolerance	h7
Discount group	102
Techn. data page	155

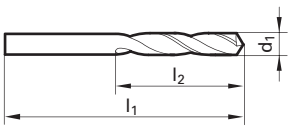




d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.500		30.00	5.50	●
0.550		30.00	5.50	●
0.600		30.00	5.50	●
0.650		30.00	6.50	●
0.700		30.00	6.50	●
0.750		30.00	8.50	●
0.800		30.00	8.50	●
0.900		30.00	9.50	●
0.950		30.00	11.00	●
1.000		30.00	11.00	●
1.050		30.00	11.00	●
1.100		30.00	11.00	●
1.200		30.00	13.00	●
1.350		30.00	13.00	●
1.400		30.00	13.00	●
1.450		30.00	13.00	●
1.500		30.00	13.00	●
1.600		40.00	17.50	●
1.650		40.00	17.50	●
1.700		40.00	17.50	●
1.800		40.00	17.50	●
1.850		40.00	17.50	●
1.900		40.00	17.50	●
1.930		40.00	17.50	●
2.000		40.00	17.50	●
2.010		40.00	17.50	●
2.050		40.00	17.50	●
2.100		40.00	17.50	●
2.200		40.00	17.50	●
2.260		40.00	17.50	◯
2.300		40.00	17.50	●
2.400		40.00	17.50	●
2.490		40.00	17.50	●
2.500		40.00	17.50	●
2.530		45.00	20.00	●
2.600		45.00	20.00	●
2.700		45.00	20.00	●
2.800		45.00	20.00	●
3.000		45.00	20.00	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	702
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	h7
Discount group	102
Techn. data page	155





d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.050		50.00	22.00	●
3.100		50.00	22.00	●
3.150		50.00	22.00	●
3.200		50.00	22.00	●
3.260		50.00	22.00	○
3.300		50.00	22.00	●
3.400		50.00	22.00	●
3.450		50.00	22.00	●
3.500		50.00	22.00	●
3.570	9/64	50.00	22.00	●
3.600		50.00	22.00	●
3.910		50.00	22.00	○
4.000		50.00	22.00	●
4.200		50.00	25.00	○
4.300		50.00	25.00	●
4.400		50.00	25.00	○
4.700		50.00	25.00	○
4.900		50.00	25.00	●
5.000		50.00	25.00	●
5.200		50.00	25.00	●
5.310		50.00	25.00	○
5.610		50.00	25.00	○
5.790		50.00	25.00	○
5.950	15/64	50.00	25.00	○
6.000		50.00	25.00	●
6.250		65.00	30.00	●
6.350	1/4	65.00	30.00	○
6.500		65.00	30.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no. of set	201	200	36	11
as Guhring no.	205	205		
	Set in case	Drills only	Case only	Plastic stand only
Standard	DIN 338	DIN 338	Guhring standard	Guhring standard
Tool material	HSS	HSS	-	-
Surface finish	○ ●	○ ●	-	-
Type	N	N	-	-
Cutting direction	rh	rh	-	-
Discount group	130	130	138	138
Techn. data page				



Guhring drills are available in the sets of popular sizes as shown. For bench use the sets can be supplied in bakelite stands. For more portable use the box is recommended.
Other drill set compositions on request.

composition of drill sets	drills per set	Code no.	Availability	Code no.	Availability	Code no.	Availability	Code no.	Availability
from 1.0 - 5.0 mm in increments of 0.1 mm	41			**200** 0,011	●			**11** 0,111	●
from 5.1 - 10.0 mm in increments of 0.1 mm	50	**201** 0,012	●	**200** 0,012	●			**11** 0,112	●
from 1.0 - 10.0 mm in increments of 0.5 mm	19	**201** 0,013	●	**200** 0,013	●	**36** 0,213	●	**11** 0,113	●
from 1.0 - 13 mm in increments of 0.5 mm	25	**201** 0,014	●	**200** 0,014	●	**36** 0,214	●	**11** 0,114	●
from 1.0 - 5.9 mm in increments of 0.1 mm	50	**201** 0,015	●	**200** 0,015	●	**36** 0,215	●	**11** 0,115	●
from 6.0 - 10.0 mm in increments of 0.1 mm	41	**201** 0,016	●	**200** 0,016	●	**36** 0,216	●		
from 1.0 - 6.0 mm in increments of 0.5 mm	11	**201** 0,017	○						
from 1.0 - 10.5 mm in increments of 0.5 mm supplementary sizes 3.3/4.2/6.8 und 10.2	24	**201** 0,018	●	**200** 0,018	●	**36** 0,218	●		
from 1.0 - 10.5 mm in increments of 0.5 mm supplementary sizes 1.9/2.1/2.6/2.9/3.2/3.3 3.8/4.2/5.1/6.8/7.9/10.2	32	**201** 0,019	●		○	**36** 0,219	●		
from 1/16 - 1/2 inch in increments of 1/64 inch	29	**201** 0,021	●					**11** 0,121	○
from 1.02 - 5.79 mm	60	**201** 0,028	○						

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

Guhring no. of set	201	200	73	11
as Guhring no.	651	651		
	Set in case	Drills only	Case only	Plastic stand only
Standard	DIN 338	DIN 338	Guhring standard	Guhring standard
Tool material	HSS	HSS	-	-
Surface finish	S	S	-	-
Type	N	N	-	-
Cutting direction	rh	rh	-	-
Discount group	130	130	138	138
Techn. data page				



Guhring drills are available in the sets of popular sizes as shown. For bench use the sets can be supplied in bakelite stands. For more portable use the box is recommended.
Other drill set compositions on request.

composition of drill sets	drills per set	Code no.	Availability	Code no.	Availability	Code no.	Availability	Code no.	Availability
from 1.0 - 10.0 mm in increments of 0.5 mm	19	**201** 6,013	●					**11** 0,113	●
from 1.0 - 13.0 mm in increments of 0.5 mm	25	**201** 6,014	●			**73** 0,614	●	**11** 0,114	●
from 1.0 - 5.9 mm in increments of 0.1 mm	50	**201** 6,015	●					**11** 0,115	●
from 6.0 - 10 mm in increments of 0.1 mm	41	**201** 6,016	●						
from 1/16 - 1/2 inch in increments of 1/64 inch	29	**201** 6,021	❍	**200** 6,021	❍			**11** 0,121	❍
from 1/16 - 1/2 inch in increments of 1/32 inch	15	**201** 6,022	❍	**200** 6,022	❍				

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no. of set	201	201	200	195	11
as Guhring no.	305	605	605	1260	
	Set in case	Set in case	Drills only	Set in case	Plastic stand only
Standard	DIN 338	DIN 338	DIN 338	DIN 338	Guhring standard
Tool material	HSCO	HSCO	HSCO	HSCO	-
Surface finish	○ ●	○	○	○	-
Type	N	Ti	Ti	VA	-
Cutting direction	rh	rh	rh	rh	-
Discount group	130	134	134	130	138
Techn. data page					



Guhring drills are available in the sets of popular sizes as shown. For bench use the sets can be supplied in bakelite stands. For more portable use the box is recommended.
Other drill set compositions on request.

composition of drill sets	drills per set	Code no.	Availability	Code no.	Availability	Code no.	Availability	Code no.	Availability	Code no.	Availability
from 1,0 - 10,0 mm in increments of 0.5 mm	19	**201** 3,013	●							**11** 0,113	●
from 1,0 - 13,0 mm in increments of 0.5 mm	25	**201** 3,014	●	**201** 8,014	●			**195** 8,014	●	**11** 0,114	●
from 1,0 - 5,9 mm in increments of 0.1 mm	50	**201** 3,015	●							**11** 0,115	●
from 6,0 - 10 mm in increments of 0.1 mm	41	**201** 3,016	●								
from 1,0 - 10,5 mm in increments of 0.5 mm supplementary sizes 3,3/4,2/6,8 and 10,2	24			**201** 8,018	●	**200** 8,018	◑	**195** 8,018	●		
from 1/16 - 1/2 inch in increments of 1/64 inch	29	**201** 3,021	●								

○ bright ◎ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A AlTiN SuperA

Guhring no. of set	2049	2050
as Guhring no.	2047	2048
	Performance-drill sets in case	*Performance*-drill sets in case
Standard	DIN 338	DIN 1897
Tool material	HSCO	HSCO
Surface finish		M
Type	P2000	P2000
Cutting direction	rh	rh
Discount group	134	135
Techn. data page		



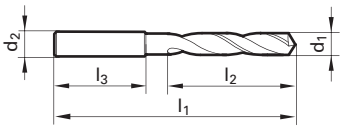


Guhring drills are available in the sets of popular sizes as shown. For bench use the sets can be supplied in bakelite stands. For more portable use the box is recommended.
Other drill set compositions on request.

composition of drill sets	drills per set	Code no.	Availability	Code no.	Availability
from 1.0 - 5.0 mm in increments of 0.1 mm	41	**2049** 0,011	●		
from 5.1 - 10.0 mm in increments of 0.1 mm	50	**2049** 0,012	●	**2050** 0,012	❍
from 1.0 - 10.0 mm in increments of 0.5 mm	19	**2049** 0,013	●	**2050** 0,013	●
from 1.0 - 13.0 mm in increments of 0.5 mm	25	**2049** 0,014	●	**2050** 0,014	❍
from 1.0 - 10.5 mm in increments of 0.5 mm supplementary sizes 3.3/4.2/6.8 und 10.2	24	**2049** 0,018	●		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	512
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	155

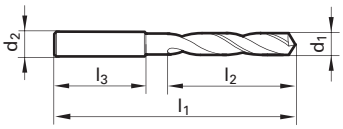




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
2.000	3.000	44.00	12.00	28.00	●
2.100	3.000	44.00	12.00	28.00	●
2.200	3.000	45.00	13.00	28.00	●
2.300	3.000	45.00	13.00	28.00	●
2.380	3.000	46.00	14.00	28.00	●
2.400	3.000	46.00	14.00	28.00	●
2.500	3.000	46.00	14.00	28.00	●
2.600	3.000	46.00	14.00	28.00	●
2.700	3.000	48.00	16.00	28.00	●
2.780	3.000	48.00	16.00	28.00	○
2.800	3.000	48.00	16.00	28.00	●
2.900	3.000	48.00	16.00	28.00	●
3.000	3.000	48.00	16.00	28.00	●
3.100	4.000	50.00	18.00	28.00	●
3.170	4.000	50.00	18.00	28.00	●
3.200	4.000	50.00	18.00	28.00	●
3.300	4.000	50.00	18.00	28.00	●
3.400	4.000	52.00	20.00	28.00	●
3.500	4.000	52.00	20.00	28.00	●
3.570	4.000	52.00	20.00	28.00	○
3.600	4.000	52.00	20.00	28.00	●
3.700	4.000	52.00	20.00	28.00	●
3.800	4.000	54.00	22.00	28.00	●
3.900	4.000	54.00	22.00	28.00	●
4.000	4.000	54.00	22.00	28.00	●
4.100	6.000	66.00	22.00	36.00	●
4.200	6.000	66.00	22.00	36.00	●
4.300	6.000	68.00	24.00	36.00	●
4.370	6.000	68.00	24.00	36.00	○
4.400	6.000	68.00	24.00	36.00	●
4.500	6.000	68.00	24.00	36.00	●
4.700	6.000	68.00	24.00	36.00	●
4.760	6.000	70.00	26.00	36.00	○
4.800	6.000	70.00	26.00	36.00	●
4.900	6.000	70.00	26.00	36.00	●
5.000	6.000	70.00	26.00	36.00	●
5.100	6.000	70.00	26.00	36.00	●
5.200	6.000	70.00	26.00	36.00	●
5.300	6.000	70.00	26.00	36.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	512
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	155

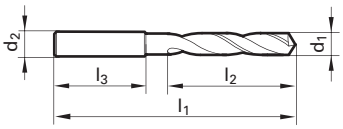




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
5.400	6.000	72.00	28.00	36.00	●
5.500	6.000	72.00	28.00	36.00	●
5.560	6.000	72.00	28.00	36.00	○
5.600	6.000	72.00	28.00	36.00	●
5.800	6.000	72.00	28.00	36.00	●
5.900	6.000	72.00	28.00	36.00	●
5.950	6.000	72.00	28.00	36.00	●
6.000	6.000	72.00	28.00	36.00	●
6.100	8.000	75.00	31.00	36.00	○
6.200	8.000	75.00	31.00	36.00	●
6.300	8.000	75.00	31.00	36.00	●
6.350	8.000	75.00	31.00	36.00	○
6.400	8.000	75.00	31.00	36.00	●
6.500	8.000	75.00	31.00	36.00	●
6.600	8.000	75.00	31.00	36.00	●
6.750	8.000	78.00	34.00	36.00	○
6.800	8.000	78.00	34.00	36.00	●
6.900	8.000	78.00	34.00	36.00	●
7.000	8.000	78.00	34.00	36.00	●
7.100	8.000	78.00	34.00	36.00	●
7.140	8.000	78.00	34.00	36.00	○
7.200	8.000	78.00	34.00	36.00	○
7.300	8.000	78.00	34.00	36.00	●
7.500	8.000	78.00	34.00	36.00	●
7.540	8.000	81.00	37.00	36.00	●
7.600	8.000	81.00	37.00	36.00	●
7.800	8.000	81.00	37.00	36.00	●
7.900	8.000	81.00	37.00	36.00	●
7.940	8.000	81.00	37.00	36.00	○
8.000	8.000	81.00	37.00	36.00	●
8.100	10.000	87.00	37.00	40.00	●
8.200	10.000	87.00	37.00	40.00	●
8.300	10.000	87.00	37.00	40.00	●
8.330	10.000	87.00	37.00	40.00	○
8.500	10.000	87.00	37.00	40.00	●
8.600	10.000	91.00	40.00	40.00	●
8.730	10.000	91.00	40.00	40.00	○
8.900	10.000	91.00	40.00	40.00	●
9.000	10.000	91.00	40.00	40.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	512
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	155

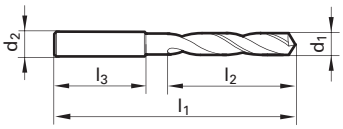




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
9.100	10.000	91.00	40.00	40.00	●
9.130	10.000	91.00	40.00	40.00	○
9.400	10.000	91.00	40.00	40.00	●
9.520	10.000	93.00	43.00	40.00	○
9.900	10.000	93.00	43.00	40.00	○
9.920	10.000	93.00	43.00	40.00	○
10.000	10.000	93.00	43.00	40.00	●
10.100	12.000	100.00	43.00	45.00	○
10.200	12.000	100.00	43.00	45.00	○
10.300	12.000	100.00	43.00	45.00	●
10.320	12.000	100.00	43.00	45.00	●
10.500	12.000	100.00	43.00	45.00	●
10.900	12.000	104.00	47.00	45.00	○
11.000	12.000	104.00	47.00	45.00	●
11.100	12.000	104.00	47.00	45.00	●
11.110	12.000	104.00	47.00	45.00	○
11.200	12.000	104.00	47.00	45.00	●
11.300	12.000	104.00	47.00	45.00	●
11.400	12.000	104.00	47.00	45.00	○
11.500	12.000	104.00	47.00	45.00	●
11.510	12.000	104.00	47.00	45.00	○
11.700	12.000	104.00	47.00	45.00	○
11.800	12.000	104.00	47.00	45.00	●
12.000	12.000	108.00	51.00	45.00	●
12.300	16.000	111.00	51.00	48.00	○
12.500	16.000	111.00	51.00	48.00	●
13.490	16.000	114.00	54.00	48.00	○
13.500	16.000	114.00	54.00	48.00	●
14.000	16.000	114.00	54.00	48.00	●
14.290	16.000	116.00	56.00	48.00	●
14.500	16.000	116.00	56.00	48.00	●
15.000	16.000	116.00	56.00	48.00	●
15.870	16.000	118.00	58.00	48.00	○
16.000	16.000	118.00	58.00	48.00	●
16.500	20.000	126.00	60.00	50.00	●
16.670	20.000	126.00	60.00	50.00	○
17.500	20.000	128.00	62.00	50.00	●
18.000	20.000	128.00	62.00	50.00	●
18.500	20.000	130.00	64.00	50.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	512
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	155

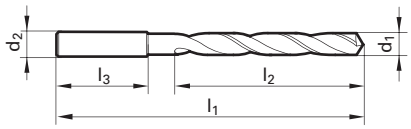




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
19.500	20.000	132.00	66.00	50.00	○
20.000	20.000	132.00	66.00	50.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	513
Standard	Guhring std.
Tool material	HSS-E-PM
Surface	F
Type	GT 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	155

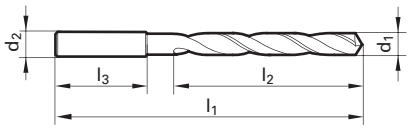




d1 mm	d2 mm	l1 mm	l2 mm	l3 mm	Availability
2.000	3.000	56.00	24.00	28.00	●
2.100	3.000	56.00	24.00	28.00	●
2.300	3.000	59.00	27.00	28.00	●
2.380	3.000	62.00	30.00	28.00	○
2.500	3.000	62.00	30.00	28.00	●
2.780	3.000	65.00	33.00	28.00	●
3.000	3.000	65.00	33.00	28.00	●
3.170	4.000	68.00	36.00	28.00	○
3.300	4.000	68.00	36.00	28.00	●
3.500	4.000	71.00	39.00	28.00	●
3.570	4.000	71.00	39.00	28.00	○
3.970	4.000	75.00	43.00	28.00	○
4.000	4.000	75.00	43.00	28.00	●
4.200	6.000	87.00	43.00	36.00	●
4.370	6.000	91.00	47.00	36.00	○
4.500	6.000	91.00	47.00	36.00	●
4.650	6.000	91.00	47.00	36.00	○
4.760	6.000	96.00	52.00	36.00	○
4.800	6.000	96.00	52.00	36.00	●
5.000	6.000	96.00	52.00	36.00	●
5.100	6.000	96.00	52.00	36.00	●
5.160	6.000	96.00	52.00	36.00	●
5.200	6.000	96.00	52.00	36.00	●
5.300	6.000	96.00	52.00	36.00	○
5.500	6.000	101.00	57.00	36.00	○
5.800	6.000	101.00	57.00	36.00	●
6.000	6.000	101.00	57.00	36.00	●
6.100	8.000	107.00	63.00	36.00	●
6.350	8.000	107.00	63.00	36.00	○
6.500	8.000	107.00	63.00	36.00	○
6.600	8.000	107.00	63.00	36.00	●
6.750	8.000	113.00	69.00	36.00	○
6.800	8.000	113.00	69.00	36.00	●
7.000	8.000	113.00	69.00	36.00	●
7.140	8.000	113.00	69.00	36.00	○
7.400	8.000	113.00	69.00	36.00	○
7.500	8.000	113.00	69.00	36.00	●
7.540	8.000	119.00	75.00	36.00	○
7.800	8.000	119.00	75.00	36.00	○

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**513**
Standard	**Guhring std.**
Tool material	**HSS-E-PM**
Surface	**F**
Type	**GT 500**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**115**
Techn. data page	**155**

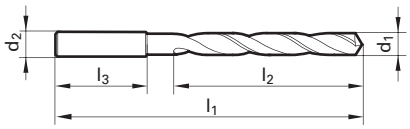




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
7.940	8.000	119.00	75.00	36.00	○
8.000	8.000	119.00	75.00	36.00	○
8.330	10.000	125.00	75.00	40.00	○
8.500	10.000	125.00	75.00	40.00	●
8.730	10.000	131.00	81.00	40.00	○
8.800	10.000	131.00	81.00	40.00	●
9.000	10.000	131.00	81.00	40.00	○
9.130	10.000	131.00	81.00	40.00	●
9.300	10.000	131.00	81.00	40.00	○
9.500	10.000	131.00	81.00	40.00	●
9.520	10.000	137.00	87.00	40.00	○
9.600	10.000	137.00	87.00	40.00	○
9.700	10.000	137.00	87.00	40.00	●
9.800	10.000	137.00	87.00	40.00	○
9.920	10.000	137.00	87.00	40.00	○
10.000	10.000	137.00	87.00	40.00	●
10.200	12.000	144.00	87.00	45.00	○
10.400	12.000	144.00	87.00	45.00	○
10.500	12.000	144.00	87.00	45.00	○
10.600	12.000	144.00	87.00	45.00	○
10.700	12.000	151.00	94.00	45.00	○
10.900	12.000	151.00	94.00	45.00	○
11.000	12.000	151.00	94.00	45.00	●
11.100	12.000	151.00	94.00	45.00	○
11.300	12.000	151.00	94.00	45.00	○
11.400	12.000	151.00	94.00	45.00	○
11.500	12.000	151.00	94.00	45.00	●
11.700	12.000	151.00	94.00	45.00	●
11.900	12.000	158.00	101.00	45.00	○
12.000	12.000	158.00	101.00	45.00	●
12.200	14.000	161.00	101.00	45.00	●
12.300	14.000	161.00	101.00	45.00	○
12.400	14.000	161.00	101.00	45.00	○
12.500	14.000	161.00	101.00	45.00	○
12.600	14.000	161.00	101.00	45.00	○
12.700	14.000	161.00	101.00	45.00	○
12.800	14.000	161.00	101.00	45.00	●
12.900	14.000	161.00	101.00	45.00	○
13.000	14.000	161.00	101.00	45.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	511
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	156

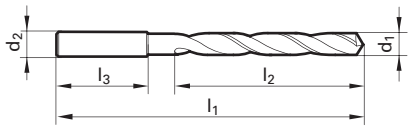




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
2.000	3.000	56.00	24.00	28.00	●
2.100	3.000	56.00	24.00	28.00	●
2.300	3.000	59.00	27.00	28.00	○
2.380	3.000	62.00	30.00	28.00	○
2.400	3.000	62.00	30.00	28.00	●
2.500	3.000	62.00	30.00	28.00	●
2.600	3.000	62.00	30.00	28.00	●
2.780	3.000	65.00	33.00	28.00	○
2.800	3.000	65.00	33.00	28.00	●
2.900	3.000	65.00	33.00	28.00	●
3.000	3.000	65.00	33.00	28.00	●
3.100	4.000	68.00	36.00	28.00	●
3.200	4.000	68.00	36.00	28.00	●
3.300	4.000	68.00	36.00	28.00	●
3.400	4.000	71.00	39.00	28.00	●
3.500	4.000	71.00	39.00	28.00	●
3.570	4.000	71.00	39.00	28.00	○
3.900	4.000	75.00	43.00	28.00	●
3.970	4.000	75.00	43.00	28.00	○
4.000	4.000	75.00	43.00	28.00	●
4.200	6.000	87.00	43.00	36.00	●
4.300	6.000	91.00	47.00	36.00	●
4.370	6.000	91.00	47.00	36.00	●
4.400	6.000	91.00	47.00	36.00	●
4.500	6.000	91.00	47.00	36.00	●
4.600	6.000	91.00	47.00	36.00	●
4.650	6.000	91.00	47.00	36.00	●
4.700	6.000	91.00	47.00	36.00	○
4.760	6.000	96.00	52.00	36.00	○
4.800	6.000	96.00	52.00	36.00	●
4.900	6.000	96.00	52.00	36.00	○
5.000	6.000	96.00	52.00	36.00	●
5.100	6.000	96.00	52.00	36.00	●
5.160	6.000	96.00	52.00	36.00	●
5.200	6.000	96.00	52.00	36.00	●
5.300	6.000	96.00	52.00	36.00	●
5.400	6.000	101.00	57.00	36.00	○
5.500	6.000	101.00	57.00	36.00	●
5.600	6.000	101.00	57.00	36.00	●

○ bright ◐ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	511
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	156

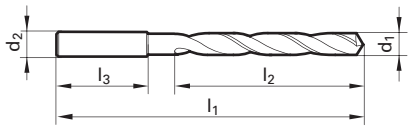




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
5.800	6.000	101.00	57.00	36.00	○
5.900	6.000	101.00	57.00	36.00	●
5.950	6.000	101.00	57.00	36.00	○
6.000	6.000	101.00	57.00	36.00	●
6.100	8.000	107.00	63.00	36.00	○
6.300	8.000	107.00	63.00	36.00	○
6.350	8.000	107.00	63.00	36.00	○
6.400	8.000	107.00	63.00	36.00	○
6.500	8.000	107.00	63.00	36.00	●
6.600	8.000	107.00	63.00	36.00	○
6.700	8.000	107.00	63.00	36.00	●
6.750	8.000	113.00	69.00	36.00	●
6.800	8.000	113.00	69.00	36.00	●
6.900	8.000	113.00	69.00	36.00	●
7.000	8.000	113.00	69.00	36.00	●
7.100	8.000	113.00	69.00	36.00	○
7.140	8.000	113.00	69.00	36.00	○
7.200	8.000	113.00	69.00	36.00	○
7.300	8.000	113.00	69.00	36.00	○
7.400	8.000	113.00	69.00	36.00	●
7.500	8.000	113.00	69.00	36.00	●
7.540	8.000	119.00	75.00	36.00	●
7.550	8.000	119.00	75.00	36.00	○
7.600	8.000	119.00	75.00	36.00	○
7.700	8.000	119.00	75.00	36.00	○
7.900	8.000	119.00	75.00	36.00	○
7.940	8.000	119.00	75.00	36.00	○
8.000	8.000	119.00	75.00	36.00	●
8.100	10.000	125.00	75.00	40.00	●
8.200	10.000	125.00	75.00	40.00	●
8.300	10.000	125.00	75.00	40.00	●
8.330	10.000	125.00	75.00	40.00	○
8.500	10.000	125.00	75.00	40.00	●
8.600	10.000	131.00	81.00	40.00	●
8.730	10.000	131.00	81.00	40.00	○
8.800	10.000	131.00	81.00	40.00	●
8.900	10.000	131.00	81.00	40.00	○
9.000	10.000	131.00	81.00	40.00	●
9.100	10.000	131.00	81.00	40.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	511
Standard	Guhring std.
Tool material	HSCO
Surface	S
Type	GU 500
Cutting direction	right-hand
Tolerance	h8
Discount group	115
Techn. data page	156

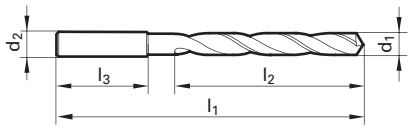




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
9.130	10.000	131.00	81.00	40.00	○
9.400	10.000	131.00	81.00	40.00	●
9.500	10.000	131.00	81.00	40.00	●
9.520	10.000	137.00	87.00	40.00	○
9.550	10.000	137.00	87.00	40.00	●
9.600	10.000	137.00	87.00	40.00	○
9.700	10.000	137.00	87.00	40.00	○
9.900	10.000	137.00	87.00	40.00	○
9.920	10.000	137.00	87.00	40.00	○
10.000	10.000	137.00	87.00	40.00	●
10.100	12.000	144.00	87.00	45.00	●
10.200	12.000	144.00	87.00	45.00	●
10.400	12.000	144.00	87.00	45.00	○
10.500	12.000	144.00	87.00	45.00	●
10.600	12.000	144.00	87.00	45.00	○
10.700	12.000	151.00	94.00	45.00	○
10.800	12.000	151.00	94.00	45.00	●
10.900	12.000	151.00	94.00	45.00	○
11.000	12.000	151.00	94.00	45.00	●
11.110	12.000	151.00	94.00	45.00	○
11.300	12.000	151.00	94.00	45.00	●
11.510	12.000	151.00	94.00	45.00	○
11.700	12.000	151.00	94.00	45.00	●
11.900	12.000	158.00	101.00	45.00	○
11.910	12.000	158.00	101.00	45.00	○
12.000	12.000	158.00	101.00	45.00	●
12.500	16.000	161.00	101.00	48.00	●
12.700	16.000	161.00	101.00	48.00	○
13.000	16.000	161.00	101.00	48.00	●
13.500	16.000	166.00	106.00	48.00	○
13.890	16.000	166.00	106.00	48.00	●
14.000	16.000	166.00	106.00	48.00	●
14.500	16.000	169.00	109.00	48.00	●
15.000	16.000	169.00	109.00	48.00	●
15.500	16.000	172.00	112.00	48.00	●
16.000	16.000	172.00	112.00	48.00	●
16.500	20.000	181.00	115.00	50.00	●
16.670	20.000	181.00	115.00	50.00	○
17.000	20.000	181.00	115.00	50.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**511**
Standard	**Guhring std.**
Tool material	**HSCO**
Surface	**S**
Type	**GU 500**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**115**
Techn. data page	**156**

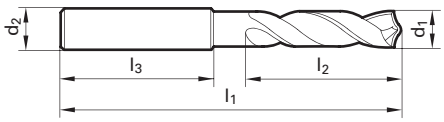




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
17.460	20.000	184.00	118.00	50.00	○
17.500	20.000	184.00	118.00	50.00	●
18.000	20.000	184.00	118.00	50.00	●
18.500	20.000	188.00	122.00	50.00	●
19.000	20.000	188.00	122.00	50.00	●
19.500	20.000	191.00	125.00	50.00	●
20.000	20.000	191.00	125.00	50.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1946
Standard	DIN 6537 K
Tool material	Solid carbide
Surface	A
Type	H
Cutting direction	right-hand
Tolerance	m7
Discount group	102
Techn. data page	156

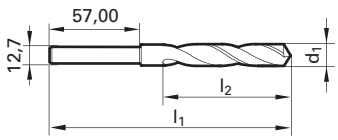




d1	d2	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
2.600	6.000	62.00	20.00	36.00	●
3.000	6.000	62.00	20.00	36.00	●
3.400	6.000	62.00	20.00	36.00	●
4.000	6.000	66.00	24.00	36.00	●
4.300	6.000	66.00	24.00	36.00	●
5.000	6.000	66.00	28.00	36.00	●
5.100	6.000	66.00	28.00	36.00	●
5.600	6.000	66.00	28.00	36.00	●
6.000	6.000	66.00	28.00	36.00	●
6.900	8.000	79.00	34.00	36.00	●
7.100	8.000	79.00	41.00	36.00	●
8.000	8.000	79.00	41.00	36.00	●
8.600	10.000	89.00	47.00	40.00	●
9.100	10.000	89.00	47.00	40.00	●
10.000	10.000	89.00	47.00	40.00	●
10.400	12.000	102.00	55.00	45.00	●
10.600	12.000	102.00	55.00	45.00	●
11.100	12.000	102.00	55.00	45.00	●
12.000	12.000	102.00	55.00	45.00	●
14.100	16.000	115.00	65.00	48.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**268**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	●
Type	**N**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**156**



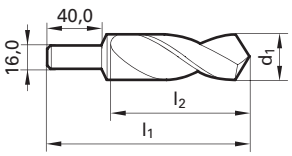


d1		l1	l2	Availability
mm	inch	mm	mm	
13.000		156.00	82.00	●
13.490	17/32	156.00	82.00	○
13.500		156.00	82.00	●
14.000		156.00	82.00	●
14.290	9/16	157.00	83.00	○
14.500		157.00	83.00	●
15.000		157.00	83.00	●
15.080	19/32	157.00	83.00	○
15.500		157.00	83.00	●
15.870	5/8	157.00	83.00	○
16.000		157.00	83.00	●
16.500		158.00	84.00	●
16.670	21/32	158.00	84.00	○
17.000		158.00	84.00	●
17.460	11/16	158.00	84.00	●
17.500		158.00	84.00	●
18.000		158.00	84.00	●
19.000		158.00	84.00	●
19.050	3/4	159.00	85.00	○
19.840	25/32	159.00	85.00	○
20.000		159.00	85.00	●
21.000		159.00	85.00	●
21.430	27/32	159.00	85.00	○
22.000		159.00	85.00	●
22.220	7/8	159.00	85.00	○
23.000		159.00	85.00	●
23.020	29/32	159.00	85.00	○
23.810	15/16	160.00	86.00	○
24.000		160.00	86.00	●
25.000	63/64	160.00	86.00	●
25.400	1	160.00	86.00	○
28.570	1 1/8	160.00	86.00	○

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	**128**
Standard	**Guhring std.**
Tool material	**HSCO**
Surface	◯
Type	**N**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**156**

without point grind

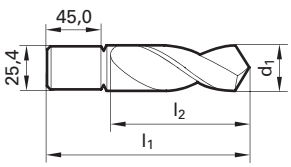




d1	l1	l2	Availability
mm	mm	mm	
16.000	130.00	88.00	●
16.500	130.00	88.00	●
17.000	130.00	88.00	●
17.500	130.00	88.00	●
18.000	130.00	88.00	●
19.000	130.00	88.00	●
20.000	130.00	88.00	●
20.500	130.00	88.00	●
21.000	130.00	88.00	●
21.500	130.00	88.00	●
22.000	130.00	88.00	●
22.500	130.00	88.00	●
23.000	130.00	88.00	●
23.500	130.00	88.00	●
24.000	130.00	88.00	●
24.500	130.00	88.00	●
25.000	130.00	88.00	●
25.500	140.00	98.00	●
26.000	140.00	98.00	●
27.000	140.00	98.00	●
28.000	140.00	98.00	●
28.500	140.00	98.00	●
30.000	140.00	98.00	●
31.000	140.00	98.00	●
32.000	140.00	98.00	●
35.000	140.00	98.00	●
38.000	140.00	98.00	●
40.000	140.00	98.00	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	129	136
Standard	Guhring std.	
Tool material	HSCO	
Surface	◯	◯
Type	N	N
Cutting direction	right-hand	left-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	156	157
	without point grind	without point grind



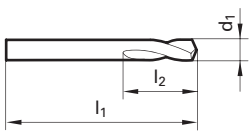




d1	l1	l2	Availability	
mm	mm	mm		
25.000	140.00	93.00	●	❍
25.500	140.00	93.00		❍
26.000	140.00	93.00	●	❍
26.500	140.00	93.00		❍
27.500	140.00	93.00		❍
28.000	140.00	93.00	●	
29.500	140.00	93.00	❍	❍
30.000	140.00	93.00	●	
32.000	140.00	93.00	●	
33.000	140.00	93.00	●	
34.000	140.00	93.00	●	
35.000	140.00	93.00	●	
36.000	140.00	93.00	●	❍
37.000	140.00	93.00	●	
38.000	140.00	93.00	●	❍
39.000	140.00	93.00		❍
40.000	140.00	93.00	●	

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	557	568	723
Standard		Guhring std.	
Tool material		HSS	Solid carbide
Surface	○	Ⓢ	○
Type	N	N	N
Point angle °	90	90	90
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h6	h6	h6
Discount group	134	135	102
Techn. data page	157	157	157





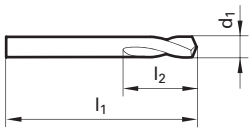




d1 mm	d1 inch	l1 mm	l2 mm	Availability		
2.950		46.00	12.00	●		
3.000		46.00	12.00	●	●	
4.000		55.00	12.00	●	●	●
5.000		62.00	14.00	●	●	●
6.000		66.00	16.00	●	●	●
6.350	1/4	70.00	17.00	●	●	●
8.000		79.00	21.00	●	●	●
9.000		84.00	22.00	●		
9.520	3/8	89.00	25.00	●	●	●
10.000		89.00	25.00	●	●	●
12.000		102.00	30.00	●	●	●
12.700	1/2	102.00	30.00	●	●	●
13.000		102.00	30.00	●		
14.000		107.00	33.50	●		
15.870	5/8	115.00	37.50	●	❍	●
16.000		115.00	37.50	●	●	●
19.050	3/4	131.00	45.00	●	❍	●
20.000		131.00	45.00	●	●	●
25.000	63/64	151.00	53.00	●	●	
25.400	1	156.00	53.00	●	❍	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**559**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	◯
Type	**N**
Point angle °	**90**
Cutting direction	**right-hand**
Tolerance	**h6**
Discount group	**138**
Techn. data page	**157**

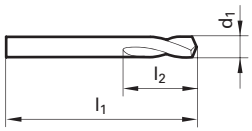




d1		l1	l2	Availability
mm	inch	mm	mm	
6.350	1/4	105.00	17.00	●
8.000		118.00	21.00	●
9.520	3/8	132.00	25.00	●
12.700	1/2	159.00	30.00	●
15.870	5/8	186.00	37.50	●
19.050	3/4	213.00	45.00	●
25.400	1	216.00	53.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	556	567	724
Standard		Guhring std.	
Tool material	HSS		Solid carbide
Surface	○	Ⓢ	○
Type	N	N	N
Point angle °	120	120	120
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h6	h6	h6
Discount group	134	139	102
Techn. data page	158	158	158





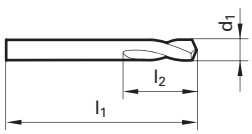




d1 mm	d1 inch	l1 mm	l2 mm	Availability		
3.000		46.00	12.00	●	●	
4.000		55.00	12.00	●	●	
5.000		62.00	14.00	●	●	●
5.600		66.00	16.00	❍		
6.000		66.00	16.00	●	●	●
6.350	1/4	70.00	17.00	●	❍	●
6.500		70.00	17.00	❍		
7.000		74.00	19.00	●		
8.000		79.00	21.00	●	●	●
9.520	3/8	89.00	25.00	●	●	●
10.000		89.00	25.00	●	●	●
11.550		95.00	28.00	❍		
12.000		102.00	30.00	●	●	●
12.700	1/2	102.00	30.00	●	●	●
14.000		107.00	33.50	●		
15.000		111.00	33.50	●		
15.870	5/8	115.00	37.50	●	❍	●
16.000		115.00	37.50	●	●	●
19.000		127.00	40.00	❍		
19.050	3/4	131.00	45.00	●	❍	
20.000		131.00	45.00	●	●	●
25.000	63/64	151.00	53.00	●	●	
25.400	1	156.00	53.00	●		

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	546
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Point angle °	142
Cutting direction	right-hand
Tolerance	h6
Discount group	102
Techn. data page	158

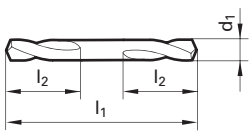




d1 mm	d1 inch	l1 mm	l2 mm	Availability
4.000		55.00	12.00	●
5.000		62.00	14.00	●
6.000		66.00	16.00	●
8.000		79.00	21.00	●
10.000		89.00	25.00	●
12.000		102.00	30.00	●
16.000		115.00	37.50	●
20.000		131.00	45.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**554**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	>Ø 2,36
Type	**DK 77**
Point angle °	**118**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**134**
Techn. data page	**158**

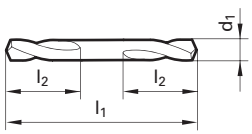




d1		l1	l2	Availability
mm	inch	mm	mm	
1.500		32.00	6.00	○
1.600		34.00	6.30	●
1.900		36.00	7.10	●
2.000		38.00	7.50	●
2.100		38.00	7.50	●
2.200		40.00	8.50	●
2.300		40.00	8.50	●
2.400		43.00	9.50	●
2.450		43.00	9.50	○
2.500		43.00	9.50	●
2.600		43.00	9.50	●
2.700		46.00	10.60	●
2.780	7/64	46.00	10.60	○
2.800		46.00	10.60	●
2.900		46.00	10.60	●
3.000		46.00	10.60	●
3.050		49.00	11.20	○
3.100		49.00	11.20	●
3.170	1/8	49.00	11.20	●
3.200		49.00	11.20	●
3.250		49.00	11.20	●
3.260		49.00	11.20	○
3.300		49.00	11.20	●
3.400		52.00	12.50	●
3.500		52.00	12.50	●
3.570	9/64	52.00	12.50	○
3.600		52.00	12.50	●
3.650		52.00	12.50	○
3.700		52.00	12.50	●
3.800		55.00	14.00	●
3.900		55.00	14.00	○
3.970	5/32	55.00	14.00	○
4.000		55.00	14.00	●
4.100		55.00	14.00	●
4.200		55.00	14.00	●
4.300		58.00	15.50	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**554**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	>Ø 2,36
Type	**DK 77**
Point angle °	**118**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**134**
Techn. data page	**158**

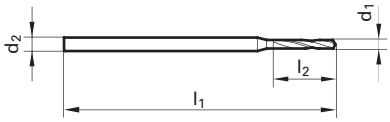




d1		l1	l2	Availability
mm	inch	mm	mm	
4.500		58.00	15.50	●
4.600		58.00	15.50	●
4.760	3/16	62.00	17.00	○
4.800		62.00	17.00	●
4.900		62.00	17.00	●
5.000		62.00	17.00	●
5.100		62.00	17.00	●
5.200		62.00	17.00	●
5.300		62.00	17.00	●
5.400		66.00	19.00	○
5.500		66.00	19.00	●
5.560	7/32	66.00	19.00	○
5.600		66.00	19.00	○
5.700		66.00	19.00	●
5.800		66.00	19.00	●
5.900		66.00	19.00	○
5.950	15/64	66.00	19.00	○
6.000		66.00	19.00	●
6.100		70.00	21.20	●
6.300		70.00	21.20	○
6.350	1/4	70.00	21.20	○
6.500		70.00	21.20	●
6.800		74.00	23.60	○
7.000		74.00	23.60	●
7.100		74.00	23.60	○
7.500		74.00	23.60	●
7.940	5/16	79.00	25.00	○
8.000		79.00	25.00	●
8.500		79.00	25.00	○
8.600		84.00	25.00	○
9.000		84.00	25.00	○
9.500		84.00	25.00	●
9.520	3/8	89.00	25.00	○
10.000		89.00	25.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	301	303	660	701
Standard		DIN 1899		Guhring std.
Tool material		HSS-E-PM		Solid carbide
Surface	○	○	Ⓢ	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159

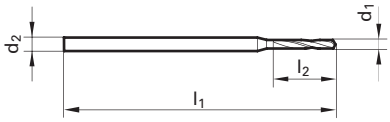




d1 mm	d2 h8 mm	l1 mm	l2 mm	Availability
0.050	1.000	25.00	0.40	●
0.060	1.000	25.00	0.40	●
0.070	1.000	25.00	0.50	●
0.075	1.000	25.00	0.50	●
0.080	1.000	25.00	0.50	●
0.090	1.000	25.00	0.50	●
0.100	1.000	25.00	0.50	●
0.105	1.000	25.00	0.50	●
0.110	1.000	25.00	0.50	●
0.115	1.000	25.00	0.50	●
0.120	1.000	25.00	0.50	●
0.121	1.000	25.00	0.80	○
0.125	1.000	25.00	0.80	●
0.128	1.000	25.00	0.80	●
0.130	1.000	25.00	0.80	● ○
0.140	1.000	25.00	0.80	● ○
0.143	1.000	25.00	0.80	●
0.145	1.000	25.00	0.80	●
0.147	1.000	25.00	0.80	○
0.150	1.000	25.00	0.80	● ○
0.155	1.000	25.00	1.10	● ○
0.160	1.000	25.00	1.10	● ● ●
0.170	1.000	25.00	1.10	● ○ ●
0.175	1.000	25.00	1.10	● ○
0.180	1.000	25.00	1.10	● ○ ●
0.185	1.000	25.00	1.10	○
0.190	1.000	25.00	1.10	● ● ●
0.195	1.000	25.00	1.50	● ○
0.200	1.000	25.00	1.50	● ● ● ●
0.205	1.000	25.00	1.50	●
0.210	1.000	25.00	1.50	● ○ ●
0.215	1.000	25.00	1.50	○ ○
0.220	1.000	25.00	1.50	● ● ● ●
0.225	1.000	25.00	1.50	● ○
0.230	1.000	25.00	1.50	● ○ ●
0.235	1.000	25.00	1.50	● ○ ○
0.240	1.000	25.00	1.50	● ● ●
0.245	1.000	25.00	1.90	● ○ ○
0.250	1.000	25.00	1.90	● ○ ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	301	303	660	701
Standard		DIN 1899		Guhring std.
Tool material		HSS-E-PM		Solid carbide
Surface	○	○	(S)	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159

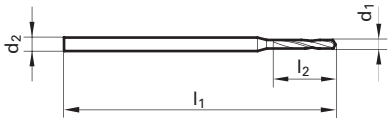




d1	d2 h8	l1	l2	Availability			
mm	mm	mm	mm				
0.255	1.000	25.00	1.90	●	○	●	
0.260	1.000	25.00	1.90	●	○	●	●
0.265	1.000	25.00	1.90	●	○	○	
0.270	1.000	25.00	1.90	●	●	●	
0.275	1.000	25.00	1.90	●	○	○	
0.280	1.000	25.00	1.90	●	○	●	●
0.285	1.000	25.00	1.90	●			
0.290	1.000	25.00	1.90	●	●	●	
0.295	1.000	25.00	1.90	●	●	○	
0.300	1.000	25.00	1.90	●	●	●	●
0.305	1.000	25.00	2.40	●		●	
0.310	1.000	25.00	2.40	●	●	●	
0.315	1.000	25.00	2.40	●	○		
0.320	1.000	25.00	2.40	●		●	
0.325	1.000	25.00	2.40	●		●	
0.330	1.000	25.00	2.40	●	●	●	●
0.335	1.000	25.00	2.40	●		●	
0.340	1.000	25.00	2.40	●	●	●	
0.345	1.000	25.00	2.40	●	○		
0.350	1.000	25.00	2.40	●	●	●	●
0.355	1.000	25.00	2.40	●	○		
0.360	1.000	25.00	2.40	●	●	●	
0.365	1.000	25.00	2.40	●			
0.370	1.000	25.00	2.40	●	●	●	
0.375	1.000	25.00	2.40	●			
0.380	1.000	25.00	2.40	●	●	●	
0.385	1.000	25.00	3.00	●			
0.390	1.000	25.00	3.00	●	●	●	
0.400	1.000	25.00	3.00	●	●	●	●
0.405	1.000	25.00	3.00	●			
0.410	1.000	25.00	3.00	●	●	●	
0.415	1.000	25.00	3.00	○	○		
0.420	1.000	25.00	3.00	●	○	●	
0.425	1.000	25.00	3.00	●			
0.430	1.000	25.00	3.00	●	●	●	
0.432	1.000	25.00	3.00	●			
0.435	1.000	25.00	3.00	●	○		
0.440	1.000	25.00	3.00	●	●	●	
0.445	1.000	25.00	3.00	●			

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	301	303	660	701
Standard		DIN 1899		Guhring std.
Tool material		HSS-E-PM		Solid carbide
Surface	○	○	Ⓢ	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159

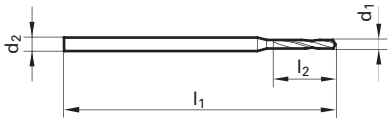




d1 mm	d2 h8 mm	l1 mm	l2 mm	Availability
0.450	1.000	25.00	3.00	● ● ● ●
0.460	1.000	25.00	3.00	● ● ●
0.465	1.000	25.00	3.00	○
0.470	1.000	25.00	3.00	● ● ●
0.475	1.000	25.00	3.00	○
0.480	1.000	25.00	3.00	● ● ●
0.485	1.000	25.00	3.40	● ○
0.490	1.000	25.00	3.40	● ● ●
0.495	1.000	25.00	3.40	● ○
0.500	1.000	25.00	3.40	● ● ● ●
0.505	1.000	25.00	3.40	● ○
0.510	1.000	25.00	3.40	● ● ●
0.515	1.000	25.00	3.40	●
0.520	1.000	25.00	3.40	● ● ●
0.525	1.000	25.00	3.40	● ○
0.530	1.000	25.00	3.40	● ● ●
0.535	1.000	25.00	3.90	● ○
0.540	1.000	25.00	3.90	● ○ ●
0.545	1.000	25.00	3.90	○
0.550	1.000	25.00	3.90	● ● ●
0.555	1.000	25.00	3.90	● ○
0.560	1.000	25.00	3.90	● ● ●
0.565	1.000	25.00	3.90	○
0.570	1.000	25.00	3.90	● ● ●
0.575	1.000	25.00	3.90	●
0.580	1.000	25.00	3.90	● ● ●
0.585	1.000	25.00	3.90	●
0.590	1.000	25.00	3.90	● ● ●
0.595	1.000	25.00	3.90	●
0.600	1.000	25.00	3.90	● ● ● ●
0.605	1.000	25.00	4.20	●
0.610	1.000	25.00	4.20	● ○ ●
0.615	1.000	25.00	4.20	● ○
0.620	1.000	25.00	4.20	● ● ●
0.625	1.000	25.00	4.20	● ○
0.630	1.000	25.00	4.20	● ● ●
0.632	1.000	25.00	4.20	●
0.640	1.000	25.00	4.20	● ● ●
0.650	1.000	25.00	4.20	● ● ● ●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	301	303	660	701
Standard	DIN 1899			Guhring std.
Tool material	HSS-E-PM			Solid carbide
Surface	○	○	(S)	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159

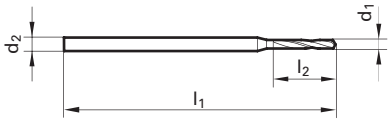




d1 mm	d2 h8 mm	l1 mm	l2 mm	Availability
0.655	1.000	25.00	4.20	● ○
0.660	1.000	25.00	4.20	● ● ●
0.665	1.000	25.00	4.20	●
0.670	1.000	25.00	4.20	● ● ●
0.675	1.000	25.00	4.80	● ○
0.680	1.000	25.00	4.80	● ○ ●
0.685	1.000	25.00	4.80	○
0.690	1.000	25.00	4.80	● ○ ●
0.695	1.000	25.00	4.80	● ○
0.700	1.000	25.00	4.80	● ● ● ●
0.705	1.000	25.00	4.80	●
0.710	1.000	25.00	4.80	● ● ●
0.720	1.000	25.00	4.80	● ● ●
0.725	1.000	25.00	4.80	● ○
0.730	1.000	25.00	4.80	● ○ ●
0.740	1.000	25.00	4.80	● ● ●
0.750	1.000	25.00	4.80	● ● ● ●
0.760	1.000	25.00	5.30	● ○ ●
0.770	1.000	25.00	5.30	● ○ ●
0.775	1.000	25.00	5.30	○ ○
0.780	1.000	25.00	5.30	● ○ ●
0.790	1.000	25.00	5.30	● ● ●
0.795	1.500	25.00	5.30	●
0.800	1.500	25.00	5.30	● ● ● ●
0.805	1.500	25.00	5.30	○
0.810	1.500	25.00	5.30	● ● ● ●
0.820	1.500	25.00	5.30	● ● ●
0.825	1.500	25.00	5.30	●
0.830	1.500	25.00	5.30	● ● ● ●
0.840	1.500	25.00	5.30	● ○ ○
0.845	1.500	25.00	5.30	○
0.850	1.500	25.00	5.30	● ● ● ●
0.855	1.500	25.00	6.00	○
0.860	1.500	25.00	6.00	● ○ ●
0.870	1.500	25.00	6.00	● ● ●
0.875	1.500	25.00	6.00	○
0.880	1.500	25.00	6.00	● ● ●
0.885	1.500	25.00	6.00	●
0.890	1.500	25.00	6.00	● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	301	303	660	701
Standard		DIN 1899		Guhring std.
Tool material		HSS-E-PM		Solid carbide
Surface	○	○	Ⓢ	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159

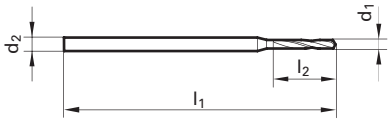




d1	d2 h8	l1	l2	Availability
mm	mm	mm	mm	
0.900	1.500	25.00	6.00	● ● ● ●
0.910	1.500	25.00	6.00	● ○ ●
0.915	1.500	25.00	6.00	○
0.920	1.500	25.00	6.00	● ○ ●
0.925	1.500	25.00	6.00	○ ○
0.930	1.500	25.00	6.00	● ●
0.935	1.500	25.00	6.00	○
0.940	1.500	25.00	6.00	● ○ ●
0.945	1.500	25.00	6.00	○
0.950	1.500	25.00	6.00	● ○ ●
0.960	1.500	25.00	6.80	● ● ●
0.965	1.500	25.00	6.80	○
0.970	1.500	25.00	6.80	● ● ●
0.975	1.500	25.00	6.80	●
0.980	1.500	25.00	6.80	● ● ●
0.985	1.500	25.00	6.80	○
0.990	1.500	25.00	6.80	● ○
0.995	1.500	25.00	6.80	●
1.000	1.500	25.00	6.80	● ● ● ●
1.005	1.500	25.00	6.80	○
1.010	1.500	25.00	6.80	● ●
1.020	1.500	25.00	6.80	● ● ●
1.030	1.500	25.00	6.80	● ●
1.035	1.500	25.00	6.80	○
1.040	1.500	25.00	6.80	● ○ ●
1.050	1.500	25.00	6.80	● ● ● ●
1.055	1.500	25.00	6.80	●
1.060	1.500	25.00	6.80	● ●
1.070	1.500	25.00	7.60	● ● ●
1.080	1.500	25.00	7.60	● ● ●
1.085	1.500	25.00	7.60	○
1.090	1.500	25.00	7.60	● ●
1.100	1.500	25.00	7.60	● ○ ● ●
1.110	1.500	25.00	7.60	● ○
1.120	1.500	25.00	7.60	● ○
1.125	1.500	25.00	7.60	○
1.130	1.500	25.00	7.60	●
1.140	1.500	25.00	7.60	●
1.150	1.500	25.00	7.60	● ● ● ●

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	301	303	660	701
Standard		DIN 1899		Guhring std.
Tool material		HSS-E-PM		Solid carbide
Surface	○	○	(S)	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159

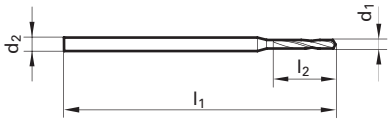




d1 mm	d2 h8 mm	l1 mm	l2 mm	Availability
1.160	1.500	25.00	7.60	● ●
1.170	1.500	25.00	7.60	● ●
1.175	1.500	25.00	7.60	●
1.180	1.500	25.00	7.60	● ● ●
1.190	1.500	25.00	8.50	● ○ ●
1.200	1.500	25.00	8.50	● ● ● ●
1.210	1.500	25.00	8.50	● ●
1.220	1.500	25.00	8.50	● ● ●
1.230	1.500	25.00	8.50	●
1.240	1.500	25.00	8.50	●
1.250	1.500	25.00	8.50	● ○ ● ●
1.260	1.500	25.00	8.50	●
1.265	1.500	25.00	8.50	○
1.270	1.500	25.00	8.50	● ○
1.280	1.500	25.00	8.50	● ●
1.285	1.500	25.00	8.50	○
1.290	1.500	25.00	8.50	● ○
1.300	1.500	25.00	8.50	● ● ● ●
1.310	1.500	25.00	8.50	● ○
1.320	1.500	25.00	8.50	● ○
1.325	1.500	25.00	9.50	●
1.330	1.500	25.00	9.50	● ○
1.340	1.500	25.00	9.50	●
1.350	1.500	25.00	9.50	● ○ ● ●
1.360	1.500	25.00	9.50	○
1.370	1.500	25.00	9.50	●
1.375	1.500	25.00	9.50	○
1.380	1.500	25.00	9.50	●
1.390	1.500	25.00	9.50	● ○
1.400	1.500	25.00	9.50	● ● ● ●
1.405	1.500	25.00	9.50	○
1.410	1.500	25.00	9.50	●
1.420	1.500	25.00	9.50	● ●
1.425	1.500	25.00	9.50	○
1.430	1.500	25.00	9.50	●
1.440	1.500	25.00	9.50	●
1.450	1.500	25.00	9.50	● ● ●
1.460	2.000	30.00	9.50	● ○
1.470	2.000	30.00	9.50	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	301	303	660	701
Standard		DIN 1899		Guhring std.
Tool material		HSS-E-PM		Solid carbide
Surface	○	○	Ⓢ	○
Type	N	N	N	N
Cutting direction	right-hand	left-hand	right-hand	right-hand
Tolerance	0/-0,004	0/-0,004	0/-0,004	0/-0,004
Discount group	134	138	135	102
Techn. data page	159	159	159	159



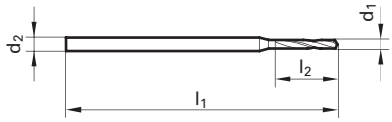


d1	d2 h8	l1	l2	Availability		
mm	mm	mm	mm			
1.500	2.000	30.00	9.50	●	●	●
1.520	2.000	30.00	10.60	●		
1.525	2.000	30.00	10.60		❍	
1.530	2.000	30.00	10.60	●		
1.540	2.000	30.00	10.60	●		
1.550	2.000	30.00	10.60	●		
1.590	2.000	30.00	10.60	●		
1.600	2.000	30.00	10.60	●	❍	
1.610	2.000	30.00	10.60	●		
1.615	2.000	30.00	10.60		❍	
1.630	2.000	30.00	10.60	●		
1.640	2.000	30.00	10.60	❍		
1.650	2.000	30.00	10.60	●		
1.660	2.000	30.00	10.60	●		
1.690	2.000	30.00	10.60	❍		
1.700	2.000	30.00	10.60	●		
1.710	2.000	30.00	11.80	●		
1.715	2.000	30.00	11.80	❍		
1.730	2.000	30.00	11.80	●		
1.745	2.000	30.00	11.80	●		
1.750	2.000	30.00	11.80	●		
1.775	2.000	30.00	11.80	●		
1.800	2.000	30.00	11.80	●	❍	●
1.830	2.000	30.00	11.80	●		
1.840	2.000	30.00	11.80	●		
1.850	2.000	30.00	11.80	●	❍	
1.860	2.000	30.00	11.80	●		
1.900	2.000	30.00	11.80	●		●
1.920	2.000	30.00	13.20	●		
1.930	2.000	30.00	13.20	❍		

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	3899
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Cutting direction	right-hand
Tolerance	h7
Discount group	102
Techn. data page	159

NEW



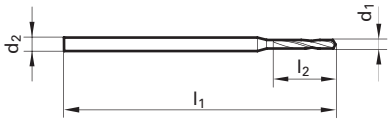


d1 mm	d2 h8 mm	l1 mm	l2 mm	Availability
0.100	3.000	38.00	1.20	●
0.150	3.000	38.00	2.00	●
0.200	3.000	38.00	2.50	●
0.250	3.000	38.00	3.00	●
0.300	3.000	38.00	5.00	●
0.310	3.000	38.00	5.00	●
0.350	3.000	38.00	6.00	●
0.370	3.000	38.00	6.00	●
0.400	3.000	38.00	7.00	●
0.450	3.000	38.00	7.00	●
0.500	3.000	38.00	7.00	●
0.550	3.000	38.00	7.00	●
0.600	3.000	38.00	7.00	●
0.640	3.000	38.00	7.00	●
0.650	3.000	38.00	7.00	●
0.700	3.000	38.00	8.00	●
0.710	3.000	38.00	8.00	●
0.720	3.000	38.00	8.00	●
0.740	3.000	38.00	8.00	●
0.750	3.000	38.00	8.00	●
0.760	3.000	38.00	8.00	○
0.770	3.000	38.00	8.00	○
0.780	3.000	38.00	8.00	○
0.790	3.000	38.00	8.00	●
0.800	3.000	38.00	10.00	●
0.810	3.000	38.00	10.00	●
0.820	3.000	38.00	10.00	●
0.830	3.000	38.00	10.00	○
0.840	3.000	38.00	10.00	●
0.850	3.000	38.00	10.00	○
0.860	3.000	38.00	10.00	○
0.870	3.000	38.00	10.00	○
0.880	3.000	38.00	10.00	○
0.890	3.000	38.00	10.00	○
0.900	3.000	38.00	10.00	●
0.910	3.000	38.00	10.00	●
0.920	3.000	38.00	10.00	●
0.930	3.000	38.00	10.00	●
0.940	3.000	38.00	10.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	3899
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Cutting direction	right-hand
Tolerance	h7
Discount group	102
Techn. data page	159

NEW

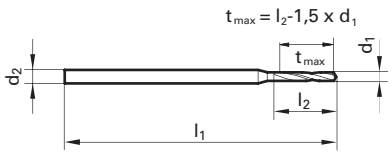




d1	d2 h8	l1	l2	Availability
mm	mm	mm	mm	
0.950	3.000	38.00	10.00	●
0.960	3.000	38.00	10.00	○
0.970	3.000	38.00	10.00	○
0.980	3.000	38.00	10.00	○
0.990	3.000	38.00	10.00	●
1.000	3.000	38.00	10.00	●
1.100	3.000	38.00	10.00	●
1.110	3.000	38.00	10.00	○
1.150	3.000	38.00	10.00	●
1.200	3.000	38.00	10.00	●
1.210	3.000	38.00	10.00	○
1.400	3.000	38.00	10.00	●
1.450	3.000	38.00	10.00	●
1.500	3.000	38.00	10.00	●
1.510	3.000	38.00	10.00	●
1.520	3.000	38.00	10.00	●
1.550	3.000	38.00	10.00	●
1.600	3.000	38.00	12.00	●
1.650	3.000	38.00	12.00	●
1.700	3.000	38.00	12.00	●
1.800	3.000	38.00	12.00	●
1.810	3.000	38.00	12.00	●
1.830	3.000	38.00	12.00	●
1.850	3.000	38.00	12.00	●
1.900	3.000	38.00	12.00	●
1.920	3.000	38.00	12.00	●
1.950	3.000	38.00	12.00	●
1.980	3.000	38.00	12.00	●
2.000	3.000	38.00	12.00	●
2.050	3.000	38.00	12.00	○
2.100	3.000	38.00	12.00	●
2.400	3.000	38.00	12.00	●
2.500	3.000	38.00	12.00	●
2.600	3.000	38.00	12.00	●
2.750	3.000	38.00	12.00	●
2.950	3.000	38.00	12.00	●
3.000	3.000	38.00	12.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6400
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	4xD
Cutting direction	right-hand
Tolerance	m7
Discount group	164
Techn. data page	160

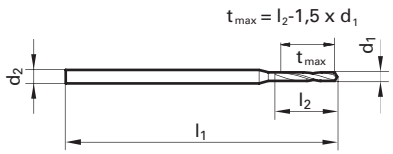




d1 mm	d2 h6 mm	l1 mm	l2 mm	Availability
0.500	3.000	47.00	3.00	●
0.550	3.000	47.00	3.30	●
0.600	3.000	47.00	3.60	●
0.650	3.000	47.00	3.90	●
0.700	3.000	47.00	4.20	●
0.750	3.000	47.00	4.50	●
0.800	3.000	47.00	4.80	●
0.850	3.000	47.00	5.10	●
0.900	3.000	47.00	5.40	●
0.950	3.000	47.00	5.70	●
1.000	3.000	47.00	6.00	●
1.050	3.000	47.00	6.30	●
1.100	3.000	47.00	6.60	●
1.150	3.000	47.00	6.90	●
1.200	3.000	47.00	7.20	●
1.250	3.000	47.00	7.50	●
1.300	3.000	47.00	7.80	●
1.350	3.000	47.00	8.10	●
1.400	3.000	47.00	8.40	●
1.450	3.000	47.00	8.70	●
1.500	3.000	47.00	9.00	●
1.550	3.000	47.00	9.30	●
1.590	3.000	47.00	9.60	●
1.600	3.000	47.00	9.60	●
1.650	3.000	47.00	9.90	●
1.700	3.000	47.00	10.20	●
1.750	3.000	47.00	10.50	●
1.800	3.000	52.00	10.80	●
1.850	3.000	52.00	11.10	●
1.900	3.000	52.00	11.40	●
1.950	3.000	52.00	11.70	●
1.980	4.000	59.00	12.00	●
2.000	4.000	59.00	12.00	●
2.050	4.000	59.00	12.30	●
2.100	4.000	59.00	12.60	●
2.150	4.000	59.00	12.90	●

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	6400
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	4xD
Cutting direction	right-hand
Tolerance	m7
Discount group	164
Techn. data page	160

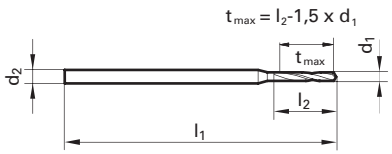




d1 mm	d2 h6 mm	l1 mm	l2 mm	Availability
2.200	4.000	59.00	13.20	●
2.250	4.000	59.00	13.50	●
2.300	4.000	59.00	13.80	●
2.350	4.000	59.00	14.10	●
2.380	4.000	59.00	14.40	●
2.400	4.000	59.00	14.40	●
2.450	4.000	59.00	14.70	●
2.500	4.000	59.00	15.00	●
2.550	4.000	59.00	15.30	●
2.600	4.000	59.00	15.60	●
2.650	4.000	59.00	15.90	●
2.700	4.000	59.00	16.20	●
2.750	4.000	59.00	16.50	●
2.780	4.000	59.00	16.80	●
2.800	4.000	59.00	16.80	●
2.850	4.000	59.00	17.10	●
2.900	4.000	59.00	17.40	●
2.950	4.000	59.00	17.70	●
3.000	4.000	59.00	18.00	●

○ bright ◐ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6401
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	7xD
Cutting direction	right-hand
Tolerance	m7
Discount group	164
Techn. data page	160

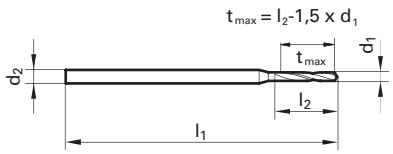




d1 mm	d2 h6 mm	l1 mm	l2 mm	Availability
0.500	3.000	47.00	4.00	●
0.550	3.000	47.00	4.40	●
0.600	3.000	47.00	4.80	●
0.650	3.000	47.00	5.20	●
0.700	3.000	47.00	5.60	●
0.750	3.000	47.00	6.00	●
0.800	3.000	47.00	6.40	●
0.850	3.000	47.00	6.80	●
0.900	3.000	47.00	7.20	●
0.950	3.000	47.00	7.60	●
1.000	3.000	47.00	8.00	●
1.050	3.000	47.00	8.40	●
1.100	3.000	47.00	8.80	●
1.150	3.000	47.00	9.20	●
1.200	3.000	52.00	10.80	●
1.250	3.000	52.00	11.30	●
1.300	3.000	52.00	11.70	●
1.350	3.000	52.00	12.20	●
1.400	3.000	52.00	12.60	●
1.450	3.000	52.00	13.10	●
1.500	3.000	52.00	13.50	●
1.550	3.000	52.00	14.00	●
1.590	3.000	52.00	14.40	●
1.600	3.000	52.00	14.40	●
1.650	3.000	52.00	14.90	●
1.700	3.000	52.00	15.30	●
1.750	3.000	52.00	15.80	●
1.800	3.000	52.00	16.20	●
1.850	3.000	52.00	16.70	●
1.900	3.000	52.00	17.10	●
1.950	3.000	52.00	17.60	●
1.980	4.000	63.00	18.00	●
2.000	4.000	63.00	18.00	●
2.050	4.000	63.00	18.50	●
2.100	4.000	63.00	18.90	●
2.150	4.000	63.00	19.40	●

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	6401
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	7xD
Cutting direction	right-hand
Tolerance	m7
Discount group	164
Techn. data page	160



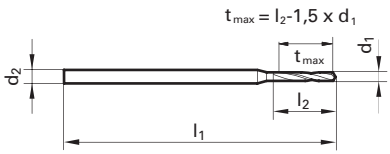


d1 mm	d2 h6 mm	l1 mm	l2 mm	Availability
2.200	4.000	63.00	19.80	●
2.250	4.000	63.00	20.30	●
2.300	4.000	63.00	20.70	●
2.350	4.000	63.00	21.20	●
2.380	4.000	63.00	21.60	●
2.400	4.000	63.00	21.60	●
2.450	4.000	63.00	22.10	●
2.500	4.000	63.00	22.50	●
2.550	4.000	63.00	23.00	●
2.600	4.000	67.00	23.40	●
2.650	4.000	67.00	23.90	●
2.700	4.000	67.00	24.30	●
2.750	4.000	67.00	24.80	●
2.780	4.000	67.00	25.20	●
2.800	4.000	67.00	25.20	●
2.850	4.000	67.00	25.70	●
2.900	4.000	67.00	26.10	●
2.950	4.000	67.00	26.60	●
3.000	4.000	67.00	27.00	●

○ bright ◐ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	6408
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	8xD
Cutting direction	right-hand
Tolerance	h7
Discount group	164
Techn. data page	160

NEW



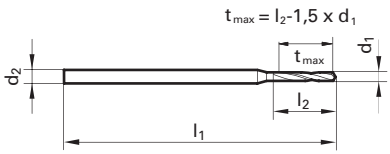


d1 mm	d2 h6 mm	l1 mm	l2 mm	Availability
1.400	4.000	52.00	15.00	●
1.450	4.000	52.00	16.00	●
1.500	4.000	52.00	17.00	●
1.550	4.000	52.00	17.00	●
1.590	4.000	52.00	18.00	●
1.600	4.000	52.00	18.00	●
1.650	4.000	52.00	18.00	●
1.700	4.000	56.00	19.00	●
1.750	4.000	56.00	19.00	●
1.800	4.000	56.00	20.00	●
1.850	4.000	56.00	20.00	●
1.900	4.000	56.00	21.00	●
1.950	4.000	56.00	21.00	●
1.980	4.000	56.00	22.00	●
2.000	4.000	56.00	22.00	●
2.050	4.000	56.00	23.00	●
2.100	4.000	62.00	23.00	●
2.150	4.000	62.00	24.00	●
2.200	4.000	62.00	24.00	●
2.250	4.000	62.00	25.00	●
2.300	4.000	62.00	25.00	●
2.350	4.000	62.00	26.00	●
2.380	4.000	62.00	26.00	●
2.400	4.000	62.00	26.00	●
2.450	4.000	62.00	27.00	●
2.500	4.000	62.00	28.00	●
2.550	4.000	62.00	28.00	●
2.600	4.000	66.00	29.00	●
2.650	4.000	66.00	29.00	●
2.700	4.000	66.00	30.00	●
2.750	4.000	66.00	30.00	●
2.780	4.000	66.00	31.00	●
2.800	4.000	66.00	31.00	●
2.850	4.000	66.00	31.00	●
2.900	4.000	66.00	32.00	●
2.950	4.000	66.00	32.00	●

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	6408
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	8xD
Cutting direction	right-hand
Tolerance	h7
Discount group	164
Techn. data page	160

NEW





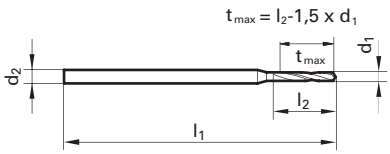
d1	d2 h6	l1	l2	Availability
mm	mm	mm	mm	
3.000	4.000	66.00	33.00	●

bright | steam tempered | nitrided lands | nitrided | golden brown | A TiAlN | a TiAlN nanoA | A TiAlN SuperA

Guhring no.	6412
Standard	Guhring std.
Tool material	Solid carbide
Surface	A
Type	N
Drilling depth	15xD
Cutting direction	right-hand
Tolerance	h7
Discount group	164
Techn. data page	160

NEW

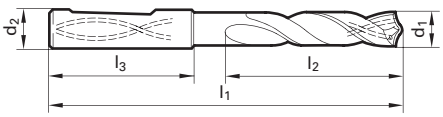




d1 mm	d2 h6 mm	l1 mm	l2 mm	Availability
1.400	4.000	62.00	25.00	●
1.500	4.000	62.00	27.00	●
1.590	4.000	62.00	29.00	●
1.600	4.000	62.00	29.00	●
1.700	4.000	70.00	31.00	●
1.800	4.000	70.00	32.00	●
1.900	4.000	70.00	34.00	●
1.980	4.000	70.00	36.00	●
2.000	4.000	70.00	36.00	●
2.100	4.000	78.00	38.00	●
2.200	4.000	78.00	40.00	●
2.300	4.000	78.00	42.00	●
2.380	4.000	78.00	44.00	●
2.400	4.000	78.00	44.00	●
2.500	4.000	78.00	45.00	●
2.600	4.000	87.00	47.00	●
2.700	4.000	87.00	48.00	●
2.780	4.000	87.00	50.00	●
2.800	4.000	87.00	50.00	●
2.900	4.000	87.00	52.00	●
3.000	4.000	87.00	54.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1131	1132
Standard	Guhring std.	
Tool material	HSCO	
Surface	○	Ⓢ
Type	GT 80 IK	GT 80 IK
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	134	135
Techn. data page	160	161



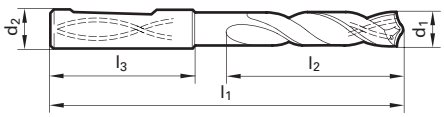




d1	d2 h6	l1	l2	l3	Availability	
mm	mm	mm	mm	mm		
5.000	6.000	82.00	44.00	36.00	●	●
5.500	6.000	82.00	44.00	36.00	●	●
6.000	6.000	82.00	44.00	36.00	●	●
6.350	8.000	91.00	53.00	36.00	○	○
6.500	8.000	91.00	53.00	36.00		●
6.800	8.000	91.00	53.00	36.00	●	●
7.000	8.000	91.00	53.00	36.00		●
7.140	8.000	91.00	53.00	36.00	○	
7.500	8.000	91.00	53.00	36.00		●
7.800	8.000	91.00	53.00	36.00	○	●
7.940	8.000	91.00	53.00	36.00	○	○
8.000	8.000	91.00	53.00	36.00	●	●
8.500	10.000	103.00	61.00	40.00		●
8.730	10.000	103.00	61.00	40.00		○
9.000	10.000	103.00	61.00	40.00	●	●
9.500	10.000	103.00	61.00	40.00	●	○
9.520	10.000	103.00	61.00	40.00	○	○
10.000	10.000	103.00	61.00	40.00	●	●
10.200	12.000	118.00	71.00	45.00		●
10.320	12.000	118.00	71.00	45.00	○	○
10.500	12.000	118.00	71.00	45.00	●	●
11.000	12.000	118.00	71.00	45.00	●	●
11.110	12.000	118.00	71.00	45.00		○
11.500	12.000	118.00	71.00	45.00	●	
12.000	12.000	118.00	71.00	45.00	●	●
12.500	14.000	124.00	77.00	45.00	●	●
12.700	14.000	124.00	77.00	45.00		○
13.000	14.000	124.00	77.00	45.00	●	●
13.490	14.000	124.00	77.00	45.00	○	
13.500	14.000	124.00	77.00	45.00	●	●
14.000	14.000	124.00	77.00	45.00	●	●
14.290	16.000	133.00	83.00	48.00	○	○
14.500	16.000	133.00	83.00	48.00		●
15.000	16.000	133.00	83.00	48.00	●	●
15.080	16.000	133.00	83.00	48.00	○	○
15.500	16.000	133.00	83.00	48.00	○	●
15.870	16.000	133.00	83.00	48.00	○	○
16.000	16.000	133.00	83.00	48.00	●	○
16.500	18.000	143.00	93.00	48.00	●	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	1131	1132
Standard	Guhring std.	
Tool material	HSCO	
Surface	◯	Ⓢ
Type	GT 80 IK	GT 80 IK
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	134	135
Techn. data page	160	161



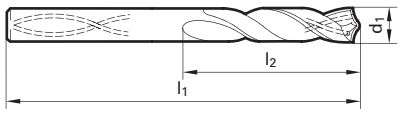




d1	d2 h6	l1	l2	l3	Availability	
mm	mm	mm	mm	mm		
17.000	18.000	143.00	93.00	48.00	●	●
17.500	18.000	143.00	93.00	48.00	❍	●
18.000	18.000	143.00	93.00	48.00	●	●
18.500	20.000	153.00	101.00	50.00	●	
19.000	20.000	153.00	101.00	50.00		●
19.500	20.000	153.00	101.00	50.00	❍	●
20.000	20.000	153.00	101.00	50.00	●	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	390
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	136
Techn. data page	161

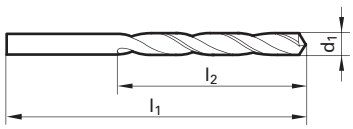




d1 mm	d2 mm	l1 mm	l2 mm	l3 mm	Availability
3.000	3.000	100.00	66.00	34.00	●
3.300	3.300	106.00	69.00	37.00	●
3.500	3.500	112.00	73.00	39.00	●
4.000	4.000	119.00	78.00	41.00	●
4.200	4.200	119.00	78.00	41.00	●
4.500	4.500	126.00	82.00	44.00	●
5.000	5.000	132.00	87.00	45.00	●
5.500	5.500	139.00	91.00	48.00	●
6.000	6.000	139.00	91.00	48.00	●
6.500	6.500	148.00	97.00	51.00	●
6.800	6.800	156.00	102.00	54.00	●
6.900	6.900	156.00	102.00	54.00	○
7.000	7.000	156.00	102.00	54.00	●
7.500	7.500	156.00	102.00	54.00	●
8.000	8.000	165.00	109.00	56.00	●
8.500	8.500	165.00	109.00	56.00	●
9.000	9.000	175.00	115.00	60.00	●
9.500	9.500	175.00	115.00	60.00	●
10.000	10.000	184.00	121.00	63.00	●
10.200	10.200	184.00	121.00	63.00	○
10.500	10.500	184.00	121.00	63.00	●
11.000	11.000	195.00	128.00	67.00	●
11.500	11.500	195.00	128.00	67.00	●
12.000	12.000	205.00	134.00	71.00	●
13.000	13.000	205.00	134.00	71.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	211	561	666	311
Standard	DIN 339			
Tool material	HSS			HSCO
Surface	>Ø 2,36		S	>Ø 2,36
Type	N	N	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	139	138
Techn. data page	161	161	161	162

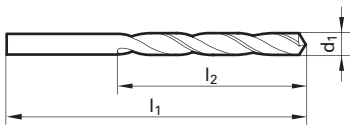




d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.800		42.00	22.00	●
1.000		48.00	26.00	● ●
1.050		48.00	26.00	●
1.080		50.00	28.00	○
1.100		50.00	28.00	● ● ○
1.110		50.00	28.00	○
1.150		50.00	28.00	●
1.200		52.00	30.00	● ●
1.230		52.00	30.00	○
1.250		52.00	30.00	●
1.270		52.00	30.00	●
1.280		52.00	30.00	○
1.300		52.00	30.00	● ● ●
1.320		52.00	30.00	●
1.350		55.00	33.00	○ ●
1.380		55.00	33.00	●
1.400		55.00	33.00	● ●
1.430		55.00	33.00	○
1.450		55.00	33.00	● ○
1.460		55.00	33.00	○
1.480		55.00	33.00	○
1.500		55.00	33.00	● ● ●
1.510		58.00	35.00	○
1.520		58.00	35.00	●
1.550		58.00	35.00	○
1.580		58.00	35.00	○
1.600		58.00	35.00	● ● ●
1.620		58.00	35.00	●
1.650		58.00	35.00	○
1.700		58.00	35.00	● ●
1.800		62.00	38.00	● ● ●
1.810		62.00	38.00	○
1.850		62.00	38.00	●
1.870		62.00	38.00	○
1.880		62.00	38.00	○
1.900		62.00	38.00	● ● ●
1.930		66.00	41.00	●
1.950		66.00	41.00	● ●
1.980	5/64	66.00	41.00	● ○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	211	561	666	311
Standard	DIN 339			
Tool material	HSS			HSCO
Surface	>Ø 2,36		S	>Ø 2,36
Type	N	N	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	139	138
Techn. data page	161	161	161	162

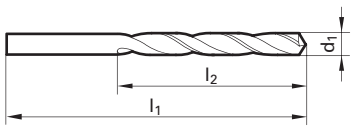




d1 mm	d1 inch	l1 mm	l2 mm	Availability
1.990		66.00	41.00	○ ○
2.000		66.00	41.00	● ● ●
2.020		66.00	41.00	○ ○
2.030		66.00	41.00	○
2.050		66.00	41.00	●
2.100		66.00	41.00	● ● ●
2.150		70.00	44.00	●
2.200		70.00	44.00	● ●
2.220		70.00	44.00	○
2.300		70.00	44.00	●
2.320		70.00	44.00	○
2.350		70.00	44.00	●
2.360		70.00	44.00	○
2.400		74.00	47.00	● ● ●
2.450		74.00	47.00	● ●
2.470		74.00	47.00	○
2.500		74.00	47.00	● ● ● ●
2.520		74.00	47.00	○
2.530		74.00	47.00	○
2.550		74.00	47.00	● ●
2.600		74.00	47.00	● ○ ●
2.620		74.00	47.00	○
2.650		74.00	47.00	●
2.680		79.00	51.00	○
2.700		79.00	51.00	○
2.730		79.00	51.00	●
2.800		79.00	51.00	● ● ●
2.900		79.00	51.00	● ● ●
2.930		79.00	51.00	○
2.950		79.00	51.00	●
2.960		79.00	51.00	●
3.000		79.00	51.00	● ● ● ●
3.050		84.00	55.00	● ●
3.070		84.00	55.00	○
3.100		84.00	55.00	● ○ ● ●
3.120		84.00	55.00	○
3.150		84.00	55.00	○ ○
3.170	1/8	84.00	55.00	●
3.200		84.00	55.00	● ○ ● ●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	211	561	666	311
Standard	DIN 339			
Tool material	HSS			HSCO
Surface	>Ø 2,36		S	>Ø 2,36
Type	N	N	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	139	138
Techn. data page	161	161	161	162

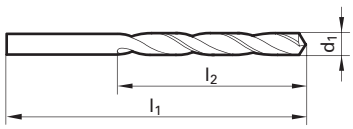




d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.250		84.00	55.00	●
3.260		84.00	55.00	●
3.300		84.00	55.00	● ● ●
3.400		91.00	60.00	● ●
3.480		91.00	60.00	○
3.500		91.00	60.00	● ●
3.570	9/64	91.00	60.00	●
3.600		91.00	60.00	● ●
3.700		91.00	60.00	● ○
3.730		91.00	60.00	○
3.800		96.00	64.00	● ●
3.900		96.00	64.00	● ●
3.950		96.00	64.00	○
4.000		96.00	64.00	● ● ● ●
4.100		96.00	64.00	● ●
4.200		96.00	64.00	● ●
4.250		96.00	64.00	○
4.300		102.00	69.00	● ● ●
4.400		102.00	69.00	● ○ ○
4.500		102.00	69.00	● ● ○
4.580		102.00	69.00	○
4.600		102.00	69.00	● ●
4.700		102.00	69.00	●
4.750		102.00	69.00	○
4.800		108.00	74.00	● ○ ○
4.900		108.00	74.00	● ●
4.950		108.00	74.00	○
5.000		108.00	74.00	● ● ● ●
5.100		108.00	74.00	● ● ○
5.150		108.00	74.00	○
5.200		108.00	74.00	● ○
5.300		108.00	74.00	● ●
5.330		116.00	80.00	○
5.350		116.00	80.00	●
5.400		116.00	80.00	● ○
5.500		116.00	80.00	● ●
5.550		116.00	80.00	●
5.600		116.00	80.00	● ●
5.700		116.00	80.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	211	561	666	311
Standard	DIN 339			
Tool material	HSS			HSCO
Surface	>Ø 2,36		S	>Ø 2,36
Type	N	N	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	139	138
Techn. data page	161	161	161	162

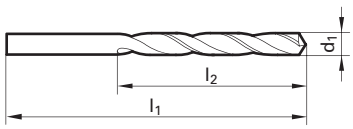




d1 mm	d1 inch	l1 mm	l2 mm	Availability
5.800		116.00	80.00	● ●
5.900		116.00	80.00	●
6.000		116.00	80.00	● ●
6.100		124.00	86.00	● ● ●
6.150		124.00	86.00	●
6.200		124.00	86.00	● ○
6.300		124.00	86.00	●
6.350	1/4	124.00	86.00	○ ○
6.400		124.00	86.00	● ○ ○
6.500		124.00	86.00	● ●
6.550		124.00	86.00	○
6.600		124.00	86.00	● ○
6.700		124.00	86.00	● ○
6.800		133.00	93.00	● ● ●
6.900		133.00	93.00	● ○
7.000		133.00	93.00	● ● ●
7.050		133.00	93.00	○
7.100		133.00	93.00	● ○
7.150		133.00	93.00	○
7.200		133.00	93.00	● ○
7.300		133.00	93.00	○ ○
7.400		133.00	93.00	●
7.500		133.00	93.00	○
7.600		142.00	100.00	○ ○
7.700		142.00	100.00	○
7.750		142.00	100.00	○
7.800		142.00	100.00	● ○
7.900		142.00	100.00	○ ○
7.940	5/16	142.00	100.00	○
7.950		142.00	100.00	○
8.000		142.00	100.00	● ●
8.100		142.00	100.00	●
8.120		142.00	100.00	○
8.200		142.00	100.00	● ● ○
8.300		142.00	100.00	○
8.400		142.00	100.00	● ●
8.500		142.00	100.00	● ● ○
8.600		151.00	107.00	● ○
8.700		151.00	107.00	●

○ bright ◎ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	211	561	666	311
Standard	DIN 339			
Tool material	HSS			HSCO
Surface	>Ø 2,36		S	>Ø 2,36
Type	N	N	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	139	138
Techn. data page	161	161	161	162

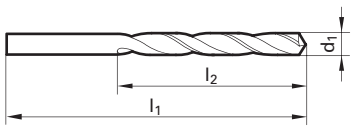




d1 mm	d1 inch	l1 mm	l2 mm	Availability
8.730	11/32	151.00	107.00	○
8.900		151.00	107.00	○
9.000		151.00	107.00	● ●
9.100		151.00	107.00	●
9.200		151.00	107.00	●
9.300		151.00	107.00	●
9.500		151.00	107.00	●
9.600		162.00	116.00	○ ○
9.650		162.00	116.00	○
9.700		162.00	116.00	○
9.750		162.00	116.00	○
9.800		162.00	116.00	● ○
9.850		162.00	116.00	○
9.900		162.00	116.00	○
10.000		162.00	116.00	● ● ●
10.200		162.00	116.00	● ●
10.500		162.00	116.00	●
10.800		173.00	125.00	○ ○
10.900		173.00	125.00	○
11.000		173.00	125.00	● ○
11.300		173.00	125.00	○
11.400		173.00	125.00	○
11.500		173.00	125.00	○ ○
11.700		173.00	125.00	○
11.750		173.00	125.00	●
11.910	15/32	184.00	134.00	○
12.000		184.00	134.00	●
12.100		184.00	134.00	○
12.250		184.00	134.00	○
12.300	31/64	184.00	134.00	○
12.500		184.00	134.00	○ ○
13.000		184.00	134.00	● ●
13.100	33/64	184.00	134.00	○
13.200		184.00	134.00	○
13.300		194.00	142.00	○
13.400		194.00	142.00	○ ○
13.500		194.00	142.00	○
13.600		194.00	142.00	○
13.800		194.00	142.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

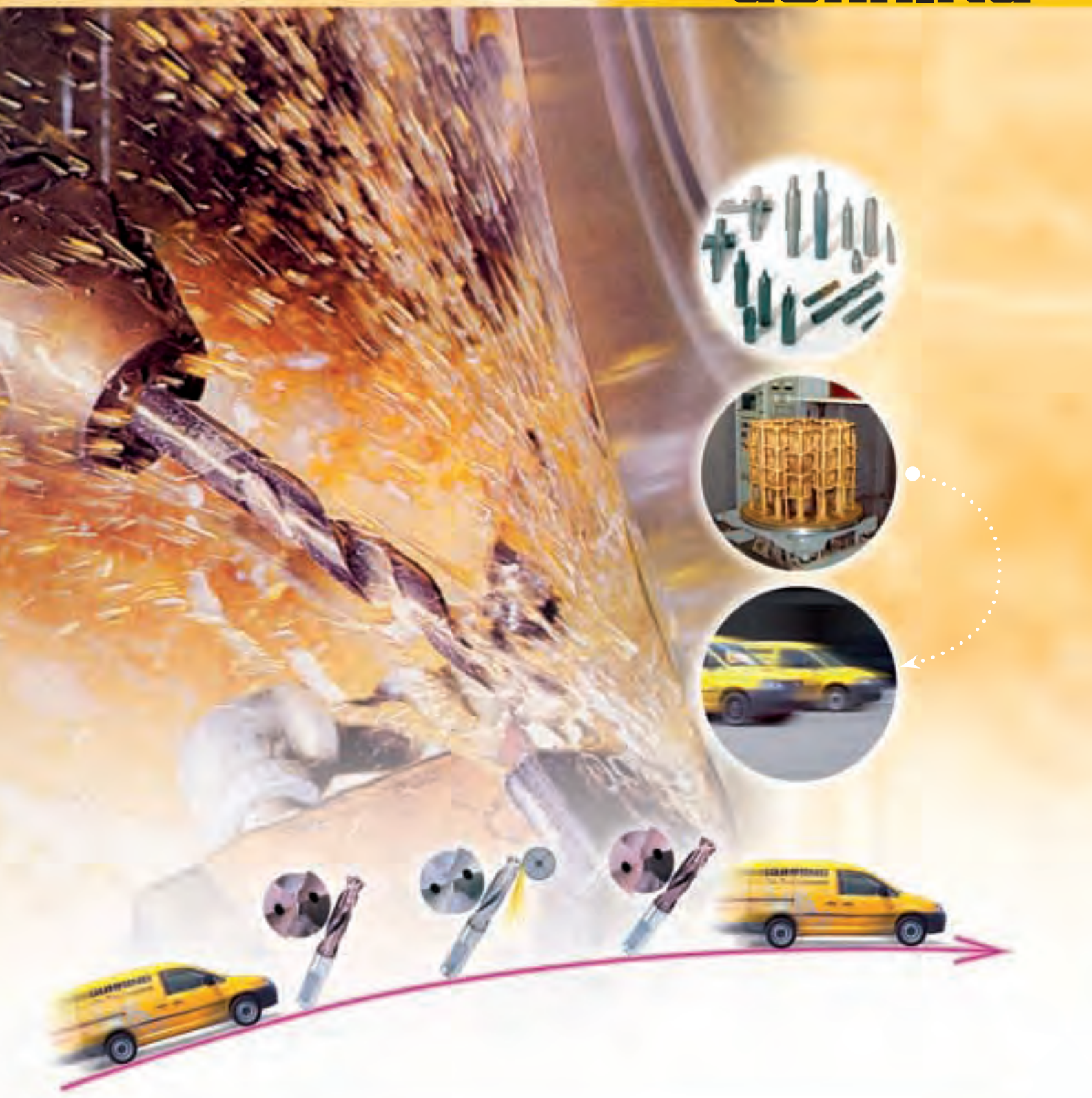
Guhring no.	211	561	666	311
Standard	DIN 339			
Tool material	HSS			HSCO
Surface	>Ø 2,36		S	>Ø 2,36
Type	N	N	N	N
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	139	138
Techn. data page	161	161	161	162





d1 mm	d1 inch	l1 mm	l2 mm	Availability
14.200		202.00	147.00	●
14.500		202.00	147.00	○
15.000		202.00	147.00	○
15.250		211.00	153.00	○
15.500		211.00	153.00	○
16.500		218.00	159.00	○
17.000		218.00	159.00	○
17.500		226.00	165.00	●
18.000		226.00	165.00	○
18.250		234.00	171.00	○
18.500		234.00	171.00	○
19.000		234.00	171.00	○ ○
19.500		242.00	177.00	○
20.000		242.00	177.00	○

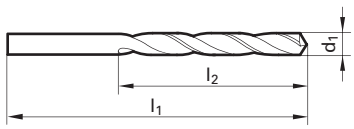
○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA



RE-GRINDING & RE-COATING

Guhring thinks big in all service matters. A comprehensive service is a matter of course even post tool sale. One area of our service program is the re-grinding and re-coating of tools – not only Guhring tools – to original geometries and original coatings so the efficiency of your tools is retained indefinitely.

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





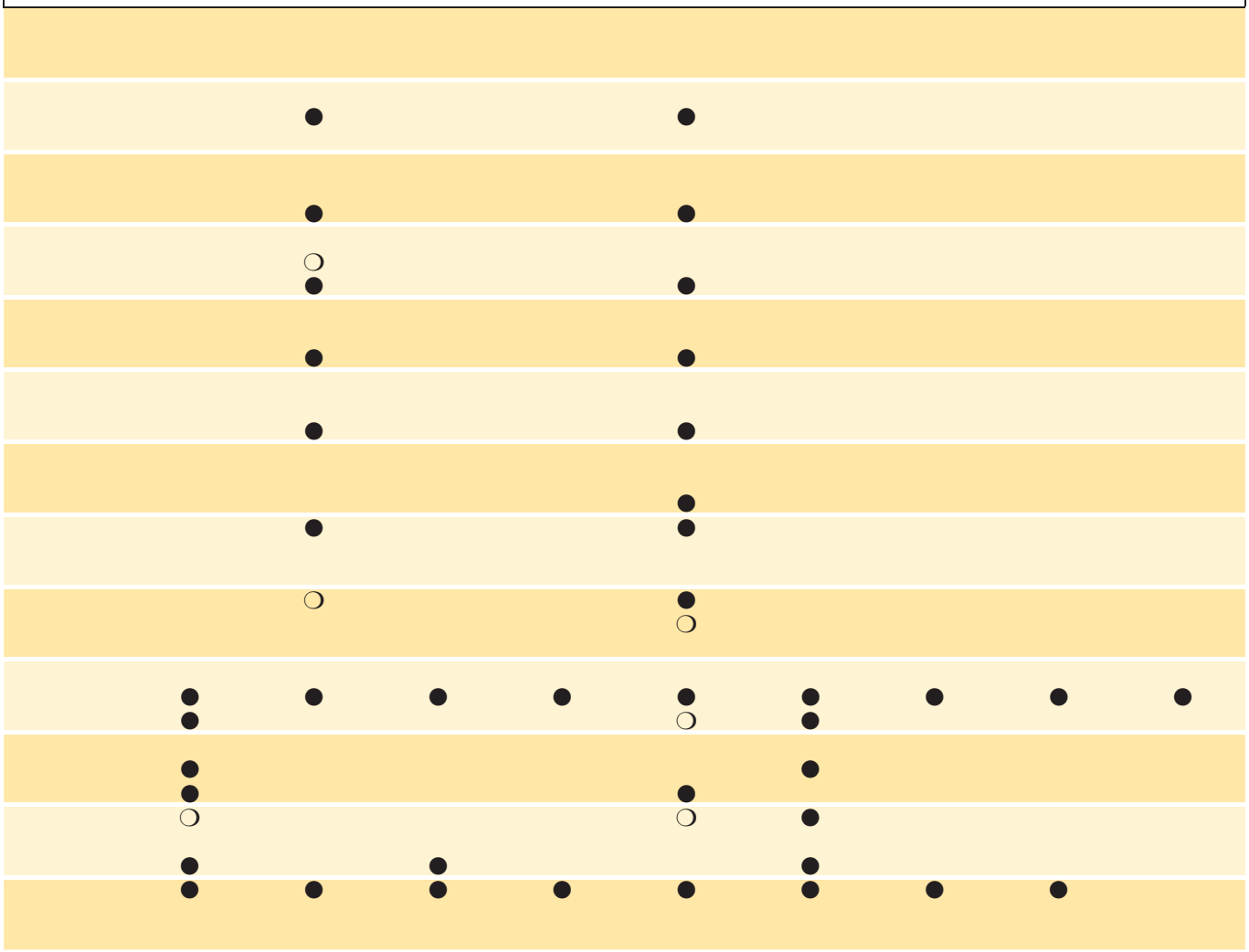
d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.400	1/64	30.00	10.00	● ●
0.440		30.00	10.00	●
0.450		30.00	10.00	● ○ ○
0.470		30.00	10.00	● ○
0.500		32.00	12.00	● ○ ●
0.520		32.00	12.00	● ● ○
0.550		35.00	15.00	● ●
0.570		35.00	15.00	●
0.600		35.00	15.00	● ● ● ●
0.620		38.00	18.00	●
0.650		38.00	18.00	● ● ● ○
0.700		42.00	21.00	● ● ● ○
0.730		42.00	21.00	●
0.740		42.00	21.00	●
0.750		42.00	21.00	● ● ●
0.760		46.00	25.00	●
0.790	1/32	46.00	25.00	●
0.800		46.00	25.00	● ● ●
0.820		46.00	25.00	● ●
0.840		46.00	25.00	●
0.850		46.00	25.00	● ● ●
0.900		51.00	29.00	● ● ● ○ ○
0.910		51.00	29.00	●
0.920		51.00	29.00	●
0.950		51.00	29.00	● ● ● ○
0.960		56.00	33.00	
0.970		56.00	33.00	● ○ ○
0.980		56.00	33.00	●
1.000		56.00	33.00	● ● ● ●
1.020		56.00	33.00	○ ●
1.030		56.00	33.00	○
1.040		56.00	33.00	●
1.050		56.00	33.00	● ● ● ●
1.070		60.00	37.00	●
1.080		60.00	37.00	● ●
1.090		60.00	37.00	○ ○
1.100		60.00	37.00	● ● ● ○ ● ●
1.120		60.00	37.00	●
1.130		60.00	37.00	○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F	○	S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

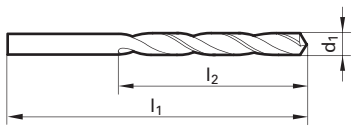


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	○	○ >Ø 2,36	○	○	○ >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





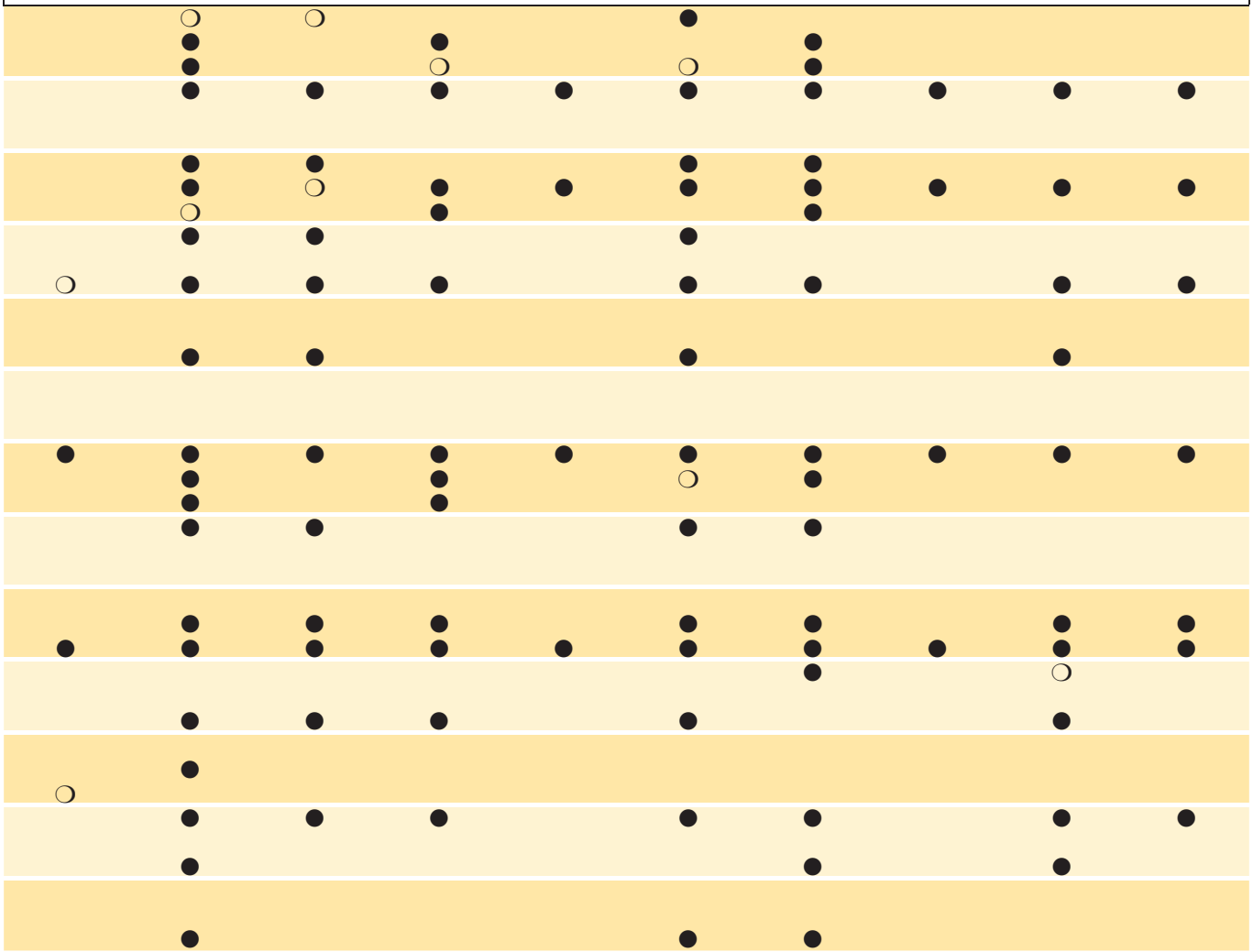
d1 mm	d1 inch	l1 mm	l2 mm	Availability
1.150		60.00	37.00	● ● ● ○
1.180		60.00	37.00	● ○ ●
1.190	3/64	65.00	41.00	● ○ ●
1.200		65.00	41.00	● ● ● ● ● ●
1.220		65.00	41.00	●
1.240		65.00	41.00	○
1.250		65.00	41.00	● ● ● ○ ●
1.300		65.00	41.00	● ● ● ● ●
1.320		65.00	41.00	● ○ ●
1.350		70.00	45.00	● ● ●
1.370		70.00	45.00	○ ●
1.400		70.00	45.00	● ● ○ ● ●
1.430		70.00	45.00	○
1.440		70.00	45.00	● ○
1.450		70.00	45.00	● ○ ●
1.470		70.00	45.00	●
1.480		70.00	45.00	○
1.490		70.00	45.00	●
1.500		70.00	45.00	● ● ● ● ● ●
1.510		76.00	50.00	○ ●
1.520		76.00	50.00	●
1.550		76.00	50.00	● ● ● ○ ●
1.560		76.00	50.00	○
1.570		76.00	50.00	●
1.580		76.00	50.00	○
1.590	1/16	76.00	50.00	● ●
1.600		76.00	50.00	● ● ● ● ●
1.610		76.00	50.00	● ○ ●
1.630		76.00	50.00	○
1.650		76.00	50.00	● ● ●
1.660		76.00	50.00	○
1.670		76.00	50.00	
1.680		76.00	50.00	
1.700		76.00	50.00	● ● ● ● ●
1.730		80.00	53.00	○
1.750		80.00	53.00	● ● ● ●
1.760		80.00	53.00	○
1.770		80.00	53.00	○
1.780		80.00	53.00	● ● ●

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F	○	S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

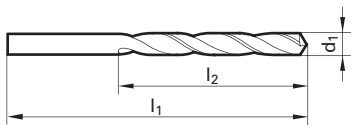


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





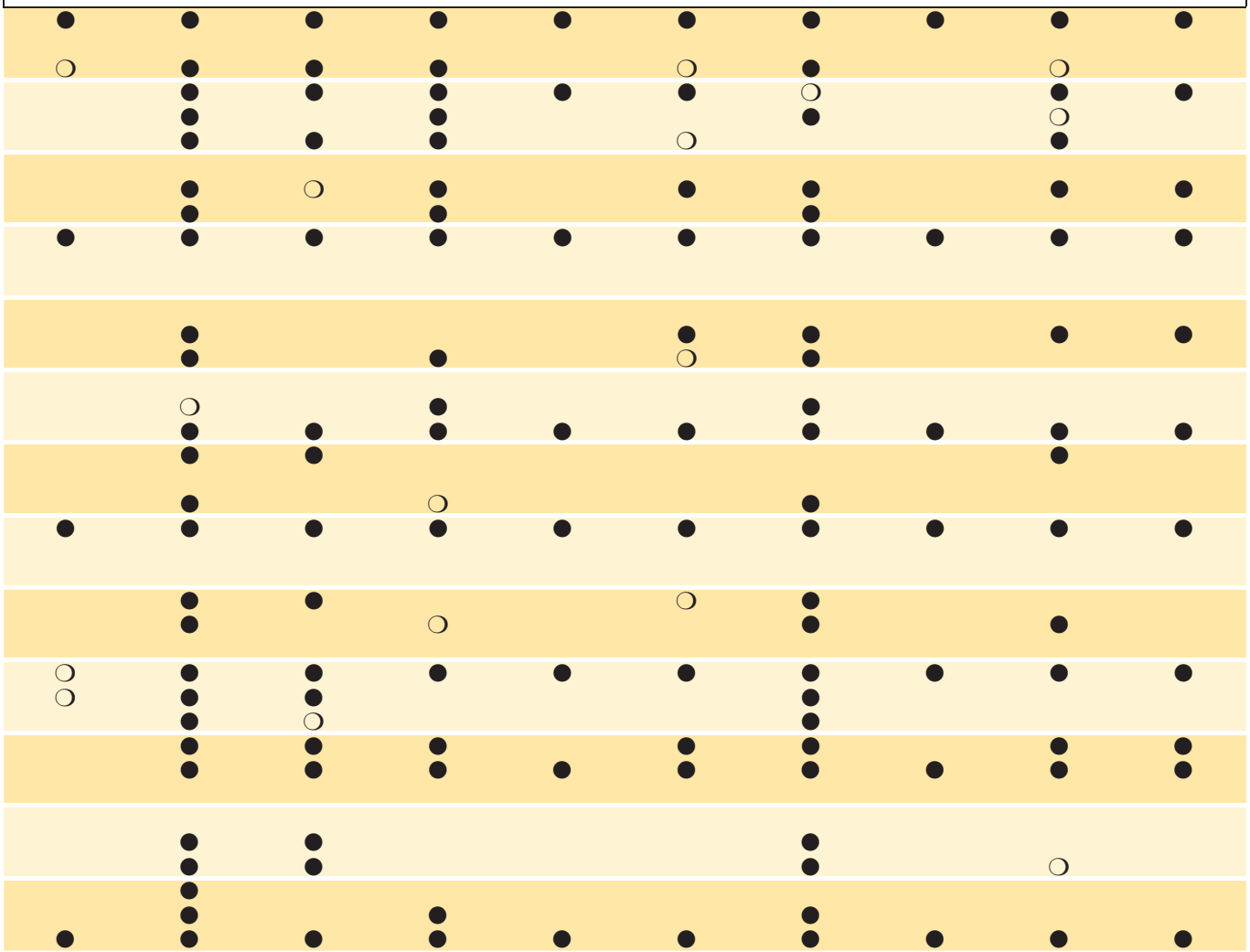
d1 mm	d1 inch	l1 mm	l2 mm	Availability
1.800		80.00	53.00	● ● ● ○ ○ ●
1.820		80.00	53.00	●
1.850		80.00	53.00	● ● ● ○ ○ ●
1.900		80.00	53.00	● ● ● ● ●
1.930		85.00	56.00	● ●
1.950		85.00	56.00	● ● ● ● ●
1.970		85.00	56.00	○
1.980	5/64	85.00	56.00	● ●
1.990		85.00	56.00	○
2.000		85.00	56.00	● ● ● ● ● ●
2.020		85.00	56.00	● ○
2.030		85.00	56.00	●
2.040		85.00	56.00	○
2.050		85.00	56.00	● ● ● ○ ●
2.060		85.00	56.00	○ ●
2.070		85.00	56.00	○
2.080		85.00	56.00	● ●
2.100		85.00	56.00	● ● ● ●
2.150		90.00	59.00	● ● ● ●
2.160		90.00	59.00	○
2.180		90.00	59.00	○ ○ ●
2.200		90.00	59.00	● ● ● ○ ●
2.210		90.00	59.00	○
2.220		90.00	59.00	●
2.250		90.00	59.00	● ● ○ ●
2.260		90.00	59.00	● ●
2.270		90.00	59.00	○
2.300		90.00	59.00	● ● ● ○ ●
2.350		90.00	59.00	● ○ ● ○ ●
2.370		95.00	62.00	● ●
2.380	3/32	95.00	62.00	● ● ●
2.400		95.00	62.00	● ● ● ●
2.420		95.00	62.00	○
2.430		95.00	62.00	○
2.440		95.00	62.00	● ○
2.450		95.00	62.00	● ● ○ ○
2.480		95.00	62.00	
2.490		95.00	62.00	● ○ ●
2.500		95.00	62.00	● ● ● ● ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

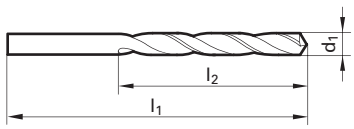


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





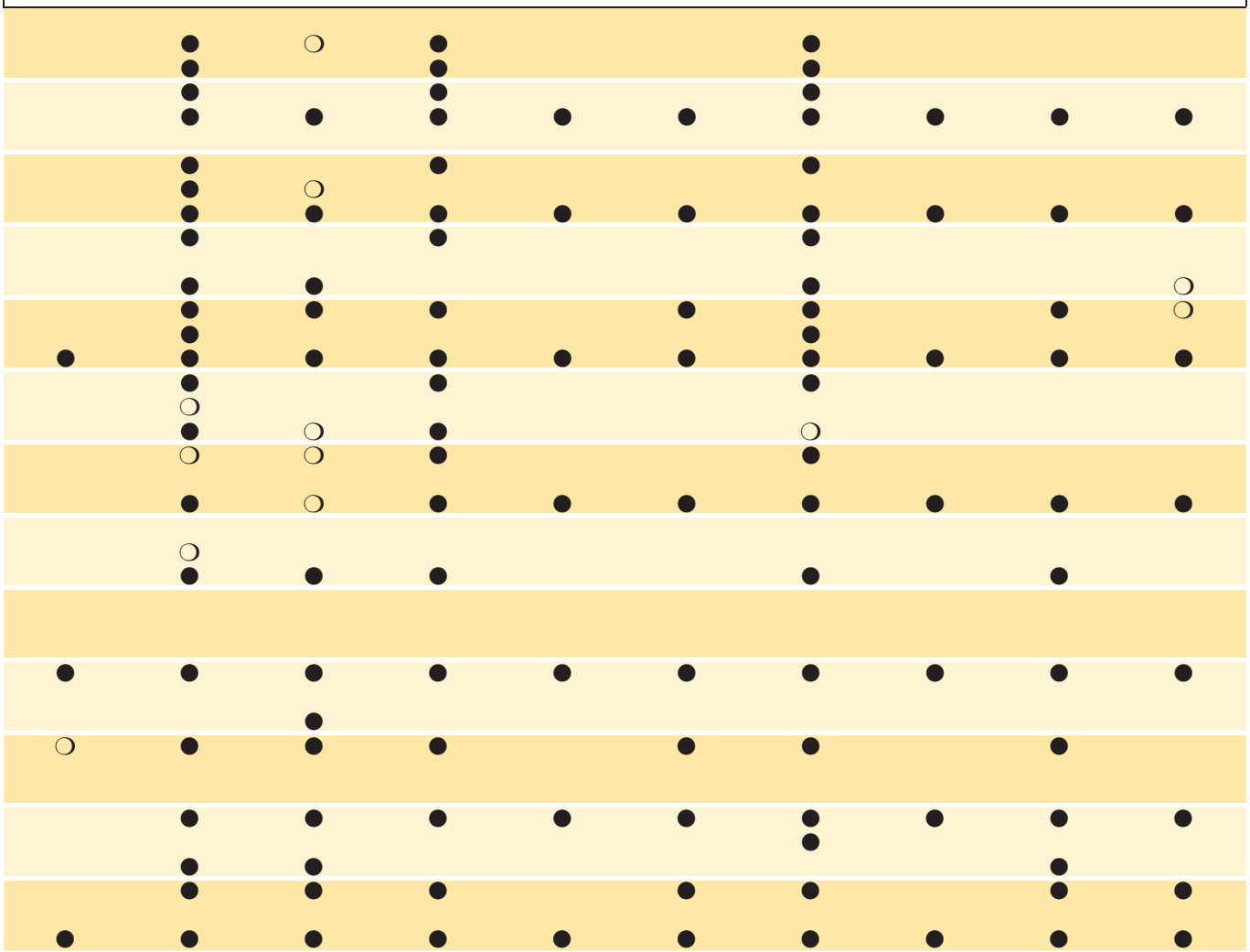
d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.520		95.00	62.00	501 ●
2.530		95.00	62.00	217 ● 501 ●
2.550		95.00	62.00	217 ● 218 ● 219 ● 501 ●
2.580		95.00	62.00	217 ● 501 ●
2.600		95.00	62.00	217 ● 218 ● 219 ● 501 ●
2.620		95.00	62.00	217 ○ 219 ○
2.640		95.00	62.00	217 ○ 501 ●
2.650		95.00	62.00	217 ● 218 ● 219 ● 501 ○
2.700		100.00	66.00	217 ● 218 ● 219 ● 220 ○ 221 ● 501 ●
2.710		100.00	66.00	217 ○ 219 ○ 501 ●
2.720		100.00	66.00	219 ●
2.750		100.00	66.00	217 ● 218 ● 219 ● 220 ○ 501 ●
2.780	7/64	100.00	66.00	217 ● 501 ●
2.790		100.00	66.00	217 ● 501 ○
2.800		100.00	66.00	217 ● 218 ● 219 ● 221 ○ 501 ●
2.820		100.00	66.00	217 ○ 501 ●
2.830		100.00	66.00	218 ○
2.850		100.00	66.00	217 ● 219 ● 221 ○ 501 ●
2.870		100.00	66.00	217 ● 218 ● 501 ●
2.880		100.00	66.00	219 ○
2.900		100.00	66.00	217 ● 218 ● 219 ● 220 ● 221 ○ 501 ●
2.920		100.00	66.00	218 ●
2.940		100.00	66.00	218 ●
2.950		100.00	66.00	216 ○ 217 ● 218 ● 219 ○ 220 ○ 221 ○ 501 ●
2.970		100.00	66.00	217 ●
2.980		100.00	66.00	217 ●
2.990		100.00	66.00	501 ●
3.000		100.00	66.00	216 ● 217 ● 218 ● 219 ● 220 ● 221 ● 501 ●
3.020		106.00	69.00	218 ● 220 ○
3.030		106.00	69.00	217 ●
3.050		106.00	69.00	217 ● 218 ● 219 ● 220 ○ 501 ●
3.060		106.00	69.00	218 ○
3.070		106.00	69.00	220 ○
3.100		106.00	69.00	216 ● 217 ● 218 ● 219 ● 220 ○ 501 ●
3.120		106.00	69.00	
3.150		106.00	69.00	217 ● 218 ● 219 ○ 221 ○
3.170	1/8	106.00	69.00	216 ○ 217 ● 219 ● 221 ○ 501 ●
3.180		106.00	69.00	218 ● 219 ○
3.200		106.00	69.00	216 ● 217 ● 218 ● 219 ● 220 ● 221 ○ 501 ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

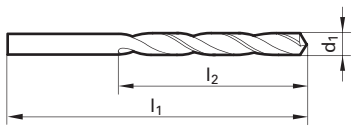


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.250		106.00	69.00	● ● ● ○ ○ ●
3.260		106.00	69.00	○ ○ ●
3.270		106.00	69.00	●
3.280		106.00	69.00	
3.300		106.00	69.00	● ● ● ● ○ ●
3.350		106.00	69.00	● ○ ○ ●
3.400		112.00	73.00	● ● ● ● ○ ○ ●
3.420		112.00	73.00	○
3.440		112.00	73.00	
3.450		112.00	73.00	● ○ ○ ● ●
3.500		112.00	73.00	● ● ● ● ● ○ ●
3.510		112.00	73.00	○
3.550		112.00	73.00	● ● ○ ○ ●
3.570	9/64	112.00	73.00	● ●
3.600		112.00	73.00	○ ● ● ● ○ ●
3.650		112.00	73.00	● ● ●
3.660		112.00	73.00	○ ●
3.700		112.00	73.00	● ● ○ ○ ●
3.730		112.00	73.00	
3.750		112.00	73.00	● ●
3.800		119.00	78.00	● ● ● ● ○ ●
3.830		119.00	78.00	●
3.850		119.00	78.00	●
3.860		119.00	78.00	○ ●
3.870		119.00	78.00	
3.900		119.00	78.00	○ ● ● ● ●
3.910		119.00	78.00	○ ●
3.920		119.00	78.00	○
3.950		119.00	78.00	●
3.970	5/32	119.00	78.00	● ○ ●
3.990		119.00	78.00	○ ● ○
4.000		119.00	78.00	● ● ● ● ● ● ●
4.030		119.00	78.00	○ ○
4.040		119.00	78.00	● ●
4.050		119.00	78.00	○ ● ● ○ ●
4.090		119.00	78.00	● ●
4.100		119.00	78.00	● ● ● ● ○ ●
4.130		119.00	78.00	
4.150		119.00	78.00	● ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

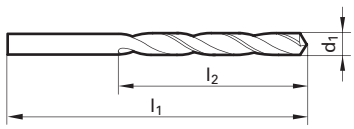


Availability

	●	●	●		●			●	●
	●	○	○			●			
	○								
								○	
○	●	●	●	●	●	●	●	●	●
		●							
○	●	●	●	●	●	●	●	●	●
						○			
	●		●			●		●	
●	●	●	●	●	●	●	●	●	●
●	●	●			●				
	●	○	●		○	●		●	●
	●	●	●		●	●	○	●	●
		●							
	●					●			
	●	●	●	●	●	●	●	●	●
	●	○	●			●			
	●	○	○			○			
○	●	●	●	○	●	●	●	●	●
		○							
	●		●			●			
			○						
○	●	○	●	○	●	●	●	●	●
	●		○			●			
○		●							
	●	○	●		○	●		●	○
	●					●			
●	●	●	●	●	●	●	●	●	●
	●		●		○	●			
	●	●						●	
	●		○			●			
	●	●	●		●	●	●	●	●
	○								
	●								

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	Availability
4.200		119.00	78.00	● ● ● ● ● ●
4.220		119.00	78.00	● ●
4.250		119.00	78.00	○ ● ● ○ ●
4.300		126.00	82.00	● ● ● ● ○ ●
4.350		126.00	82.00	○ ●
4.370	11/64	126.00	82.00	● ●
4.390		126.00	82.00	○
4.400		126.00	82.00	● ● ● ● ○
4.450		126.00	82.00	○
4.500		126.00	82.00	● ● ● ● ● ○ ●
4.550		126.00	82.00	●
4.570		126.00	82.00	○ ●
4.600		126.00	82.00	○ ● ● ● ○ ●
4.620		126.00	82.00	●
4.650		126.00	82.00	●
4.700		126.00	82.00	● ● ● ●
4.750		126.00	82.00	● ●
4.760	3/16	132.00	87.00	○ ● ● ●
4.780		132.00	87.00	○
4.800		132.00	87.00	● ● ● ● ○ ●
4.830		132.00	87.00	○
4.850		132.00	87.00	○ ●
4.870		132.00	87.00	○
4.900		132.00	87.00	● ● ● ● ●
4.910		132.00	87.00	
4.920		132.00	87.00	○ ●
4.950		132.00	87.00	● ○ ○
4.980		132.00	87.00	● ○
5.000		132.00	87.00	● ● ● ● ● ● ●
5.030		132.00	87.00	●
5.050		132.00	87.00	● ○ ●
5.060		132.00	87.00	● ●
5.080		132.00	87.00	○
5.100		132.00	87.00	● ● ● ● ○ ○ ●
5.110		132.00	87.00	○ ●
5.150		132.00	87.00	●
5.160	13/64	132.00	87.00	● ○
5.180		132.00	87.00	○ ○
5.200		132.00	87.00	● ● ● ● ○ ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

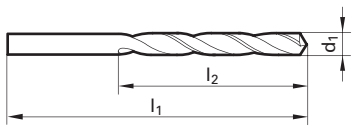


Availability

●	●	●	●	●	●	●	●	●	●
	○		●			●			
	●	●							
	●	●	●	●	●	●		●	●
	●								
	●	○	●		○	●			●
	●					●			
○	●	●	●		○	●		●	●
●	●	●	●	●	●	●	●	●	●
	●	○			○	●			
○	●	○	●		●	●		●	
	●	○				●			
		○							
	●	●	●	●	●	●	●	●	●
	●	○							
●	●	●	●		●	●		●	●
○	●	●	●	●	●	●	●	●	●
	●	○	○		●	●			
	●	○	●	●	●	●		●	
			○						
	●	○	●			●			
○								○	
	●					●			
●	●	●	●	●	●	●	●	●	●
	●				●				
	●		●			●			
	●		●		●	●	●	●	●
	●					●			
○	●	○	●		○	●		●	○
	●					○			
○	●	●	●	●	●	●	●	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	204	217	218	219	220	221	501
5.220		132.00	87.00		●					
5.250		132.00	87.00		●					
5.300		132.00	87.00		●	●	●			●
5.310		139.00	91.00		○					○
5.350		139.00	91.00		○					
5.400		139.00	91.00		●	●	●		○	●
5.410		139.00	91.00		○					○
5.430		139.00	91.00				○			
5.450		139.00	91.00		○	○				
5.500		139.00	91.00	●	●	●	●	○		●
5.550		139.00	91.00		○					
5.560	7/32	139.00	91.00		●					●
5.600		139.00	91.00	●	●	●		○	○	●
5.610		139.00	91.00		●					○
5.650		139.00	91.00		○		○			○
5.700		139.00	91.00		●		●	○		●
5.750		139.00	91.00		●					
5.790		139.00	91.00		○					○
5.800		139.00	91.00	●	●	●				●
5.850		139.00	91.00	○						
5.900		139.00	91.00	○	●	●	●		○	●
5.940		139.00	91.00							○
5.950	15/64	139.00	91.00		●	○				●
5.980		139.00	91.00				○			
6.000		139.00	91.00	●	●	●	●	●	●	●
6.030		148.00	97.00							●
6.040		148.00	97.00							●
6.050		148.00	97.00					○		
6.060		148.00	97.00		○					
6.100		148.00	97.00	●	●	●	●	○		
6.150		148.00	97.00							●
6.200		148.00	97.00	●	●	●				●
6.250		148.00	97.00		●		○			○
6.300		148.00	97.00	●	●	●	●	●		●
6.350	1/4	148.00	97.00	●	●					●
6.400		148.00	97.00	●	●		●	○		●
6.420		148.00	97.00			○				
6.500		148.00	97.00	●	●	●	●	○		●
6.530		148.00	97.00							●

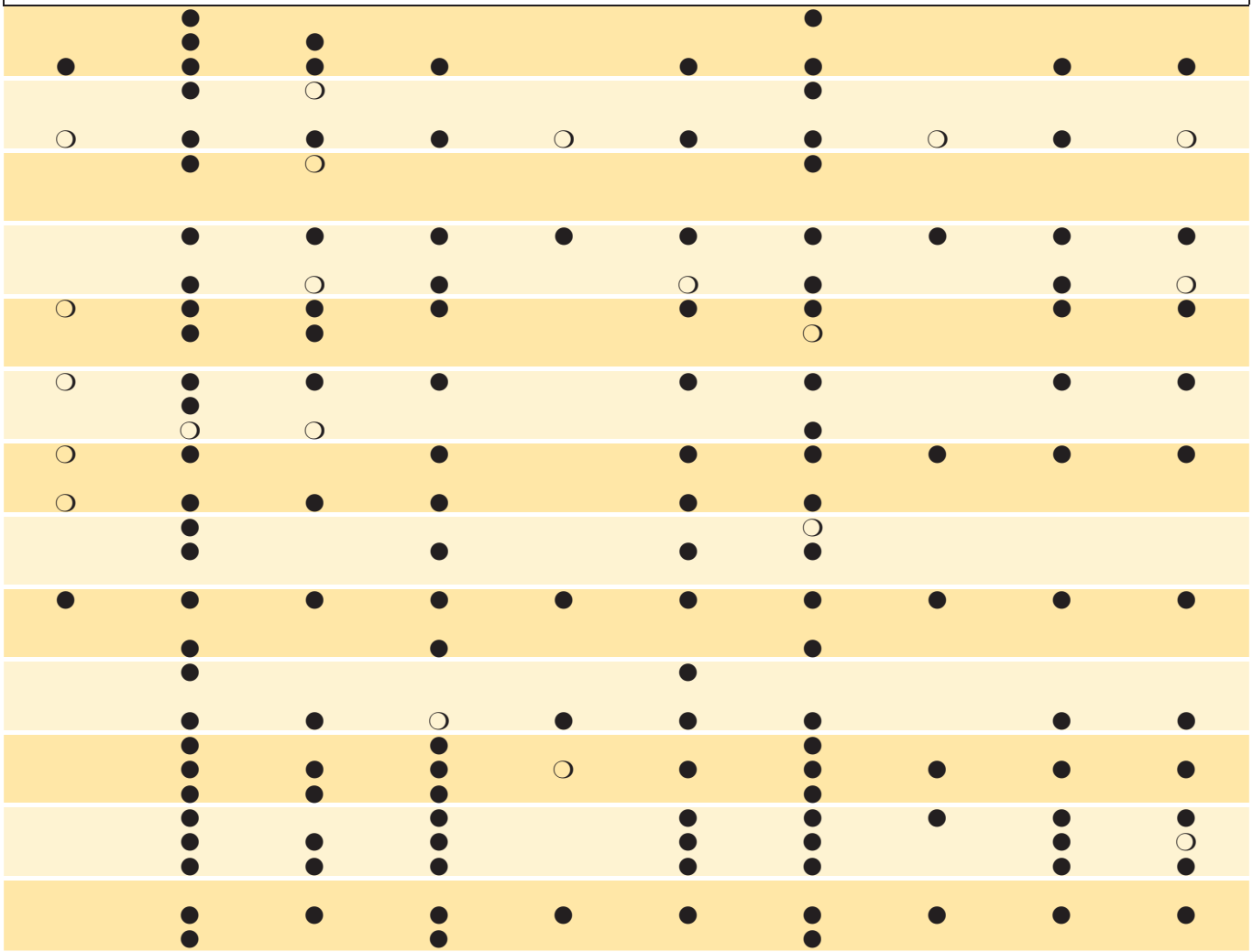
Availability

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F	○	S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

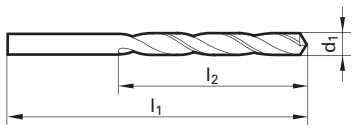


Availability



C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	Availability
6.600		148.00	97.00	● ● ● ● ● ●
6.630		148.00	97.00	●
6.700		148.00	97.00	● ● ● ● ●
6.750	17/64	156.00	102.00	❍ ● ●
6.760		156.00	102.00	
6.800		156.00	102.00	● ● ● ● ● ❍ ●
6.900		156.00	102.00	● ● ❍ ● ●
6.910		156.00	102.00	
7.000		156.00	102.00	● ● ● ● ●
7.030		156.00	102.00	
7.040		156.00	102.00	❍
7.100		156.00	102.00	● ❍ ●
7.140	9/32	156.00	102.00	● ●
7.200		156.00	102.00	● ● ❍ ❍
7.250		156.00	102.00	❍
7.300		156.00	102.00	● ● ●
7.350		156.00	102.00	❍
7.370		156.00	102.00	❍
7.400		156.00	102.00	❍ ● ●
7.450		156.00	102.00	❍
7.490		156.00	102.00	❍
7.500		156.00	102.00	● ● ● ● ❍ ●
7.540	19/64	165.00	109.00	● ❍ ●
7.550		165.00	109.00	●
7.600		165.00	109.00	❍ ❍ ❍
7.670		165.00	109.00	❍ ❍
7.700		165.00	109.00	❍ ● ❍
7.750		165.00	109.00	●
7.800		165.00	109.00	❍ ● ❍
7.850		165.00	109.00	●
7.900		165.00	109.00	● ● ❍
7.940	5/16	165.00	109.00	● ●
7.950		165.00	109.00	❍
8.000		165.00	109.00	● ● ● ● ● ❍ ●
8.025		165.00	109.00	❍
8.030		165.00	109.00	●
8.050		165.00	109.00	
8.100		165.00	109.00	● ● ❍ ●
8.200		165.00	109.00	❍ ● ● ● ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

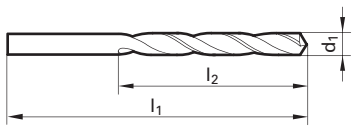


Availability

	●	●	●	●	●	●		●	●
	●		●		○	●			
	●		●			●	●		●
	●	○	●		○	●		●	●
			○						
	●	●	●	●	●	●	●	●	●
	●	●	●		●	●		●	
	○								
	●	●	●	●	●	●	●	●	●
	●					●			
	●								
	●	●	○			●		○	○
	●	●	●					●	○
	●	●		○	○	●	○		●
		○	○					○	
	●	●	●	○		●			●
	○	○	○			●			
○	●	●	●	○	●	●	●	●	○
	●		○			○			
	●	●	●		●	●	○	●	●
	●	○			○	●		●	○
	○		○	○	●		●		
	●					●			
	●	●	●		●	●	○	●	
	○				○				
○	●	●	●		●	●	●	●	●
	○								
	●		●	○		●	●		○
	●	○	●		●	●		●	○
●	●	●	●	●	●	●	●	●	●
	●					○			
		●							
	●	●				●			
	●	●	●		●	●	●	●	●

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	○	○ >Ø 2,36	○	○	○ >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	Availability
8.250		165.00	109.00	○ ● ○
8.300		165.00	109.00	● ○ ○
8.330	21/64	165.00	109.00	● ●
8.400		165.00	109.00	○ ● ○ ○
8.430		165.00	109.00	●
8.450		165.00	109.00	○
8.500		165.00	109.00	● ● ● ●
8.550		175.00	115.00	○
8.600		175.00	115.00	○ ● ○ ○
8.610		175.00	115.00	●
8.700		175.00	115.00	● ● ● ●
8.730	11/32	175.00	115.00	● ●
8.750		175.00	115.00	○ ● ● ○ ○
8.800		175.00	115.00	● ● ● ○
8.840		175.00	115.00	
8.900		175.00	115.00	● ● ○ ●
9.000		175.00	115.00	● ● ● ● ○ ○ ●
9.090		175.00	115.00	○
9.100		175.00	115.00	● ○ ●
9.130	23/64	175.00	115.00	● ●
9.200		175.00	115.00	●
9.300		175.00	115.00	○ ● ●
9.340		175.00	115.00	○
9.350		175.00	115.00	○
9.400		175.00	115.00	○ ● ○
9.500		175.00	115.00	● ● ● ●
9.520	3/8	184.00	121.00	● ○ ●
9.580		184.00	121.00	●
9.600		184.00	121.00	● ●
9.700		184.00	121.00	○ ● ○ ○ ○
9.750		184.00	121.00	●
9.800		184.00	121.00	● ● ● ○ ●
9.900		184.00	121.00	○ ● ● ○ ○
9.920	25/64	184.00	121.00	● ●
10.000		184.00	121.00	● ● ● ● ● ●
10.080		184.00	121.00	●
10.100		184.00	121.00	● ○
10.200		184.00	121.00	● ● ●
10.250		184.00	121.00	●

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F	○	S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

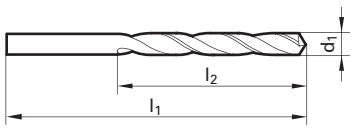


Availability

	●	○	●		○	●	○	●	
	●	●	●		●	●		●	
	●	●	●		●	●			
●	●	●	●		●	●	●	●	●
	●	●	○		●	●	●	●	
	●	●	●		○	●		●	○
	●	●	●			●	●		
●	●	○	○	●	●	●	○	●	
	●	●	●		○	●	○		○
	●	○	●		●	●			●
	●	○	○		●	●		●	●
	●	●	●		●	●	○		○
	●	●	●		●	●	○		
○	●	●	○		○	●		●	
	●	○	●	●	○	●	●	●	●
	●	●	○		●	●		●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





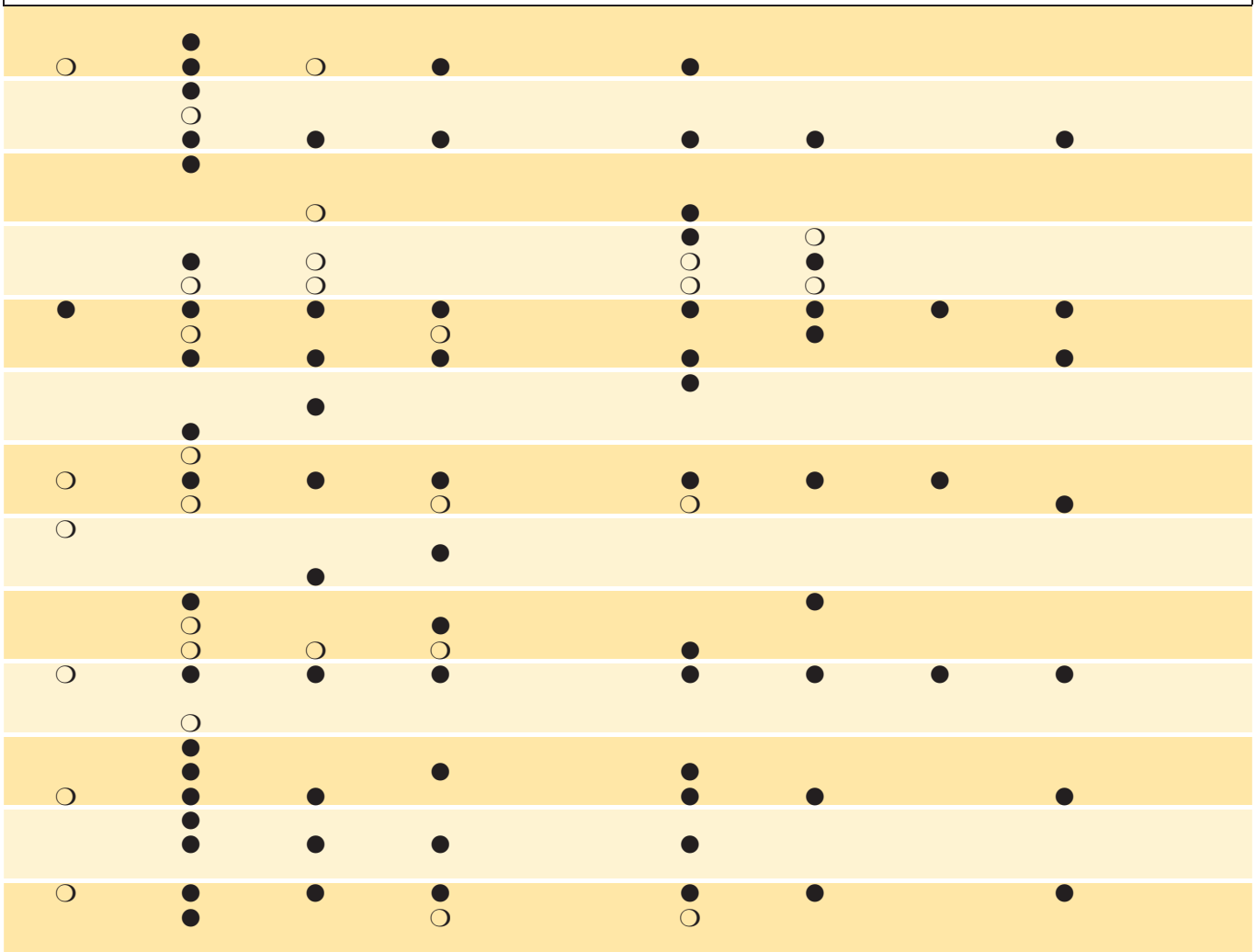
d1 mm	d1 inch	l1 mm	l2 mm	Availability
10.260		184.00	121.00	○
10.300		184.00	121.00	○ ● ○ ●
10.320	13/32	184.00	121.00	● ○
10.400		184.00	121.00	○ ● ●
10.490		184.00	121.00	
10.500		184.00	121.00	● ● ● ●
10.600		184.00	121.00	● ○
10.700		195.00	128.00	● ○ ○
10.720	27/64	195.00	128.00	● ○
10.750		195.00	128.00	● ○
10.800		195.00	128.00	○ ● ○
10.900		195.00	128.00	
11.000		195.00	128.00	● ● ○ ●
11.100		195.00	128.00	
11.110	7/16	195.00	128.00	● ●
11.200		195.00	128.00	● ○
11.250		195.00	128.00	○
11.300		195.00	128.00	○
11.400		195.00	128.00	● ○ ○
11.500		195.00	128.00	● ○ ●
11.510	29/64	195.00	128.00	● ○
11.600		195.00	128.00	● ●
11.700		195.00	128.00	●
11.750		195.00	128.00	● ○
11.800		195.00	128.00	● ●
11.900		205.00	134.00	○ ○
11.910	15/32	205.00	134.00	● ●
12.000		205.00	134.00	● ● ● ○ ●
12.100		205.00	134.00	● ○
12.150		205.00	134.00	
12.200		205.00	134.00	● ○ ●
12.300	31/64	205.00	134.00	○ ● ●
12.500		205.00	134.00	● ○ ●
12.600		205.00	134.00	
12.700	1/2	205.00	134.00	● ●
12.800		205.00	134.00	● ○
13.000		205.00	134.00	○ ● ○ ●
13.100	33/64	205.00	134.00	○ ●
13.200		205.00	134.00	●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165

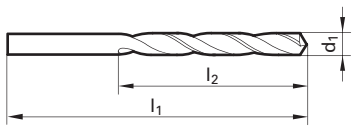


Availability



C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	○	○ >Ø 2,36	○	○	○ >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	Availability
13.490	17/32	214.00	140.00	● ● ●
13.500		214.00	140.00	● ● ○ ●
13.700		214.00	140.00	○
13.750		214.00	140.00	○ ●
13.800		214.00	140.00	●
13.890	35/64	214.00	140.00	● ●
13.900		214.00	140.00	
14.000		214.00	140.00	● ○ ○ ●
14.100		220.00	144.00	●
14.200		220.00	144.00	●
14.250		220.00	144.00	●
14.290	9/16	220.00	144.00	●
14.400		220.00	144.00	
14.490		220.00	144.00	○
14.500		220.00	144.00	● ○ ●
14.600		220.00	144.00	
14.680	37/64	220.00	144.00	●
14.700		220.00	144.00	
14.750		220.00	144.00	○
14.800		220.00	144.00	
14.900		220.00	144.00	●
15.000		220.00	144.00	● ○ ● ○
15.080	19/32	227.00	149.00	●
15.200		227.00	149.00	●
15.250		227.00	149.00	●
15.400		227.00	149.00	○
15.480	39/64	227.00	149.00	●
15.500		227.00	149.00	● ●
15.600		227.00	149.00	○
15.800		227.00	149.00	
15.870	5/8	227.00	149.00	●
16.000		227.00	149.00	● ●
16.270	41/64	235.00	154.00	●
16.500		235.00	154.00	●
16.670	21/32	235.00	154.00	●
16.750		235.00	154.00	
17.000		235.00	154.00	● ●
17.070	43/64	241.00	158.00	●
17.460	11/16	241.00	158.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

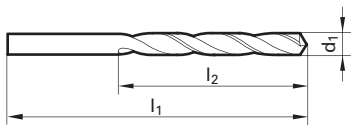
506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F	○	S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165



Availability									
	●	●			●				
	●	●			●				
	○								
		●							
	●	●			○				
	○				○				
	●	●	●		●				
		●			○				
					○				
		●							
					○				
		●			●				
		●			○				
		●			●				
		○			○				
					●				
					○	○			
					●				
		●			●	●			
		●							
		○							
		●							
		●							

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	204	217	218	219	220	221	501
Standard	DIN 340						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	● >Ø 6,00	○	○
Type	N	N	H	W	N	H	GT50
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	left-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	134	134	138	138	136
Techn. data page	162	162	162	162	163	163	163





d1 mm	d1 inch	l1 mm	l2 mm	Availability
17.500		241.00	158.00	●
18.000		241.00	158.00	● ○
18.250		247.00	162.00	○ ○
18.500		247.00	162.00	●
18.650	47/64	247.00	162.00	●
19.000		247.00	162.00	● ○ ○
19.450	49/64	254.00	166.00	
19.840	25/32	254.00	166.00	○
20.000		254.00	166.00	● ● ○
20.100		261.00	171.00	○
20.400		261.00	171.00	●
20.500		261.00	171.00	●
20.640	13/16	261.00	171.00	● ○
20.750		261.00	171.00	●
21.000		261.00	171.00	●
21.500		268.00	176.00	●
22.000		268.00	176.00	● ○
22.220	7/8	268.00	176.00	
23.300		275.00	180.00	○
23.420	59/64	275.00	180.00	○
23.810	15/16	282.00	185.00	●
24.000		282.00	185.00	●
24.750		282.00	185.00	○
25.000	63/64	282.00	185.00	● ○
25.250		290.00	190.00	○
25.500		290.00	190.00	○
26.190	1 1/32	290.00	190.00	○
26.500		290.00	190.00	●
26.990	1 1/16	298.00	195.00	●
28.570	1 1/8	307.00	201.00	○
29.000		307.00	201.00	○ ○
29.370	1 5/32	307.00	201.00	○
29.500		307.00	201.00	○
30.000		307.00	201.00	●
30.160	1 3/16	316.00	207.00	○
30.960	1 7/32	316.00	207.00	○
31.000		316.00	207.00	○
32.600		325.00	213.00	○
36.510	1 7/16	345.00	225.00	○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

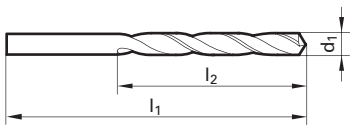
506	535	667	668	2462	317	336	396	617	669
DIN 340									
HSS					HSCO				
>Ø 2,36	>Ø 2,36	S	S	F	>Ø 2,36	>Ø 2,36	F		S
GT 100	GT 100	N	GT 100	GT 100	N	GT 100	GT 100	Ti	Ti
left-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
h8	h8	h8	h8	h8	h8	h8	h8	h8	h8
138	136	133	137	137	134	136	137	134	139
163	163	164	164	164	164	164	165	165	165



Availability									
		● ○							
		○							
		○			●				

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	706
Standard	Guhring std.
Tool material	Solid carbide
Surface	◯
Type	N
Cutting direction	right-hand
Tolerance	h7
Discount group	102
Techn. data page	165

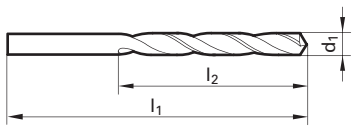


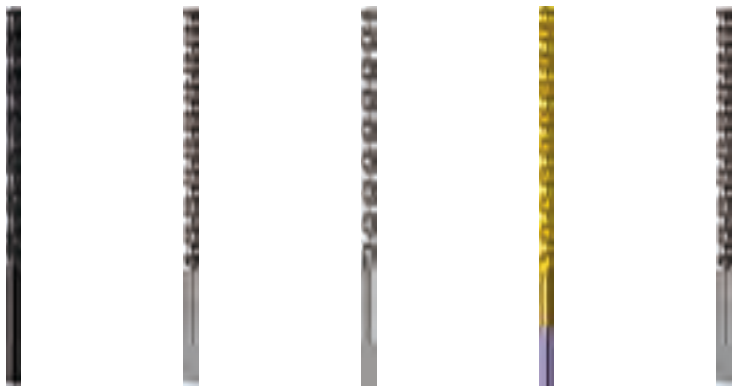


d1 mm	d1 inch	l1 mm	l2 mm	Availability
0.500		38.00	8.50	●
0.600		38.00	9.50	●
0.650		38.00	10.50	●
0.700		38.00	10.50	●
0.750		38.00	12.50	●
0.800		38.00	12.50	●
0.850		38.00	14.50	●
0.900		38.00	14.50	●
1.000		38.00	17.00	●
1.050		38.00	17.00	●
1.100		38.00	17.00	●
1.400		38.00	17.00	●
1.450		38.00	17.00	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	235	502	524	670	618
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	>Ø 2,36	>Ø 2,36		S	
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	137	136
Techn. data page	165	166	166	166	166



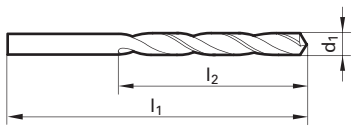


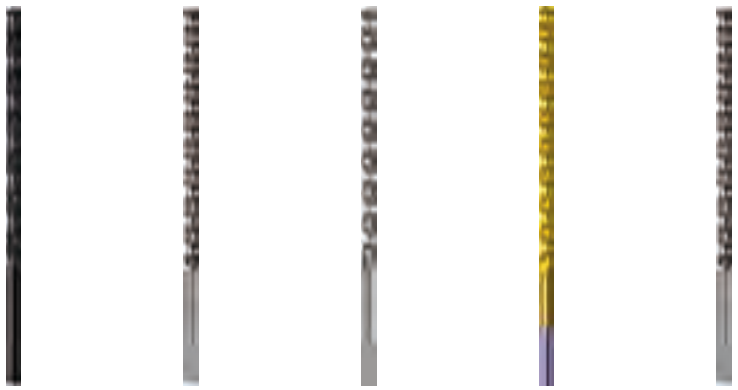
d1 mm	d1 inch	l1 mm	l2 mm	235	502	524	670	618
1.600		115.00	75.00	●				
1.700		115.00	75.00	●				
1.800		120.00	80.00	●				
1.900		120.00	80.00	●				
1.930		125.00	85.00	❍				
1.950		125.00	85.00	●	●			
1.980	5/64	125.00	85.00				❍	
2.000		125.00	85.00	●	●	●	●	
2.050		125.00	85.00	●	●			
2.100		125.00	85.00	●	●	●	●	
2.200		135.00	90.00	●	●	●	●	
2.300		135.00	90.00	●	●	●	●	
2.350		135.00	90.00	❍		●		
2.370		140.00	95.00		●			
2.380	3/32	140.00	95.00	●	●	●	●	
2.400		140.00	95.00	●	●	●	●	
2.450		140.00	95.00			❍		
2.500		140.00	95.00	●	●	●	●	
2.550		140.00	95.00		●			
2.580		140.00	95.00		●			
2.600		140.00	95.00	●	●	●		
2.700		150.00	100.00	●	●			●
2.780	7/64	150.00	100.00	❍	●	●	❍	
2.800		150.00	100.00	●	●	●	●	
2.850		150.00	100.00		●			
2.870		150.00	100.00		●			
2.900		150.00	100.00	●	●	●	●	●
2.950		150.00	100.00		●	●	●	
3.000		150.00	100.00	●	●	●	●	●
3.030		155.00	105.00		●			
3.100		155.00	105.00	●	●	●	●	●
3.170	1/8	155.00	105.00	●	●	●	●	●
3.200		155.00	105.00	●	●	●	●	●
3.220		155.00	105.00				❍	
3.250		155.00	105.00	●	●			
3.300		155.00	105.00	●	●	●	●	●
3.350		155.00	105.00			❍		
3.400		165.00	115.00	●	●	●		●
3.450		165.00	115.00			●		

Availability

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	235	502	524	670	618
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	>Ø 2,36	>Ø 2,36		S	
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	137	136
Techn. data page	165	166	166	166	166

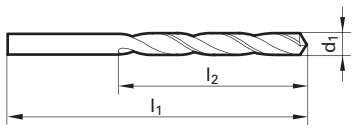


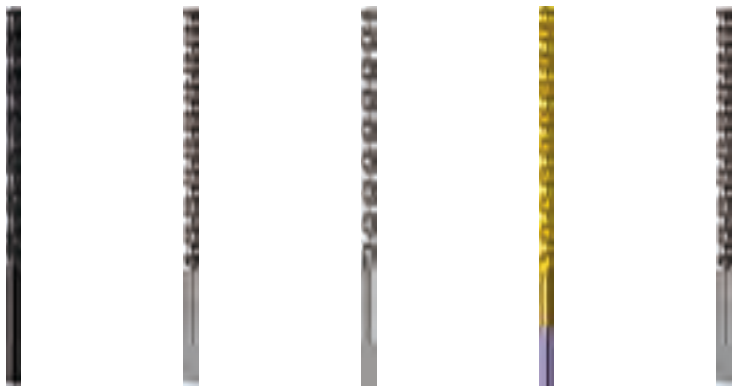


d1 mm	d1 inch	l1 mm	l2 mm	Availability
3.500		165.00	115.00	● ● ● ● ●
3.530		165.00	115.00	❍
3.570	9/64	165.00	115.00	● ● ❍ ❍ ❍
3.600		165.00	115.00	● ● ❍ ● ●
3.650		165.00	115.00	❍
3.700		165.00	115.00	● ● ● ●
3.750		165.00	115.00	❍ ● ❍
3.800		175.00	120.00	● ● ● ● ●
3.860		175.00	120.00	●
3.900		175.00	120.00	● ● ●
3.970	5/32	175.00	120.00	● ● ● ● ●
4.000		175.00	120.00	● ● ● ● ●
4.100		175.00	120.00	● ● ● ● ●
4.200		175.00	120.00	● ● ● ● ●
4.250		175.00	120.00	●
4.300		185.00	125.00	● ● ●
4.370	11/64	185.00	125.00	❍ ● ❍ ● ●
4.400		185.00	125.00	● ● ● ●
4.500		185.00	125.00	● ● ● ● ●
4.570		185.00	125.00	●
4.600		185.00	125.00	❍ ● ● ●
4.700		185.00	125.00	● ●
4.760	3/16	195.00	135.00	● ● ● ● ●
4.800		195.00	135.00	● ● ● ● ●
4.850		195.00	135.00	❍
4.900		195.00	135.00	● ● ❍
5.000		195.00	135.00	● ● ● ● ●
5.100		195.00	135.00	● ● ● ● ●
5.110		195.00	135.00	●
5.160	13/64	195.00	135.00	● ● ● ●
5.200		195.00	135.00	● ● ● ● ●
5.300		195.00	135.00	● ● ❍ ●
5.340		205.00	140.00	❍
5.400		205.00	140.00	● ● ❍ ●
5.500		205.00	140.00	● ● ● ● ●
5.560	7/32	205.00	140.00	● ● ● ●
5.600		205.00	140.00	● ● ❍ ●
5.700		205.00	140.00	● ● ● ●
5.750		205.00	140.00	●

❍ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	235	502	524	670	618
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	>Ø 2,36	>Ø 2,36		S	
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	137	136
Techn. data page	165	166	166	166	166

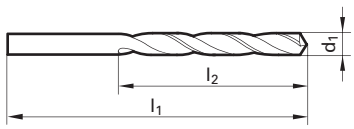


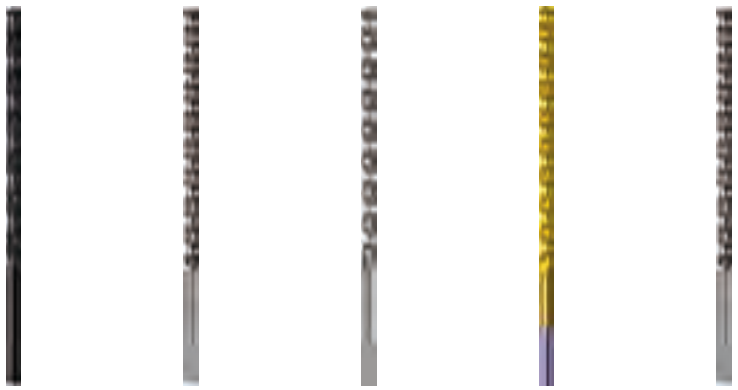


d1 mm	d1 inch	l1 mm	l2 mm	Availability
5.800		205.00	140.00	● ● ● ● ●
5.900		205.00	140.00	● ● ○
5.950	15/64	205.00	140.00	○ ○ ○
6.000		205.00	140.00	● ● ● ● ●
6.050		215.00	150.00	○
6.100		215.00	150.00	● ● ● ● ●
6.200		215.00	150.00	● ● ● ●
6.250		215.00	150.00	● ●
6.300		215.00	150.00	● ● ●
6.350	1/4	215.00	150.00	● ● ● ● ●
6.400		215.00	150.00	● ● ● ●
6.500		215.00	150.00	● ● ● ● ●
6.600		215.00	150.00	● ● ● ○ ●
6.700		215.00	150.00	● ● ○ ●
6.750	17/64	225.00	155.00	● ● ○ ●
6.800		225.00	155.00	● ● ● ● ●
6.900		225.00	155.00	●
7.000		225.00	155.00	● ● ● ● ●
7.100		225.00	155.00	● ○
7.140	9/32	225.00	155.00	○ ○ ● ●
7.200		225.00	155.00	● ●
7.300		225.00	155.00	● ○
7.400		225.00	155.00	● ● ○
7.500		225.00	155.00	● ● ● ● ●
7.540	19/64	240.00	165.00	○ ● ○ ○ ●
7.600		240.00	165.00	○
7.700		240.00	165.00	● ● ●
7.750		240.00	165.00	●
7.800		240.00	165.00	● ● ● ● ●
7.900		240.00	165.00	● ● ○
7.940	5/16	240.00	165.00	○ ● ○ ● ●
8.000		240.00	165.00	● ● ● ● ●
8.100		240.00	165.00	● ● ●
8.200		240.00	165.00	● ● ○ ○ ●
8.300		240.00	165.00	● ●
8.330	21/64	240.00	165.00	○ ● ○
8.400		240.00	165.00	○ ● ○
8.430		240.00	165.00	●
8.500		240.00	165.00	● ● ● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	235	502	524	670	618
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	>Ø 2,36	>Ø 2,36		S	
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	137	136
Techn. data page	165	166	166	166	166



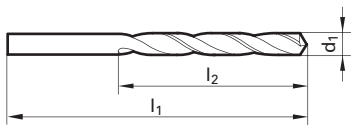


d1 mm	d1 inch	l1 mm	l2 mm	235	502	524	670	618
8.600		250.00	175.00		●	○		
8.700		250.00	175.00	●	●			●
8.730	11/32	250.00	175.00	●	●	○	●	●
8.800		250.00	175.00	●	●		●	●
8.900		250.00	175.00	●		○		
9.000		250.00	175.00	●	●	●	●	●
9.130	23/64	250.00	175.00	○		●	○	○
9.200		250.00	175.00		●	●		
9.300		250.00	175.00		●			
9.400		250.00	175.00		●			
9.500		250.00	175.00	●	●	○	●	●
9.520	3/8	265.00	185.00	●	●	●	○	●
9.600		265.00	185.00	○	●		○	
9.700		265.00	185.00	●	●	○		●
9.800		265.00	185.00	●	●			
9.900		265.00	185.00	●	●			
9.920	25/64	265.00	185.00	○	●	○	○	
10.000		265.00	185.00	●	●	●	●	●
10.100		265.00	185.00	●				
10.200		265.00	185.00	●	●			
10.250		265.00	185.00	●				
10.320	13/32	265.00	185.00	●	●	○	○	
10.500		265.00	185.00	●	●	●		
10.600		265.00	185.00				○	
10.720	27/64	280.00	195.00		●			
10.900		280.00	195.00				○	
11.000		280.00	195.00	●	●	●	●	
11.110	7/16	280.00	195.00		●	○		
11.200		280.00	195.00		●			
11.500		280.00	195.00	●	●	●		
11.510	29/64	280.00	195.00	○	○			
11.750		280.00	195.00		●			
11.800		280.00	195.00	●	●			
11.900		295.00	205.00				○	
11.910	15/32	295.00	205.00			●	○	
12.000		295.00	205.00	●	●	●	●	
12.100		295.00	205.00	●				
12.250		295.00	205.00	●				
12.300	31/64	295.00	205.00	●				

Availability

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	235	502	524	670	618
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	>Ø 2,36	>Ø 2,36		S	
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	137	136
Techn. data page	165	166	166	166	166

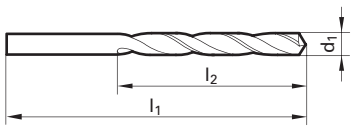




d1 mm	d1 inch	l1 mm	l2 mm	Availability
12.500		295.00	205.00	● ● ●
12.700	1/2	295.00	205.00	● ● ● ❍
13.000		295.00	205.00	● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	236	503	528	671	619
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	●	◒ >Ø 2,36	○	Ⓢ	◒
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	139	138
Techn. data page	166	167	167	167	167

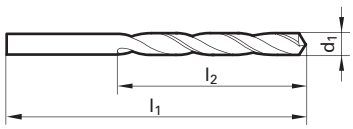




d1 mm	d1 inch	l1 mm	l2 mm	Availability
2.000		160.00	110.00	●
2.200		170.00	115.00	●
2.300		170.00	115.00	●
2.500		180.00	120.00	●
2.700		190.00	130.00	● ○
2.800		190.00	130.00	● ● ●
2.900		190.00	130.00	●
3.000		190.00	130.00	● ● ● ● ●
3.030		200.00	135.00	● ○
3.100		200.00	135.00	● ● ● ○
3.170	1/8	200.00	135.00	● ● ● ● ●
3.200		200.00	135.00	● ● ● ●
3.300		200.00	135.00	● ● ●
3.400		210.00	145.00	●
3.500		210.00	145.00	● ● ● ● ●
3.570	9/64	210.00	145.00	○ ● ○ ●
3.600		210.00	145.00	● ●
3.650		210.00	145.00	○
3.700		210.00	145.00	●
3.800		220.00	150.00	● ● ○
3.900		220.00	150.00	●
3.970	5/32	220.00	150.00	● ○ ● ●
4.000		220.00	150.00	● ● ● ● ●
4.090		220.00	150.00	○
4.100		220.00	150.00	● ● ●
4.200		220.00	150.00	● ● ● ●
4.300		235.00	160.00	● ●
4.370		235.00	160.00	○ ○ ○ ○
4.400		235.00	160.00	○ ○
4.500		235.00	160.00	● ● ● ● ●
4.600		235.00	160.00	● ●
4.760	3/16	245.00	170.00	● ● ○ ● ●
4.800		245.00	170.00	● ● ● ○ ●
4.900		245.00	170.00	● ● ●
5.000		245.00	170.00	● ● ● ● ●
5.100		245.00	170.00	●
5.110		245.00	170.00	●
5.160	13/64	245.00	170.00	●
5.200		245.00	170.00	● ● ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	236	503	528	671	619
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface		>Ø 2,36		S	
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	139	138
Techn. data page	166	167	167	167	167

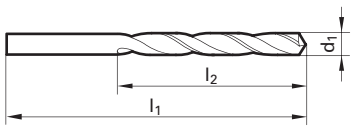




d1 mm	d1 inch	l1 mm	l2 mm	Availability
5.300		245.00	170.00	○
5.400		260.00	180.00	
5.500		260.00	180.00	● ● ○ ● ●
5.560	7/32	260.00	180.00	○ ● ○ ●
5.700		260.00	180.00	● ●
5.800		260.00	180.00	● ● ○
5.900		260.00	180.00	● ●
5.950	15/64	260.00	180.00	○ ○ ●
6.000		260.00	180.00	● ● ● ●
6.100		275.00	190.00	● ●
6.150		275.00	190.00	●
6.200		275.00	190.00	● ●
6.350	1/4	275.00	190.00	● ● ● ●
6.400		275.00	190.00	●
6.500		275.00	190.00	● ● ○ ● ●
6.600		275.00	190.00	●
6.700		275.00	190.00	● ●
6.750	17/64	290.00	200.00	● ○ ●
6.800		290.00	200.00	● ● ● ●
6.900		290.00	200.00	●
7.000		290.00	200.00	● ● ● ● ●
7.140	9/32	290.00	200.00	○ ● ○ ●
7.200		290.00	200.00	●
7.400		290.00	200.00	●
7.500		290.00	200.00	● ● ● ○ ●
7.540	19/64	305.00	210.00	○ ○ ○
7.600		305.00	210.00	○ ○
7.700		305.00	210.00	●
7.800		305.00	210.00	● ●
7.940	5/16	305.00	210.00	● ● ● ●
8.000		305.00	210.00	● ● ● ● ●
8.100		305.00	210.00	●
8.200		305.00	210.00	● ●
8.330	21/64	305.00	210.00	●
8.500		305.00	210.00	● ● ● ● ●
8.600		320.00	220.00	●
8.700		320.00	220.00	●
8.730	11/32	320.00	220.00	● ● ●
8.800		320.00	220.00	● ●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	236	503	528	671	619
Standard	DIN 1869				
Tool material	HSS				HSCO
Surface	●	◒ >Ø 2,36	○	Ⓢ	◒
Type	N	GT 100	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8
Discount group	134	136	138	139	138
Techn. data page	166	167	167	167	167



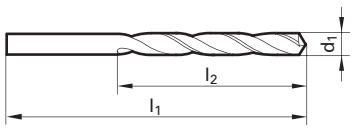


d1 mm	d1 inch	l1 mm	l2 mm	Availability
8.900		320.00	220.00	❍
9.000		320.00	220.00	● ● ❍ ●
9.100		320.00	220.00	❍
9.130	23/64	320.00	220.00	❍ ❍ ❍
9.200		320.00	220.00	❍
9.300		320.00	220.00	❍
9.500		320.00	220.00	● ● ●
9.520	3/8	340.00	235.00	● ●
9.600		340.00	235.00	●
9.700		340.00	235.00	●
9.800		340.00	235.00	● ●
9.900		340.00	235.00	●
9.920	25/64	340.00	235.00	❍ ●
10.000		340.00	235.00	● ● ● ●
10.200		340.00	235.00	● ●
10.500		340.00	235.00	● ● ❍
10.720	27/64	365.00	250.00	● ●
11.000		365.00	250.00	● ● ❍
11.110	7/16	365.00	250.00	● ●
11.500		365.00	250.00	● ● ❍
11.510	29/64	365.00	250.00	❍ ❍
11.750		365.00	250.00	● ●
11.910	15/32	375.00	260.00	❍ ●
12.000		375.00	260.00	● ●
12.300	31/64	375.00	260.00	●
12.500		375.00	260.00	●
12.700	1/2	375.00	260.00	●
13.000		375.00	260.00	● ● ❍

○ bright ◯ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	237	504	529	571
Standard		DIN 1869		
Tool material		HSS		HSCO
Surface	●	◓	○	◓
Type	N	GT 100	GT50	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	138	136	138	136
Techn. data page	167	168	168	168

NEW



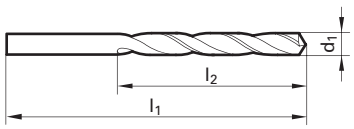


d1 mm	d1 inch	l1 mm	l2 mm	Availability			
2.500		225.00	150.00		●	●	●
3.000		240.00	160.00		●	●	●
3.100		250.00	170.00		●		●
3.170	1/8	250.00	170.00		●		●
3.200		250.00	170.00		●		●
3.300		250.00	170.00		●		●
3.400		265.00	180.00		●		●
3.500		265.00	180.00	●	●	○	●
3.570	9/64	265.00	180.00		○		
3.600		265.00	180.00		○		
3.700		265.00	180.00		●		●
3.800		280.00	190.00	●	●	○	●
3.900		280.00	190.00	○	●		●
3.970	5/32	280.00	190.00		●		●
4.000		280.00	190.00	●	●	●	●
4.100		280.00	190.00		●	○	●
4.200		280.00	190.00	●	●		●
4.300		295.00	200.00		●		●
4.370	11/64	295.00	200.00		○		
4.400		295.00	200.00		○		
4.500		295.00	200.00	●	●	○	●
4.600		295.00	200.00		●		●
4.760	3/16	315.00	210.00		●		●
4.800		315.00	210.00		●	○	●
4.900		315.00	210.00		●		●
5.000		315.00	210.00	●	●	●	●
5.100		315.00	210.00		●		●
5.200		315.00	210.00	●	●		●
5.400		330.00	225.00		○		
5.500		330.00	225.00	●	●	○	●
5.560	7/32	330.00	225.00		●		●
5.800		330.00	225.00	●	●		●
5.900		330.00	225.00	●			
5.950	15/64	330.00	225.00		●		●
6.000		330.00	225.00	●	●	●	●
6.100		350.00	235.00	●	●		●
6.200		350.00	235.00	●	●		●
6.300		350.00	235.00		●		●
6.350	1/4	350.00	235.00		●		●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	237	504	529	571
Standard		DIN 1869		
Tool material		HSS		HSCO
Surface	○	◓	○	◓
Type	N	GT 100	GT50	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	138	136	138	136
Techn. data page	167	168	168	168

NEW



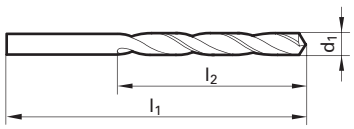


d1 mm	d1 inch	l1 mm	l2 mm	Availability
6.400		350.00	235.00	○ ● ●
6.500		350.00	235.00	● ● ● ●
6.600		350.00	235.00	○
6.700		350.00	235.00	● ● ○ ●
6.750	17/64	370.00	250.00	● ●
6.800		370.00	250.00	● ● ○ ●
7.000		370.00	250.00	● ● ● ●
7.140	9/32	370.00	250.00	● ●
7.200		370.00	250.00	●
7.500		370.00	250.00	○ ● ○ ●
7.540	19/64	390.00	265.00	○
7.750		390.00	265.00	● ●
7.800		390.00	265.00	● ● ●
7.940	5/16	390.00	265.00	● ●
8.000		390.00	265.00	● ● ● ●
8.200		390.00	265.00	● ●
8.330	21/64	390.00	265.00	○
8.500		390.00	265.00	● ● ● ●
8.600		410.00	280.00	● ●
8.700		410.00	280.00	●
8.730	11/32	410.00	280.00	● ●
8.800		410.00	280.00	● ●
8.900		410.00	280.00	○
9.000		410.00	280.00	● ● ● ●
9.100		410.00	280.00	○
9.200		410.00	280.00	○
9.500		410.00	280.00	● ● ○ ●
9.520	3/8	430.00	295.00	● ●
9.530		430.00	295.00	○
9.800		430.00	295.00	●
9.920	25/64	430.00	295.00	○
10.000		430.00	295.00	● ● ● ●
10.300		430.00	295.00	●
10.320	13/32	430.00	295.00	● ●
10.500		430.00	295.00	● ● ●
10.720	27/64	455.00	310.00	● ●
11.000		455.00	310.00	● ● ●
11.100		455.00	310.00	○
11.110	7/16	455.00	310.00	● ●

○ bright ◎ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	237	504	529	571
Standard	DIN 1869			
Tool material	HSS			HSCO
Surface	●	◓	○	◓
Type	N	GT 100	GT50	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	138	136	138	136
Techn. data page	167	168	168	168

NEW

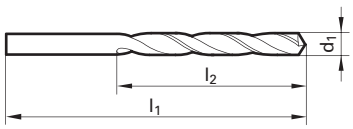




d1 mm	d1 inch	l1 mm	l2 mm	Availability			
11.500		455.00	310.00	●	●	○	●
11.750		455.00	310.00	●			
12.000		480.00	330.00	●	●		●
12.200		480.00	330.00		●		●
12.500		480.00	330.00	●	●		●
13.000		480.00	330.00	●	●		●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**242**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	
Type	**GT 100**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**136**
Techn. data page	**168**

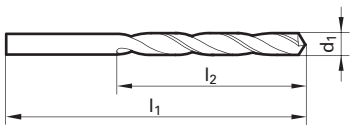




d1	l1	l2	Availability
mm	mm	mm	
6.000	500.00	400.00	●
8.000	500.00	400.00	●
10.000	600.00	500.00	●
11.000	600.00	500.00	●
12.000	600.00	500.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**243**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	◯
Type	**GT 100**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**168**

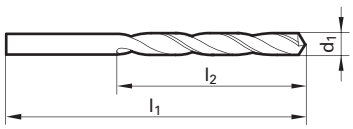




d1	l1	l2	Availability
mm	mm	mm	
8.000	750.00	650.00	●
9.800	750.00	650.00	●
10.000	750.00	650.00	●
11.000	750.00	650.00	●
12.000	750.00	650.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**244**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	○
Type	**GT 100**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**169**

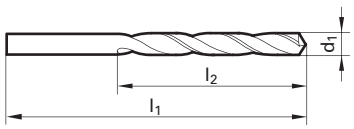




d1	l1	l2	Availability
mm	mm	mm	
10.000	1000.00	850.00	●
11.000	1000.00	850.00	●
12.000	1000.00	850.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	577	579
Standard	NAS 907	
Tool material	HSS	
Surface	○	● >Ø 2,36
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	169	169



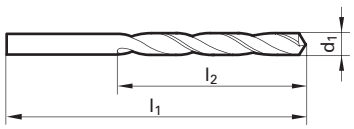




d1 mm	d1 inch	l1 mm	l2 mm	Availability	
1.500		153.00	23.00	●	●
1.590	1/16	153.00	26.00	●	○
1.650		153.00	26.00	●	
1.750		153.00	26.00	○	
1.780		153.00	26.00	●	●
1.900		153.00	26.00	●	
1.930		153.00	29.00	○	
1.980	5/64	153.00	29.00	○	○
1.990		153.00	29.00	○	
2.000		153.00	29.00	●	●
2.100		153.00	29.00	●	
2.300		153.00	32.50	●	
2.370		153.00	37.00	○	
2.380	3/32	153.00	37.00	●	●
2.400		153.00	37.00	●	●
2.490		153.00	37.00	●	●
2.500		153.00	37.00	●	●
2.530		153.00	37.00	●	●
2.580		153.00	37.00	●	○
2.640		153.00	37.00		○
2.710		153.00	42.00	○	○
2.780	7/64	153.00	42.00		○
2.790		153.00	42.00	○	○
2.820		153.00	42.00		○
2.870		153.00	42.00	○	○
2.950		153.00	42.00	○	○
3.000		153.00	42.00	●	●
3.050		153.00	42.00	○	●
3.170	1/8	153.00	42.00	●	●
3.200		153.00	42.00	●	○
3.260		153.00	42.00	●	●
3.450		154.00	49.00		○
3.500		154.00	49.00	●	○
3.570	9/64	154.00	49.00	○	○
3.600		154.00	49.00		○
3.660		154.00	49.00		○
3.700		154.00	49.00		●
3.730		154.00	49.00	○	
3.800		154.00	55.00	●	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	577	579
Standard	NAS 907	
Tool material	HSS	
Surface	○	● >Ø 2,36
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	169	169



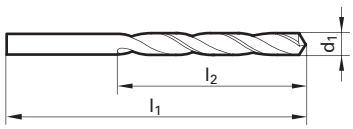




d1 mm	d1 inch	l1 mm	l2 mm	Availability	
3.860		154.00	55.00	○	
3.910		154.00	55.00	○	
3.970	5/32	154.00	55.00	●	●
3.990		154.00	55.00	○	○
4.000		154.00	55.00	●	●
4.040		154.00	55.00	●	●
4.090		154.00	55.00	●	●
4.220		154.00	55.00	●	○
4.370	11/64	154.00	60.00		○
4.390		154.00	60.00	●	○
4.500		154.00	60.00	●	○
4.570		154.00	60.00	○	○
4.620		154.00	60.00		○
4.700		154.00	60.00	●	○
4.760	3/16	154.00	63.50	●	●
4.800		154.00	63.50	●	●
4.850		154.00	63.50	○	○
4.920		154.00	63.50	●	○
4.980		154.00	63.50	○	○
5.000		154.00	63.50	●	●
5.160	13/64	154.00	63.50	●	○
5.410		154.00	68.50		○
5.500		154.00	68.50	●	●
5.560	7/32	154.00	68.50	●	●
5.800		154.00	68.50	●	○
5.940		154.00	68.50	○	○
5.950	15/64	154.00	68.50	○	○
6.040		154.00	75.00	○	○
6.150		154.00	75.00	○	○
6.200		154.00	75.00	○	○
6.250		154.00	75.00	○	○
6.350	1/4	154.00	75.00	●	●
6.400		154.00	75.00	○	
6.450		154.00	75.00		●
6.530		154.00	75.00	●	○
6.750	17/64	155.00	80.00		○
6.800		155.00	80.00	○	
7.000		155.00	80.00	●	
7.700		155.00	90.00	○	

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	577	579
Standard	NAS 907	
Tool material	HSS	
Surface	○	● >Ø 2,36
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	169	169



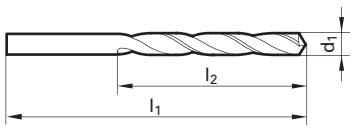




d1		l1	l2	Availability	
mm	inch	mm	mm		
7.940	5/16	155.00	90.00	○	●
8.000		155.00	90.00	○	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	578	580
Standard	NAS 907	
Tool material	HSS	
Surface	○	●○ >Ø 2,36
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	169	169



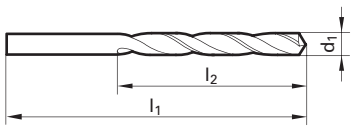




d1 mm	d1 inch	l1 mm	l2 mm	Availability 578	Availability 580
1.500		306.00	23.00	●	●
1.590	1/16	306.00	26.00	●	○
1.780		306.00	26.00	○	○
1.850		306.00	26.00	●	
1.930		306.00	29.00	●	
1.980	5/64	306.00	29.00		○
1.990		306.00	29.00	○	
2.000		306.00	29.00	●	●
2.180		306.00	32.50	●	
2.260		306.00	32.50	●	
2.380	3/32	306.00	37.00	●	●
2.440		306.00	37.00	●	
2.490		306.00	37.00	○	●
2.500		306.00	37.00	●	●
2.530		306.00	37.00		○
2.580		306.00	37.00	●	○
2.640		306.00	37.00	○	○
2.710		306.00	42.00		●
2.780	7/64	306.00	42.00		○
2.790		306.00	42.00	●	●
2.820		306.00	42.00	●	○
2.870		306.00	42.00		○
2.950		306.00	42.00		○
3.000		306.00	42.00	●	●
3.170	1/8	306.00	42.00	●	●
3.200		306.00	42.00	●	
3.260		306.00	42.00	●	○
3.450		308.00	49.00	○	○
3.500		308.00	49.00	●	●
3.570	9/64	308.00	49.00	○	
3.660		308.00	49.00	○	○
3.700		308.00	49.00	○	○
3.730		308.00	49.00		○
3.800		308.00	55.00	●	○
3.970	5/32	308.00	55.00	●	●
3.990		308.00	55.00		○
4.000		308.00	55.00	●	●
4.040		308.00	55.00	●	●
4.090		308.00	55.00	●	

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	578	580
Standard	NAS 907	
Tool material	HSS	
Surface	○	● >Ø 2,36
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	169	169



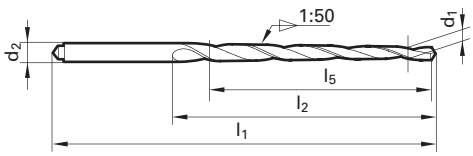




d1 mm	d1 inch	l1 mm	l2 mm	Availability	
4.220		308.00	55.00	●	
4.300		308.00	60.00		○
4.370	11/64	308.00	60.00	○	○
4.390		308.00	60.00	○	○
4.500		308.00	60.00	●	●
4.570		308.00	60.00	○	○
4.620		308.00	60.00	○	○
4.700		308.00	60.00	○	○
4.760	3/16	308.00	63.50	●	●
4.800		308.00	63.50	●	●
4.850		308.00	63.50	○	○
4.920		308.00	63.50	●	○
4.980		308.00	63.50	○	○
5.000		308.00	63.50	●	●
5.060		308.00	63.50		●
5.110		308.00	63.50		○
5.160	13/64	308.00	63.50	●	●
5.500		308.00	68.50	●	
5.560	7/32	308.00	68.50		○
5.790		308.00	68.50	○	○
5.800		308.00	68.50	●	
5.940		308.00	68.50		○
5.950	15/64	308.00	68.50	●	●
6.000		308.00	68.50	●	●
6.040		308.00	75.00	○	○
6.150		308.00	75.00	○	○
6.250		308.00	75.00	○	○
6.350	1/4	308.00	75.00	●	●
6.530		308.00	75.00	●	○
7.000		310.00	80.00	●	
7.940	5/16	310.00	90.00		●
8.000		310.00	90.00	●	○

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	**531**
Standard	**DIN 1898**
Tool material	**HSS**
Surface	>Ø 2,36
Type	**N**
Cutting direction	**right-hand**
Tolerance	
Discount group	**138**
Techn. data page	**170**

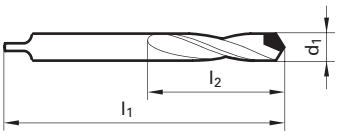




d1	d2	l1	l2	l5	Availability
mm	mm	mm	mm	mm	
1.000	1.600	50.00	29.00	26.00	●
2.000	3.150	86.00	52.00	48.00	●
2.500	3.150	86.00	52.00	48.00	●
3.000	4.000	100.00	63.00	58.00	●
3.500	5.000	112.00	74.00	68.00	●
4.000	5.000	112.00	74.00	68.00	●
4.500	6.300	122.00	81.00	73.00	●
5.000	6.300	122.00	81.00	73.00	●
5.500	8.000	160.00	114.00	105.00	○
6.000	8.000	160.00	114.00	105.00	●
8.000	10.000	207.00	157.00	145.00	●
10.000	12.500	245.00	190.00	175.00	●
12.000	16.000	290.00	228.00	210.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	703	704
Standard	DIN 8037	DIN 8038
Tool material	Carbide	
Surface	◯	◯
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	102	102
Techn. data page	170	170



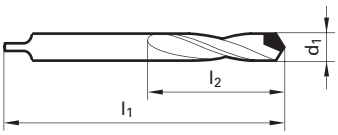




d1 mm	l1 mm	l2 mm	Availability	
1.700	45.00	18.00	●	
1.900	45.00	18.00		●
2.200	45.00	18.00		●
2.600	50.00	20.00	●	
2.700	50.00	20.00	❍	
2.900	50.00	20.00	●	
3.000	50.00	20.00	●	
3.100	56.00	25.00	●	●
3.200	56.00	25.00	●	●
3.250	56.00	25.00	●	
3.300	56.00	25.00	●	
3.500	56.00	25.00	●	●
3.700	56.00	25.00	●	❍
3.800	56.00	25.00	●	
3.900	56.00	25.00	●	
4.000	56.00	25.00	●	
4.100	63.00	28.00	●	
4.200	63.00	28.00	●	●
4.300	63.00	28.00	●	
4.400	63.00	28.00	●	
4.500	63.00	28.00	●	●
4.800	63.00	28.00	●	
4.900	63.00	28.00	●	
5.000	63.00	28.00	●	●
5.100	71.00	32.00	●	
5.200	71.00	32.00	●	
5.300	71.00	32.00	●	
5.400	71.00	32.00	●	
5.500	71.00	32.00	●	●
5.800	71.00	32.00	●	
6.000	71.00	32.00	●	❍
6.200	71.00	32.00	●	
6.300	71.00	32.00	●	
6.350	71.00	32.00	●	
6.400	71.00	32.00	●	
6.500	71.00	32.00	●	
6.700	80.00	40.00	●	
6.800	80.00	40.00	●	
7.000	80.00	40.00	●	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	703	704
Standard	DIN 8037	DIN 8038
Tool material	Carbide	
Surface	○	○
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	102	102
Techn. data page	170	170



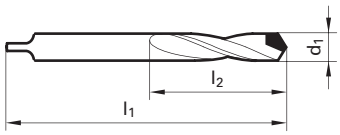




d1	l1	l2	Availability	
mm	mm	mm		
7.100	80.00	40.00	●	
7.200	80.00	40.00	❍	
7.500	80.00	40.00	●	
7.800	80.00	40.00	●	
8.000	80.00	40.00	●	●
8.200	90.00	50.00	●	
8.400	90.00	50.00	●	
8.500	90.00	50.00	●	
8.800	90.00	50.00	●	
9.000	90.00	50.00	●	
9.500	90.00	50.00	●	
9.700	100.00	56.00	●	
9.800	100.00	56.00	●	
10.000	100.00	56.00	●	
10.200	100.00	56.00	●	
10.400	100.00	56.00	●	
10.500	100.00	56.00	●	
11.000	100.00	56.00	●	
11.500	112.00	63.00	●	
12.000	112.00	63.00	●	
12.500	112.00	63.00	●	
12.700	112.00	63.00	●	
13.000	112.00	63.00	●	
13.500	125.00	71.00	●	
14.000	125.00	71.00	●	
14.500	125.00	71.00	●	
15.000	125.00	71.00	●	
15.500	140.00	80.00	●	
16.000	140.00	80.00	●	
16.500	140.00	80.00	●	●
17.000	140.00	80.00	●	
17.500	160.00	90.00	●	
18.000	160.00	90.00	●	
19.000	160.00	90.00	●	
19.500	160.00	90.00	●	
20.000	160.00	90.00	●	
21.000	160.00	90.00	●	
22.000	160.00	90.00	●	
23.500	170.00	100.00	●	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	703	704
Standard	DIN 8037	DIN 8038
Tool material	Carbide	
Surface	◯	◯
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	102	102
Techn. data page	170	170



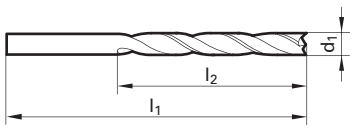




d1	l1	l2	Availability	
mm	mm	mm		
24.000	170.00	100.00	●	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	1149
Standard	Guhring std.
Tool material	Solid carbide
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	102
Techn. data page	170

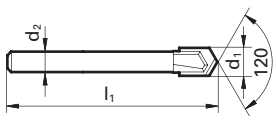




d1		l1	l2	Availability
mm	inch	mm	mm	
2.500		43.00	14.00	●
3.200		49.00	18.00	○
3.570	9/64	52.00	20.00	●
4.000		55.00	22.00	●
4.760	3/16	62.00	26.00	○
5.000		62.00	26.00	●
6.000		66.00	28.00	●
8.000		79.00	37.00	●
10.000		89.00	43.00	●
12.000		102.00	51.00	●

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**707**
Standard	**Guhring std.**
Tool material	**Carbide**
Surface	○
Type	
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**102**
Techn. data page	**170**

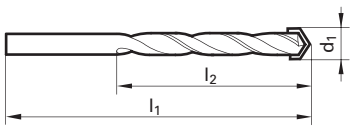




d1	d2	l1	Availability
mm	mm	mm	
3.000	2.500	50.00	○
5.000	4.000	63.00	○
5.500	5.000	70.00	○
6.000	5.000	70.00	○
7.000	6.000	80.00	●
8.000	6.000	80.00	●
9.000	7.000	90.00	○
10.000	8.000	100.00	●
12.000	8.000	112.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**716**
Standard	**Guhring std.**
Tool material	**Carbide**
Surface	◯
Type	**N**
Cutting direction	**right-hand**
Tolerance	
Discount group	**102**
Techn. data page	**171**

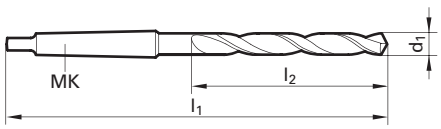




d1	l1	l2	Availability
mm	mm	mm	
4.000	75.00	40.00	●
5.000	85.00	50.00	●
6.000	100.00	60.00	●
8.000	120.00	80.00	●
10.000	120.00	80.00	●
12.000	150.00	90.00	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	363	663
Standard	Guhring std.	
Tool material	HSCO	
Surface	●	(S)
Type	GV 120	GV 120
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	134	139
Techn. data page	172	172



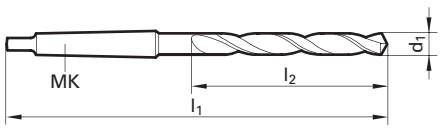




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability	
8.100		1	130.00	49.00	○	
8.200		1	130.00	49.00	○	
8.300		1	130.00	49.00	○	
8.500		1	130.00	49.00	●	
8.600		1	134.00	53.00	○	
8.730	11/32	1	134.00	53.00	○	
9.000		1	134.00	53.00	●	
9.520	3/8	1	138.00	57.00	○	
9.920	25/64	1	138.00	57.00	○	
10.000		1	138.00	57.00	●	
10.100		1	138.00	57.00	○	
10.200		1	138.00	57.00	●	
10.500		1	138.00	57.00	●	●
10.750		1	142.00	61.00		○
11.000		1	142.00	61.00	●	
11.500		1	142.00	61.00		○
11.510	29/64	1	142.00	61.00	○	
11.750		1	142.00	61.00	○	
12.000		1	147.00	66.00	●	
12.500		1	147.00	66.00	●	○
12.700	1/2	1	147.00	66.00	○	
13.000		1	147.00	66.00	●	
13.490	17/32	2	168.00	70.00	○	
13.500		2	168.00	70.00	●	○
14.000		2	168.00	70.00	●	●
14.250		2	172.00	74.00		○
14.290	9/16	2	172.00	74.00		○
14.500		2	172.00	74.00	●	
15.000		2	172.00	74.00	●	●
15.480		2	176.00	78.00		○
15.500		2	176.00	78.00	●	●
16.000		2	176.00	78.00	●	●
16.500		2	179.00	81.00	●	●
17.000		2	179.00	81.00	●	●
17.500		2	183.00	85.00	●	●
18.000		2	183.00	85.00	●	●
18.500		2	186.00	88.00	●	
19.000		2	186.00	88.00	●	○
19.450	49/64	3	212.00	91.00	○	

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	363	663
Standard	Guhring std.	
Tool material	HSCO	
Surface	○	Ⓢ
Type	GV 120	GV 120
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	134	139
Techn. data page	172	172



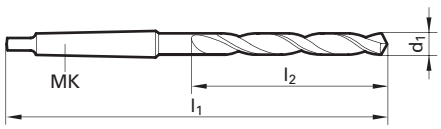




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability	
20.000		3	212.00	91.00	●	●
20.500		3	216.00	95.00	●	
20.900		3	216.00	95.00	❍	
21.000		3	216.00	95.00	●	●
21.030	53/64	3	216.00	95.00	❍	
21.500		3	219.00	98.00	●	
22.000		3	219.00	98.00	●	●
22.220	7/8	3	219.00	98.00	●	
23.000		3	222.00	101.00	●	●
23.020	29/32	3	222.00	101.00	❍	
24.000		3	225.00	104.00	●	
24.500		3	225.00	104.00	●	
25.000	63/64	3	225.00	104.00	●	●
26.000		4	256.00	107.00	●	
26.500		4	256.00	107.00	●	
27.000		4	259.00	110.00	●	●
27.500		4	259.00	110.00	❍	
28.000		4	259.00	110.00	●	
29.000		4	263.00	114.00	●	❍
29.370	1 5/32	4	263.00	114.00	❍	
30.000		4	263.00	114.00	●	❍
31.000		4	266.00	117.00		●
32.000		4	269.00	120.00	●	
32.500		4	269.00	120.00	❍	
33.000		4	269.00	120.00	●	❍
37.000		4	276.00	127.00	●	
38.000		5	317.00	130.00	❍	
43.000		5	323.00	136.00	❍	

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

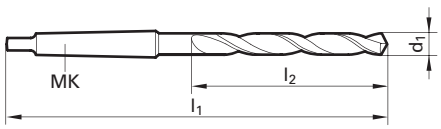




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
2.380	3/32	1	111.00	30.00	○
2.400		1	111.00	30.00	○
2.450		1	111.00	30.00	○
2.500		1	111.00	30.00	●
2.650		1	111.00	30.00	○
2.750		1	114.00	33.00	●
2.780	7/64	1	114.00	33.00	○
2.900		1	114.00	33.00	○
3.000		1	114.00	33.00	●
3.050		1	117.00	36.00	○
3.170	1/8	1	117.00	36.00	●
3.200		1	117.00	36.00	● ○
3.250		1	117.00	36.00	●
3.300		1	117.00	36.00	● ○
3.450		1	120.00	39.00	○
3.500		1	120.00	39.00	●
3.570	9/64	1	120.00	39.00	○
3.600		1	120.00	39.00	○
3.700		1	120.00	39.00	○
3.800		1	124.00	43.00	○
3.970	5/32	1	124.00	43.00	○
4.000		1	124.00	43.00	● ○
4.200		1	124.00	43.00	●
4.250		1	124.00	43.00	●
4.300		1	128.00	47.00	○
4.370	11/64	1	128.00	47.00	○
4.400		1	128.00	47.00	○
4.500		1	128.00	47.00	●
4.600		1	128.00	47.00	○
4.700		1	128.00	47.00	○
4.750		1	128.00	47.00	●
4.760	3/16	1	133.00	52.00	●
4.800		1	133.00	52.00	●
4.900		1	133.00	52.00	○
5.000		1	133.00	52.00	● ○
5.100		1	133.00	52.00	●
5.160	13/64	1	133.00	52.00	●
5.200		1	133.00	52.00	●
5.300		1	133.00	52.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface		>Ø 2,36				>Ø 16,0	>Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

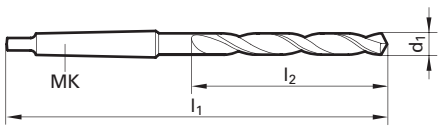




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
5.400		1	138.00	57.00	○ ○
5.500		1	138.00	57.00	● ○
5.560	7/32	1	138.00	57.00	○
5.600		1	138.00	57.00	●
5.700		1	138.00	57.00	●
5.750		1	138.00	57.00	●
5.800		1	138.00	57.00	●
5.900		1	138.00	57.00	●
5.950	15/64	1	138.00	57.00	○
6.000		1	138.00	57.00	● ○ ○
6.050		1	144.00	63.00	○
6.100		1	144.00	63.00	●
6.200		1	144.00	63.00	●
6.300		1	144.00	63.00	● ○
6.350	1/4	1	144.00	63.00	○
6.400		1	144.00	63.00	●
6.500		1	144.00	63.00	● ○ ○
6.600		1	144.00	63.00	● ○
6.700		1	144.00	63.00	● ○
6.750	17/64	1	150.00	69.00	● ○
6.800		1	150.00	69.00	● ○
6.900		1	150.00	69.00	○
7.000		1	150.00	69.00	● ○
7.140	9/32	1	150.00	69.00	○
7.200		1	150.00	69.00	●
7.250		1	150.00	69.00	●
7.300		1	150.00	69.00	●
7.400		1	150.00	69.00	●
7.500		1	150.00	69.00	● ○
7.540	19/64	1	156.00	75.00	○
7.700		1	156.00	75.00	● ○
7.750		1	156.00	75.00	● ○
7.800		1	156.00	75.00	● ○
7.900		1	156.00	75.00	●
7.940	5/16	1	156.00	75.00	○ ○
8.000		1	156.00	75.00	● ○ ○ ●
8.050		1	156.00	75.00	●
8.100		1	156.00	75.00	● ○
8.200		1	156.00	75.00	● ○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

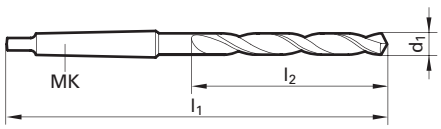




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
8.250		1	156.00	75.00	● ○
8.300		1	156.00	75.00	●
8.330	21/64	1	156.00	75.00	●
8.400		1	156.00	75.00	● ○
8.500		1	156.00	75.00	● ● ● ○
8.600		1	162.00	81.00	●
8.700		1	162.00	81.00	●
8.730	11/32	1	162.00	81.00	○ ●
8.750		1	162.00	81.00	●
8.800		1	162.00	81.00	●
8.900		1	162.00	81.00	●
9.000		1	162.00	81.00	● ● ○
9.050		1	162.00	81.00	○
9.100		1	162.00	81.00	●
9.130	23/64	1	162.00	81.00	●
9.200		1	162.00	81.00	● ○
9.250		1	162.00	81.00	●
9.300		1	162.00	81.00	●
9.400		1	162.00	81.00	○
9.500		1	162.00	81.00	● ● ○ ●
9.520	3/8	1	168.00	87.00	○ ○
9.700		1	168.00	87.00	●
9.750		1	168.00	87.00	● ○ ○
9.800		1	168.00	87.00	● ○
9.900		1	168.00	87.00	●
9.920	25/64	1	168.00	87.00	○
10.000		1	168.00	87.00	○ ● ● ○
10.100		1	168.00	87.00	●
10.150		1	168.00	87.00	○
10.200		1	168.00	87.00	● ○
10.250		1	168.00	87.00	● ○
10.300		1	168.00	87.00	●
10.320	13/32	1	168.00	87.00	● ○
10.400		1	168.00	87.00	●
10.500		1	168.00	87.00	● ○
10.520		1	168.00	87.00	○
10.600		1	168.00	87.00	●
10.700		1	175.00	94.00	●
10.720	27/64	1	175.00	94.00	○

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

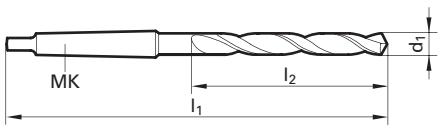




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
10.750		1	175.00	94.00	●
10.800		1	175.00	94.00	●
10.900		1	175.00	94.00	●
11.000		1	175.00	94.00	● ● ○ ○ ○ ○
11.100		1	175.00	94.00	●
11.110	7/16	1	175.00	94.00	○ ○ ●
11.200		1	175.00	94.00	●
11.250		1	175.00	94.00	●
11.300		1	175.00	94.00	●
11.400		1	175.00	94.00	●
11.500		1	175.00	94.00	● ○ ○
11.600		1	175.00	94.00	●
11.700		1	175.00	94.00	●
11.750		1	175.00	94.00	● ○
11.800		1	175.00	94.00	●
11.900		1	182.00	101.00	●
11.910	15/32	1	182.00	101.00	○ ● ○
12.000		1	182.00	101.00	● ○ ● ○
12.100		1	182.00	101.00	●
12.200		1	182.00	101.00	●
12.250		1	182.00	101.00	○ ●
12.300	31/64	1	182.00	101.00	●
12.500		1	182.00	101.00	● ● ○
12.550		1	182.00	101.00	○
12.600		1	182.00	101.00	● ○
12.700	1/2	1	182.00	101.00	● ○ ○
12.750		1	182.00	101.00	● ○
12.800		1	182.00	101.00	● ○
12.850		1	182.00	101.00	○
12.900		1	182.00	101.00	●
13.000		1	182.00	101.00	● ● ● ○ ○ ○
13.100	33/64	1	182.00	101.00	●
13.200		1	182.00	101.00	● ○
13.250		1	189.00	108.00	○ ● ○
13.300		1	189.00	108.00	●
13.490	17/32	1	189.00	108.00	○ ● ○
13.500		1	189.00	108.00	● ○
13.600		1	189.00	108.00	●
13.700		1	189.00	108.00	●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

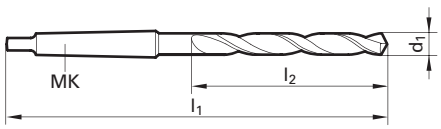




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
13.750		1	189.00	108.00	● ○
13.800		1	189.00	108.00	●
13.890	35/64	1	189.00	108.00	●
14.000		1	189.00	108.00	● ● ● ○ ● ○
14.050		2	212.00	114.00	●
14.100		2	212.00	114.00	●
14.200		2	212.00	114.00	●
14.250		2	212.00	114.00	○ ● ○
14.290	9/16	2	212.00	114.00	○ ● ○ ○
14.300		2	212.00	114.00	●
14.400		2	212.00	114.00	●
14.500		2	212.00	114.00	● ● ○ ○
14.600		2	212.00	114.00	●
14.700		2	212.00	114.00	●
14.750		2	212.00	114.00	●
14.800		2	212.00	114.00	●
14.900		2	212.00	114.00	●
15.000		2	212.00	114.00	● ● ○ ○
15.080	19/32	2	218.00	120.00	○ ● ○
15.100		2	218.00	120.00	●
15.200		2	218.00	120.00	●
15.250		2	218.00	120.00	● ○
15.300		2	218.00	120.00	●
15.400		2	218.00	120.00	●
15.500		2	218.00	120.00	● ● ○
15.600		2	218.00	120.00	●
15.700		2	218.00	120.00	●
15.750		2	218.00	120.00	●
15.800		2	218.00	120.00	●
15.870	5/8	2	218.00	120.00	● ○
15.900		2	218.00	120.00	●
16.000		2	218.00	120.00	● ● ○ ●
16.100		2	223.00	125.00	●
16.200		2	223.00	125.00	●
16.250		2	223.00	125.00	●
16.270	41/64	2	223.00	125.00	●
16.300		2	223.00	125.00	●
16.400		2	223.00	125.00	●
16.500		2	223.00	125.00	● ○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

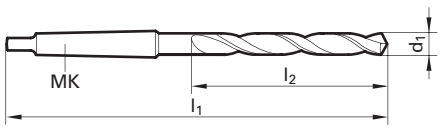




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
16.670	21/32	2	223.00	125.00	●
16.700		2	223.00	125.00	●
16.750		2	223.00	125.00	●
16.800		2	223.00	125.00	●
17.000		2	223.00	125.00	● ● ○ ● ○
17.070	43/64	2	228.00	130.00	●
17.100		2	228.00	130.00	●
17.200		2	228.00	130.00	○
17.250		2	228.00	130.00	●
17.300		2	228.00	130.00	●
17.400		2	228.00	130.00	●
17.460		2	228.00	130.00	○ ●
17.500		2	228.00	130.00	● ●
17.600		2	228.00	130.00	●
17.700		2	228.00	130.00	●
17.750		2	228.00	130.00	●
17.800		2	228.00	130.00	●
17.860	45/64	2	228.00	130.00	●
17.900		2	228.00	130.00	●
18.000		2	228.00	130.00	● ● ● ○ ● ○
18.100		2	233.00	135.00	●
18.200		2	233.00	135.00	●
18.250		2	233.00	135.00	○ ●
18.260	23/32	2	233.00	135.00	●
18.300		2	233.00	135.00	●
18.500		2	233.00	135.00	● ○
18.650	47/64	2	233.00	135.00	●
18.700		2	233.00	135.00	○
18.750		2	233.00	135.00	●
18.800		2	233.00	135.00	●
18.900		2	233.00	135.00	●
19.000		2	233.00	135.00	● ● ●
19.050	3/4	2	238.00	140.00	○ ● ○
19.100		2	238.00	140.00	●
19.200		2	238.00	140.00	●
19.250		2	238.00	140.00	●
19.450	49/64	2	238.00	140.00	●
19.500		2	238.00	140.00	○ ● ●
19.700		2	238.00	140.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface		>Ø 2,36				>Ø 16,0	>Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

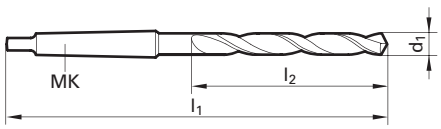




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
19.750		2	238.00	140.00	●
19.800		2	238.00	140.00	●
19.840	25/32	2	238.00	140.00	❍ ● ❍
20.000		2	238.00	140.00	● ● ● ❍ ❍ ❍
20.100		2	243.00	145.00	●
20.200		2	243.00	145.00	●
20.250		2	243.00	145.00	●
20.300		2	243.00	145.00	●
20.400		2	243.00	145.00	●
20.500		2	243.00	145.00	● ● ❍ ●
20.600		2	243.00	145.00	❍
20.640	13/16	2	243.00	145.00	❍ ● ❍
20.750		2	243.00	145.00	●
21.000		2	243.00	145.00	● ● ❍ ● ●
21.100		2	243.00	145.00	●
21.200		2	243.00	145.00	❍
21.250		2	248.00	150.00	● ❍
21.430	27/32	2	248.00	150.00	● ❍
21.500		2	248.00	150.00	●
21.750		2	248.00	150.00	●
21.830	55/64	2	248.00	150.00	●
22.000		2	248.00	150.00	● ● ❍ ● ❍
22.100		2	248.00	150.00	●
22.200		2	248.00	150.00	●
22.220	7/8	2	248.00	150.00	❍ ●
22.250		2	248.00	150.00	● ❍
22.400		2	248.00	150.00	●
22.500		2	253.00	155.00	❍ ● ❍
22.620	57/64	2	253.00	155.00	●
22.750		2	253.00	155.00	●
23.000		2	253.00	155.00	● ❍ ● ❍ ❍
23.020	29/32	2	253.00	155.00	●
23.250		3	276.00	155.00	●
23.300		3	276.00	155.00	❍
23.420	59/64	3	276.00	155.00	●
23.500		3	276.00	155.00	● ❍
23.750		3	281.00	160.00	●
23.810	15/16	3	281.00	160.00	❍ ●
23.900		3	281.00	160.00	❍

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	◑ >Ø 2,36	○	○	●	◑ >Ø 16,0	◑ >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

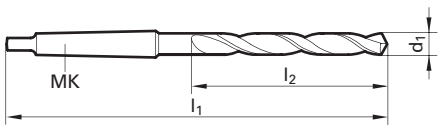




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
24.000		3	281.00	160.00	◑ ● ●
24.100		3	281.00	160.00	●
24.210	61/64	3	281.00	160.00	●
24.250		3	281.00	160.00	●
24.300		3	281.00	160.00	◑
24.500		3	281.00	160.00	●
24.610	31/32	3	281.00	160.00	●
24.750		3	281.00	160.00	●
25.000	63/64	3	281.00	160.00	● ● ◑
25.100		3	286.00	165.00	●
25.200		3	286.00	165.00	●
25.250		3	286.00	165.00	● ◑
25.400	1	3	286.00	165.00	◑ ●
25.500		3	286.00	165.00	● ◑
25.750		3	286.00	165.00	●
25.800	1 1/64	3	286.00	165.00	●
26.000		3	286.00	165.00	● ●
26.190	1 1/32	3	286.00	165.00	◑ ●
26.250		3	286.00	165.00	●
26.500		3	286.00	165.00	◑ ●
26.590	1 3/64	3	291.00	170.00	●
26.750		3	291.00	170.00	●
26.990	1 1/16	3	291.00	170.00	●
27.000		3	291.00	170.00	● ○
27.200		3	291.00	170.00	○
27.250		3	291.00	170.00	○
27.500		3	291.00	170.00	◑ ● ○ ◑
27.750		3	291.00	170.00	●
27.780	1 3/32	3	291.00	170.00	◑
28.000		3	291.00	170.00	● ● ○ ◑
28.250		3	296.00	175.00	●
28.500		3	296.00	175.00	● ○ ◑
28.570	1 1/8	3	296.00	175.00	● ◑
28.750		3	296.00	175.00	●
29.000		3	296.00	175.00	● ○
29.250		3	296.00	175.00	●
29.370	1 5/32	3	296.00	175.00	◑
29.500		3	296.00	175.00	● ◑
29.750		3	296.00	175.00	●

◑ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

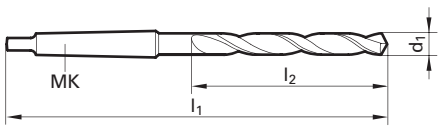




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
30.000		3	296.00	175.00	● ●
30.100		3	301.00	180.00	●
30.160	1 3/16	3	301.00	180.00	● ○
30.250		3	301.00	180.00	● ○
30.300		3	301.00	180.00	○
30.500		3	301.00	180.00	● ○ ○ ○
30.560	1 13/64	3	301.00	180.00	●
30.750		3	301.00	180.00	●
31.000		3	301.00	180.00	● ○
31.250		3	301.00	180.00	●
31.500		3	301.00	180.00	○ ● ○ ○
31.750	1 1/4	3	306.00	185.00	● ○
32.000		4	334.00	185.00	● ○
32.150	1 17/64	4	334.00	185.00	●
32.250		4	334.00	185.00	●
32.500		4	334.00	185.00	● ○
32.540	1 9/32	4	334.00	185.00	○
32.750		4	334.00	185.00	●
33.000		4	334.00	185.00	● ○
33.340	1 5/16	4	334.00	185.00	●
33.500		4	334.00	185.00	●
33.730	1 21/64	4	339.00	190.00	○
34.000		4	339.00	190.00	● ○
34.500		4	339.00	190.00	●
34.750		4	339.00	190.00	●
34.920	1 3/8	4	339.00	190.00	●
35.000		4	339.00	190.00	● ●
35.500		4	339.00	190.00	●
36.000		4	344.00	195.00	● ○
36.500		4	344.00	195.00	●
36.750		4	344.00	195.00	○
37.000		4	344.00	195.00	●
37.310	1 15/32	4	344.00	195.00	●
37.500		4	344.00	195.00	●
37.700	1 31/64	4	349.00	200.00	○
38.000		4	349.00	200.00	● ○
38.100	1 1/2	4	349.00	200.00	●
38.500	1 33/64	4	349.00	200.00	●
39.000		4	349.00	200.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

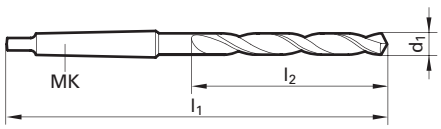




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
39.500		4	349.00	200.00	○ ●
39.690	1 9/16	4	349.00	200.00	●
40.000		4	349.00	200.00	● ○
40.500		4	354.00	205.00	●
40.750		4	354.00	205.00	○
40.800		4	354.00	205.00	○
40.880	1 39/64	4	354.00	205.00	○
41.000		4	354.00	205.00	●
41.270	1 5/8	4	354.00	205.00	●
41.500		4	354.00	205.00	●
42.000		4	354.00	205.00	●
42.500		4	354.00	205.00	○ ●
43.000		4	359.00	210.00	●
43.500		4	359.00	210.00	○ ●
44.000		4	359.00	210.00	●
44.450	1 3/4	4	359.00	210.00	●
44.500		4	359.00	210.00	●
45.000		4	359.00	210.00	●
45.240	1 25/32	4	364.00	215.00	○
45.500		4	364.00	215.00	●
46.000		4	364.00	215.00	● ●
46.040	1 13/16	4	364.00	215.00	○
46.430	1 53/64	4	364.00	215.00	○
46.500		4	364.00	215.00	○ ●
46.830	1 27/32	4	364.00	215.00	○
47.000		4	364.00	215.00	● ○
47.230	1 55/64	4	364.00	215.00	○
47.500		4	364.00	215.00	○ ●
47.620	1 7/8	4	369.00	220.00	●
48.000		4	369.00	220.00	●
48.020	1 57/64	4	369.00	220.00	○
48.500		4	369.00	220.00	●
48.820	1 59/64	4	369.00	220.00	●
49.000		4	369.00	220.00	●
49.500		4	369.00	220.00	●
49.610	1 61/64	4	369.00	220.00	●
50.000		4	369.00	220.00	●
50.500		4	374.00	225.00	●
50.800	2	4	374.00	225.00	●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface	●	● >Ø 2,36	○	○	●	● >Ø 16,0	● >Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

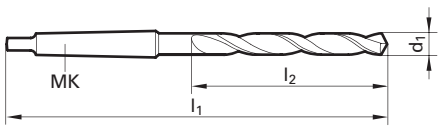




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
51.000		5	412.00	225.00	●
52.000		5	412.00	225.00	●
53.000		5	412.00	225.00	●
53.390		5	417.00	230.00	○
53.400		5	417.00	230.00	○
54.000		5	417.00	230.00	●
55.000		5	417.00	230.00	●
55.500		5	417.00	230.00	○
55.560	2 3/16	5	417.00	230.00	○
56.000		5	417.00	230.00	○ ●
57.000		5	422.00	235.00	○ ●
58.000		5	422.00	235.00	○ ●
59.000		5	422.00	235.00	● ●
60.000		5	422.00	235.00	● ○
61.000		5	427.00	240.00	●
62.000		5	427.00	240.00	●
63.000		5	427.00	240.00	●
63.500	2 1/2	5	432.00	245.00	●
65.000		5	432.00	245.00	●
66.670	2 5/8	5	432.00	245.00	●
67.500		5	437.00	250.00	○
68.000		5	437.00	250.00	●
69.850	2 3/4	5	437.00	250.00	○
70.000		5	437.00	250.00	●
71.500		5	442.00	255.00	○
72.000		5	442.00	255.00	●
75.000		5	442.00	255.00	●
76.990	3 1/32	6	514.00	260.00	○
77.000		6	514.00	260.00	●
77.790	3 1/16	6	514.00	260.00	○
78.580	3 3/32	6	514.00	260.00	○
79.000		6	514.00	260.00	○
79.500		6	514.00	260.00	●
87.310	3 7/16	6	524.00	270.00	○
89.000		6	524.00	270.00	●
89.500		6	524.00	270.00	○
91.000		6	529.00	275.00	○
91.500		6	529.00	275.00	○
92.500		6	529.00	275.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	229	245	246	247	248	558	592
Standard	DIN 345						
Tool material	HSS						
Surface		>Ø 2,36				>Ø 16,0	>Ø 16,0
Type	N	N	H	W	N	GT 100	N
Cutting direction	right-hand	right-hand	right-hand	right-hand	left-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	138	132	138	138	138	138	138
Techn. data page	172	172	172	173	173	173	173

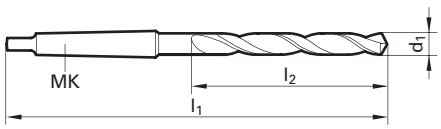




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
93.000		6	529.00	275.00	○
94.000		6	529.00	275.00	○
94.500		6	529.00	275.00	○
95.250	3 3/4	6	534.00	280.00	○
95.500		6	534.00	280.00	○
96.000		6	534.00	280.00	○
98.420	3 7/8	6	534.00	280.00	○

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	606	654	345	645	661	662	1222
Standard	DIN 345						
Tool material	HSS		HSCO				
Surface	S	S		>Ø 16,0	S	S	C
Type	GT 100	N	N	GT 100	N	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	139	133	134	138	139	139	139
Techn. data page	173	174	174	174	174	174	175

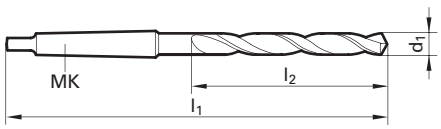




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
3.000		1	114.00	33.00	○ ○
3.170	1/8	1	117.00	36.00	○
3.500		1	120.00	39.00	○
3.570	9/64	1	120.00	39.00	○
3.970	5/32	1	124.00	43.00	○
4.000		1	124.00	43.00	● ●
4.100		1	124.00	43.00	○
4.250		1	124.00	43.00	○
4.370	11/64	1	128.00	47.00	○
4.500		1	128.00	47.00	○
4.760	3/16	1	133.00	52.00	○
5.000		1	133.00	52.00	● ●
5.160	13/64	1	133.00	52.00	○
5.200		1	133.00	52.00	○
5.500		1	138.00	57.00	●
5.560	7/32	1	138.00	57.00	○
6.000		1	138.00	57.00	● ●
6.200		1	144.00	63.00	○
6.400		1	144.00	63.00	● ○
6.500		1	144.00	63.00	● ●
6.700		1	144.00	63.00	●
6.750	17/64	1	150.00	69.00	○ ○
6.800		1	150.00	69.00	● ●
7.000		1	150.00	69.00	● ●
7.100		1	150.00	69.00	○ ○
7.140	9/32	1	150.00	69.00	○
7.250		1	150.00	69.00	○
7.400		1	150.00	69.00	○
7.500		1	150.00	69.00	●
7.540	19/64	1	156.00	75.00	○
7.700		1	156.00	75.00	○
7.750		1	156.00	75.00	○
7.900		1	156.00	75.00	○
7.940	5/16	1	156.00	75.00	○ ○
8.000		1	156.00	75.00	● ● ●
8.200		1	156.00	75.00	● ●
8.500		1	156.00	75.00	● ● ●
8.700		1	162.00	81.00	● ●
8.730	11/32	1	162.00	81.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	606	654	345	645	661	662	1222
Standard	DIN 345						
Tool material	HSS		HSCO				
Surface	S	S		>Ø 16,0	S	S	C
Type	GT 100	N	N	GT 100	N	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	139	133	134	138	139	139	139
Techn. data page	173	174	174	174	174	174	175



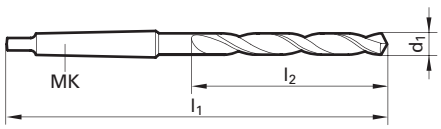


d1 mm	d1 inch	MK	l1 mm	l2 mm	606	654	345	645	661	662	1222
8.750		1	162.00	81.00	○						
8.800		1	162.00	81.00		○	●				
9.000		1	162.00	81.00	●	●	●		●		
9.130	23/64	1	162.00	81.00		○					
9.200		1	162.00	81.00			●				
9.400		1	162.00	81.00		○	○				
9.500		1	162.00	81.00			●		●		
9.520	3/8	1	168.00	87.00	○	●	●		○		
9.600		1	168.00	87.00		○					
9.750		1	168.00	87.00	○	○	○				
9.800		1	168.00	87.00		○					
10.000		1	168.00	87.00	○	●	●	●	●	○	○
10.100		1	168.00	87.00			○	●			
10.150		1	168.00	87.00			○				
10.200		1	168.00	87.00		●	●	●	●	●	○
10.250		1	168.00	87.00		●	●				
10.300		1	168.00	87.00		●					
10.320	13/32	1	168.00	87.00		○	○				
10.400		1	168.00	87.00		●					○
10.500		1	168.00	87.00	○	●	●	●			
10.700		1	175.00	94.00			○				
10.720	27/64	1	175.00	94.00		●	○	○			
10.750		1	175.00	94.00		○	●				
10.800		1	175.00	94.00		●	●	●			
11.000		1	175.00	94.00		●	●	●	●		○
11.110	7/16	1	175.00	94.00	○		●			○	○
11.200		1	175.00	94.00		○	●				
11.250		1	175.00	94.00		●			○		
11.400		1	175.00	94.00						○	○
11.500		1	175.00	94.00	○	●	●	●			
11.510	29/64	1	175.00	94.00		●		○			
11.600		1	175.00	94.00		●	○				
11.700		1	175.00	94.00			○				
11.750		1	175.00	94.00		●	●				
11.800		1	175.00	94.00			●				
11.900		1	182.00	101.00			●				
11.910	15/32	1	182.00	101.00		○					
12.000		1	182.00	101.00		●	●	●	●		
12.100		1	182.00	101.00			●				

Availability

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	606	654	345	645	661	662	1222
Standard	DIN 345						
Tool material	HSS		HSCO				
Surface	(S)	(S)	●	● >Ø 16,0	(S)	(S)	(C)
Type	GT 100	N	N	GT 100	N	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	139	133	134	138	139	139	139
Techn. data page	173	174	174	174	174	174	175

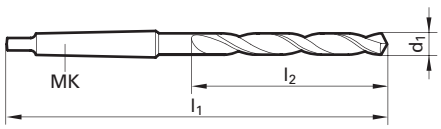




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
12.150		1	182.00	101.00	○
12.200		1	182.00	101.00	● ● ○
12.250		1	182.00	101.00	○ ●
12.300	31/64	1	182.00	101.00	○ ○ ○
12.400		1	182.00	101.00	●
12.500		1	182.00	101.00	○ ● ● ● ● ○ ○
12.700	1/2	1	182.00	101.00	● ● ○ ○
12.750		1	182.00	101.00	○ ● ○
12.800		1	182.00	101.00	○
13.000		1	182.00	101.00	● ● ● ●
13.100	33/64	1	182.00	101.00	○ ○
13.250		1	189.00	108.00	○ ●
13.300		1	189.00	108.00	○ ○
13.490	17/32	1	189.00	108.00	● ●
13.500		1	189.00	108.00	● ● ● ●
13.700		1	189.00	108.00	○
13.750		1	189.00	108.00	●
13.890	35/64	1	189.00	108.00	○
13.900		1	189.00	108.00	●
14.000		1	189.00	108.00	○ ● ● ● ● ●
14.100		2	212.00	114.00	●
14.200		2	212.00	114.00	● ● ○
14.250		2	212.00	114.00	● ● ●
14.290	9/16	2	212.00	114.00	● ○ ○
14.500		2	212.00	114.00	○ ● ● ● ●
14.680	37/64	2	212.00	114.00	○
14.750		2	212.00	114.00	● ●
14.900		2	212.00	114.00	○
15.000		2	212.00	114.00	○ ● ● ● ●
15.080	19/32	2	218.00	120.00	●
15.200		2	218.00	120.00	○
15.250		2	218.00	120.00	● ● ●
15.500		2	218.00	120.00	● ● ● ●
15.750		2	218.00	120.00	● ● ● ●
15.870	5/8	2	218.00	120.00	○ ● ● ○
16.000		2	218.00	120.00	● ● ● ● ●
16.100		2	223.00	125.00	●
16.200		2	223.00	125.00	●
16.250		2	223.00	125.00	● ● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	606	654	345	645	661	662	1222
Standard	DIN 345						
Tool material	HSS		HSCO				
Surface	S	S	●	◑ >Ø 16,0	S	S	C
Type	GT 100	N	N	GT 100	N	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	139	133	134	138	139	139	139
Techn. data page	173	174	174	174	174	174	175

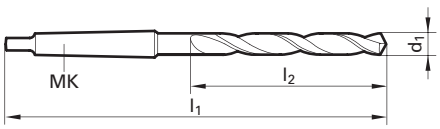




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
16.270	41/64	2	223.00	125.00	●
16.500		2	223.00	125.00	● ● ● ❍
16.670	21/32	2	223.00	125.00	❍ ● ❍ ❍
16.750		2	223.00	125.00	●
17.000		2	223.00	125.00	● ● ● ●
17.070	43/64	2	228.00	130.00	❍ ❍
17.250		2	228.00	130.00	● ● ❍
17.460		2	228.00	130.00	❍ ● ❍ ❍ ❍ ❍
17.500		2	228.00	130.00	● ● ● ● ● ●
17.750		2	228.00	130.00	● ●
17.860	45/64	2	228.00	130.00	❍ ❍
18.000		2	228.00	130.00	● ● ● ● ●
18.200		2	233.00	135.00	●
18.250		2	233.00	135.00	● ● ❍
18.260	23/32	2	233.00	135.00	● ●
18.500		2	233.00	135.00	● ● ●
18.650	47/64	2	233.00	135.00	❍ ● ❍
18.750		2	233.00	135.00	●
19.000		2	233.00	135.00	❍ ● ● ● ●
19.050	3/4	2	238.00	140.00	● ● ❍
19.250		2	238.00	140.00	❍ ●
19.450	49/64	2	238.00	140.00	●
19.500		2	238.00	140.00	● ● ● ❍
19.750		2	238.00	140.00	● ●
19.840	25/32	2	238.00	140.00	● ●
20.000		2	238.00	140.00	❍ ● ● ● ● ●
20.250		2	243.00	145.00	● ● ❍
20.500		2	243.00	145.00	❍ ● ● ● ❍ ●
20.640	13/16	2	243.00	145.00	❍ ●
20.750		2	243.00	145.00	● ●
21.000		2	243.00	145.00	● ● ● ● ●
21.250		2	248.00	150.00	● ●
21.500		2	248.00	150.00	● ● ● ❍
21.750		2	248.00	150.00	❍
21.830	55/64	2	248.00	150.00	❍
22.000		2	248.00	150.00	● ● ● ● ●
22.220	7/8	2	248.00	150.00	● ● ❍
22.250		2	248.00	150.00	●
22.500		2	253.00	155.00	● ●

❍ bright ◑ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	606	654	345	645	661	662	1222
Standard	DIN 345						
Tool material	HSS		HSCO				
Surface	S	S		>Ø 16,0	S	S	C
Type	GT 100	N	N	GT 100	N	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	139	133	134	138	139	139	139
Techn. data page	173	174	174	174	174	174	175

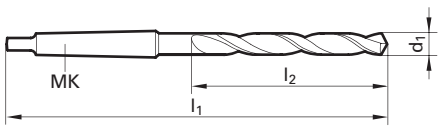




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
22.620	57/64	2	253.00	155.00	○ ○
23.000		2	253.00	155.00	● ● ● ○ ○
23.020	29/32	2	253.00	155.00	●
23.500		3	276.00	155.00	○ ● ● ○ ○
23.750		3	281.00	160.00	●
23.810	15/16	3	281.00	160.00	○ ● ○ ○ ○
24.000		3	281.00	160.00	● ● ●
24.210	61/64	3	281.00	160.00	○ ○
24.500		3	281.00	160.00	● ●
24.610	31/32	3	281.00	160.00	○
24.750		3	281.00	160.00	●
25.000	63/64	3	281.00	160.00	● ● ● ●
25.250		3	286.00	165.00	●
25.400	1	3	286.00	165.00	○ ○ ● ○ ○ ○
25.500		3	286.00	165.00	● ● ○
26.000		3	286.00	165.00	● ● ● ●
26.500		3	286.00	165.00	● ● ● ●
26.990	1 1/16	3	291.00	170.00	○ ○ ○ ○ ○
27.000		3	291.00	170.00	● ● ○
27.380	1 5/64	3	291.00	170.00	○
27.500		3	291.00	170.00	● ○
27.780	1 3/32	3	291.00	170.00	○
28.000		3	291.00	170.00	● ●
28.500		3	296.00	175.00	○ ○ ● ○
28.570	1 1/8	3	296.00	175.00	○ ○ ● ○
29.000		3	296.00	175.00	○ ● ● ○
29.370	1 5/32	3	296.00	175.00	○
29.500		3	296.00	175.00	○ ● ● ○ ○
29.750		3	296.00	175.00	○
30.000		3	296.00	175.00	● ● ● ●
30.160	1 3/16	3	301.00	180.00	○
30.500		3	301.00	180.00	● ●
31.000		3	301.00	180.00	○ ● ●
31.500		3	301.00	180.00	○ ● ○
31.750	1 1/4	3	306.00	185.00	●
32.000		4	334.00	185.00	●
32.500		4	334.00	185.00	●
33.000		4	334.00	185.00	● ○
34.000		4	339.00	190.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	606	654	345	645	661	662	1222
Standard	DIN 345						
Tool material	HSS		HSCO				
Surface	S	S		>Ø 16,0	S	S	C
Type	GT 100	N	N	GT 100	N	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	139	133	134	138	139	139	139
Techn. data page	173	174	174	174	174	174	175

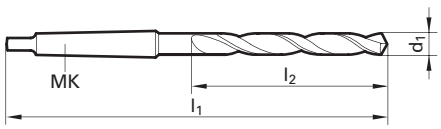




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability	
35.000		4	339.00	190.00	●	●
36.000		4	344.00	195.00	●	
37.000		4	344.00	195.00	●	●
38.000		4	349.00	200.00	●	○
39.000		4	349.00	200.00	●	○
40.000		4	349.00	200.00	●	
42.000		4	354.00	205.00	●	
42.070	1 21/32	4	354.00	205.00	○	
42.860	1 11/16	4	359.00	210.00	●	
43.000		4	359.00	210.00	●	
45.000		4	359.00	210.00	●	
50.000		4	369.00	220.00	●	

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1224	1262
Standard	DIN 345	
Tool material	HSCO	
Surface	(A)	○
Type	GT 100	VA
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	139	134
Techn. data page	175	175



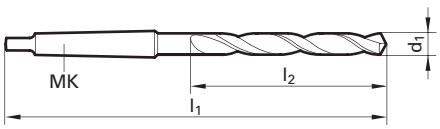




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
10.000		1	168.00	87.00	●
10.200		1	168.00	87.00	●
10.400		1	168.00	87.00	❍
10.500		1	168.00	87.00	●
10.800		1	175.00	94.00	●
11.000		1	175.00	94.00	●
11.110	7/16	1	175.00	94.00	❍
11.200		1	175.00	94.00	○
11.800		1	175.00	94.00	○
12.000		1	182.00	101.00	●
12.300	31/64	1	182.00	101.00	❍ ○
12.500		1	182.00	101.00	●
12.700	1/2	1	182.00	101.00	❍
13.000		1	182.00	101.00	●
13.490	17/32	1	189.00	108.00	○
13.500		1	189.00	108.00	●
13.750		1	189.00	108.00	●
13.800		1	189.00	108.00	●
14.000		1	189.00	108.00	●
14.200		2	212.00	114.00	❍
14.250		2	212.00	114.00	●
14.290	9/16	2	212.00	114.00	❍
14.500		2	212.00	114.00	●
14.750		2	212.00	114.00	●
15.000		2	212.00	114.00	●
15.250		2	218.00	120.00	●
15.480	39/64	2	218.00	120.00	○
15.500		2	218.00	120.00	●
15.870	5/8	2	218.00	120.00	❍ ○
16.000		2	218.00	120.00	❍ ●
16.250		2	223.00	125.00	○
16.500		2	223.00	125.00	❍ ●
17.000		2	223.00	125.00	●
17.460		2	228.00	130.00	❍
17.500		2	228.00	130.00	●
17.860	45/64	2	228.00	130.00	○
18.000		2	228.00	130.00	●
18.500		2	233.00	135.00	●
19.000		2	233.00	135.00	❍ ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	1224	1262
Standard	DIN 345	
Tool material	HSCO	
Surface	A	○
Type	GT 100	VA
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	139	134
Techn. data page	175	175



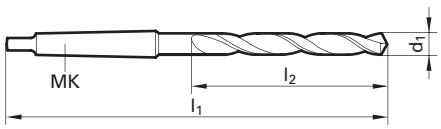




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability 1224	Availability 1262
19.500		2	238.00	140.00	●	●
20.000		2	238.00	140.00		●
20.500		2	243.00	145.00		●
21.000		2	243.00	145.00		●
21.500		2	248.00	150.00		●
21.750		2	248.00	150.00		○
22.000		2	248.00	150.00		●
22.500		2	253.00	155.00		●
23.000		2	253.00	155.00		●
23.420	59/64	3	276.00	155.00		○
23.810	15/16	3	281.00	160.00	○	
24.000		3	281.00	160.00		●
24.500		3	281.00	160.00		●
25.000	63/64	3	281.00	160.00		●
25.500		3	286.00	165.00	○	○
26.000		3	286.00	165.00		●
26.500		3	286.00	165.00		●
26.990	1 1/16	3	291.00	170.00	○	
27.000		3	291.00	170.00	○	●
27.500		3	291.00	170.00		○
28.000		3	291.00	170.00	○	●
28.500		3	296.00	175.00	○	●
29.000		3	296.00	175.00	●	●
29.500		3	296.00	175.00	○	
30.000		3	296.00	175.00		●
30.160	1 3/16	3	301.00	180.00	○	
31.500		3	301.00	180.00		○
31.750	1 1/4	3	306.00	185.00		○
32.000		4	334.00	185.00		●
34.000		4	339.00	190.00		●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	251	351
Standard	DIN 346	
Tool material	HSS	HSCO
Surface	●	●
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	175	175



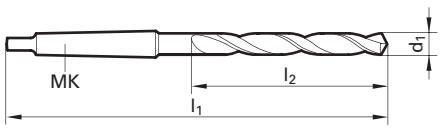




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability	
10.000		2	185.00	87.00	●	
10.500		2	185.00	87.00	●	
11.910	15/32	2	199.00	101.00	○	
12.000		2	199.00	101.00	●	●
12.250		2	199.00	101.00	○	
12.500		2	199.00	101.00	●	
12.700	1/2	2	199.00	101.00	○	
12.750		2	199.00	101.00		○
13.000		2	199.00	101.00	●	●
13.100	33/64	2	199.00	101.00	○	
13.250		2	206.00	108.00	○	○
13.490	17/32	2	206.00	108.00	○	
13.500		2	206.00	108.00	●	
13.890	35/64	2	206.00	108.00	○	
14.000		2	206.00	108.00	●	●
16.000		3	241.00	120.00	○	
16.700		3	246.00	125.00	○	
17.000		3	246.00	125.00	○	
17.250		3	251.00	130.00	○	
17.500		3	251.00	130.00		○
18.250		3	256.00	135.00	○	
18.260	23/32	3	256.00	135.00	○	
18.500		3	256.00	135.00		●
18.650	47/64	3	256.00	135.00	○	
18.750		3	256.00	135.00	○	
19.000		3	256.00	135.00	●	
19.050	3/4	3	261.00	140.00	○	
19.450	49/64	3	261.00	140.00	○	
19.840	25/32	3	261.00	140.00	○	
20.000		3	261.00	140.00	●	●
20.250		3	266.00	145.00	○	
20.640	13/16	3	266.00	145.00	●	
21.000		3	266.00	145.00	●	○
21.030	53/64	3	266.00	145.00	○	
21.430	27/32	3	271.00	150.00	○	
21.500		3	271.00	150.00	○	○
21.830		3	271.00	150.00	○	
22.000		3	271.00	150.00	●	
22.220	7/8	3	271.00	150.00	○	

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	251	351
Standard	DIN 346	
Tool material	HSS	HSCO
Surface	◍	◍
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	175	175



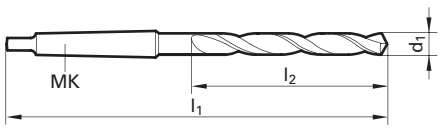




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability	
22.500		3	276.00	155.00	○	
22.750		3	276.00	155.00		○
23.000		3	276.00	155.00	●	○
23.020	29/32	3	276.00	155.00	○	
27.500		4	319.00	170.00	○	
27.750		4	319.00	170.00	○	
27.780	1 3/32	4	319.00	170.00	○	
28.000		4	319.00	170.00	●	
28.180	1 7/64	4	324.00	175.00	○	
28.500		4	324.00	175.00	○	
28.570	1 1/8	4	324.00	175.00	○	
28.970	1 9/64	4	324.00	175.00	○	
29.000		4	324.00	175.00		○
29.770	1 11/64	4	324.00	175.00	○	
30.000		4	324.00	175.00		○
30.960	1 7/32	4	329.00	180.00	○	
31.000		4	329.00	180.00		○
31.500		4	329.00	180.00	○	○
32.000		5	372.00	185.00	○	
35.000		5	377.00	190.00	○	
36.000		5	382.00	195.00	○	
40.080	1 37/64	5	392.00	205.00	●	
41.000		5	392.00	205.00	○	
41.500		5	392.00	205.00	○	
42.000		5	392.00	205.00	○	
42.070	1 21/32	5	392.00	205.00	○	
44.050	1 47/64	5	397.00	210.00	○	
45.000		5	397.00	210.00	○	
46.000		5	402.00	215.00	○	
46.040	1 13/16	5	402.00	215.00	○	
47.000		5	402.00	215.00	○	
49.000		5	407.00	220.00	○	
49.500		5	407.00	220.00	○	
73.000		6	509.00	255.00	○	
76.000		6	514.00	260.00	○	

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface			>Ø 16,0	S	S		>Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

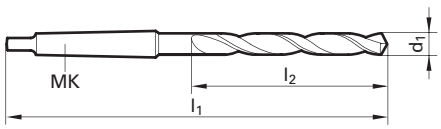




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
2.900		1	132.00	51.00	○
3.900		1	145.00	64.00	○
4.000		1	145.00	64.00	●
4.100		1	145.00	64.00	●
4.200		1	145.00	64.00	● ○
4.500		1	150.00	69.00	●
4.700		1	150.00	69.00	○
4.750		1	150.00	69.00	●
5.000		1	155.00	74.00	● ● ●
5.100		1	155.00	74.00	●
5.200		1	155.00	74.00	●
5.250		1	155.00	74.00	○
5.400		1	161.00	80.00	○
5.500		1	161.00	80.00	○ ○ ○ ○
5.550		1	161.00	80.00	○
5.600		1	161.00	80.00	○
5.800		1	161.00	80.00	● ○
6.000		1	161.00	80.00	● ● ○ ● ●
6.100		1	167.00	86.00	○
6.300		1	167.00	86.00	○
6.350	1/4	1	167.00	86.00	○
6.500		1	167.00	86.00	● ○ ● ○
6.700		1	167.00	86.00	● ○
6.750	17/64	1	174.00	93.00	● ○
6.800		1	174.00	93.00	● ● ○ ○ ●
7.000		1	174.00	93.00	● ○ ● ● ● ●
7.100		1	174.00	93.00	○
7.200		1	174.00	93.00	● ○
7.300		1	174.00	93.00	○ ○ ○
7.400		1	174.00	93.00	○
7.500		1	174.00	93.00	● ○ ○ ●
7.540		1	181.00	100.00	○
7.600		1	181.00	100.00	●
7.700		1	181.00	100.00	○
7.800		1	181.00	100.00	●
7.940	5/16	1	181.00	100.00	○
7.950		1	181.00	100.00	○
8.000		1	181.00	100.00	● ● ● ● ●
8.050		1	181.00	100.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface	●	○	◑ >Ø 16,0	Ⓢ	Ⓢ	●	◑ >Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

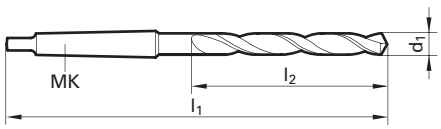




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
8.100		1	181.00	100.00	◑
8.200		1	181.00	100.00	● ● ◑ ○ ○
8.250		1	181.00	100.00	○
8.300		1	181.00	100.00	○ ○
8.330	21/64	1	181.00	100.00	◑
8.400		1	181.00	100.00	○ ◑ ○
8.500		1	181.00	100.00	● ○ ◑ ● ●
8.600		1	188.00	107.00	● ● ○ ○
8.700		1	188.00	107.00	○ ◑ ○
8.750		1	188.00	107.00	● ○ ○
8.800		1	188.00	107.00	● ○ ●
8.900		1	188.00	107.00	○
9.000		1	188.00	107.00	● ◑ ● ● ●
9.050		1	188.00	107.00	○
9.100		1	188.00	107.00	○
9.300		1	188.00	107.00	● ○
9.400		1	188.00	107.00	○
9.500		1	188.00	107.00	● ○ ◑ ● ○ ●
9.520	3/8	1	197.00	116.00	○
9.600		1	197.00	116.00	● ○ ○
9.700		1	197.00	116.00	◑
9.750		1	197.00	116.00	●
9.800		1	197.00	116.00	● ○ ◑ ●
9.900		1	197.00	116.00	○ ○
9.920	25/64	1	197.00	116.00	◑ ○
10.000		1	197.00	116.00	● ● ◑ ● ● ● ●
10.050		1	197.00	116.00	○ ○
10.100		1	197.00	116.00	● ○
10.200		1	197.00	116.00	● ○ ◑ ● ○ ● ●
10.250		1	197.00	116.00	● ○ ○ ○
10.300		1	197.00	116.00	●
10.320	13/32	1	197.00	116.00	◑ ○ ●
10.400		1	197.00	116.00	● ●
10.500		1	197.00	116.00	● ● ◑ ● ○ ● ●
10.600		1	197.00	116.00	○
10.700		1	206.00	125.00	○
10.720	27/64	1	206.00	125.00	◑
10.750		1	206.00	125.00	● ○ ○
10.800		1	206.00	125.00	● ○ ●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface	●	○	● >Ø 16,0	(S)	(S)	●	● >Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

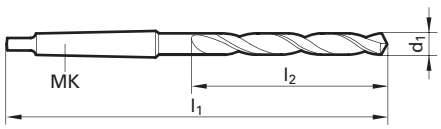




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
10.900		1	206.00	125.00	●
11.000		1	206.00	125.00	● ● ● ● ● ●
11.100		1	206.00	125.00	○
11.110	7/16	1	206.00	125.00	● ○ ○
11.200		1	206.00	125.00	○ ○ ●
11.250		1	206.00	125.00	○ ○
11.300		1	206.00	125.00	●
11.400		1	206.00	125.00	● ○
11.500		1	206.00	125.00	● ○ ● ● ● ● ●
11.510	29/64	1	206.00	125.00	○ ○
11.750		1	206.00	125.00	● ○ ○
11.800		1	206.00	125.00	● ○ ● ●
12.000		1	215.00	134.00	● ○ ● ● ● ● ●
12.050		1	215.00	134.00	○
12.100		1	215.00	134.00	●
12.200		1	215.00	134.00	● ○ ○
12.250		1	215.00	134.00	● ○ ●
12.300	31/64	1	215.00	134.00	● ○
12.400		1	215.00	134.00	● ●
12.500		1	215.00	134.00	● ○ ● ● ○ ● ●
12.600		1	215.00	134.00	●
12.700	1/2	1	215.00	134.00	○ ○ ○
12.750		1	215.00	134.00	●
12.800		1	215.00	134.00	● ○ ● ○
13.000		1	215.00	134.00	● ● ● ● ● ● ●
13.100	33/64	1	215.00	134.00	● ○
13.200		1	215.00	134.00	● ○ ○ ●
13.250		1	223.00	142.00	○ ○
13.490	17/32	1	223.00	142.00	○ ○ ●
13.500		1	223.00	142.00	● ● ○ ● ●
13.750		1	223.00	142.00	● ○ ○
13.800		1	223.00	142.00	○ ● ○
13.890	35/64	1	223.00	142.00	○ ○
13.900		1	223.00	142.00	●
14.000		1	223.00	142.00	● ● ● ● ● ● ●
14.100		2	245.00	147.00	●
14.200		2	245.00	147.00	○ ○ ●
14.250		2	245.00	147.00	● ○ ● ○
14.290	9/16	2	245.00	147.00	○ ● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface	●	○	◐ >Ø 16,0	Ⓢ	Ⓢ	●	◐ >Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

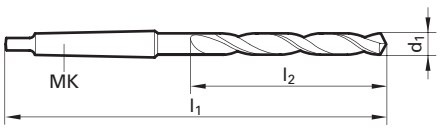




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
14.300		2	245.00	147.00	○ ○
14.400		2	245.00	147.00	○ ○
14.500		2	245.00	147.00	● ○ ● ● ● ● ●
14.680	37/64	2	245.00	147.00	●
14.750		2	245.00	147.00	● ○ ● ○ ●
14.800		2	245.00	147.00	○
14.900		2	245.00	147.00	●
15.000		2	245.00	147.00	● ● ● ● ● ● ●
15.080	19/32	2	251.00	153.00	○
15.200		2	251.00	153.00	●
15.250		2	251.00	153.00	● ● ●
15.480	39/64	2	251.00	153.00	○ ○
15.500		2	251.00	153.00	● ● ●
15.600		2	251.00	153.00	○
15.750		2	251.00	153.00	● ○ ●
15.870	5/8	2	251.00	153.00	○
16.000		2	251.00	153.00	● ○ ● ○ ● ●
16.100		2	257.00	159.00	●
16.200		2	257.00	159.00	●
16.250		2	257.00	159.00	●
16.400		2	257.00	159.00	○
16.500		2	257.00	159.00	● ○ ● ○ ●
16.670	21/32	2	257.00	159.00	● ○ ●
16.750		2	257.00	159.00	● ○
16.800		2	257.00	159.00	○ ○
17.000		2	257.00	159.00	● ● ● ●
17.070	43/64	2	263.00	165.00	○ ○
17.250		2	263.00	165.00	●
17.460	11/16	2	263.00	165.00	● ○ ○ ○
17.500		2	263.00	165.00	● ○ ● ● ● ● ●
17.750		2	263.00	165.00	● ○
18.000		2	263.00	165.00	● ● ● ● ●
18.250		2	269.00	171.00	●
18.500		2	269.00	171.00	● ● ●
18.650	47/64	2	269.00	171.00	○
18.750		2	269.00	171.00	●
19.000		2	269.00	171.00	● ● ●
19.050	3/4	2	275.00	177.00	○ ○
19.250		2	275.00	177.00	○

○ bright ◐ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface	●	○	● >Ø 16,0	Ⓢ	Ⓢ	●	● >Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

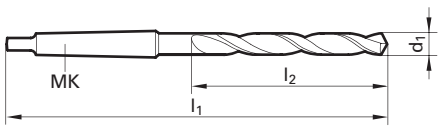




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
19.450	49/64	2	275.00	177.00	○
19.500		2	275.00	177.00	● ● ○ ●
19.750		2	275.00	177.00	●
19.840	25/32	2	275.00	177.00	● ●
20.000		2	275.00	177.00	● ● ● ●
20.250		2	282.00	184.00	●
20.500		2	282.00	184.00	● ○ ●
20.640	13/16	2	282.00	184.00	● ○ ○
21.000		2	282.00	184.00	● ● ● ● ● ●
21.100		2	282.00	184.00	○
21.500		2	289.00	191.00	● ● ○ ○
21.750		2	289.00	191.00	●
21.830	55/64	2	289.00	191.00	○
22.000		2	289.00	191.00	● ● ● ●
22.220	7/8	2	289.00	191.00	●
22.250		2	289.00	191.00	●
22.300		2	289.00	191.00	○
22.500		2	296.00	198.00	● ●
23.000		2	296.00	198.00	● ● ○ ●
23.020	29/32	2	296.00	198.00	○
23.500		3	319.00	198.00	● ○ ○ ○
23.750		3	327.00	206.00	○
23.810	15/16	3	327.00	206.00	●
24.000		3	327.00	206.00	● ○ ● ● ●
24.250		3	327.00	206.00	●
24.500		3	327.00	206.00	●
24.600		3	327.00	206.00	○
24.610		3	327.00	206.00	○
25.000	63/64	3	327.00	206.00	● ● ● ●
25.250		3	335.00	214.00	○ ○
25.500		3	335.00	214.00	●
26.000		3	335.00	214.00	● ● ● ●
26.500		3	335.00	214.00	● ○
26.590	1 3/64	3	343.00	222.00	○ ●
26.750		3	343.00	222.00	●
26.990	1 1/16	3	343.00	222.00	○
27.000		3	343.00	222.00	● ●
27.250		3	343.00	222.00	○
27.380	1 5/64	3	343.00	222.00	○

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface	●	○	◐ >Ø 16,0	Ⓢ	Ⓢ	●	◐ >Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

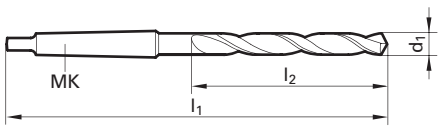




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
27.500		3	343.00	222.00	●
28.000		3	343.00	222.00	● ○ ●
28.500		3	351.00	230.00	●
28.570	1 1/8	3	351.00	230.00	○
28.900		3	351.00	230.00	○
28.970	1 9/64	3	351.00	230.00	○
29.000		3	351.00	230.00	● ○ ○
29.250		3	351.00	230.00	○
29.370	1 5/32	3	351.00	230.00	○
29.500		3	351.00	230.00	● ○ ○
30.000		3	351.00	230.00	● ● ●
30.500		3	360.00	239.00	● ○
30.560	1 13/64	3	360.00	239.00	○
30.960	1 7/32	3	360.00	239.00	○
31.000		3	360.00	239.00	● ○
31.500		3	360.00	239.00	●
32.000		4	397.00	248.00	● ●
33.000		4	397.00	248.00	● ●
33.500		4	397.00	248.00	●
34.000		4	406.00	257.00	●
35.000		4	406.00	257.00	●
36.000		4	416.00	267.00	●
36.120	1 27/64	4	416.00	267.00	○
36.910	1 29/64	4	416.00	267.00	○
37.000		4	416.00	267.00	●
37.500		4	416.00	267.00	●
38.000		4	426.00	277.00	●
39.000		4	426.00	277.00	●
39.500		4	426.00	277.00	●
40.000		4	426.00	277.00	● ●
40.080	1 37/64	4	436.00	287.00	○
40.880	1 39/64	4	436.00	287.00	○
41.000		4	436.00	287.00	●
41.670	1 41/64	4	436.00	287.00	○
42.000		4	436.00	287.00	●
43.000		4	447.00	298.00	●
43.660	1 23/32	4	447.00	298.00	○
44.000		4	447.00	298.00	● ○
45.000		4	447.00	298.00	●

○ bright ◐ steam tempered ◒ nitrided lands ● nitrided ● golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	257	505	551	655	656	357	623
Standard	DIN 341						
Tool material	HSS					HSCO	
Surface			>Ø 16,0	S	S		>Ø 16,0
Type	N	GT50	GT 100	N	GT 100	N	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8	h8
Discount group	132	138	136	133	139	138	138
Techn. data page	176	176	176	176	176	177	177

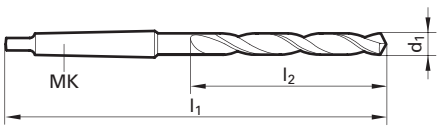




d1		MK	l1	l2	Availability
mm	inch		mm	mm	
46.830	1 27/32	4	459.00	310.00	●
48.000		4	470.00	321.00	●
49.000		4	470.00	321.00	●
50.000		4	470.00	321.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**523**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	●
Type	**N**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**177**

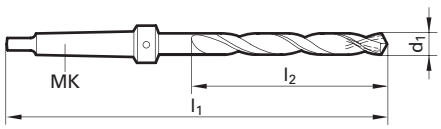




d1		MK	l1	l2	Availability
mm	inch		mm	mm	
10.000		2	214.00	116.00	○
11.000		2	223.00	125.00	○
12.300	31/64	2	232.00	134.00	○
12.500		2	232.00	134.00	●
13.000		2	232.00	134.00	○
14.000		2	240.00	142.00	●
21.000		3	305.00	184.00	○
22.000		3	312.00	191.00	○
23.000		3	319.00	198.00	○
29.000		4	379.00	230.00	○

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	269
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	177

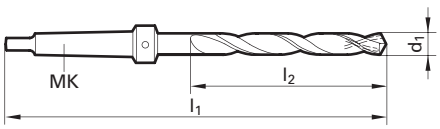




d1		MK	l1	l2	Availability
mm	inch		mm	mm	
9.520	3/8	1	197.00	101.00	○
9.920	25/64	1	197.00	101.00	○
10.000		1	197.00	101.00	○
10.320	13/32	1	197.00	101.00	○
10.500		1	197.00	101.00	○
11.000		1	206.00	110.00	○
11.110	7/16	1	206.00	110.00	○
11.500		1	206.00	110.00	○
12.500		1	215.00	119.00	○
12.700	1/2	1	215.00	119.00	○
12.800		1	215.00	119.00	○
13.000		1	215.00	119.00	○
13.200		1	215.00	119.00	○
13.490	17/32	1	223.00	127.00	○
13.500		1	223.00	127.00	○
13.800		1	223.00	127.00	○
14.000		1	223.00	127.00	○
14.250		2	245.00	133.00	○
14.290	9/16	2	245.00	133.00	○
14.500		2	245.00	133.00	○
15.000		2	245.00	133.00	○
15.080	19/32	2	251.00	139.00	○
15.150		2	251.00	139.00	○
15.180		2	251.00	139.00	○
15.250		2	251.00	139.00	○
15.870	5/8	2	251.00	139.00	○
16.000		2	251.00	139.00	○
16.500		2	257.00	145.00	○
16.670	21/32	2	257.00	145.00	○
16.750		2	257.00	145.00	○
17.000		2	257.00	145.00	○
17.100		2	263.00	151.00	○
17.460	11/16	2	263.00	151.00	○
17.500		2	263.00	151.00	○
17.750		2	263.00	151.00	○
18.000		2	263.00	151.00	○
18.260	23/32	2	269.00	157.00	○
18.500		2	269.00	157.00	○
19.000		2	269.00	157.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	269
Standard	Guhring std.
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	177

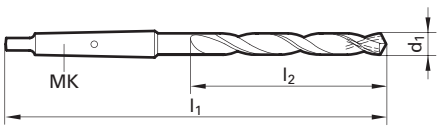




d1		MK	l1	l2	Availability
mm	inch		mm	mm	
19.050	3/4	2	275.00	163.00	○
19.200		2	275.00	163.00	○
19.250		2	275.00	163.00	○
19.500		2	275.00	163.00	○
19.750		2	275.00	163.00	○
19.840	25/32	2	275.00	163.00	○
20.250		2	282.00	170.00	○
20.640	13/16	2	282.00	170.00	○
20.750		2	282.00	170.00	○
21.000		2	282.00	170.00	○
21.430	27/32	2	289.00	177.00	○
21.500		2	289.00	177.00	○
22.220	7/8	2	289.00	177.00	○
23.020	29/32	2	296.00	184.00	○

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	1101
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	177

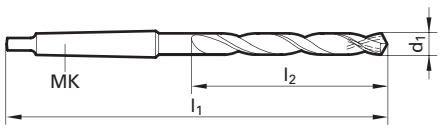




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
10.000		2	223.00	116.00	●
10.500		2	223.00	116.00	○
11.000		2	232.00	125.00	●
11.500		2	232.00	125.00	○
12.000		2	241.00	134.00	●
12.500		2	241.00	134.00	●
13.000		2	241.00	134.00	●
13.500		2	249.00	142.00	●
13.800		2	249.00	142.00	○
14.000		2	249.00	142.00	●
14.750		2	254.00	147.00	○
15.000		2	254.00	147.00	●
15.250		2	260.00	153.00	●
16.000		2	260.00	153.00	●
16.250		2	266.00	159.00	○
17.000		2	266.00	159.00	●
17.500		2	272.00	165.00	●
18.000		2	272.00	165.00	●
19.000		2	278.00	171.00	●
20.000		2	284.00	177.00	●
21.000		2	291.00	184.00	●
22.000		2	298.00	191.00	●
24.000		3	332.00	206.00	●
25.000	63/64	3	332.00	206.00	●
26.000		3	340.00	214.00	●
28.000		3	348.00	222.00	●
29.000		3	356.00	230.00	●
30.000		3	356.00	230.00	●
32.000		4	409.00	248.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	270	271	272	370	371	372
Standard	Guhring std.					
Tool material	HSS			HSCO		
Surface	●	●	●	●	●	●
Type	N	N	N	GT 100	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	138	138	138	138	138	138
Techn. data page	178	178	178	178	178	179

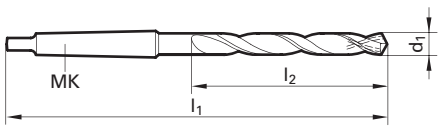




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
10.000		2	233.00	116.00	● ○ ○
10.500		2	233.00	116.00	○
10.720	27/64	2	242.00	125.00	○
11.000		2	242.00	125.00	● ○ ○ ● ○
11.110	7/16	2	242.00	125.00	○
11.500		2	242.00	125.00	○
11.510	29/64	2	242.00	125.00	○
11.910	15/32	2	251.00	134.00	○
12.000		2	251.00	134.00	● ●
12.300	31/64	2	251.00	134.00	○ ○
12.500		2	251.00	134.00	○ ○ ○ ○
12.700	1/2	2	251.00	134.00	○ ○
12.800		2	251.00	134.00	○
13.000		2	251.00	134.00	● ○ ● ○
13.200		2	251.00	134.00	○ ○
13.490		2	259.00	142.00	○ ○
13.500		2	259.00	142.00	● ○ ● ● ○
13.800		2	259.00	142.00	○
14.000		2	259.00	142.00	● ○ ● ○ ●
14.250		2	264.00	147.00	○
14.290	9/16	2	264.00	147.00	○ ○ ○ ○
14.500		2	264.00	147.00	○ ○ ○
14.750		2	264.00	147.00	○
15.000		2	264.00	147.00	● ○ ● ○
15.080	19/32	2	270.00	153.00	○ ○
15.500		2	270.00	153.00	● ○ ○
15.870	5/8	2	270.00	153.00	○
16.000		2	270.00	153.00	● ○ ● ○ ○
16.250		2	276.00	159.00	●
16.500		2	276.00	159.00	● ○ ○ ○
16.670	21/32	2	276.00	159.00	○ ○
17.000		2	276.00	159.00	● ○ ○ ● ○ ○
17.250		2	282.00	165.00	○
17.460	11/16	2	282.00	165.00	○ ○
17.500		2	282.00	165.00	● ○ ● ○
18.000		2	282.00	165.00	● ○ ●
18.250		3	307.00	171.00	○
18.260	23/32	3	307.00	171.00	○
18.500		3	307.00	171.00	● ○ ○ ● ○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	270	271	272	370	371	372
Standard	Guhring std.					
Tool material	HSS			HSCO		
Surface	●	●	●	●	●	●
Type	N	N	N	GT 100	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	138	138	138	138	138	138
Techn. data page	178	178	178	178	178	179

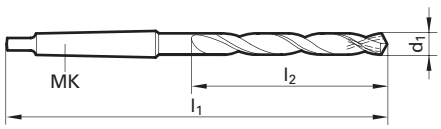




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
19.000		3	307.00	171.00	● ●
19.050	3/4	3	313.00	177.00	○
19.500		3	313.00	177.00	● ○ ○
19.840	25/32	3	313.00	177.00	○ ○
20.000		3	313.00	177.00	● ○ ○ ●
20.250		3	320.00	184.00	○
20.500		3	320.00	184.00	● ○
20.640	13/16	3	320.00	184.00	○ ○ ○
21.000		3	320.00	184.00	● ● ○
21.500		3	327.00	191.00	● ○ ○
22.000		3	327.00	191.00	● ○ ●
22.220	7/8	3	327.00	191.00	○
22.500		3	334.00	198.00	○ ○ ○
23.000		3	334.00	198.00	● ○
23.020	29/32	3	334.00	198.00	○ ○
23.750		3	342.00	206.00	○
23.810	15/16	3	342.00	206.00	○ ○ ○
24.000		3	342.00	206.00	● ● ●
24.250		3	342.00	206.00	○
24.610	31/32	3	342.00	206.00	○ ○
25.000	63/64	3	342.00	206.00	●
25.400	1	3	350.00	214.00	● ○
26.000		3	350.00	214.00	● ○ ○
26.500		3	350.00	214.00	●
26.990	1 1/16	4	385.00	222.00	○ ● ○
27.000		4	385.00	222.00	● ○
27.780	1 3/32	4	385.00	222.00	○
28.000		4	385.00	222.00	●
28.250		4	393.00	230.00	○
28.570	1 1/8	4	393.00	230.00	○ ○
28.750		4	393.00	230.00	○
29.000		4	393.00	230.00	● ○ ○
29.370	1 5/32	4	393.00	230.00	○
29.500		4	393.00	230.00	○ ○ ○ ○
30.000		4	393.00	230.00	● ○ ○ ○ ○
30.160		4	402.00	239.00	○
30.500		4	402.00	239.00	○
30.960	1 7/32	4	402.00	239.00	○ ○
31.000		4	402.00	239.00	● ○

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	270	271	272	370	371	372
Standard	Guhring std.					
Tool material	HSS			HSCO		
Surface	○	○	○	○	○	○
Type	N	N	N	GT 100	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8	h8	h8
Discount group	138	138	138	138	138	138
Techn. data page	178	178	178	178	178	179

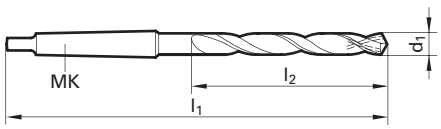




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
31.750	1 1/4	4	411.00	248.00	○
32.000		4	421.00	248.00	● ○ ● ○
32.250		4	421.00	248.00	○
32.500		4	421.00	248.00	○
32.540	1 9/32	4	421.00	248.00	○ ○
33.000		4	421.00	248.00	● ○
33.340	1 5/16	4	421.00	248.00	○
34.000		4	430.00	257.00	● ○ ○ ○
34.130	1 11/32	4	430.00	257.00	○ ○
34.920	1 3/8	4	430.00	257.00	○ ○
35.000		4	430.00	257.00	●
40.000		4	450.00	277.00	●
44.000		4	471.00	298.00	○
44.450		4	471.00	298.00	○ ○

○ bright ○ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	374	375	376
Standard		Guhring std.	
Tool material		HSCO	
Surface	●	●	●
Type	GT 100	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8
Discount group	138	138	138
Techn. data page	179	179	179

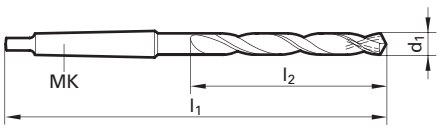




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability		
11.000		2	312.00	195.00	●	○	○
11.110	7/16	2	312.00	195.00		○	
11.510	29/64	2	312.00	195.00		○	
12.000		2	322.00	205.00	●		
12.300	31/64	2	322.00	205.00	○		
12.500		2	322.00	205.00	●		○
12.700	1/2	2	322.00	205.00		○	
12.800		2	322.00	205.00		○	
13.000		2	322.00	205.00	●		○
13.500		2	337.00	220.00		○	
14.000		2	337.00	220.00	●	●	○
14.290	9/16	2	337.00	220.00	○		
15.000		2	337.00	220.00	●		
15.080	19/32	2	347.00	230.00			○
16.000		2	347.00	230.00	●		
16.500		2	347.00	230.00	○		○
17.000		2	347.00	230.00		●	
17.460	11/16	2	362.00	245.00		○	
17.500		2	362.00	245.00	●		
18.000		2	362.00	245.00	●		○
18.260	23/32	3	381.00	245.00		○	
18.500		3	381.00	245.00	●		
19.000		3	381.00	245.00		○	
19.840	25/32	3	396.00	260.00	○		○
20.000		3	396.00	260.00	●		
21.000		3	396.00	260.00	●	○	
21.430	27/32	3	406.00	270.00	●	○	○
21.500		3	406.00	270.00	○		○
23.020	29/32	3	406.00	270.00		○	
24.000		3	426.00	290.00			○
24.500		3	426.00	290.00		●	
24.610	31/32	3	426.00	290.00	○		
25.000	63/64	3	426.00	290.00		○	
25.400	1	3	426.00	290.00		○	
26.500		3	426.00	290.00		○	○
26.990	1 1/16	4	468.00	305.00		○	
27.780	1 3/32	4	468.00	305.00			○
28.570	1 1/8	4	468.00	305.00	●	○	
28.750		4	468.00	305.00	○		

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	374	375	376
Standard		Guhring std.	
Tool material		HSCO	
Surface	●	●	●
Type	GT 100	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8
Discount group	138	138	138
Techn. data page	179	179	179

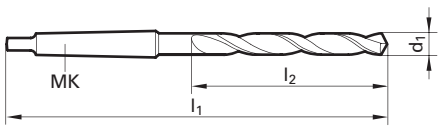




d1		MK	l1	l2	Availability		
mm	inch		mm	mm			
29.000		4	468.00	305.00	❍		❍
29.370	1 5/32	4	468.00	305.00	❍		
30.960	1 7/32	4	483.00	320.00	❍	❍	
32.250		4	493.00	320.00	❍		
32.540	1 9/32	4	493.00	320.00	❍	❍	
33.340	1 5/16	4	493.00	320.00		❍	
34.000		4	513.00	340.00	❍	❍	

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	266	525	526	620
Standard	DIN 1870			
Tool material	HSS			HSCO
Surface	●	○	>Ø 16,0	>Ø 16,0
Type	N	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	136	138
Techn. data page	179	180	180	180

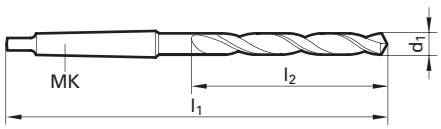




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
8.000		1	265.00	165.00	● ●
8.200		1	265.00	165.00	●
8.500		1	265.00	165.00	● ○ ●
8.600		1	275.00	175.00	○
8.700		1	275.00	175.00	○ ●
8.800		1	275.00	175.00	○ ○
9.000		1	275.00	175.00	● ○ ●
9.500		1	275.00	175.00	● ○ ●
9.520	3/8	1	285.00	185.00	● ● ●
9.800		1	285.00	185.00	●
10.000		1	285.00	185.00	● ○ ● ●
10.200		1	285.00	185.00	● ● ●
10.250		1	285.00	185.00	●
10.320	13/32	1	285.00	185.00	●
10.500		1	285.00	185.00	● ○ ● ●
10.720	27/64	1	300.00	195.00	○
10.800		1	300.00	195.00	○ ○
11.000		1	300.00	195.00	● ● ●
11.110	7/16	1	300.00	195.00	● ●
11.400		1	300.00	195.00	○
11.500		1	300.00	195.00	● ● ●
11.510	29/64	1	300.00	195.00	○ ○
11.750		1	300.00	195.00	● ●
11.800		1	300.00	195.00	●
12.000		1	310.00	205.00	● ○ ● ●
12.200		1	310.00	205.00	●
12.300	31/64	1	310.00	205.00	● ●
12.500		1	310.00	205.00	● ○ ● ●
12.700	1/2	1	310.00	205.00	● ●
12.800		1	310.00	205.00	○
13.000		1	310.00	205.00	● ○ ● ●
13.500		1	325.00	220.00	● ○ ● ●
13.750		1	325.00	220.00	●
13.800		1	325.00	220.00	●
14.000		1	325.00	220.00	● ● ● ●
14.200		2	340.00	220.00	●
14.290	9/16	2	340.00	220.00	● ● ●
14.500		2	340.00	220.00	● ● ●
15.000		2	340.00	220.00	● ● ● ●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	266	525	526	620
Standard	DIN 1870			
Tool material	HSS			HSCO
Surface	●	○	● >Ø 16,0	● >Ø 16,0
Type	N	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	136	138
Techn. data page	179	180	180	180

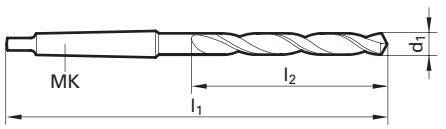




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
15.080	19/32	2	355.00	230.00	●
15.250		2	355.00	230.00	●
15.500		2	355.00	230.00	● ○ ● ●
15.750		2	355.00	230.00	●
15.800		2	355.00	230.00	●
15.870	5/8	2	355.00	230.00	●
16.000		2	355.00	230.00	● ● ● ●
16.250		2	355.00	230.00	●
16.500		2	355.00	230.00	● ● ●
16.670	21/32	2	355.00	230.00	●
17.000		2	355.00	230.00	● ● ●
17.460	11/16	2	370.00	245.00	●
17.500		2	370.00	245.00	● ● ●
17.750		2	370.00	245.00	●
18.000		2	370.00	245.00	● ● ● ●
18.500		2	370.00	245.00	● ● ●
18.650	47/64	2	370.00	245.00	○
19.000		2	370.00	245.00	● ● ●
19.500		2	385.00	260.00	● ○ ●
19.750		2	385.00	260.00	●
20.000		2	385.00	260.00	● ● ●
20.500		2	385.00	260.00	● ●
20.640	13/16	2	385.00	260.00	●
21.000		2	385.00	260.00	● ○ ● ●
21.430	27/32	2	405.00	270.00	●
21.500		2	405.00	270.00	● ●
21.830		2	405.00	270.00	○
22.000		2	405.00	270.00	● ● ●
22.500		2	405.00	270.00	● ○
22.620		2	405.00	270.00	○
23.000		2	405.00	270.00	● ● ● ●
23.020	29/32	2	405.00	270.00	○
23.500		3	425.00	270.00	●
24.000		3	440.00	290.00	● ● ●
24.300		3	440.00	290.00	●
24.380		3	440.00	290.00	○
24.500		3	440.00	290.00	● ○
25.000	63/64	3	440.00	290.00	● ●
25.500		3	440.00	290.00	● ○ ○

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	266	525	526	620
Standard	DIN 1870			
Tool material	HSS			HSCO
Surface	●	○	>Ø 16,0	>Ø 16,0
Type	N	GT50	GT 100	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	134	138	136	138
Techn. data page	179	180	180	180

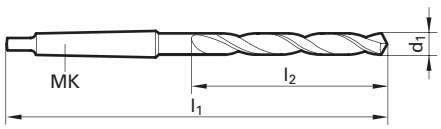




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability			
26.000		3	440.00	290.00	●	○	●	●
26.500		3	440.00	290.00	●	○	●	
27.000		3	460.00	305.00	●			
27.180		3	460.00	305.00				○
27.500		3	460.00	305.00		○		
28.000		3	460.00	305.00	●	●	●	
28.500		3	460.00	305.00		○	○	
29.000		3	460.00	305.00		○	●	
29.370	1 5/32	3	460.00	305.00				○
30.000		3	460.00	305.00	●		●	●
30.500		3	480.00	320.00	●			
31.000		3	480.00	320.00	●	○		
32.000		4	505.00	320.00	●			
33.000		4	505.00	320.00	●	●		
34.000		4	530.00	340.00	●			
35.000		4	530.00	340.00	●			
36.000		4	530.00	340.00	●			
38.000		4	555.00	360.00	●			
39.000		4	555.00	360.00	●			
40.000		4	555.00	360.00	●			
42.000		4	555.00	360.00	●			
45.000		4	585.00	385.00	●			
45.240	1 25/32	4	585.00	385.00	○			
48.000		4	605.00	405.00	●			
50.000		4	605.00	405.00	●			

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	267	527	542	621
Standard	DIN 1870			
Tool material	HSS			HSCO
Surface	●	◑ >Ø 16,0	○	◑ >Ø 16,0
Type	N	GT 100	GT50	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	138	136	138	138
Techn. data page	180	180	181	181

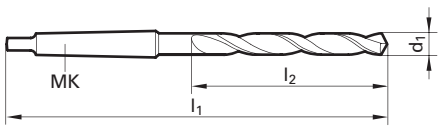




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
8.000		1	330.00	210.00	● ●
8.400		1	330.00	210.00	○
8.500		1	330.00	210.00	● ● ○
8.600		1	345.00	220.00	○
8.800		1	345.00	220.00	○
8.900		1	345.00	220.00	○
9.000		1	345.00	220.00	● ● ○
9.500		1	345.00	220.00	● ● ○
9.520	3/8	1	360.00	235.00	○ ○
10.000		1	360.00	235.00	● ● ●
10.200		1	360.00	235.00	●
10.320	13/32	1	360.00	235.00	○
10.500		1	360.00	235.00	● ● ○ ●
10.700		1	375.00	250.00	○
10.720	27/64	1	375.00	250.00	○
11.000		1	375.00	250.00	● ● ○ ●
11.110	7/16	1	375.00	250.00	●
11.500		1	375.00	250.00	● ● ○ ●
11.510	29/64	1	375.00	250.00	○ ○
11.750		1	375.00	250.00	● ○
11.800		1	375.00	250.00	● ●
11.910	15/32	1	395.00	260.00	○
12.000		1	395.00	260.00	● ● ○ ●
12.500		1	395.00	260.00	● ● ○ ●
12.700	1/2	1	395.00	260.00	● ●
13.000		1	395.00	260.00	● ● ○ ●
13.490	17/32	1	410.00	275.00	○
13.500		1	410.00	275.00	● ● ○ ●
13.700		1	410.00	275.00	○
13.800		1	410.00	275.00	●
13.890	35/64	1	410.00	275.00	○
14.000		1	410.00	275.00	● ● ○ ●
14.290	9/16	2	425.00	275.00	○ ●
14.500		2	425.00	275.00	● ● ○ ●
15.000		2	425.00	275.00	● ● ○ ●
15.480	39/64	2	445.00	295.00	○
15.500		2	445.00	295.00	● ●
16.000		2	445.00	295.00	● ● ○ ●
16.270		2	445.00	295.00	○

○ bright ◑ steam tempered ◒ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	267	527	542	621
Standard	DIN 1870			
Tool material	HSS			HSCO
Surface	●	>Ø 16,0	○	>Ø 16,0
Type	N	GT 100	GT50	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	138	136	138	138
Techn. data page	180	180	181	181

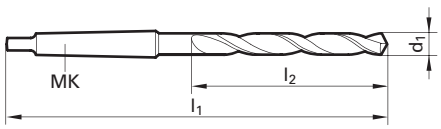




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability
16.500		2	445.00	295.00	● ●
16.900		2	445.00	295.00	○
17.000		2	445.00	295.00	● ● ○
17.070	43/64	2	465.00	310.00	○ ○
17.500		2	465.00	310.00	● ● ○
17.800		2	465.00	310.00	○
18.000		2	465.00	310.00	● ● ●
18.500		2	465.00	310.00	● ● ●
18.650	47/64	2	465.00	310.00	○
19.000		2	465.00	310.00	● ● ●
19.050	3/4	2	490.00	325.00	○ ○
19.450	49/64	2	490.00	325.00	●
19.500		2	490.00	325.00	● ●
20.000		2	490.00	325.00	● ● ○ ●
20.240	51/64	2	490.00	325.00	○
20.500		2	490.00	325.00	● ○
20.640	13/16	2	490.00	325.00	○
21.000		2	490.00	325.00	● ● ○
21.030	53/64	2	490.00	325.00	○
21.430	27/32	2	515.00	345.00	○ ○ ○
21.500		2	515.00	345.00	● ○
21.830	55/64	2	515.00	345.00	● ○
22.000		2	515.00	345.00	● ● ●
22.500		2	515.00	345.00	○
22.620	57/64	2	515.00	345.00	○
22.800		2	515.00	345.00	○
23.000		2	515.00	345.00	● ● ○
23.020	29/32	2	515.00	345.00	○ ○
23.420	59/64	3	535.00	345.00	●
23.500		3	535.00	345.00	○
23.750		3	555.00	365.00	○
23.810	15/16	3	555.00	365.00	○ ○
24.000		3	555.00	365.00	● ● ○
24.210	61/64	3	555.00	365.00	○
24.500		3	555.00	365.00	● ○ ○
24.610	31/32	3	555.00	365.00	○
25.000	63/64	3	555.00	365.00	● ●
25.500		3	555.00	365.00	○
25.800	1 1/64	3	555.00	365.00	○

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	267	527	542	621
Standard	DIN 1870			
Tool material	HSS			HSCO
Surface	●	◑ >Ø 16,0	○	◑ >Ø 16,0
Type	N	GT 100	GT50	GT 100
Cutting direction	right-hand	right-hand	right-hand	right-hand
Tolerance	h8	h8	h8	h8
Discount group	138	136	138	138
Techn. data page	180	180	181	181

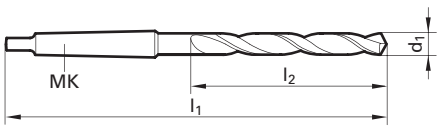




d1 mm	d1 inch	MK	l1 mm	l2 mm	Availability		
26.000		3	555.00	365.00	●	●	❍
26.190	1 1/32	3	555.00	365.00		❍	
26.500		3	555.00	365.00		●	●
27.000		3	580.00	385.00			❍
27.500		3	580.00	385.00			❍
28.000		3	580.00	385.00	●	●	❍
28.750		3	580.00	385.00		❍	
29.000		3	580.00	385.00		●	❍
29.500		3	580.00	385.00	❍	●	❍
30.000		3	580.00	385.00	●	●	❍
31.000		3	610.00	410.00	●		●
32.000		4	635.00	410.00	●		
34.000		4	665.00	430.00	●		
40.000		4	695.00	460.00	●		
45.000		4	735.00	490.00	●		

○ bright ◑ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	563	566
Standard	Guhring std.	
Tool material	HSS	
Surface		>Ø 16,0
Type	GT 100	GT 100
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	181	181



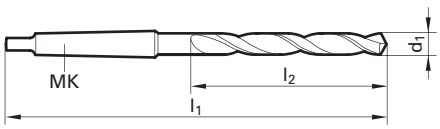




d1 mm	MK	l1 mm	l2 mm	Availability
6.000	1	200.00	120.00	●
6.500	1	200.00	120.00	●
7.000	1	200.00	120.00	●
7.500	1	200.00	120.00	❍
8.000	1	500.00	420.00	●
8.500	1	500.00	420.00	●
9.000	1	500.00	420.00	●
9.500	1	500.00	420.00	●
10.000	1	500.00	420.00	●
11.000	1	500.00	420.00	●
12.000	1	500.00	420.00	●
13.000	1	500.00	420.00	●
14.000	1	500.00	420.00	●
15.000	2	500.00	400.00	●
16.000	2	500.00	400.00	●
17.000	2	500.00	400.00	●
18.000	2	500.00	400.00	●
19.000	2	500.00	400.00	●
20.000	2	500.00	400.00	●
21.000	2	500.00	400.00	●
22.000	2	500.00	400.00	●
35.000	4	500.00	350.00	●
40.000	4	500.00	350.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	293	564
Standard	Guhring std.	
Tool material	HSS	
Surface	>Ø 16,0	
Type	GT 100	GT 100
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	181	182



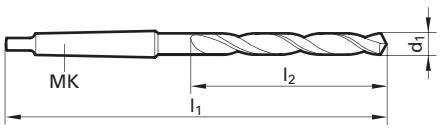




d1 mm	MK	l1 mm	l2 mm	Availability
6.000	1	300.00	220.00	●
6.500	1	300.00	220.00	●
7.000	1	300.00	220.00	●
8.000	1	350.00	270.00	●
8.500	1	350.00	270.00	●
9.000	1	350.00	270.00	●
10.000	1	350.00	270.00	●
14.000	1	600.00	500.00	●
15.000	2	600.00	500.00	●
16.000	2	600.00	500.00	●
17.000	2	600.00	500.00	●
18.000	2	600.00	500.00	●
19.000	2	600.00	500.00	●
20.000	2	600.00	500.00	●
21.000	2	600.00	500.00	●
22.000	2	600.00	500.00	●
23.000	2	600.00	500.00	●
24.000	3	600.00	475.00	●
25.000	3	600.00	475.00	●
26.000	3	600.00	475.00	●
28.000	3	600.00	475.00	●
30.000	3	600.00	475.00	●
32.000	4	600.00	450.00	●
35.000	4	600.00	450.00	●
38.000	4	600.00	450.00	●
40.000	4	600.00	450.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**565**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	>Ø 16,0
Type	**GT 100**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**182**

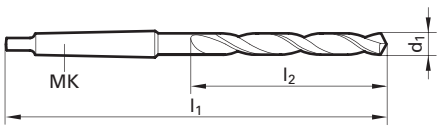




d1	MK	l1	l2	Availability
mm		mm	mm	
6.000	1	425.00	345.00	●
6.500	1	425.00	345.00	●
7.000	1	425.00	345.00	●
7.500	1	425.00	345.00	●
8.000	1	425.00	345.00	●
8.500	1	425.00	345.00	●
9.000	1	425.00	345.00	●
10.000	1	425.00	345.00	●
11.000	1	425.00	345.00	●
12.000	1	425.00	345.00	●
13.000	1	425.00	345.00	●
14.000	1	425.00	345.00	●
15.000	2	425.00	325.00	●
16.000	2	425.00	325.00	●
17.000	2	425.00	325.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**298**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	○
Type	**GT 100**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**182**

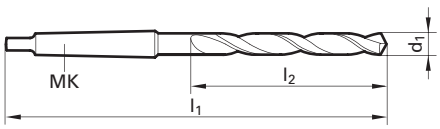




d1	MK	l1	l2	Availability
mm		mm	mm	
14.000	1	750.00	650.00	●
15.000	2	750.00	650.00	●
16.000	2	750.00	650.00	●
18.000	2	750.00	650.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**299**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	◯
Type	**GT 100**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**182**

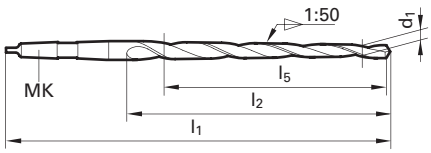




d1	MK	l1	l2	Availability
mm		mm	mm	
14.000	1	1000.00	850.00	●
15.000	2	1000.00	850.00	●
16.000	2	1000.00	850.00	●
18.000	2	1000.00	850.00	●

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	532
Standard	DIN 1898
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	
Discount group	138
Techn. data page	182

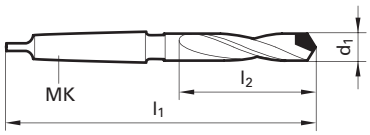




d1	MK	l1	l2	l5	Availability
mm		mm	mm	mm	
5.000	1	155.00	81.00	73.00	○
6.000	1	187.00	108.00	105.00	●
8.000	1	227.00	149.00	145.00	●
10.000	1	257.00	180.00	175.00	●
12.000	2	315.00	219.00	210.00	●
13.000	2	325.00	229.00	220.00	●
14.000	2	325.00	229.00	220.00	●
16.000	2	335.00	239.00	230.00	●
20.000	3	377.00	263.00	250.00	●
25.000	3	427.00	311.00	300.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**705**
Standard	**DIN 8041**
Tool material	**Carbide**
Surface	◯
Type	**N**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**102**
Techn. data page	**183**

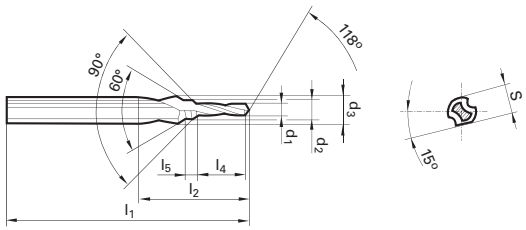




d1 mm	MK	l1 mm	l2 mm	Availability
8.500	1	135.00	45.00	●
10.000	1	140.00	50.00	●
10.200	1	140.00	50.00	●
10.500	1	140.00	50.00	◯
11.000	1	140.00	50.00	●
11.500	1	146.00	56.00	●
12.000	1	146.00	56.00	●
13.000	1	146.00	56.00	●
13.500	2	168.00	63.00	●
14.000	2	168.00	63.00	●
14.500	2	168.00	63.00	●
15.000	2	168.00	63.00	●
15.500	2	175.00	70.00	●
16.000	2	175.00	70.00	●
16.500	2	175.00	70.00	●
17.000	2	175.00	70.00	●
17.500	2	185.00	80.00	●
18.000	2	185.00	80.00	●
19.000	2	185.00	80.00	●
19.500	3	215.00	90.00	●
20.000	3	215.00	90.00	●
21.000	3	215.00	90.00	●
21.500	3	215.00	90.00	●
22.000	3	215.00	90.00	●
23.000	3	225.00	100.00	●
24.000	3	225.00	100.00	●
24.500	3	225.00	100.00	●
25.000	3	225.00	100.00	●
26.000	4	260.00	110.00	●
26.500	4	260.00	110.00	●
27.000	4	260.00	110.00	●
28.000	4	260.00	110.00	●
30.000	4	275.00	125.00	●
32.000	4	275.00	125.00	●
33.000	4	290.00	140.00	●
38.000	4	310.00	160.00	●
40.000	4	310.00	160.00	●

C TiCN | Cb Carbo | D Cristall | F FIRE/nanoFIRE | P AlCrN | S TiN | S+ TiN+ | M MolyGlide | Y Signum

Guhring no.	274	574
Standard	Guhring std.	
Tool material	HSS	
Surface	●	●
Type	N	N
Form	for countersinks form D	for countersinks form DR
Cutting direction	right-hand	right-hand
Discount group	138	138
Techn. data page	184	184



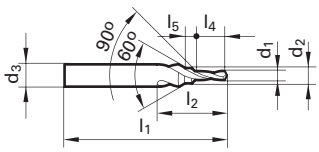




d3 h7	d2	d1 h8	s	l1	l2	l4	l5	for	Availability	
mm	mm	mm	mm	mm	mm	mm	mm	thread		
8.000	4.300	3.300	6.75	63.00	23.00	11.00	1.60	M 4	●	●
10.000	5.300	4.200	8.45	67.00	27.00	13.00	2.15	M 5	●	●
12.500	6.400	5.000	10.45	71.00	33.00	16.00	2.90	M 6	●	●
14.000	8.400	6.800	12.50	88.00	41.00	19.50	3.50	M 8	●	●
16.000	10.500	8.500	14.85	94.00	47.00	23.00	4.70	M10	●	●
20.000	13.000	10.200	18.45	105.00	59.00	28.00	6.50	M12	●	●
25.000	17.000	14.000	23.40	132.00	67.00	33.00	8.30	M16	●	●
31.500	21.000	17.500	29.35	145.00	76.50	38.00	10.35	M20	●	●
40.000	25.000	21.000	36.50	160.00	90.00	45.00	12.00	M24	●	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	575
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Form	for countersinks form D
Cutting direction	right-hand
Discount group	138
Techn. data page	184

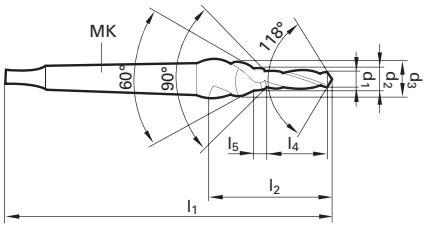




d3 h7	d2	d1 h8	l1	l2	l4	l5	for	Availability
mm	mm	mm	mm	mm	mm	mm	thread	
8.000	4.300	3.300	63.00	23.00	11.00	1.60	M 4	●
10.000	5.300	4.200	67.00	27.00	13.00	2.15	M 5	●
12.500	6.400	5.000	71.00	33.00	16.00	2.90	M 6	●
14.000	8.400	6.800	88.00	41.00	19.50	3.50	M 8	●
16.000	10.500	8.500	94.00	47.00	23.00	4.70	M10	●
20.000	13.000	10.200	105.00	59.00	28.00	6.50	M12	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	576
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Form	for countersinks form D
Cutting direction	right-hand
Discount group	138
Techn. data page	184

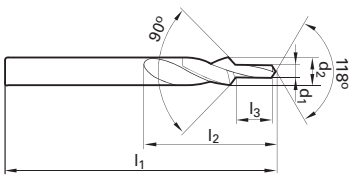




d3 h7	d2	d1 h8	MK	l1	l2	l4	l5	for	Availability
mm	mm	mm		mm	mm	mm	mm	thread	
14.000	8.400	6.800	1	110.00	41.00	19.50	3.50	M 8	●
16.000	10.500	8.500	2	131.00	47.00	23.00	4.70	M10	●
20.000	13.000	10.200	2	145.00	59.00	28.00	6.50	M12	●
25.000	17.000	14.000	3	172.00	67.00	33.00	8.30	M16	●
31.500	21.000	17.500	3	184.00	76.50	38.00	10.35	M20	●
40.000	25.000	21.000	4	222.00	90.00	45.00	12.00	M24	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	378	1147
Standard	Guhring std.	
Tool material	HSS	
Surface	◯	◯
Type	N	N
Form	fine tolerances	medial tolerances
Cutting direction	right-hand	right-hand
Discount group	138	138
Techn. data page	184	185



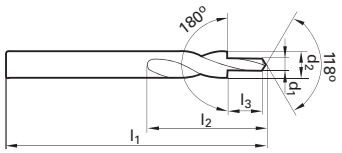




d2	d1	l1	l2	l3	for	Availability	
mm	mm	mm	mm	mm	thread		
6.000	3.200	66.00	28.00	9.00	M 3	●	
6.600	3.400	70.00	31.00	9.00	M 3		●
8.000	4.300	79.00	37.00	11.00	M 4	●	
9.000	4.500	84.00	40.00	11.00	M 4		●
10.000	5.300	89.00	43.00	13.00	M 5	●	
11.000	5.500	95.00	47.00	13.00	M 5		●
11.500	6.400	95.00	47.00	15.00	M 6	●	
13.000	6.600	102.00	51.00	15.00	M 6		●
15.000	8.400	111.00	56.00	19.00	M 8	●	
17.200	9.000	123.00	62.00	19.00	M 8		●
19.000	10.500	127.00	64.00	23.00	M10	●	
21.500	11.000	141.00	70.00	23.00	M10		●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	379
Standard	Guhring std.
Tool material	HSS
Surface	◯
Type	N
Form	medial tolerances
Cutting direction	right-hand
Discount group	138
Techn. data page	185

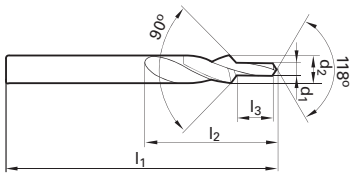




d2	d1	l1	l2	l3	for	Availability
mm	mm	mm	mm	mm	thread	
6.000	3.400	66.00	28.00	9.00	M 3	●
8.000	4.500	79.00	37.00	11.00	M 4	●
10.000	5.500	89.00	43.00	13.00	M 5	●
11.000	6.600	95.00	47.00	15.00	M 6	●
15.000	9.000	111.00	56.00	19.00	M 8	●
18.000	11.000	123.00	62.00	23.00	M10	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**380**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	◯
Type	**N**
Form	**for tapping size holes**
Cutting direction	**right-hand**
Discount group	**138**
Techn. data page	**185**

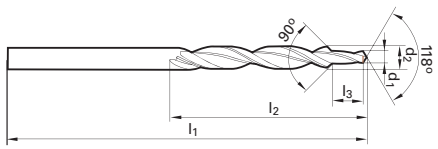




d2	d1	l1	l2	l3	for	Availability
mm	mm	mm	mm	mm	thread	
3.400	2.500	52.00	20.00	8.80	M 3	●
4.500	3.300	58.00	24.00	11.40	M 4	●
5.500	4.200	66.00	28.00	13.60	M 5	●
6.600	5.000	70.00	31.00	16.50	M 6	●
9.000	6.800	84.00	40.00	21.00	M 8	●
11.000	8.500	95.00	47.00	25.50	M10	●
13.500	10.200	107.00	54.00	30.00	M12	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	536	569	636	638
Standard	DIN 8374		Guhring std.	
Tool material	HSS			
Surface	●	●	●	●
Type	N	N	N	N
Form	A	B	medial tole-	fine tolerances
Cutting direction	right-hand	right-hand	right-hand	right-hand
Discount group	138	138	138	138
Techn. data page	185	185	186	186

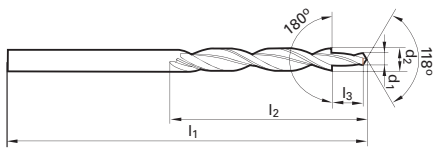




d2	d1	l1	l2	l3	for	Availability			
mm	mm	mm	mm	mm	thread				
6.000	3.200	93.00	57.00	9.00	M 3	●			●
6.600	3.400	101.00	63.00	9.00	M 3			●	
7.500	3.400	109.00	69.00	9.00	M 3		●		
8.000	4.300	117.00	75.00	11.00	M 4	●			●
9.000	4.500	125.00	81.00	11.00	M 4			●	
9.700	4.500	133.00	87.00	11.00	M 4		●		
10.000	5.300	133.00	87.00	13.00	M 5	●			
11.000	5.500	142.00	94.00	13.00	M 5			●	
11.500	6.400	142.00	94.00	15.00	M 6	●			
12.000	5.500	151.00	101.00	13.00	M 5		●		
13.000	6.600	151.00	101.00	15.00	M 6			●	
14.500	6.600	169.00	114.00	15.00	M 6		●		
15.000	8.400	169.00	114.00	19.00	M 8	●			
17.200	9.000	191.00	130.00	19.00	M 8			●	
19.000	9.000	198.00	135.00	19.00	M 8		●		

○ bright ◔ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	538	738
Standard	DIN 8376	Guhring std.
Tool material	HSS	Solid carbide
Surface	●	○
Type	N	N
Form	medial tolerances	medial tolerances
Cutting direction	right-hand	right-hand
Discount group	138	102
Techn. data page	186	186



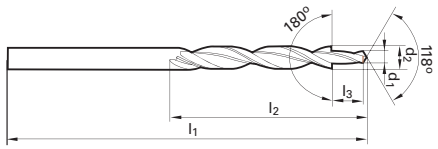




d2	d1	l1	l2	l3	for	Availability	
mm	mm	mm	mm	mm	thread		
6.000	3.400	93.00	57.00	9.00	M 3	●	●
8.000	4.500	117.00	75.00	11.00	M 4	●	●
10.000	5.500	133.00	87.00	13.00	M 5	●	●
11.000	6.600	142.00	94.00	15.00	M 6	●	●
15.000	9.000	169.00	114.00	19.00	M 8	●	●
18.000	11.000	191.00	130.00	23.00	M10	●	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	514
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Form	
Cutting direction	right-hand
Discount group	138
Techn. data page	186

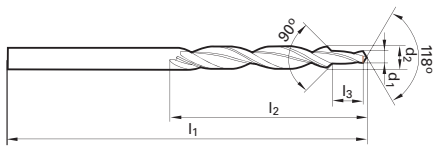




d2	d1	l1	l2	l3	for	Availability
mm	mm	mm	mm	mm	thread	
5.900	3.200	93.00	57.00	11.00	M 3	●
7.400	4.300	109.00	69.00	13.00	M 4	●
8.000	4.800	117.00	75.00	13.00	M 4	●
9.400	5.300	125.00	81.00	16.00	M 5	●
10.000	5.800	133.00	87.00	16.00	M 5	●
10.400	6.400	133.00	87.00	19.00	M 6	●
11.000	7.000	142.00	94.00	19.00	M 6	●
13.500	8.400	160.00	108.00	22.00	M 8	●
16.500	10.500	184.00	125.00	25.00	M10	●
17.500	11.500	191.00	130.00	25.00	M10	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	540	739
Standard	DIN 8378	Guhring std.
Tool material	HSS	Solid carbide
Surface	●	○
Type	N	N
Form	for tapping size holes	for tapping size holes
Cutting direction	right-hand	right-hand
Discount group	138	102
Techn. data page	187	187



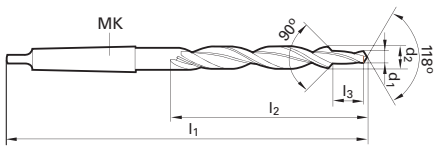




d2	d1	l1	l2	l3	for	Availability	
mm	mm	mm	mm	mm	thread		
3.400	2.500	70.00	39.00	8.80	M 3	●	
4.500	3.300	80.00	47.00	11.40	M 4	●	●
5.500	4.200	93.00	57.00	13.60	M 5	●	●
6.600	5.000	101.00	63.00	16.50	M 6	●	●
9.000	6.800	125.00	81.00	21.00	M 8	●	●
11.000	8.500	142.00	94.00	25.50	M10	●	●
13.500	10.200	160.00	108.00	30.00	M12	●	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	637	537
Standard	Guhring std.	
Tool material	HSS	
Surface	●	●
Type	N	N
Form	fine tolerances	medial tolerances
Cutting direction	right-hand	right-hand
Discount group	138	138
Techn. data page	187	187

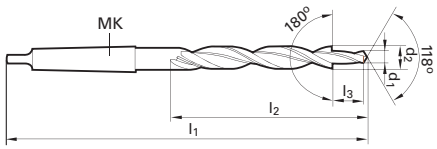




d2	d1	MK	l1	l2	l3	for	Availability
mm	mm		mm	mm	mm	thread	
11.000	5.500	1	175.00	94.00	13.00	M 5	○
11.500	6.400	1	175.00	94.00	15.00	M 6	●
15.000	8.400	2	212.00	114.00	19.00	M 8	●
17.200	9.000	2	228.00	130.00	19.00	M 8	●
19.000	10.500	2	233.00	135.00	23.00	M10	●
21.500	11.000	2	248.00	150.00	23.00	M10	●
23.000	13.000	2	253.00	155.00	27.00	M12	●
26.000	14.000	3	286.00	165.00	27.00	M12	●
29.000	16.000	3	296.00	175.00	31.00	M14	○
30.000	17.000	3	296.00	175.00	35.00	M16	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	639
Standard	Guhring std.
Tool material	HSS
Surface	●
Type	N
Form	fine tolerances
Cutting direction	right-hand
Discount group	138
Techn. data page	187

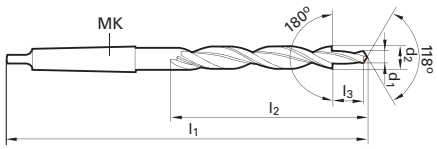




d2	d1	MK	l1	l2	l3	for	Availability
mm	mm		mm	mm	mm	thread	
18.000	10.500	2	228.00	130.00	23.00	M10	●
20.000	13.000	2	238.00	140.00	27.00	M12	●
26.000	17.000	3	286.00	165.00	35.00	M16	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	539
Standard	DIN 8377
Tool material	HSS
Surface	●
Type	N
Form	medial tolerances
Cutting direction	right-hand
Discount group	138
Techn. data page	188

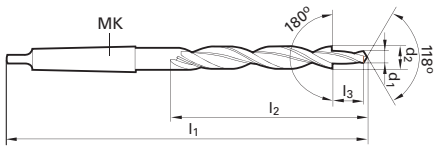




d2	d1	MK	l1	l2	l3	for	Availability
mm	mm		mm	mm	mm	thread	
10.000	5.500	1	168.00	87.00	13.00	M 5	●
11.000	6.600	1	175.00	94.00	15.00	M 6	●
15.000	9.000	2	212.00	114.00	19.00	M 8	●
18.000	11.000	2	228.00	130.00	23.00	M10	●
20.000	13.500	2	238.00	140.00	27.00	M12	●
26.000	17.500	3	286.00	165.00	35.00	M16	●
30.000	20.000	3	296.00	175.00	39.00	M18	❍
33.000	22.000	4	334.00	185.00	43.00	M20	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**520**
Standard	**Guhring std.**
Tool material	**HSS**
Surface	
Type	**N**
Form	
Cutting direction	**right-hand**
Discount group	**138**
Techn. data page	**188**

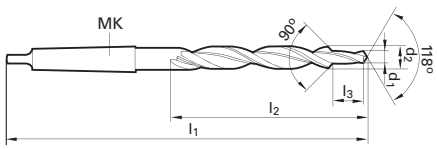




d2	d1	MK	l1	l2	l3	for	Availability
mm	mm		mm	mm	mm	thread	
9.400	5.300	1	162.00	81.00	16.00	M 5	○
10.000	5.800	1	168.00	87.00	16.00	M 5	○
10.400	6.400	1	168.00	87.00	19.00	M 6	○
11.000	7.000	1	175.00	94.00	19.00	M 6	●
13.500	8.400	1	189.00	108.00	22.00	M 8	●
14.500	9.500	2	212.00	114.00	22.00	M 8	○
16.500	10.500	2	223.00	125.00	25.00	M10	●
17.500	11.500	2	228.00	130.00	25.00	M10	○
19.000	13.000	2	233.00	135.00	28.00	M12	●
20.000	14.000	2	238.00	140.00	28.00	M12	●
23.000	15.000	2	253.00	155.00	30.00	M14	●
24.000	16.000	3	281.00	160.00	30.00	M14	○
25.000	17.000	3	281.00	160.00	33.00	M16	●
26.000	18.000	3	286.00	165.00	33.00	M16	●
28.000	19.000	3	291.00	170.00	36.00	M18	○
29.000	20.000	3	296.00	175.00	36.00	M18	○
31.000	21.000	3	301.00	180.00	39.00	M20	○
33.000	23.000	4	334.00	185.00	39.00	M20	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	541
Standard	DIN 8379
Tool material	HSS
Surface	●
Type	N
Form	for tapping size holes
Cutting direction	right-hand
Discount group	138
Techn. data page	188

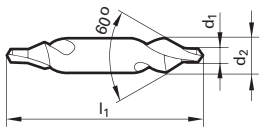




d2	d1	MK	l1	l2	l3	for	Availability
mm	mm		mm	mm	mm	thread	
9.000	6.800	1	162.00	81.00	21.00	M 8	●
11.000	8.500	1	175.00	94.00	25.50	M10	●
13.500	10.200	1	189.00	108.00	30.00	M12	●
15.500	12.000	2	218.00	120.00	34.50	M14	●
17.500	14.000	2	228.00	130.00	38.50	M16	●
20.000	15.500	2	238.00	140.00	43.50	M18	●
22.000	17.500	2	248.00	150.00	47.50	M20	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**594**
Standard	**ASA**
Tool material	**HSS**
Surface	○
Form	**A**
Cutting direction	**right-hand**
Discount group	**138**
Techn. data page	**189**

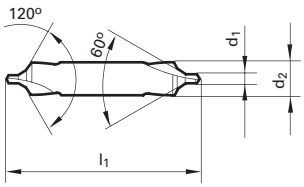




size	d1	d2	l1	Code no.	Availability
	inch	mm	mm		
1	3/64	3.170	31.30	1.190	○
2	5/64	4.760	47.20	1.980	●
3	7/64	6.350	50.40	2.780	●
4	1/8	7.940	53.50	3.170	●
5	3/16	11.110	69.40	4.760	●
6	7/32	12.700	75.80	5.560	●
7	1/4	15.870	82.10	6.350	●
8	5/16	19.050	88.50	7.940	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	**595**
Standard	**ASA**
Tool material	**HSS**
Surface	◯
Form	**B**
Cutting direction	**right-hand**
Discount group	**138**
Techn. data page	**189**

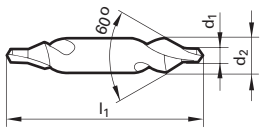




size	d1	d2	l1	Code no.	Availability
	inch	mm	mm		
11	3/64	3.170	31.30	1.190	●
12	1/16	4.760	47.20	1.590	❍
13	3/32	6.350	50.40	2.380	❍
14	7/64	7.940	53.50	2.780	●
15	5/32	11.110	69.40	3.970	●
16	3/16	12.700	75.80	4.760	●
17	7/32	15.870	82.10	5.560	●
18	1/4	19.050	88.50	6.350	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	292	294
Standard	BS 328	
Tool material	HSS	
Surface	◯	◯
Form	A	A
Cutting direction	right-hand	left-hand
Discount group	138	138
Techn. data page	189	189



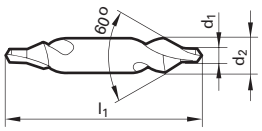




size	d1	d2	l1	Code no.	Availability	
	inch	mm	mm			
1	3/64	3.170	38.00	1.190	●	●
2	1/16	4.760	44.00	1.590	●	●
3	3/32	6.350	51.00	2.380	●	●
4	1/8	7.940	57.00	3.170	●	●
5	3/16	11.110	63.00	4.760	●	❍
6	1/4	15.870	76.00	6.350	●	❍
7	5/16	19.050	89.00	7.940	●	❍

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	581	582	583	584
Standard	DIN 333			
Tool material	HSS			
Carbide grade				
Surface	○	○	○	○
Form	A	A	R	R
Cutting direction	right-hand	left-hand	right-hand	left-hand
Discount group	132	138	138	138
Techn. data page	189	190	190	190





d1	d2	l1	Availability			
mm	mm	mm				
0.500	3.150	25.00	●	●	●	
0.800	3.150	25.00	●	●	●	●
1.000	3.150	31.50	●	●	●	❍
1.250	3.150	31.50	●	●	●	●
1.600	4.000	35.50	●	●	●	●
2.000	5.000	40.00	●	●	●	●
2.400	6.300	45.00				❍
2.500	6.300	45.00	●	●	●	●
3.150	8.000	50.00	●	●	●	●
4.000	10.000	56.00	●	●	●	●
5.000	12.500	63.00	●	●	●	●
6.300	16.000	71.00	●	●	●	
8.000	20.000	80.00	●	❍	●	
10.000	25.000	100.00	●	❍	●	
12.500	31.500	125.00	●	❍	●	

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

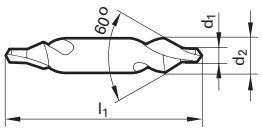
590	613	614	381	736
	DIN 333			Guhring std.
HSS			HSCO	Solid carbide
				K10/K20
○	S	S	○	○
A	A	R	A	A
right-hand	right-hand	right-hand	right-hand	right-hand
138	133	139	138	102
190	190	191	191	191



Availability				
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●		●
●	●	●		●
●	●	●		●
●	●	●		●
●	●	●		●
○				
○				

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	281	282	283	284
Standard	DIN 333			
Tool material	HSS			
Carbide grade				
Surface	○	○	○	○
Form	A	A	R	R
Cutting direction	right-hand	left-hand	right-hand	left-hand
Discount group	138	138	138	138
Techn. data page	191	191	192	192







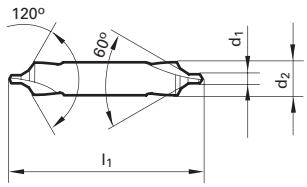




d1 mm	d2 mm	l1 mm	Availability			
0.500	3.150	25.00	●		●	
0.800	3.150	25.00		❍	●	
1.000	3.150	31.50	●		●	
1.250	4.000	35.50	●	●	●	
1.600	5.000	40.00	●	●	●	❍
2.000	6.300	45.00	●	❍	●	❍
2.500	8.000	50.00	●	●	●	●
3.150	10.000	56.00	●	●	●	❍
4.000	12.500	63.00	●	●	●	●
5.000	16.000	71.00	●	●	●	
6.300	20.000	80.00	●		●	
8.000	25.000	100.00	●		●	
10.000	31.500	125.00	●		❍	

○ bright ◔ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	585	586	591
Standard		DIN 333	
Tool material		HSS	
Carbide grade			
Surface	◯	◯	◯
Form	B	B	B
Cutting direction	right-hand	left-hand	right-hand
Discount group	138	138	138
Techn. data page	192	192	192





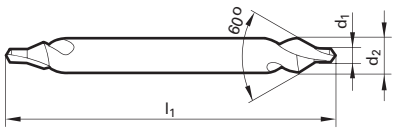




d1	d2	l1	Availability		
mm	mm	mm			
1.000	4.000	35.50	●	❍	❍
1.250	5.000	40.00	●	●	
1.600	6.300	45.00	●	●	❍
2.000	8.000	50.00	●	●	❍
2.500	10.000	56.00	●	●	●
3.150	11.200	60.00	●	●	●
4.000	14.000	67.00	●	●	●
5.000	18.000	75.00	●		●
6.300	20.000	80.00	●	●	●
8.000	25.000	100.00	●	●	
10.000	31.500	125.00	●	●	❍

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	280
Standard	Guhring std.
Tool material	HSS
Carbide grade	
Surface	○
Form	A
Cutting direction	right-hand
Discount group	138
Techn. data page	193

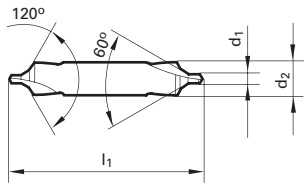




d1 mm	d2 mm	l1 mm	Availability
1.000	4.000	120.00	●
1.600	5.000	120.00	●
2.000	6.000	120.00	●
2.500	8.000	120.00	●
3.150	10.000	120.00	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**285**
Standard	**Guhring std.**
Tool material	**HSS**
Carbide grade	
Surface	◯
Form	**B**
Cutting direction	**right-hand**
Discount group	**138**
Techn. data page	**193**

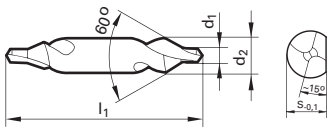




d1	d2	l1	Availability
mm	mm	mm	
1.000	6.300	40.00	●
1.600	8.000	50.00	❍
2.000	10.000	56.00	●
2.500	11.200	63.00	●
3.150	14.000	71.00	●
4.000	16.000	80.00	●
5.000	20.000	90.00	●
6.300	25.000	100.00	●

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	587	588
Standard	DIN 333	
Tool material	HSS	
Surface	◯	◯
Form	A	R
Cutting direction	right-hand	right-hand
Discount group	138	138
Techn. data page	193	193



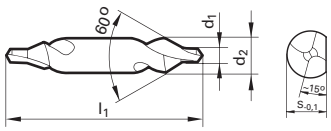




d1	d2	l1	s	Availability	
mm	mm	mm	mm		
1.000	3.150	31.50	2.35		❍
1.600	4.000	35.50	3.25	●	
2.000	5.000	40.00	4.20	●	●
2.500	6.300	45.00	5.35	●	●
3.150	8.000	50.00	6.95	●	●
4.000	10.000	56.00	8.40	●	●
5.000	12.500	63.00	10.95	●	●
6.300	16.000	71.00	14.00	●	●
8.000	20.000	80.00	17.90	❍	●
10.000	25.000	100.00	22.50	●	●

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	287	288
Standard	DIN 333	
Tool material	HSS	
Surface	◯	◯
Form	A	R
Cutting direction	right-hand	right-hand
Discount group	138	138
Techn. data page	193	194



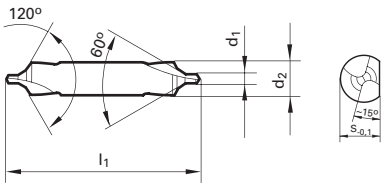




d1	d2	l1	s	Availability	
mm	mm	mm	mm		
1.600	5.000	40.00	4.20	❍	❍
2.000	6.300	45.00	5.35	●	●
2.500	8.000	50.00	6.85	●	●
3.150	10.000	56.00	8.40	●	●
4.000	12.500	63.00	10.65	●	●
5.000	16.000	71.00	13.65	●	❍
6.300	20.000	80.00	17.40	❍	●
8.000	25.000	100.00	21.90	❍	❍
10.000	31.500	125.00	27.10	❍	

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	589
Standard	DIN 333
Tool material	HSS
Surface	○
Form	B
Cutting direction	right-hand
Discount group	138
Techn. data page	194

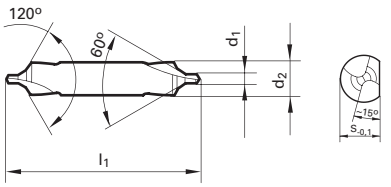




d1 mm	d2 mm	l1 mm	s mm	Availability
1.600	6.300	45.00	5.35	●
2.000	8.000	50.00	6.95	●
2.500	10.000	56.00	8.40	●
3.150	11.200	60.00	10.00	●
4.000	14.000	67.00	12.65	●
5.000	18.000	75.00	16.40	●
6.300	20.000	80.00	17.90	●
8.000	25.000	100.00	22.50	●

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	289
Standard	Guhring std.
Tool material	HSS
Surface	◯
Form	B
Cutting direction	right-hand
Discount group	138
Techn. data page	194

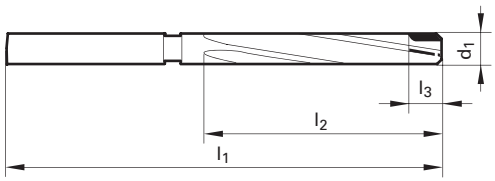




d1 mm	d2 mm	l1 mm	s mm	Availability
1.600	8.000	50.00	6.50	❍
2.000	10.000	56.00	7.95	❍
2.500	11.200	63.00	9.50	❍
3.150	14.000	71.00	12.00	●
4.000	16.000	80.00	14.40	●
5.000	20.000	90.00	18.40	❍

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Guhring no.	750
Standard	Guhring std.
Tool material	Carbide
Carbide grade	K10/K20
Surface	◯
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	102
Techn. data page	195

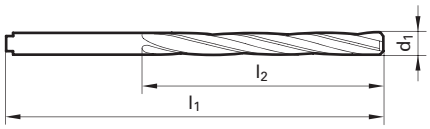




d1	d0 ≥	l1	l2	l3	Availability
mm	mm	mm	mm	mm	
3.800	2.800	96.00	64.00		●
4.800	3.500	108.00	74.00		●
5.000	3.500	108.00	74.00		●
5.800	4.200	116.00	80.00		●
6.000	4.200	116.00	80.00		●
7.800	5.600	142.00	100.00		●
8.000	5.600	142.00	100.00		●
11.750	8.400	184.00	134.00	16.00	●
13.000	9.100	184.00	134.00	16.00	◯
14.000	9.800	194.00	142.00	19.00	◯
15.000	10.500	202.00	147.00	19.00	◯

◯ bright ◯ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	533
Standard	DIN 344
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	195

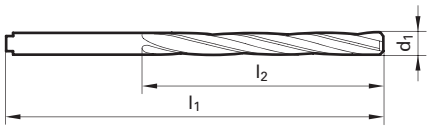




d1 mm	d0 ≥	l1 mm	l2 mm	Availability
3.800	2.800	96.00	64.00	●
4.000	2.800	96.00	64.00	●
4.100	2.800	96.00	64.00	●
4.400	3.200	102.00	69.00	●
4.500	3.200	102.00	69.00	●
4.600	3.200	102.00	69.00	●
4.750	3.200	102.00	69.00	●
4.800	3.500	108.00	74.00	●
4.900	3.500	108.00	74.00	●
5.000	3.500	108.00	74.00	●
5.050	3.500	108.00	74.00	●
5.100	3.500	108.00	74.00	●
5.300	3.500	108.00	74.00	●
5.400	4.200	116.00	80.00	●
5.500	4.200	116.00	80.00	●
5.550	4.200	116.00	80.00	○
5.750	4.200	116.00	80.00	●
5.800	4.200	116.00	80.00	●
5.850	4.200	116.00	80.00	●
5.900	4.200	116.00	80.00	●
6.000	4.200	116.00	80.00	●
6.100	4.200	124.00	86.00	●
6.200	4.200	124.00	86.00	●
6.250	4.200	124.00	86.00	○
6.300	4.200	124.00	86.00	●
6.400	4.200	124.00	86.00	●
6.500	4.200	124.00	86.00	●
6.700	4.200	124.00	86.00	●
6.800	4.900	133.00	93.00	●
6.850	4.900	133.00	93.00	○
6.900	4.900	133.00	93.00	●
7.000	4.900	133.00	93.00	●
7.150	4.900	133.00	93.00	●
7.200	4.900	133.00	93.00	●
7.250	4.900	133.00	93.00	●
7.500	4.900	133.00	93.00	●
7.600	5.600	142.00	100.00	●
7.800	5.600	142.00	100.00	●
7.950	5.600	142.00	100.00	○

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	533
Standard	DIN 344
Tool material	HSS
Surface	●
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	195

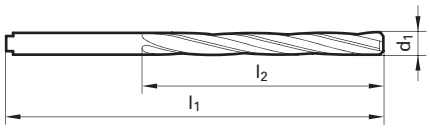




d1 mm	d0 ≥	l1 mm	l2 mm	Availability
8.000	5.600	142.00	100.00	●
8.050	5.600	142.00	100.00	●
8.100	5.600	142.00	100.00	●
8.150	5.600	142.00	100.00	●
8.200	5.600	142.00	100.00	●
8.250	5.600	142.00	100.00	○
8.300	5.600	142.00	100.00	●
8.400	5.600	142.00	100.00	●
8.500	5.600	142.00	100.00	●
8.600	6.300	151.00	107.00	●
8.700	6.300	151.00	107.00	●
8.800	6.300	151.00	107.00	●
8.850	6.300	151.00	107.00	●
9.000	6.300	151.00	107.00	●
9.100	6.300	151.00	107.00	○
9.200	6.300	151.00	107.00	○
9.300	6.300	151.00	107.00	●
9.400	6.300	151.00	107.00	●
9.500	6.300	151.00	107.00	●
9.650	7.000	162.00	116.00	●
9.750	7.000	162.00	116.00	●
9.800	7.000	162.00	116.00	●
9.900	7.000	162.00	116.00	●
10.000	7.000	162.00	116.00	●
10.100	7.000	162.00	116.00	●
10.200	7.000	162.00	116.00	●
10.300	7.000	162.00	116.00	●
10.500	7.000	162.00	116.00	●
10.600	7.000	162.00	116.00	○
10.700	7.700	173.00	125.00	●
10.750	7.700	173.00	125.00	●
11.000	7.700	173.00	125.00	●
11.250	7.700	173.00	125.00	○
11.300	7.700	173.00	125.00	●
11.750	8.400	184.00	134.00	●
11.800	8.400	184.00	134.00	●
12.000	8.400	184.00	134.00	●
12.100	8.400	184.00	134.00	●
12.200	8.400	184.00	134.00	●

○ bright ● steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	**533**
Standard	**DIN 344**
Tool material	**HSS**
Surface	●
Type	**N**
Cutting direction	**right-hand**
Tolerance	**h8**
Discount group	**138**
Techn. data page	**195**

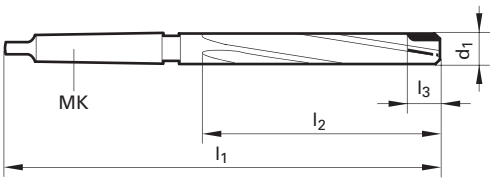




d1 mm	d0 ≥	l1 mm	l2 mm	Availability
12.500	8.400	184.00	134.00	●
12.750	9.100	184.00	134.00	●
13.000	9.100	184.00	134.00	●
13.500	9.800	194.00	142.00	○
13.750	9.800	194.00	142.00	●
14.000	9.800	194.00	142.00	●
15.000	10.500	202.00	147.00	●
15.750	11.200	211.00	153.00	●
15.870	11.200	211.00	153.00	○
16.000	11.200	211.00	153.00	●
17.000	11.900	218.00	159.00	●
18.000	12.600	226.00	165.00	●
20.000	14.000	242.00	177.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	729
Standard	Guhring std.
Tool material	Carbide
Carbide grade	K10/K20
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	102
Techn. data page	195

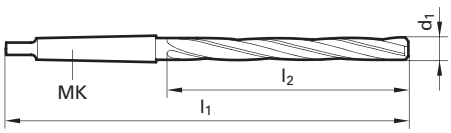




d1	d0 ≥	MK	l1	l2	l3	Availability
mm	mm		mm	mm	mm	
26.700	19.000	3	291.00	170.00	25.00	○
28.700	21.000	3	296.00	175.00	25.00	●
29.700	22.000	3	296.00	175.00	25.00	●
30.600	23.000	3	301.00	180.00	25.00	○
31.600	24.000	4	334.00	185.00	25.00	○
32.600	25.000	4	334.00	185.00	25.00	○
33.000	25.000	4	334.00	185.00	25.00	○
33.600	26.000	4	339.00	190.00	25.00	●
34.000	26.000	4	339.00	190.00	25.00	○
34.600	27.000	4	339.00	190.00	25.00	○
36.000	28.000	4	344.00	195.00	25.00	○
37.600	30.000	4	349.00	200.00	25.00	○
38.600	31.000	4	349.00	200.00	25.00	●
39.000	31.000	4	349.00	200.00	25.00	○
39.600	32.000	4	349.00	200.00	25.00	○
40.000	32.000	4	349.00	200.00	25.00	○

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	534	634
Standard	DIN 343	
Tool material	HSS	HSCO
Surface	●	●
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	195	195



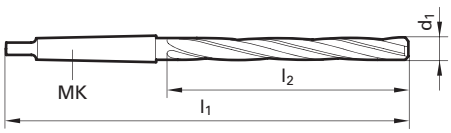




d1 mm	d0 ≥ mm	MK	l1 mm	l2 mm	Availability
7.800	5.600	1	156.00	75.00	●
8.000	5.600	1	156.00	75.00	●
8.100	5.600	1	156.00	75.00	●
8.500	5.600	1	156.00	75.00	❍
8.700	6.300	1	162.00	81.00	❍
8.800	6.300	1	162.00	81.00	●
9.000	6.300	1	162.00	81.00	❍ ❍
9.200	6.300	1	162.00	81.00	❍
9.700	7.000	1	168.00	87.00	●
9.800	7.000	1	168.00	87.00	● ●
9.900	7.000	1	168.00	87.00	❍
10.000	7.000	1	168.00	87.00	●
10.100	7.000	1	168.00	87.00	●
10.200	7.000	1	168.00	87.00	●
10.750	7.700	1	175.00	94.00	● ●
11.000	7.700	1	175.00	94.00	●
11.100	7.700	1	175.00	94.00	❍
11.250	7.700	1	175.00	94.00	❍
11.500	7.700	1	175.00	94.00	●
11.750	8.400	1	182.00	101.00	● ●
11.800	8.400	1	182.00	101.00	●
12.000	8.400	1	182.00	101.00	● ●
12.200	8.400	1	182.00	101.00	●
12.300	8.400	1	182.00	101.00	●
12.500	8.400	1	182.00	101.00	● ❍
12.700	9.100	1	182.00	101.00	❍
12.750	9.100	1	182.00	101.00	● ●
13.000	9.100	1	182.00	101.00	● ●
13.250	9.800	1	189.00	108.00	●
13.500	9.800	1	189.00	108.00	●
13.750	9.800	1	189.00	108.00	●
13.800	9.800	1	189.00	108.00	●
14.000	9.800	1	189.00	108.00	● ●
14.100	10.500	2	212.00	114.00	●
14.200	10.500	2	212.00	114.00	●
14.450	10.500	2	212.00	114.00	❍
14.500	10.500	2	212.00	114.00	●
14.750	10.500	2	212.00	114.00	● ●
15.000	10.500	2	212.00	114.00	●

(C) TiCN (Cb) Carbo (D) Cristall (F) FIRE/nanoFIRE (P) AlCrN (S) TiN (S+) TiN+ (M) MolyGlide (Y) Signum

Guhring no.	534	634
Standard	DIN 343	
Tool material	HSS	HSCO
Surface	●	●
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	195	195



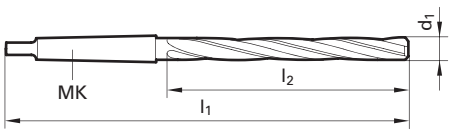




d1	d0 ≥	MK	l1	l2	Availability	
mm	mm		mm	mm		
15.250	11.200	2	218.00	120.00	●	
15.500	11.200	2	218.00	120.00	●	
15.750	11.200	2	218.00	120.00	●	●
16.000	11.200	2	218.00	120.00	●	●
16.150	11.900	2	223.00	125.00	●	
16.200	11.900	2	223.00	125.00	●	
16.250	11.900	2	223.00	125.00	●	
16.500	11.900	2	223.00	125.00	●	●
16.750	11.900	2	223.00	125.00	●	○
17.000	11.900	2	223.00	125.00	●	○
17.500	12.600	2	228.00	130.00	●	
17.750	12.600	2	228.00	130.00	●	
18.000	12.600	2	228.00	130.00	●	●
18.100	13.300	2	233.00	135.00	●	
18.250	13.300	2	233.00	135.00	●	
18.500	13.300	2	233.00	135.00	●	
18.700	13.300	2	233.00	135.00	●	
18.750	13.300	2	233.00	135.00	●	
18.800	13.300	2	233.00	135.00	○	
19.000	13.300	2	233.00	135.00	●	
19.250	14.000	2	238.00	140.00	●	
19.500	14.000	2	238.00	140.00	●	
19.700	14.000	2	238.00	140.00	●	●
19.750	14.000	2	238.00	140.00	●	
20.000	14.000	2	238.00	140.00	●	●
20.100	14.600	2	243.00	145.00	○	
20.200	14.600	2	243.00	145.00	●	
20.250	14.600	2	243.00	145.00	●	
20.500	14.600	2	243.00	145.00	●	
20.700	14.600	2	243.00	145.00	●	
21.000	14.600	2	243.00	145.00	●	●
21.500	15.300	2	248.00	150.00	●	
21.700	15.300	2	248.00	150.00	●	
21.750	15.300	2	248.00	150.00	●	
22.000	15.300	2	248.00	150.00	●	○
22.250	15.300	2	248.00	150.00	●	
22.400	15.300	2	248.00	150.00	○	
22.500	16.000	2	253.00	155.00	●	
22.700	16.000	2	253.00	155.00	●	

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ● golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	534	634
Standard	DIN 343	
Tool material	HSS	HSCO
Surface	●	●
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	195	195



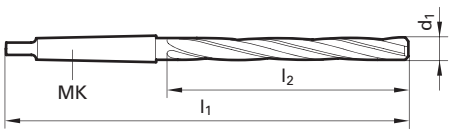




d1 mm	d0 ≥ mm	MK	l1 mm	l2 mm	Availability	
23.000	16.000	2	253.00	155.00	●	●
23.500	16.000	2	253.00	155.00	●	
23.700	16.600	3	281.00	160.00	●	
24.000	16.600	3	281.00	160.00	●	●
24.200	16.600	3	281.00	160.00	●	
24.500	17.300	3	281.00	160.00	●	
24.700	17.300	3	281.00	160.00	●	
24.750	17.300	3	281.00	160.00	●	
25.000	17.300	3	281.00	160.00	●	●
25.250	18.000	3	286.00	165.00	●	
25.500	18.000	3	286.00	165.00	●	
25.600	18.000	3	286.00	165.00	○	
25.700	18.000	3	286.00	165.00	●	
26.000	18.000	3	286.00	165.00	●	●
26.500	18.000	3	286.00	165.00	●	
26.700	18.600	3	291.00	170.00	●	
27.000	18.600	3	291.00	170.00	●	
27.500	18.600	3	291.00	170.00	●	
27.700	19.300	3	291.00	170.00	●	
28.000	19.300	3	291.00	170.00	●	
28.700	20.000	3	296.00	175.00	●	
29.000	20.000	3	296.00	175.00	●	
29.250	20.500	3	296.00	175.00	○	
29.500	20.500	3	296.00	175.00	●	
29.700	20.500	3	296.00	175.00	●	
29.750	20.500	3	296.00	175.00	●	
30.000	20.500	3	296.00	175.00	●	
30.500	21.000	3	301.00	180.00	●	
30.600	21.000	3	301.00	180.00	●	
31.000	21.000	3	301.00	180.00	●	
31.600	22.000	4	334.00	185.00	●	
32.000	22.000	4	334.00	185.00	●	
32.600	23.000	4	334.00	185.00	●	
33.000	23.000	4	334.00	185.00	●	
33.600	24.000	4	339.00	190.00	●	
34.000	24.000	4	339.00	190.00	●	
34.600	25.000	4	339.00	190.00	●	
35.000	25.000	4	339.00	190.00	●	
35.600	25.500	4	344.00	195.00	●	

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	534	634
Standard	DIN 343	
Tool material	HSS	HSCO
Surface	○	○
Type	N	N
Cutting direction	right-hand	right-hand
Tolerance	h8	h8
Discount group	138	138
Techn. data page	195	195



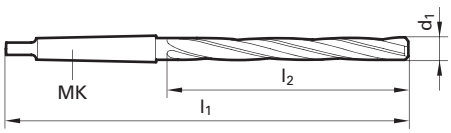




d1	d0 ≥	MK	l1	l2	Availability
mm	mm		mm	mm	
36.000	25.500	4	344.00	195.00	●
36.600	26.000	4	344.00	195.00	●
37.600	26.500	4	349.00	200.00	●
38.000	26.500	4	349.00	200.00	●
39.000	27.000	4	349.00	200.00	●
39.600	28.000	4	349.00	200.00	●
40.000	28.000	4	349.00	200.00	●
44.000	30.500	4	359.00	210.00	●
44.600	31.000	4	359.00	210.00	●
45.000	31.000	4	359.00	210.00	●
50.000	34.500	4	369.00	220.00	●

○ bright ◍ steam tempered ◒ nitrided lands ● nitrided ◉ golden brown A TiAlN a TiAlN nanoA A TiAlN SuperA

Guhring no.	635
Standard	DIN 1864
Tool material	HSCO
Surface	●
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	196

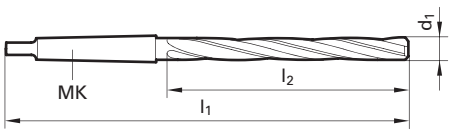




d1	d0 ≥	MK	l1	l2	Availability
mm	mm		mm	mm	
8.000	5.600	1	181.00	100.00	○
10.000	7.000	1	197.00	116.00	○
11.750	8.400	1	215.00	134.00	○
12.500	8.400	1	215.00	134.00	●
12.750	9.100	1	215.00	134.00	○
14.000	9.800	1	223.00	142.00	○
15.000	10.500	2	245.00	147.00	○

C TiCN Cb Carbo D Cristall F FIRE/nanoFIRE P AlCrN S TiN S+ TiN+ M MolyGlide Y Signum

Guhring no.	555
Standard	DIN 1864
Tool material	HSS
Surface	○
Type	N
Cutting direction	right-hand
Tolerance	h8
Discount group	138
Techn. data page	196

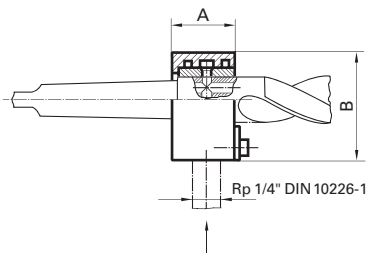




d1 mm	d0 ≥ mm	MK	l1 mm	l2 mm	Availability
5.000	3.500	1	155.00	74.00	○
8.000	5.600	1	181.00	100.00	○
8.800	6.300	1	188.00	107.00	○
9.000	6.300	1	188.00	107.00	○
9.700	7.000	1	197.00	116.00	○
9.800	7.000	1	197.00	116.00	●
10.000	7.000	1	197.00	116.00	●
10.100	7.000	1	197.00	116.00	○
10.500	7.000	1	197.00	116.00	○
11.000	7.700	1	206.00	125.00	○
11.100	7.700	1	206.00	125.00	○
11.750	8.400	1	215.00	134.00	●
12.000	8.400	1	215.00	134.00	●
12.750	9.100	1	215.00	134.00	●
13.000	9.100	1	215.00	134.00	●
13.750	9.800	1	223.00	142.00	●
14.000	9.800	1	223.00	142.00	●
15.000	10.500	2	245.00	147.00	●
15.750	11.200	2	251.00	153.00	●
16.000	11.200	2	251.00	153.00	●
16.750	11.900	2	257.00	159.00	●
17.750	12.600	2	263.00	165.00	●
19.000	13.300	2	269.00	171.00	●
19.700	14.000	2	275.00	177.00	●
20.000	14.000	2	275.00	177.00	●
20.700	14.600	2	282.00	184.00	●
21.000	14.600	2	282.00	184.00	○
21.700	15.300	2	289.00	191.00	○
22.000	15.300	2	289.00	191.00	●
22.700	16.000	2	296.00	198.00	●
23.000	16.000	2	296.00	198.00	○
23.700	16.600	3	327.00	206.00	○
24.000	16.600	3	327.00	206.00	●
25.000	17.300	3	327.00	206.00	●
25.700	18.000	3	335.00	214.00	●
30.000	20.500	3	351.00	230.00	●
31.000	21.000	3	360.00	239.00	○

○ bright ◍ steam tempered ◓ nitrided lands ● nitrided ◉ golden brown Ⓐ TiAlN ⓐ TiAlN nanoA Ⓐ TiAlN SuperA

Guhring no.	230
Standard	Guhring std.
Discount group	138
Techn. data page	





B	A	Code no.	Availability
mm	mm		
40.000	28.50	3.001	❍
50.000	29.50	3.002	❍
60.000	29.50	3.003	❍
90.000	40.00	3.004	❍
120.000	40.00	3.005	❍

Ⓒ TiCN Ⓒb Carbo Ⓓ Cristall Ⓕ FIRE/nanoFIRE Ⓟ AlCrN Ⓢ TiN Ⓢ+ TiN+ Ⓜ MolyGlide Ⓨ Signum

Additional charges for intermediate sizes for high speed steel twist drills

from quantity	gross additional charges per item depending on shank diameter (mm)						
	up to 1.06	1.07 up to 2.12	2.13 up to 8.50	8.51 up to 23.02	23.03 up to 31.75	31.76 up to 50.80	50.81 up to 100.00
5	●	●	●	●	●	●	●
6	●	●	●	●	●	●	●
7	●	●	●	●	●	●	●
8	●	●	●	●	●	●	●
9	●	●	●	●	●	●	●
10	●	●	●	●	●	●	●
11	●	●	●	●	●	●	●
15	●	●	●	●	●	●	●
20	●	●	●	●	●	●	●
25	●	●	●	●	●	●	●
30	●	●	●	●	●	●	●
40	●	●	●	●	●	●	●
50	●	●	●	●	●	●	
70	●	●	●	●	●	●	
100	●	●	●	●			

Additional charges for intermediate sizes for carbide twist drills

from quantity	gross additional charges per item depending on shank diameter (mm)			
	up to 1.06	1.07 up to 2.12	2.13 up to 8.50	8.51 up to 25.00
3	●	●	●	●
4	●	●	●	●
5	●	●	●	●
6	●	●	●	●
7	●	●	●	●
8	●	●	●	●
9	●	●	●	●
10	●	●	●	●
11	●	●	●	●
15	●	●	●	●
20	●	●	●	●
25	●	●	●	●
30	●	●	●	●
40	●	●	●	●
50	●	●	●	●
75	●	●	●	●
100	●	●	●	●

Additional charges for thinned chisel edge (to DIN 1412. form A)

from quantity	gross additional charges per item depending on shank diameter (mm)		
	2.36 up to 4.25	4.26 up to 8.50	8.51 up to 14.00
5	●	●	●
6	●	●	●
7	●	●	●
8	●	●	●
9	●	●	●
10	●	●	●
11	●	●	●
15	●	●	●
20	●	●	●
25	●	●	●
30	●	●	●
40	●	●	●
50	●	●	●
75	●	●	●
100	●	●	●

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Additional charges for closer diameter tolerance, for h7 straight shank

from quantity	gross additional charges per item depending on shank diameter (mm)							
	1.00 up to 2.12	2.13 up to 4.25	4.26 up to 8.50	8.51 up to 14.00	14.01 up to 23.02	23.03 up to 31.75	31.76 up to 50.80	50.81 up to 60.00
5	●	●	●	●	●	●	●	●
6	●	●	●	●	●	●	●	●
7	●	●	●	●	●	●	●	●
8	●	●	●	●	●	●	●	●
9	●	●	●	●	●	●	●	●
10	●	●	●	●	●	●	●	●
11	●	●	●	●	●	●	●	●
15	●	●	●	●	●	●	●	●
20	●	●	●	●	●	●	●	●
25	●	●	●	●	●	●	●	●
30	●	●	●	●	●	●	●	●
40	●	●	●	●	●	●	●	●
50	●	●	●	●	●	●	●	
70	●	●	●	●	●	●	●	
100	●	●	●	●	●	●		

Additional charges for tangs for straight shank high speed twist drills (tang to DIN 1809)

from quantity	gross additional charges per item depending on shank diameter (mm)			
	tang grinding		tang milling	
	3.01 up to 10.60	10.61 up to 16.00	16.01 up to 23.60	23.61 up to 30.00
5	●	●	●	●
6	●	●	●	●
7	●	●	●	●
8	●	●	●	●
9	●	●	●	●
10	●	●	●	●
11	●	●	●	●
15	●	●	●	●
20	●	●	●	●
25	●	●	●	●
30	●	●	●	●
40	●	●	●	●
50	●	●	●	●
75	●	●	●	●
100	●	●	●	●

Additional charges for tangs for straight shank carbide twist drills (tang to DIN 1809)

from quantity	gross additional charges per item depending on shank diameter (mm)	
	tang grinding	
	3.01 up to 10.60	16.01 up to 16.00
3	●	●
4	●	●
5	●	●
6	●	●
7	●	●
8	●	●
9	●	●
10	●	●
11	●	●
15	●	●
20	●	●
25	●	●
30	●	●
40	●	●
50	●	●
75	●	●
100	●	●

Additional charges for additional marking for all twist drills with a diameter > 4.0 mm

from quantity	gross additional charges per item
5	●
6	●
7	●
8	●
9	●
10	●
11	●
15	●
20	●
25	●
30	●
40	●
50	●
75	●
100	●

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Additional charges for grinding of flat to DIN 6535 form HE on straight shank

from quantity	gross additional charges per item depending on shank diameter (mm)							
	6,00	8,00	10,00	12,00	14,00	16,00	18,00	20,00
3	●	●	●	●	●	●	●	●
10	●	●	●	●	●	●	●	●
20	●	●	●	●	●	●	●	●
30	●	●	●	●	●	●	●	●
50	●	●	●	●	●	●	●	●
100	●	●	●	●	●	●	●	●

Additional charges for intermediate sizes for high speed steel core drills

from quantity	gross additional charges per item depending on core drill diameter (mm) (calculated on the next size up diameter)
5	●
6	●
7	●
8	●
9	●
10	●
11	●
15	●
20	●

Additional charges for intermediate sizes for carbide core drills

from quantity	gross additional charges per item depending on core drill diameter (mm) (calculated on the next size up diameter)
3	●
4	●
5	●
6	●
7	●
8	●
9	●
10	●
11	●
15	●
20	●

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Quality control requirements for twist drills (not micro-precision

The QS principle encourages requests for inspection records or certificates of conformity to be supplied with ordered tools. We will gladly do this. But as the setting-up of inspection records is particularly time consuming and costly - special marking on a specified number of tools, the provision of measuring records, the entry of measured data in special forms - and we do not wish to incorporate these costs in our overhead costs, we have chosen to charge the prices below in relation to the quantity ordered. Surely you will appreciate this.

inspected number of items / inspection criteria	1	up to 3	up to 5	up to 10	up to 15	up to 20	up to 30	up to 50	up to 100
	net prices for the inspected number of items per inspection criteria								
drill diameter	●	●	●	●	●	●	●	●	●
tapering of diameter	●	●	●	●	●	●	●	●	●
shank diameter	●	●	●	●	●	●	●	●	●
driving tangs, knock-out tangs	●	●	●	●	●	●	●	●	●
taper shank	●	●	●	●	●	●	●	●	●
concentricity tolerance	●	●	●	●	●	●	●	●	●
web thickness	●	●	●	●	●	●	●	●	●
land width	●	●	●	●	●	●	●	●	●
difference in height of cutting edge	●	●	●	●	●	●	●	●	●
total pitch deviation	●	●	●	●	●	●	●	●	●
point angle	●	●	●	●	●	●	●	●	●
side rake angle	●	●	●	●	●	●	●	●	●
clearance angle	●	●	●	●	●	●	●	●	●
point grinds	●	●	●	●	●	●	●	●	●
chisel edge	●	●	●	●	●	●	●	●	●
optical	●	●	●	●	●	●	●	●	●
marking of inspected tools	●	●	●	●	●	●	●	●	●
	net prices for the inspected number of items for all inspection criteria								
	●	●	●	●	●	●	●	●	●
	plus cost of inspection report								
total price	●	●	●	●	●	●	●	●	●

Quality control requirements for micro-precision drills

inspected number of items / inspection criteria	1	up to 3	up to 5	up to 10	up to 15	up to 20	up to 30	up to 50	up to 100
	net prices for the inspected number of items per inspection criteria								
total length	●	●	●	●	●	●	●	●	●
step length	●	●	●	●	●	●	●	●	●
coaxiality	●	●	●	●	●	●	●	●	●
shank diameter	●	●	●	●	●	●	●	●	●
land width	●	●	●	●	●	●	●	●	●
web thickness	●	●	●	●	●	●	●	●	●
point angle	●	●	●	●	●	●	●	●	●
clearance angle	●	●	●	●	●	●	●	●	●
optical	●	●	●	●	●	●	●	●	●
marking of inspected tools	●	●	●	●	●	●	●	●	●
	net prices for the inspected number of items for all inspection criteria								
	●	●	●	●	●	●	●	●	●
	plus cost of inspection report								
total price	●	●	●	●	●	●	●	●	●

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Quality control requirements for step drills

inspected number of items / inspection criteria	1	up to 3	up to 5	up to 10	up to 15	up to 20	up to 30	up to 50	up to 100
	net prices for the inspected number of items per inspection criteria								
total length	●	●	●	●	●	●	●	●	●
step length	●	●	●	●	●	●	●	●	●
drill and step diameter	●	●	●	●	●	●	●	●	●
shank diameter	●	●	●	●	●	●	●	●	●
concentricity tolerance	●	●	●	●	●	●	●	●	●
tapering of diameter	●	●	●	●	●	●	●	●	●
land width	●	●	●	●	●	●	●	●	●
point angle	●	●	●	●	●	●	●	●	●
major angle	●	●	●	●	●	●	●	●	●
clearance angle	●	●	●	●	●	●	●	●	●
point grind	●	●	●	●	●	●	●	●	●
coaxiality	●	●	●	●	●	●	●	●	●
optical	●	●	●	●	●	●	●	●	●
marking of inspected tools	●	●	●	●	●	●	●	●	●

	net prices for the inspected number of items for all inspection criteria								
	●	●	●	●	●	●	●	●	●
	plus cost of inspection report								
total price	●	●	●	●	●	●	●	●	●

Quality control requirements for centre drills

inspected number of items / inspection criteria	1	up to 3	up to 5	up to 10	up to 15	up to 20	up to 30	up to 50	up to 100
	net prices for the inspected number of items per inspection criteria								
total length/drill length	●	●	●	●	●	●	●	●	●
shank diameter	●	●	●	●	●	●	●	●	●
drill diameter	●	●	●	●	●	●	●	●	●
chamfer angle/radius	●	●	●	●	●	●	●	●	●
rake angle	●	●	●	●	●	●	●	●	●
clearance angle	●	●	●	●	●	●	●	●	●
optical	●	●	●	●	●	●	●	●	●
marking of inspected tools	●	●	●	●	●	●	●	●	●

	net prices for the inspected number of items for all inspection criteria								
	●	●	●	●	●	●	●	●	●
	plus cost of inspection report								
total price	●	●	●	●	●	●	●	●	●

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Quality control requirements for core drills

inspected number of items / inspection criteria	1	up to 3	up to 5	up to 10	up to 15	up to 20	up to 30	up to 50	up to 100
	net prices for the inspected number of items per inspection criteria								
drill diameter	●	●	●	●	●	●	●	●	●
shank diameter	●	●	●	●	●	●	●	●	●
taper shank	●	●	●	●	●	●	●	●	●
total length/flute length	●	●	●	●	●	●	●	●	●
pitch	●	●	●	●	●	●	●	●	●
rake angle	●	●	●	●	●	●	●	●	●
clearance angle	●	●	●	●	●	●	●	●	●
chamfer lead	●	●	●	●	●	●	●	●	●
optical	●	●	●	●	●	●	●	●	●
marking of inspected tools	●	●	●	●	●	●	●	●	●

	net prices for the inspected number of items for all inspection criteria								
	●	●	●	●	●	●	●	●	●
	plus cost of inspection report								
total price	●	●	●	●	●	●	●	●	●

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