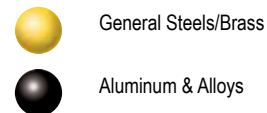


10xD

Series 219

Application Materials:



Bright Finish



External Coolant

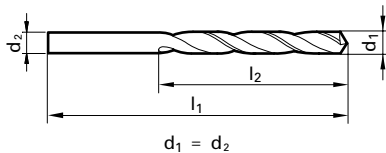


Straight Shank

High Helix

HSS, High Helix (Type W), taper length, 130° point, Form A web thinned
>14.0mm dia., standard straight shank, RH helix

Cut / Shank Dia. = h8 tolerance range



Speeds & Feeds
information pg 426

Dec. inch	Diameter (d1)		l1 mm	l2 mm	EDP #
	Fract. inch	Wire / letter			
0.0157	1/64		30.00	10.00	9002190004000
0.0197			32.00	12.00	9002190005000
0.0236			35.00	15.00	9002190006000
0.0256			38.00	18.00	9002190006500
0.0276			42.00	21.00	9002190007000
0.0291		69	42.00	21.00	9002190007400
0.0295			42.00	21.00	9002190007500
0.0315			46.00	25.00	9002190008000
0.0335			46.00	25.00	9002190008500
0.0354			51.00	29.00	9002190009000
0.0374			51.00	29.00	9002190009500
0.0394			56.00	33.00	9002190010000
0.0413			56.00	33.00	9002190010500
0.0433			60.00	37.00	9002190011000
0.0453			60.00	37.00	9002190011500
0.0472			65.00	41.00	9002190012000
0.0480			65.00	41.00	9002190012200
0.0492			65.00	41.00	9002190012500
0.0512			65.00	41.00	9002190013000
0.0531			70.00	45.00	9002190013500
0.0551		54	70.00	45.00	9002190014000
0.0571			70.00	45.00	9002190014500
0.0591			70.00	45.00	9002190015000
0.0610			76.00	50.00	9002190015500
0.0630			76.00	50.00	9002190016000
0.0650			76.00	50.00	9002190016500
0.0669		51	76.00	50.00	9002190017000
0.0689			80.00	53.00	9002190017500
0.0701		50	80.00	53.00	9002190017800
0.0709			80.00	53.00	9002190018000
0.0728		49	80.00	53.00	9002190018500
0.0748			80.00	53.00	9002190019000
0.0768			85.00	56.00	9002190019500
0.0780	5/64		85.00	56.00	9002190019800
0.0787			85.00	56.00	9002190020000
0.0807			85.00	56.00	9002190020500
0.0827			85.00	56.00	9002190021000
0.0846			90.00	59.00	9002190021500
0.0866			90.00	59.00	9002190022000
0.0886			90.00	59.00	9002190022500
0.0906			90.00	59.00	9002190023000
0.0925			90.00	59.00	9002190023500
0.0937	3/32		95.00	62.00	9002190023800
0.0945			95.00	62.00	9002190024000
0.0965			95.00	62.00	9002190024500
0.0984			95.00	62.00	9002190025000
0.1004			95.00	62.00	9002190025500
0.1024			95.00	62.00	9002190026000
0.1043			95.00	62.00	9002190026500
0.1063			100.00	66.00	9002190027000
0.1083			100.00	66.00	9002190027500
0.1102			100.00	66.00	9002190028000
0.1122			100.00	66.00	9002190028500
0.1142			100.00	66.00	9002190029000
0.1161		32	100.00	66.00	9002190029500

Dec. inch	Diameter (d1)		l1 mm	l2 mm	EDP #
	Fract. inch	Wire / letter			
0.1181			100.00	66.00	9002190030000
0.1220			106.00	69.00	9002190031000
0.1240			106.00	69.00	9002190031500
0.1248	1/8		106.00	69.00	9002190031700
0.1260			106.00	69.00	9002190032000
0.1280			106.00	69.00	9002190032500
0.1299			106.00	69.00	9002190033000
0.1319			106.00	69.00	9002190033500
0.1339			112.00	73.00	9002190034000
0.1358		29	112.00	73.00	9002190034500
0.1378			112.00	73.00	9002190035000
0.1398			112.00	73.00	9002190035500
0.1417			112.00	73.00	9002190036000
0.1437			112.00	73.00	9002190036500
0.1457			112.00	73.00	9002190037000
0.1476			112.00	73.00	9002190037500
0.1496		25	119.00	78.00	9002190038000
0.1535			119.00	78.00	9002190039000
0.1575			119.00	78.00	9002190040000
0.1614			119.00	78.00	9002190041000
0.1634			119.00	78.00	9002190041500
0.1654			119.00	78.00	9002190042000
0.1673			119.00	78.00	9002190042500
0.1693		18	126.00	82.00	9002190043000
0.1732			126.00	82.00	9002190044000
0.1772		16	126.00	82.00	9002190045000
0.1811			126.00	82.00	9002190046000
0.1850		13	126.00	82.00	9002190047000
0.1890		12	132.00	87.00	9002190048000
0.1929			132.00	87.00	9002190049000
0.1969			132.00	87.00	9002190050000
0.2008			132.00	87.00	9002190051000
0.2047			132.00	87.00	9002190052000
0.2087			132.00	87.00	9002190053000
0.2126			139.00	91.00	9002190054000
0.2165			139.00	91.00	9002190055000
0.2205			139.00	91.00	9002190056000
0.2244			139.00	91.00	9002190057000
0.2283			139.00	91.00	9002190058000
0.2323			139.00	91.00	9002190059000
0.2362			139.00	91.00	9002190060000
0.2402			148.00	97.00	9002190061000
0.2441			148.00	97.00	9002190062000
0.2461		D	148.00	97.00	9002190062500
0.2480			148.00	97.00	9002190063000
0.2520			148.00	97.00	9002190064000
0.2559			148.00	97.00	9002190065000
0.2598			148.00	97.00	9002190066000
0.2638			148.00	97.00	9002190067000
0.2677			156.00	102.00	9002190068000
0.2717		I	156.00	102.00	9002190069000
0.2756			156.00	102.00	9002190070000
0.2795			156.00	102.00	9002190071000
0.2835			156.00	102.00	9002190072000
0.2874			156.00	102.00	9002190073000

Series 219

Speeds & Feeds information pg 426

Dec. inch	Diameter (d1)		l1 mm	l2 mm	EDP #	
	Fract. inch	Wire / letter				
0.2913			7.400	156.00	102.00	9002190074000
0.2953			7.500	156.00	102.00	9002190075000
0.3031			7.700	165.00	109.00	9002190077000
0.3071			7.800	165.00	109.00	9002190078000
0.3110			7.900	165.00	109.00	9002190079000
0.3150			8.000	165.00	109.00	9002190080000
0.3169			8.050	165.00	109.00	9002190080500
0.3189			8.100	165.00	109.00	9002190081000
0.3228		P	8.200	165.00	109.00	9002190082000
0.3268			8.300	165.00	109.00	9002190083000
0.3307			8.400	165.00	109.00	9002190084000
0.3346			8.500	165.00	109.00	9002190085000
0.3366			8.550	175.00	115.00	9002190085500
0.3386			8.600	175.00	115.00	9002190086000
0.3425			8.700	175.00	115.00	9002190087000
0.3465			8.800	175.00	115.00	9002190088000
0.3504			8.900	175.00	115.00	9002190089000
0.3543			9.000	175.00	115.00	9002190090000
0.3583			9.100	175.00	115.00	9002190091000
0.3622			9.200	175.00	115.00	9002190092000
0.3740			9.500	175.00	115.00	9002190095000
0.3819			9.700	184.00	121.00	9002190097000
0.3858		W	9.800	184.00	121.00	9002190098000

Dec. inch	Diameter (d1)		l1 mm	l2 mm	EDP #	
	Fract. inch	Wire / letter				
0.3937			10.000	184.00	121.00	9002190100000
0.4016			10.200	184.00	121.00	9002190102000
0.4134			10.500	184.00	121.00	9002190105000
0.4252			10.800	195.00	128.00	9002190108000
0.4331			11.000	195.00	128.00	9002190110000
0.4528			11.500	195.00	128.00	9002190115000
0.4724			12.000	205.00	134.00	9002190120000
0.4921			12.500	205.00	134.00	9002190125000
0.5118			13.000	205.00	134.00	9002190130000
0.5157	33/64		13.100	205.00	134.00	9002190131000
0.5512			14.000	214.00	140.00	9002190140000
0.5709			14.500	220.00	144.00	9002190145000
0.5906			15.000	220.00	144.00	9002190150000
0.6299			16.000	227.00	149.00	9002190160000
0.6693			17.000	235.00	154.00	9002190170000
0.7087			18.000	241.00	158.00	9002190180000
0.7480			19.000	247.00	162.00	9002190190000
0.7874			20.000	254.00	166.00	9002190200000

Alternative Drill Series:
#501 HSS, GT50, 10xD, 118 pt, Bright

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