



Tool material

Solid Carbide

Surface

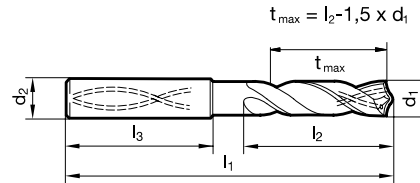


P	Steel	★
M	Stainless steel	○
K	Cast iron	○
N	Aluminum	
S	Titanium alloys	○
H	Hardened steel	○

- = Optimal
○ = Limited

relieved cone • main cutting edge form concave • optimized cutting geometry • maximum performance • double margin

structural and case hardened steels • free-cutting steels, heat treatable steels • steels (alloyed/unalloyed) up to 1400 N/mm²



For L3 dimensions per DIN 6537, please see page 468
Speeds and feeds information on pg. 568

Diameter (d ₁)			d ₂	l ₁	t _{max}	l ₂	EDP #
inch	wire/ltr	mm	mm	mm	mm	mm	
0.1181		3.00	6.00	70.00	25.50	30.00	9054990030000
0.1220		3.10	6.00	70.00	25.35	30.00	9054990031000
0.1248	1/8	3.17	6.00	70.00	25.25	30.00	9054990031700
0.1260		3.20	6.00	70.00	25.20	30.00	9054990032000
0.1280		3.25	6.00	70.00	25.13	30.00	9054990032500
0.1299		3.30	6.00	70.00	25.05	30.00	9054990033000
0.1339		3.40	6.00	75.00	30.40	35.50	9054990034000
0.1378		3.50	6.00	75.00	30.25	35.50	9054990035000
0.1406	9/64 #28	3.57	6.00	75.00	30.15	35.50	9054990035700
0.1417		3.60	6.00	75.00	30.10	35.50	9054990036000
0.1457		3.70	6.00	75.00	29.95	35.50	9054990037000
0.1496	#25	3.80	6.00	75.00	31.80	37.50	9054990038000
0.1535		3.90	6.00	75.00	31.65	37.50	9054990039000
0.1563	5/32	3.97	6.00	75.00	31.55	37.50	9054990039700
0.1575		4.00	6.00	75.00	31.50	37.50	9054990040000
0.1591	#21	4.04	6.00	75.00	31.44	37.50	9054990040400
0.1614		4.10	6.00	75.00	31.35	37.50	9054990041000
0.1654		4.20	6.00	75.00	31.20	37.50	9054990042000
0.1693	#18	4.30	6.00	85.00	38.55	45.00	9054990043000
0.1720	11/64	4.37	6.00	85.00	38.45	45.00	9054990043700
0.1732		4.40	6.00	85.00	38.40	45.00	9054990044000
0.1772	#16	4.50	6.00	85.00	38.25	45.00	9054990045000
0.1811		4.60	6.00	85.00	38.10	45.00	9054990046000
0.1831		4.65	6.00	85.00	38.03	45.00	9054990046500
0.1850	#13	4.70	6.00	85.00	37.95	45.00	9054990047000
0.1874	3/16	4.76	6.00	90.00	42.86	50.00	9054990047600
0.1890	#12	4.80	6.00	90.00	42.80	50.00	9054990048000
0.1929		4.90	6.00	90.00	42.65	50.00	9054990049000
0.1969		5.00	6.00	90.00	42.50	50.00	9054990050000
0.2008		5.10	6.00	90.00	42.35	50.00	9054990051000
0.2012	#7	5.11	6.00	90.00	42.34	50.00	9054990051100
0.2031	13/64	5.16	6.00	90.00	42.26	50.00	9054990051600
0.2047		5.20	6.00	90.00	42.20	50.00	9054990052000
0.2087		5.30	6.00	90.00	42.05	50.00	9054990053000
0.2126		5.40	6.00	97.00	48.90	57.00	9054990054000
0.2130	#3	5.41	6.00	97.00	48.89	57.00	9054990054100
0.2165		5.50	6.00	97.00	48.75	57.00	9054990055000
0.2185		5.55	6.00	97.00	48.68	57.00	9054990055500
0.2189	7/32	5.56	6.00	97.00	48.66	57.00	9054990055600
0.2205		5.60	6.00	97.00	48.60	57.00	9054990056000
0.2244		5.70	6.00	97.00	48.45	57.00	9054990057000
0.2283		5.80	6.00	97.00	48.30	57.00	9054990058000

Diameter (d ₁)			d ₂	l ₁	t _{max}	l ₂	EDP #
inch	wire/ltr	mm	mm	mm	mm	mm	
0.2323		5.90	6.00	97.00	48.15	57.00	9054990059000
0.2343	15/64	5.95	6.00	97.00	48.08	57.00	9054990059500
0.2362		6.00	6.00	97.00	48.00	57.00	9054990060000
0.2402		6.10	8.00	106.00	56.85	66.00	9054990061000
0.2441		6.20	8.00	106.00	56.70	66.00	9054990062000
0.2480		6.30	8.00	106.00	56.55	66.00	9054990063000
0.2500	1/4 E	6.35	8.00	106.00	56.48	66.00	9054990063500
0.2520		6.40	8.00	106.00	56.40	66.00	9054990064000
0.2559		6.50	8.00	106.00	56.25	66.00	9054990065000
0.2571	F	6.53	8.00	106.00	56.21	66.00	9054990065300
0.2579		6.55	8.00	106.00	56.18	66.00	9054990065500
0.2598		6.60	8.00	106.00	56.10	66.00	9054990066000
0.2638		6.70	8.00	106.00	55.95	66.00	9054990067000
0.2657	17/64 H	6.75	8.00	106.00	55.88	66.00	9054990067500
0.2677		6.80	8.00	106.00	55.80	66.00	9054990068000
0.2717	I	6.90	8.00	116.00	65.65	76.00	9054990069000
0.2756		7.00	8.00	116.00	65.50	76.00	9054990070000
0.2795		7.10	8.00	116.00	65.35	76.00	9054990071000
0.2811	9/32 K	7.14	8.00	116.00	65.29	76.00	9054990071400
0.2835		7.20	8.00	116.00	65.20	76.00	9054990072000
0.2874		7.30	8.00	116.00	65.05	76.00	9054990073000
0.2913		7.40	8.00	116.00	64.90	76.00	9054990074000
0.2953		7.50	8.00	116.00	64.75	76.00	9054990075000
0.2969	19/64	7.54	8.00	116.00	64.69	76.00	9054990075400
0.2992		7.60	8.00	116.00	64.60	76.00	9054990076000
0.3031		7.70	8.00	116.00	64.45	76.00	9054990077000
0.3071		7.80	8.00	116.00	64.30	76.00	9054990078000
0.3110		7.90	8.00	116.00	64.15	76.00	9054990079000
0.3126	5/16	7.94	8.00	116.00	64.09	76.00	9054990079400
0.3150		8.00	8.00	116.00	64.00	76.00	9054990080000
0.3189		8.10	10.00	131.00	74.85	87.00	9054990081000
0.3228	P	8.20	10.00	131.00	74.70	87.00	9054990082000
0.3268		8.30	10.00	131.00	74.55	87.00	9054990083000
0.3280	21/64	8.33	10.00	131.00	74.51	87.00	9054990083300
0.3307		8.40	10.00	131.00	74.40	87.00	9054990084000
0.3346		8.50	10.00	131.00	74.25	87.00	9054990085000
0.3386		8.60	10.00	131.00	74.10	87.00	9054990086000
0.3425		8.70	10.00	131.00	73.95	87.00	9054990087000
0.3437	11/32	8.73	10.00	131.00	73.91	87.00	9054990087300
0.3465		8.80	10.00	131.00	73.80	87.00	9054990088000
0.3504		8.90	10.00	131.00	73.65	87.00	9054990089000
0.3543		9.00	10.00	131.00	73.50	87.00	9054990090000

Diameter (d ₁)			d2	l ₁	t _{max}	l ₂	EDP #
inch	wire/ltr	mm	mm	mm	mm	mm	
0.3583	23/64	9.10	10.00	139.00	81.35	95.00	9054990091000
0.3594		9.13	10.00	139.00	81.31	95.00	9054990091300
0.3622		9.20	10.00	139.00	81.20	95.00	9054990092000
0.3642		9.25	10.00	139.00	81.13	95.00	9054990092500
0.3661	U	9.30	10.00	139.00	81.05	95.00	9054990093000
0.3677		9.34	10.00	139.00	80.99	95.00	9054990093400
0.3701		9.40	10.00	139.00	80.90	95.00	9054990094000
0.3740	3/8	9.50	10.00	139.00	80.75	95.00	9054990095000
0.3748		9.52	10.00	139.00	80.72	95.00	9054990095200
0.3780		9.60	10.00	139.00	80.60	95.00	9054990096000
0.3819	W	9.70	10.00	139.00	80.45	95.00	9054990097000
0.3858		9.80	10.00	139.00	80.30	95.00	9054990098000
0.3898		9.90	10.00	139.00	80.15	95.00	9054990099000
0.3906	25/64	9.92	10.00	139.00	80.12	95.00	9054990099200
0.3937		10.00	10.00	139.00	80.00	95.00	9054990100000
0.3976	13/32	10.10	12.00	155.00	90.85	106.00	9054990101000
0.4016		10.20	12.00	155.00	90.70	106.00	9054990102000
0.4055		10.30	12.00	155.00	90.55	106.00	9054990103000
0.4063		10.32	12.00	155.00	90.52	106.00	9054990103200
0.4094		10.40	12.00	155.00	90.40	106.00	9054990104000
0.4134		10.50	12.00	155.00	90.25	106.00	9054990105000
0.4173		10.60	12.00	155.00	90.10	106.00	9054990106000
0.4213	27/64	10.70	12.00	155.00	89.95	106.00	9054990107000
0.4220		10.72	12.00	155.00	89.92	106.00	9054990107200
0.4252		10.80	12.00	155.00	89.80	106.00	9054990108000
0.4291		10.90	12.00	155.00	89.65	106.00	9054990109000
0.4331	7/16	11.00	12.00	155.00	89.50	106.00	9054990110000
0.4370		11.10	12.00	163.00	97.35	114.00	9054990111000
0.4374		11.11	12.00	163.00	97.34	114.00	9054990111100
0.4409		11.20	12.00	163.00	97.20	114.00	9054990112000
0.4449	29/64	11.30	12.00	163.00	97.05	114.00	9054990113000
0.4488		11.40	12.00	163.00	96.90	114.00	9054990114000
0.4528		11.50	12.00	163.00	96.75	114.00	9054990115000
0.4531		11.51	12.00	163.00	96.74	114.00	9054990115100
0.4567	15/32	11.60	12.00	163.00	96.60	114.00	9054990116000
0.4606		11.70	12.00	163.00	96.45	114.00	9054990117000
0.4646		11.80	12.00	163.00	96.30	114.00	9054990118000
0.4685		11.90	12.00	163.00	96.15	114.00	9054990119000
0.4689	31/64	11.91	12.00	163.00	96.14	114.00	9054990119100
0.4724		12.00	12.00	163.00	96.00	114.00	9054990120000
0.4764		12.10	14.00	182.00	114.85	133.00	9054990121000
0.4803		12.20	14.00	182.00	114.70	133.00	9054990122000
0.4843		12.30	14.00	182.00	114.55	133.00	9054990123000
0.4882		12.40	14.00	182.00	114.40	133.00	9054990124000

Diameter (d ₁)			d2	l ₁	t _{max}	l ₂	EDP #
inch	wire/ltr	mm	mm	mm	mm	mm	
0.4921	1/2	12.50	14.00	182.00	114.25	133.00	9054990125000
0.4961		12.60	14.00	182.00	114.10	133.00	9054990126000
0.5000		12.70	14.00	182.00	113.95	133.00	9054990127000
0.5039		12.80	14.00	182.00	113.80	133.00	9054990128000
0.5079	33/64	12.90	14.00	182.00	113.65	133.00	9054990129000
0.5118		13.00	14.00	182.00	113.50	133.00	9054990130000
0.5157		13.10	14.00	182.00	113.35	133.00	9054990131000
0.5311		17/32	13.49	14.00	182.00	112.77	133.00
0.5315	35/64	13.50	14.00	182.00	112.75	133.00	9054990135000
0.5394		13.70	14.00	182.00	112.45	133.00	9054990137000
0.5469		13.89	14.00	182.00	112.17	133.00	9054990138900
0.5512		14.00	14.00	182.00	112.00	133.00	9054990140000
0.5551	9/16	14.10	16.00	204.00	130.85	152.00	9054990141000
0.5591		14.20	16.00	204.00	130.70	152.00	9054990142000
0.5626		14.29	16.00	204.00	130.57	152.00	9054990142900
0.5630		14.30	16.00	204.00	130.55	152.00	9054990143000
0.5709		14.50	16.00	204.00	130.25	152.00	9054990145000
0.5787		14.70	16.00	204.00	129.95	152.00	9054990147000
0.5827		14.80	16.00	204.00	129.80	152.00	9054990148000
0.5906		15.00	16.00	204.00	129.50	152.00	9054990150000
0.5945	39/64	15.10	16.00	204.00	129.35	152.00	9054990151000
0.6024		15.30	16.00	204.00	129.05	152.00	9054990153000
0.6094		15.48	16.00	204.00	128.78	152.00	9054990154800
0.6102		15.50	16.00	204.00	128.75	152.00	9054990155000
0.6181	5/8	15.70	16.00	204.00	128.45	152.00	9054990157000
0.6220		15.80	16.00	204.00	128.30	152.00	9054990158000
0.6248		15.87	16.00	204.00	128.20	152.00	9054990158700
0.6299		16.00	16.00	204.00	128.00	152.00	9054990160000
0.6417		16.30	18.00	223.00	146.55	171.00	9054990163000
0.6496		16.50	18.00	223.00	146.25	171.00	9054990165000
0.6575		16.70	18.00	223.00	145.95	171.00	9054990167000
0.6654		16.90	18.00	223.00	145.65	171.00	9054990169000
0.6693		17.00	18.00	223.00	145.50	171.00	9054990170000
0.6890		17.50	18.00	223.00	144.75	171.00	9054990175000
0.6969		17.70	18.00	223.00	144.45	171.00	9054990177000
0.7087		18.00	18.00	223.00	144.00	171.00	9054990180000
0.7283	3/4	18.50	20.00	244.00	162.25	190.00	9054990185000
0.7441		18.90	20.00	244.00	161.65	190.00	9054990189000
0.7480		19.00	20.00	244.00	161.50	190.00	9054990190000
0.7500		19.05	20.00	244.00	161.43	190.00	9054990190500
0.7677		19.50	20.00	244.00	160.75	190.00	9054990195000
0.7795		19.80	20.00	244.00	160.30	190.00	9054990198000
0.7874		20.00	20.00	244.00	160.00	190.00	9054990200000

Series 5499

Material group	Hardness		SFM	Feed Rate - IPR					
	HRC	BHN		1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm
Common structural steels	-	≤ 150	590	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	< 32	< 301	590	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
Free-cutting steels	≤ 25	≤ 255	590	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	< 32	< 301	590	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
Unalloyed heat-treatable steels	≤ 20	≤ 220	525	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	≤ 25	≤ 255	460	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	< 32	< 301	395	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
Alloyed heat-treatable steels	≤ 32	≤ 301	360	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	< 43	< 402	360	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
Unalloyed case hardened steels	< 25	< 255	525	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
Alloyed case hardened steels	≤ 32	≤ 301	360	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	< 43	< 402	330	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
Nitriding steels	≤ 32	≤ 301	330	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
	< 43	< 402	295	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
Tool steels	≤ 25	≤ 255	260	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
	< 43	< 402	195	0.0040	0.0065	0.0100	0.0100	0.0125	0.0155
High speed steels	< 43	< 402	180	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
Spring steels	< 38	< 354	180	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
Hardened steels	≤ 48	≤ 460	150	0.0020	0.0030	0.0050	0.0050	0.0065	0.0080
	< 66	-	-	-	-	-	-	-	-
Stainless steels, sulphured austenitic martensitic	≤ 28	≤ 273	230	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
	≤ 36	≤ 337	-	-	-	-	-	-	-
	< 46	< 435	165	0.0030	0.0050	0.0080	0.0080	0.0100	0.0125
Cast iron	≤ 23	≤ 242	540	0.0065	0.0125	0.0155	0.0195	0.0250	0.0250
	< 38	< 354	475	0.0065	0.0125	0.0155	0.0195	0.0250	0.0250
Spheroidal graphite iron and malleable cast iron	≤ 23	≤ 242	425	0.0065	0.0125	0.0155	0.0195	0.0250	0.0250
	< 38	< 354	425	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
Chilled cast iron	≤ 38	≤ 354	-	-	-	-	-	-	-
New cast materials GGV	≤ 20	≤ 220	425	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
	< 32	< 301	425	0.0065	0.0100	0.0155	0.0155	0.0195	0.0250
New cast materials ADI	≤ 32	≤ 301	230	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
	< 43	< 402	230	0.0050	0.0080	0.0125	0.0125	0.0155	0.0195
Special alloys	< 54	< 549	80	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
Ti and Ti-alloys	≤ 25	≤ 255	115	0.0025	0.0040	0.0065	0.0065	0.0080	0.0100
	< 43	< 402	100	0.0020	0.0030	0.0050	0.0050	0.0065	0.0080
Aluminium and Al-alloys	-	< 120	-	-	-	-	-	-	-
Al wrought alloys	-	< 200	-	-	-	-	-	-	-
Al cast alloys ≤ 10 % Si ≤ 24 % Si	-	≤ 180	-	-	-	-	-	-	-
	-	< 180	-	-	-	-	-	-	-
Magnesium alloys	-	< 120	-	-	-	-	-	-	-
Copper, low-alloyed	-	< 150	-	-	-	-	-	-	-
Brass, short-chipping long-chipping	-	≤ 180	-	-	-	-	-	-	-
	-	< 180	-	-	-	-	-	-	-
Bronze, short-chipping	-	≤ 180	-	-	-	-	-	-	-
	< 25	< 255	-	-	-	-	-	-	-
Bronze, long-chipping	≤ 25	≤ 255	-	-	-	-	-	-	-
	< 32	< 301	-	-	-	-	-	-	-
Duroplastics Thermoplastics Reinforced plastics - Kevlar Reinforced plastics - GFK / CFK	-	-	-	-	-	-	-	-	-