

3xD



External Coolant



Straight Shank

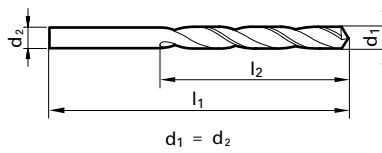
Speeds & Feeds
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Series 329

Heavy Duty

Cobalt, Heavy Duty (Type GV120), stub length, 130° point, Form A web thinned
>2.36mm dia., standard straight shank, RH helix

Cut / Shank Dia. = h8 tolerance range



Application Materials:

-  Universal Steels
-  Stainless Steels
-  Hardened Materials

Twist Drills

Diameter (d1)		Wire / letter	mm	l1 mm	l2 mm	EDP #
Dec. inch	Fract. inch					
0.0157	1/64		0.400	19.00	2.50	9003290004000
0.0197			0.500	20.00	3.00	9003290005000
0.0201		76	0.510	20.00	3.00	9003290005100
0.0217			0.550	21.00	3.50	9003290005500
0.0224		74	0.570	21.00	3.50	9003290005700
0.0236			0.600	21.00	3.50	9003290006000
0.0240		73	0.610	22.00	4.00	9003290006100
0.0252		72	0.640	22.00	4.00	9003290006400
0.0256			0.650	22.00	4.00	9003290006500
0.0276			0.700	23.00	4.50	9003290007000
0.0287			0.730	23.00	4.50	9003290007300
0.0291		69	0.740	23.00	4.50	9003290007400
0.0295			0.750	23.00	4.50	9003290007500
0.0311	1/32	68	0.790	24.00	5.00	9003290007900
0.0315			0.800	24.00	5.00	9003290008000
0.0319		67	0.810	24.00	5.00	9003290008100
0.0323			0.820	24.00	5.00	9003290008200
0.0331		66	0.840	24.00	5.00	9003290008400
0.0335			0.850	24.00	5.00	9003290008500
0.0343			0.870	25.00	5.50	9003290008700
0.0354			0.900	25.00	5.50	9003290009000
0.0358		64	0.910	25.00	5.50	9003290009100
0.0370		63	0.940	25.00	5.50	9003290009400
0.0374			0.950	25.00	5.50	9003290009500
0.0382		62	0.970	26.00	6.00	9003290009700
0.0390		61	0.990	26.00	6.00	9003290009900
0.0394			1.000	26.00	6.00	9003290010000
0.0402		60	1.020	26.00	6.00	9003290010200
0.0413			1.050	26.00	6.00	9003290010500
0.0417			1.060	26.00	6.00	9003290010600
0.0421		58	1.070	28.00	7.00	9003290010700
0.0429		57	1.090	28.00	7.00	9003290010900
0.0433			1.100	28.00	7.00	9003290011000
0.0453			1.150	28.00	7.00	9003290011500
0.0465		56	1.180	28.00	7.00	9003290011800
0.0469	3/64		1.190	28.00	7.00	9003290011900
0.0472			1.200	28.00	7.00	9003290012000
0.0484			1.230	28.00	7.00	9003290012300
0.0492			1.250	28.00	7.00	9003290012500
0.0504			1.280	28.00	7.00	9003290012800
0.0512			1.300	28.00	7.00	9003290013000
0.0520		55	1.320	28.00	7.00	9003290013200
0.0524			1.330	32.00	9.00	9003290013300
0.0531			1.350	32.00	9.00	9003290013500
0.0551		54	1.400	32.00	9.00	9003290014000
0.0571			1.450	32.00	9.00	9003290014500
0.0579			1.470	32.00	9.00	9003290014700
0.0591			1.500	32.00	9.00	9003290015000
0.0594		53	1.510	34.00	10.00	9003290015100
0.0610			1.550	34.00	10.00	9003290015500
0.0618			1.570	34.00	10.00	9003290015700
0.0626	1/16		1.590	34.00	10.00	9003290015900
0.0630			1.600	34.00	10.00	9003290016000
0.0634		52	1.610	34.00	10.00	9003290016100

Diameter (d1)		Wire / letter	mm	l1 mm	l2 mm	EDP #
Dec. inch	Fract. inch					
0.0650			1.650	34.00	10.00	9003290016500
0.0669		51	1.700	34.00	10.00	9003290017000
0.0681			1.730	36.00	11.00	9003290017300
0.0689			1.750	36.00	11.00	9003290017500
0.0701		50	1.780	36.00	11.00	9003290017800
0.0709			1.800	36.00	11.00	9003290018000
0.0717			1.820	36.00	11.00	9003290018200
0.0728		49	1.850	36.00	11.00	9003290018500
0.0748			1.900	36.00	11.00	9003290019000
0.0760		48	1.930	38.00	12.00	9003290019300
0.0768			1.950	38.00	12.00	9003290019500
0.0776			1.970	38.00	12.00	9003290019700
0.0780	5/64		1.980	38.00	12.00	9003290019800
0.0783		47	1.990	38.00	12.00	9003290019900
0.0787			2.000	38.00	12.00	9003290020000
0.0799			2.030	38.00	12.00	9003290020300
0.0811		46	2.060	38.00	12.00	9003290020600
0.0819		45	2.080	38.00	12.00	9003290020800
0.0827			2.100	38.00	12.00	9003290021000
0.0846			2.150	40.00	13.00	9003290021500
0.0858		44	2.180	40.00	13.00	9003290021800
0.0866			2.200	40.00	13.00	9003290022000
0.0886			2.250	40.00	13.00	9003290022500
0.0890		43	2.260	40.00	13.00	9003290022600
0.0906			2.300	40.00	13.00	9003290023000
0.0913			2.320	40.00	13.00	9003290023200
0.0925			2.350	40.00	13.00	9003290023500
0.0929			2.360	40.00	13.00	9003290023600
0.0933		42	2.370	43.00	14.00	9003290023700
0.0937	3/32		2.380	43.00	14.00	9003290023800
0.0945			2.400	43.00	14.00	9003290024000
0.0953			2.420	43.00	14.00	9003290024200
0.0961		41	2.440	43.00	14.00	9003290024400
0.0965			2.450	43.00	14.00	9003290024500
0.0972			2.470	43.00	14.00	9003290024700
0.0980		40	2.490	43.00	14.00	9003290024900
0.0984			2.500	43.00	14.00	9003290025000
0.0996		39	2.530	43.00	14.00	9003290025300
0.1004			2.550	43.00	14.00	9003290025500
0.1016		38	2.580	43.00	14.00	9003290025800
0.1024			2.600	43.00	14.00	9003290026000
0.1039		37	2.640	43.00	14.00	9003290026400
0.1043			2.650	43.00	14.00	9003290026500
0.1063			2.700	46.00	16.00	9003290027000
0.1067		36	2.710	46.00	16.00	9003290027100
0.1083			2.750	46.00	16.00	9003290027500
0.1094	7/64		2.780	46.00	16.00	9003290027800
0.1098		35	2.790	46.00	16.00	9003290027900
0.1102			2.800	46.00	16.00	9003290028000
0.1110		34	2.820	46.00	16.00	9003290028200
0.1130		33	2.870	46.00	16.00	9003290028700
0.1142			2.900	46.00	16.00	9003290029000
0.1161		32	2.950	46.00	16.00	9003290029500
0.1181			3.000	46.00	16.00	9003290030000

*Items listed in red are non-stocked items, and may take 2 - 6 weeks to receive

Series 329

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Dec. inch	Diameter (d1)		l1 mm	l2 mm	EDP #	
	Fract. inch	Wire / letter				
0.1189			3.020	49.00	18.00	9003290030200
0.1201		31	3.050	49.00	18.00	9003290030500
0.1220			3.100	49.00	18.00	9003290031000
0.1240			3.150	49.00	18.00	9003290031500
0.1248	1/8		3.170	49.00	18.00	9003290031700
0.1260			3.200	49.00	18.00	9003290032000
0.1280			3.250	49.00	18.00	9003290032500
0.1283		30	3.260	49.00	18.00	9003290032600
0.1299			3.300	49.00	18.00	9003290033000
0.1339			3.400	52.00	20.00	9003290034000
0.1358		29	3.450	52.00	20.00	9003290034500
0.1378			3.500	52.00	20.00	9003290035000
0.1398			3.550	52.00	20.00	9003290035500
0.1406	9/64	28	3.570	52.00	20.00	9003290035700
0.1417			3.600	52.00	20.00	9003290036000
0.1441		27	3.660	52.00	20.00	9003290036600
0.1457			3.700	52.00	20.00	9003290037000
0.1469		26	3.730	52.00	20.00	9003290037300
0.1476			3.750	52.00	20.00	9003290037500
0.1496		25	3.800	55.00	22.00	9003290038000
0.1516			3.850	55.00	22.00	9003290038500
0.1520		24	3.860	55.00	22.00	9003290038600
0.1535			3.900	55.00	22.00	9003290039000
0.1539		23	3.910	55.00	22.00	9003290039100
0.1543			3.920	55.00	22.00	9003290039200
0.1555			3.950	55.00	22.00	9003290039500
0.1563	5/32		3.970	55.00	22.00	9003290039700
0.1571		22	3.990	55.00	22.00	9003290039900
0.1575			4.000	55.00	22.00	9003290040000
0.1591		21	4.040	55.00	22.00	9003290040400
0.1594			4.050	55.00	22.00	9003290040500
0.1610		20	4.090	55.00	22.00	9003290040900
0.1614			4.100	55.00	22.00	9003290041000
0.1634			4.150	55.00	22.00	9003290041500
0.1654			4.200	55.00	22.00	9003290042000
0.1661		19	4.220	55.00	22.00	9003290042200
0.1673			4.250	55.00	22.00	9003290042500
0.1693		18	4.300	58.00	24.00	9003290043000
0.1720	11/64		4.370	58.00	24.00	9003290043700
0.1728		17	4.390	58.00	24.00	9003290043900
0.1732			4.400	58.00	24.00	9003290044000
0.1752			4.450	58.00	24.00	9003290044500
0.1772		16	4.500	58.00	24.00	9003290045000
0.1799		15	4.570	58.00	24.00	9003290045700
0.1811			4.600	58.00	24.00	9003290046000
0.1819		14	4.620	58.00	24.00	9003290046200
0.1831			4.650	58.00	24.00	9003290046500
0.1850		13	4.700	58.00	24.00	9003290047000
0.1870			4.750	58.00	24.00	9003290047500
0.1874	3/16		4.760	62.00	26.00	9003290047600
0.1890		12	4.800	62.00	26.00	9003290048000
0.1909		11	4.850	62.00	26.00	9003290048500
0.1929			4.900	62.00	26.00	9003290049000
0.1937		10	4.920	62.00	26.00	9003290049200
0.1949			4.950	62.00	26.00	9003290049500
0.1961		9	4.980	62.00	26.00	9003290049800
0.1969			5.000	62.00	26.00	9003290050000
0.1992		8	5.060	62.00	26.00	9003290050600
0.2008			5.100	62.00	26.00	9003290051000
0.2012		7	5.110	62.00	26.00	9003290051100
0.2028			5.150	62.00	26.00	9003290051500
0.2031	13/64		5.160	62.00	26.00	9003290051600
0.2039		6	5.180	62.00	26.00	9003290051800
0.2047			5.200	62.00	26.00	9003290052000
0.2055		5	5.220	62.00	26.00	9003290052200
0.2067			5.250	62.00	26.00	9003290052500
0.2087			5.300	62.00	26.00	9003290053000
0.2091		4	5.310	66.00	28.00	9003290053100
0.2106			5.350	66.00	28.00	9003290053500
0.2126			5.400	66.00	28.00	9003290054000

Dec. inch	Diameter (d1)		l1 mm	l2 mm	EDP #	
	Fract. inch	Wire / letter				
0.2130		3	5.410	66.00	28.00	9003290054100
0.2146			5.450	66.00	28.00	9003290054500
0.2165			5.500	66.00	28.00	9003290055000
0.2185			5.550	66.00	28.00	9003290055500
0.2189	7/32		5.560	66.00	28.00	9003290055600
0.2205			5.600	66.00	28.00	9003290056000
0.2209		2	5.610	66.00	28.00	9003290056100
0.2244			5.700	66.00	28.00	9003290057000
0.2264			5.750	66.00	28.00	9003290057500
0.2280		1	5.790	66.00	28.00	9003290057900
0.2283			5.800	66.00	28.00	9003290058000
0.2303			5.850	66.00	28.00	9003290058500
0.2323			5.900	66.00	28.00	9003290059000
0.2343	15/64		5.950	66.00	28.00	9003290059500
0.2362			6.000	66.00	28.00	9003290060000
0.2378		B	6.040	70.00	31.00	9003290060400
0.2402			6.100	70.00	31.00	9003290061000
0.2421		C	6.150	70.00	31.00	9003290061500
0.2441			6.200	70.00	31.00	9003290062000
0.2461		D	6.250	70.00	31.00	9003290062500
0.2480			6.300	70.00	31.00	9003290063000
0.2488			6.320	70.00	31.00	9003290063200
0.2500	1/4	E	6.350	70.00	31.00	9003290063500
0.2520			6.400	70.00	31.00	9003290064000
0.2539			6.450	70.00	31.00	9003290064500
0.2559			6.500	70.00	31.00	9003290065000
0.2571		F	6.530	70.00	31.00	9003290065300
0.2598			6.600	70.00	31.00	9003290066000
0.2610		G	6.630	70.00	31.00	9003290066300
0.2638			6.700	70.00	31.00	9003290067000
0.2657	17/64	H	6.750	74.00	34.00	9003290067500
0.2677			6.800	74.00	34.00	9003290068000
0.2697			6.850	74.00	34.00	9003290068500
0.2717		I	6.900	74.00	34.00	9003290069000
0.2756			7.000	74.00	34.00	9003290070000
0.2768		J	7.030	74.00	34.00	9003290070300
0.2776			7.050	74.00	34.00	9003290070500
0.2795			7.100	74.00	34.00	9003290071000
0.2811	9/32	K	7.140	74.00	34.00	9003290071400
0.2835			7.200	74.00	34.00	9003290072000
0.2854			7.250	74.00	34.00	9003290072500
0.2874			7.300	74.00	34.00	9003290073000
0.2902		L	7.370	74.00	34.00	9003290073700
0.2913			7.400	74.00	34.00	9003290074000
0.2949		M	7.490	74.00	34.00	9003290074900
0.2953			7.500	74.00	34.00	9003290075000
0.2969	19/64		7.540	79.00	37.00	9003290075400
0.2992			7.600	79.00	37.00	9003290076000
0.3020		N	7.670	79.00	37.00	9003290076700
0.3031			7.700	79.00	37.00	9003290077000
0.3051			7.750	79.00	37.00	9003290077500
0.3071			7.800	79.00	37.00	9003290078000
0.3110			7.900	79.00	37.00	9003290079000
0.3126	5/16		7.940	79.00	37.00	9003290079400
0.3150			8.000	79.00	37.00	9003290080000
0.3161		O	8.030	79.00	37.00	9003290080300
0.3189			8.100	79.00	37.00	9003290081000
0.3209			8.150	79.00	37.00	9003290081500
0.3228		P	8.200	79.00	37.00	9003290082000
0.3248			8.250	79.00	37.00	9003290082500
0.3268			8.300	79.00	37.00	9003290083000
0.3280	21/64		8.330	79.00	37.00	9003290083300
0.3307			8.400	79.00	37.00	9003290084000
0.3319		Q	8.430	79.00	37.00	9003290084300
0.3346			8.500	79.00	37.00	9003290085000
0.3366			8.550	84.00	40.00	9003290085500
0.3386			8.600	84.00	40.00	9003290086000
0.3390		R	8.610	84.00	40.00	9003290086100
0.3425			8.700	84.00	40.00	9003290087000
0.3437	11/32		8.730	84.00	40.00	9003290087300

Series 329

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Twist Drills

Dec. inch	Diameter (d1)			I1 mm	I2 mm	EDP #
	Fract. inch	Wire / letter	mm			
0.3445			8.750	84.00	40.00	9003290087500
0.3465			8.800	84.00	40.00	9003290088000
0.3480		S	8.840	84.00	40.00	9003290088400
0.3504			8.900	84.00	40.00	9003290089000
0.3543			9.000	84.00	40.00	9003290090000
0.3563			9.050	84.00	40.00	9003290090500
0.3579		T	9.090	84.00	40.00	9003290090900
0.3583			9.100	84.00	40.00	9003290091000
0.3594	23/64		9.130	84.00	40.00	9003290091300
0.3622			9.200	84.00	40.00	9003290092000
0.3642			9.250	84.00	40.00	9003290092500
0.3661			9.300	84.00	40.00	9003290093000
0.3677		U	9.340	84.00	40.00	9003290093400
0.3701			9.400	84.00	40.00	9003290094000
0.3740			9.500	84.00	40.00	9003290095000
0.3748	3/8		9.520	89.00	43.00	9003290095200
0.3772		V	9.580	89.00	43.00	9003290095800
0.3780			9.600	89.00	43.00	9003290096000
0.3819			9.700	89.00	43.00	9003290097000
0.3839			9.750	89.00	43.00	9003290097500
0.3858		W	9.800	89.00	43.00	9003290098000
0.3898			9.900	89.00	43.00	9003290099000
0.3906	25/64		9.920	89.00	43.00	9003290099200
0.3937			10.000	89.00	43.00	9003290100000
0.3969		X	10.080	89.00	43.00	9003290100800
0.3976			10.100	89.00	43.00	9003290101000
0.4016			10.200	89.00	43.00	9003290102000
0.4039		Y	10.260	89.00	43.00	9003290102600
0.4055			10.300	89.00	43.00	9003290103000
0.4063	13/32		10.320	89.00	43.00	9003290103200
0.4094			10.400	89.00	43.00	9003290104000
0.4130		Z	10.490	89.00	43.00	9003290104900
0.4134			10.500	89.00	43.00	9003290105000
0.4173			10.600	89.00	43.00	9003290106000
0.4193			10.650	95.00	47.00	9003290106500
0.4220	27/64		10.720	95.00	47.00	9003290107200
0.4252			10.800	95.00	47.00	9003290108000
0.4291			10.900	95.00	47.00	9003290109000
0.4331			11.000	95.00	47.00	9003290110000
0.4370			11.100	95.00	47.00	9003290111000
0.4374	7/16		11.110	95.00	47.00	9003290111100
0.4409			11.200	95.00	47.00	9003290112000
0.4429			11.250	95.00	47.00	9003290112500
0.4449			11.300	95.00	47.00	9003290113000
0.4488			11.400	95.00	47.00	9003290114000
0.4528			11.500	95.00	47.00	9003290115000
0.4531	29/64		11.510	95.00	47.00	9003290115100
0.4567			11.600	95.00	47.00	9003290116000
0.4606			11.700	95.00	47.00	9003290117000
0.4646			11.800	95.00	47.00	9003290118000
0.4689	15/32		11.910	102.00	51.00	9003290119100
0.4724			12.000	102.00	51.00	9003290120000
0.4764			12.100	102.00	51.00	9003290121000
0.4803			12.200	102.00	51.00	9003290122000
0.4843	31/64		12.300	102.00	51.00	9003290123000
0.4882			12.400	102.00	51.00	9003290124000
0.4921			12.500	102.00	51.00	9003290125000
0.5000	1/2		12.700	102.00	51.00	9003290127000

Dec. inch	Diameter (d1)			I1 mm	I2 mm	EDP #
	Fract. inch	Wire / letter	mm			
0.5039			12.800	102.00	51.00	9003290128000
0.5079			12.900	102.00	51.00	9003290129000
0.5118			13.000	102.00	51.00	9003290130000
0.5157	33/64		13.100	102.00	51.00	9003290131000
0.5197			13.200	102.00	51.00	9003290132000
0.5311	17/32		13.490	107.00	54.00	9003290134900
0.5315			13.500	107.00	54.00	9003290135000
0.5413			13.750	107.00	54.00	9003290137500
0.5469	35/64		13.890	107.00	54.00	9003290138900
0.5512			14.000	107.00	54.00	9003290140000
0.5551			14.100	111.00	56.00	9003290141000
0.5626	9/16		14.290	111.00	56.00	9003290142900
0.5709			14.500	111.00	56.00	9003290145000
0.5780	37/64		14.680	111.00	56.00	9003290146800
0.5807			14.750	111.00	56.00	9003290147500
0.5906			15.000	111.00	56.00	9003290150000
0.5937	19/32		15.080	115.00	58.00	9003290150800
0.6004			15.250	115.00	58.00	9003290152500
0.6094	39/64		15.480	115.00	58.00	9003290154800
0.6102			15.500	115.00	58.00	9003290155000
0.6248	5/8		15.870	115.00	58.00	9003290158700
0.6299			16.000	115.00	58.00	9003290160000
0.6378			16.200	119.00	60.00	9003290162000
0.6406	41/64		16.270	119.00	60.00	9003290162700
0.6496			16.500	119.00	60.00	9003290165000
0.6563	21/32		16.670	119.00	60.00	9003290166700
0.6693			17.000	119.00	60.00	9003290170000
0.6720	43/64		17.070	123.00	62.00	9003290170700
0.6874	11/16		17.460	123.00	62.00	9003290174600
0.6890			17.500	123.00	62.00	9003290175000
0.7031	45/64		17.860	123.00	62.00	9003290178600
0.7087			18.000	123.00	62.00	9003290180000
0.7283			18.500	127.00	64.00	9003290185000
0.7343	47/64		18.650	127.00	64.00	9003290186500
0.7480			19.000	127.00	64.00	9003290190000
0.7500	3/4		19.050	131.00	66.00	9003290190500
0.7657	49/64		19.450	131.00	66.00	9003290194500
0.7677			19.500	131.00	66.00	9003290195000
0.7811	25/32		19.840	131.00	66.00	9003290198400
0.7874			20.000	131.00	66.00	9003290200000
0.7972			20.250	136.00	68.00	9003290202500
0.8071			20.500	136.00	68.00	9003290205000
0.8126	13/16		20.640	136.00	68.00	9003290206400
0.8268			21.000	136.00	68.00	9003290210000
0.8465			21.500	141.00	70.00	9003290215000
0.8661			22.000	141.00	70.00	9003290220000
0.8740			22.200	141.00	70.00	9003290222000
0.9055			23.000	146.00	72.00	9003290230000
0.9449			24.000	151.00	75.00	9003290240000
0.9646			24.500	151.00	75.00	9003290245000
0.9843	63/64		25.000	151.00	75.00	9003290250000
1.0000	1		25.400	156.00	78.00	9003290254000

Alternative Drill Series:

#659 Cobalt, GV120, 3xD, 130 pt, TiN
 #5524 Cobalt, GU500, 3xD, 118 pt, Bright

*Items listed in red are non-stocked items, and may take 2 - 6 weeks to receive