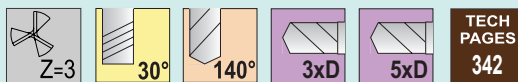


Series 1160, 1180

.1562" - .1910"
(3.967mm - 4.851mm)

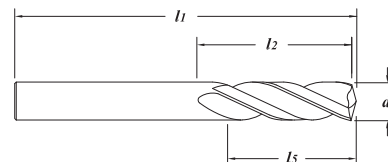


TOLERANCES	
d	+0.0000" -0.0005" (+0.0000 -0.127mm)
l_1	+0.125" -0.125" (+3.175 -3.175mm)
l_2	+0.125" -0.125" (+3.175 -3.175mm)

Recommended for aluminum and other soft materials <40 Rc

BALINIT® MAYURA Coated

- High performance solid submicron grain carbide drill
- No spot drilling required
- Unique point geometry and coating for higher speeds and feeds
- High performance drill point
- Live tooling recommended on lathe processes



3xD (1160) EDP#	5xD (1180) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
70631		.1562	5/32"	3.967	2-1/16"	9/16"	.497"	40.74
	70161	.1562	5/32"	3.967	2-1/2"	1"	.809"	41.95
70633		.1570	#22	3.988	2-1/8"	5/8"	.500"	41.13
	70163	.1570	#22	3.988	2-1/2"	1"	.814"	42.26
70635		.1575		4.000	54	16	13	41.45
	70166	.1575		4.000	65	24	21	42.58
70637		.1590	#21	4.039	2-1/8"	5/8"	.506"	41.81
	70177	.1590	#21	4.039	2-1/2"	1"	.824"	42.87
70639		.1610	#20	4.089	2-1/8"	5/8"	.512"	42.17
	70179	.1610	#20	4.089	2-1/2"	1"	.834"	43.23
70641		.1660	#19	4.216	2-1/8"	5/8"	.528"	42.53
	70181	.1660	#19	4.216	2-3/4"	1-1/8"	.860"	43.53
70643		.1695	#18	4.305	2-1/8"	5/8"	.539"	42.86
	70183	.1695	#18	4.305	2-3/4"	1-1/8"	.878"	43.82
70645		.1719	11/64"	4.366	2-1/8"	5/8"	.547"	43.23
	70185	.1719	11/64"	4.366	2-3/4"	1-1/8"	.891"	44.13
70647		.1730	#17	4.394	2-3/16"	11/16"	.551"	43.58
	70187	.1730	#17	4.394	2-3/4"	1-1/8"	.897"	44.44
70649		.1770	#16	4.496	2-3/16"	11/16"	.563"	43.88
	70189	.1770	#16	4.496	2-3/4"	1-1/8"	.917"	44.78
70651		.1772		4.500	55	18	14	44.25
	70191	.1772		4.500	65	25	23	44.98
70653		.1800	#15	4.572	2-3/16"	11/16"	.573"	44.55
	70196	.1800	#15	4.572	2-3/4"	1-1/4"	.933"	45.37
70655		.1820	#14	4.623	2-3/16"	11/16"	.579"	44.96
	70201	.1820	#14	4.623	2-3/4"	1-1/4"	.943"	45.67
70657		.1850	#13	4.700	2-3/16"	11/16"	.589"	45.29
	70206	.1850	#13	4.700	2-3/4"	1-1/4"	.959"	46.01
70659		.1875	3/16"	4.763	2-3/16"	11/16"	.597"	45.65
	70211	.1875	3/16"	4.763	2-3/4"	1-1/4"	.972"	46.16
70661		.1890	#12	4.801	2-1/4"	3/4"	.601"	47.14
	70216	.1890	#12	4.801	2-3/4"	1-1/4"	.979"	47.87
70663		.1910	#11	4.851	2-1/4"	3/4"	.608"	47.58
	70221	.1910	#11	4.851	2-3/4"	1-1/4"	.990"	48.17

3xD (1160) EDP#	5xD (1180) EDP#	$d \dagger$ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
70665		.1935	#10	4.914	2-1/4"	3/4"	.616"	47.86
	70226	.1935	#10	4.914	2-3/4"	1-1/4"	1.003"	48.47
70667		.1960	#9	4.978	2-1/4"	3/4"	.624"	48.20
	70229	.1960	#9	4.978	3"	1-5/16"	1.016"	48.76
70669		.1969		5.000	57	19	16	48.46
	70231	.1969		5.000	75	32	26	49.07
70671		.1990	#8	5.055	2-1/4"	3/4"	.633"	48.92
	70236	.1990	#8	5.055	3"	1-5/16"	1.031"	49.31
70673		.2010	#7	5.105	2-1/4"	3/4"	.640"	49.06
	70241	.2010	#7	5.105	3"	1-5/16"	1.042"	49.51
70675		.2031	13/64"	5.159	2-1/4"	3/4"	.646"	49.39
	70246	.2031	13/64"	5.159	3"	1-5/16"	1.053"	49.86
70677		.2040	#6	5.182	2-3/8"	7/8"	.649"	49.73
	70251	.2040	#6	5.182	3"	1-3/8"	1.057"	50.19
70679		.2055	#5	5.220	2-3/8"	7/8"	.654"	50.10
	70256	.2055	#5	5.220	3"	1-3/8"	1.065"	50.52
70681		.2090	#4	5.309	2-3/8"	7/8"	.665"	50.39
	70261	.2090	#4	5.309	3"	1-3/8"	1.083"	50.80
70683		.2130	#3	5.410	2-3/8"	7/8"	.678"	50.73
	70266	.2130	#3	5.410	3"	1-3/8"	1.104"	51.14
70685		.2165		5.500	60	22	18	51.04
	70271	.2165		5.500	75	35	29	51.45
70687		.2188	7/32"	5.558	2-3/8"	7/8"	.696"	51.47
	70276	.2188	7/32"	5.558	3"	1-3/8"	1.134"	51.75
70689		.2210	#2	5.613	2-7/16"	15/16"	.703"	51.84
	70281	.2210	#2	5.613	3"	1-3/8"	1.145"	52.79
70691		.2280	#1	5.791	2-7/16"	15/16"	.726"	52.23
	70286	.2280	#1	5.791	3"	1-3/8"	1.182"	53.04
70693		.2340	A	5.944	2-7/16"	15/16"	.745"	52.59
	70294	.2340	A	5.944	3-1/4"	1-1/2"	1.213"	53.57
70695		.2344	15/64"	5.954	2-7/16"	15/16"	.746"	53.00
	70296	.2344	15/64"	5.954	3-1/4"	1-1/2"	1.215"	54.11
70697		.2362		6.000	64	26	19	53.36
	70301	.2362		6.000	82	38	31	54.26
70699		.2380	B	6.045	2-1/2"	1"	.757"	53.73
	70306	.2380	B	6.045	3-1/4"	1-5/8"	1.233"	54.41
70701		.2420	C	6.147	2-1/2"	1"	.770"	54.16
	70311	.2420	C	6.147	3-1/4"	1-5/8"	1.254"	54.76
70703		.2460	D	6.248	2-1/2"	1"	.783"	54.46
	70316	.2460	D	6.248	3-1/4"	1-5/8"	1.275"	55.09
70705		.2500	1/4" / E	6.350	2-1/2"	1"	.796"	54.93
	70321	.2500	1/4" / E	6.350	3-1/4"	1-5/8"	1.296"	55.38
70707		.2510		6.375	2-1/2"	1"	.799"	55.63
	70911	.2510		6.375	3-1/4"	1-5/8"	1.300"	56.23
70709		.2559		6.500	66	28	21	57.79
	70326	.2559		6.500	82	41	34	58.75
70711		.2570	F	6.528	2-5/8"	1-1/8"	.818"	58.71
	70331	.2570	F	6.528	3-1/4"	1-11/16"	1.332"	59.63

continued →

Series 1160, 1180 (continued)

.2610" - .3594"
(6.629mm - 9.129mm)

3xD (1160) EDP#	5xD (1180) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
70713		.2610	G	6.629	2-5/8"	1-1/8"	.831"	59.60
	70336	.2610	G	6.629	3-1/2"	1-11/16"	1.353"	60.55
70715		.2656	17/64"	6.746	2-5/8"	1-1/8"	.845"	60.50
	70341	.2656	17/64"	6.746	3-1/2"	1-11/16"	1.376"	61.44
70717		.2660	H	6.756	2-11/16"	1-3/16"	.846"	61.40
	70346	.2660	H	6.756	3-1/2"	1-11/16"	1.378"	62.38
70719		.2720	I	6.909	2-11/16"	1-3/16"	.866"	61.54
	70351	.2720	I	6.909	3-1/2"	1-11/16"	1.410"	63.27
70721		.2756		7.000	68	30	22	62.44
	70356	.2756		7.000	88	43	36	64.17
70723		.2770	J	7.036	2-11/16"	1-3/16"	.881"	63.31
	70361	.2770	J	7.036	3-1/2"	1-11/16"	1.435"	65.08
70725		.2812	9/32"	7.142	2-11/16"	1-3/16"	.895"	65.12
	70371	.2812	9/32"	7.142	3-1/2"	1-3/4"	1.457"	66.92
70727		.2900	L	7.366	2-3/4"	1-1/4"	.923"	66.00
	70376	.2900	L	7.366	3-1/2"	1-3/4"	1.503"	67.75
70728		.2950	M	7.493	2-3/4"	1-1/4"	.939"	67.27
	70378	.2950	M	7.493	3-3/4"	1-7/8"	1.529"	68.64
70729		.2953		7.500	70	32	24	67.27
	70381	.2953		7.500	95	44	39	68.64
70731		.2969	19/64"	7.541	2-3/4"	1-1/4"	.945"	67.89
	70386	.2969	19/64"	7.541	3-3/4"	1-7/8"	1.539"	69.24
70733		.3020	N	7.671	2-15/16"	1-7/16"	.961"	70.05
	70391	.3020	N	7.671	3-3/4"	1-7/8"	1.565"	71.75
70735		.3125	5/16"	7.938	2-15/16"	1-7/16"	.994"	70.31
	70396	.3125	5/16"	7.938	3-3/4"	1-7/8"	1.619"	71.94
70737		.3150		8.000	76	36	25	74.21
	70401	.3150		8.000	95	48	41	75.92
70739		.3160	O	8.026	2-15/16"	1-7/16"	1.006"	74.21
	70406	.3160	O	8.026	3-3/4"	1-7/8"	1.638"	75.92
70741		.3230	P	8.204	2-15/16"	1-7/16"	1.028"	74.74
	70411	.3230	P	8.204	3-3/4"	2-3/32"	1.674"	76.17
70743		.3281	21/64"	8.334	2-15/16"	1-7/16"	1.044"	76.11
	70416	.3281	21/64"	8.334	4"	2-3/32"	1.700"	76.82
70745		.3320	Q	8.433	3"	1-7/16"	1.056"	77.48
	70421	.3320	Q	8.433	4"	2-3/32"	1.720"	78.23
70747		.3346		8.500	76	36	27	77.82
	70426	.3346		8.500	100	53	44	78.76
70749		.3390	R	8.611	3"	1-7/16"	1.079"	79.91
	70431	.3390	R	8.611	4"	2-3/32"	1.757"	80.73
70751		.3438	11/32"	8.733	3"	1-7/16"	1.094"	81.65
	70436	.3438	11/32"	8.733	4"	2-3/16"	1.782"	83.36
70753		.3480	S	8.839	3-1/16"	1-1/2"	1.107"	85.39
	70441	.3480	S	8.839	4"	2-3/16"	1.803"	88.16
70755		.3543		9.000	78	38	29	87.56
	70446	.3543		9.000	100	55	47	88.64
70757		.3580	T	9.093	3-1/16"	1-1/2"	1.139"	92.11
	70451	.3580	T	9.093	4-1/4"	2-9/32"	1.855"	93.40
70759		.3594	23/64"	9.129	3-1/16"	1-1/2"	1.144"	92.68
	70456	.3594	23/64"	9.129	4-1/4"	2-9/32"	1.862"	93.89

3xD (1160) EDP#	5xD (1180) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE
		Decimal	Metric				
70761		.3680	U	9.347	3-1/8"	1-9/16"	93.47
	70461	.3680	U	9.347	4-1/4"	2-9/32"	98.31
70763		.3740		9.500	79	39	94.24
	70466	.3740		9.500	108	58	99.18
70765		.3750	3/8"	9.525	3-1/8"	1-9/16"	94.81
	70471	.3750	3/8"	9.525	4-1/4"	2-3/8"	100.06
70767		.3760		9.550	3-1/8"	1-9/16"	96.62
	70913	.3760		9.550	4-1/4"	2-3/8"	101.40
70769		.3770	V	9.576	3-1/4"	1-5/8"	98.44
	70476	.3770	V	9.576	4-1/4"	2-3/8"	102.72
70771		.3860	W	9.804	3-1/4"	1-5/8"	100.16
	70481	.3860	W	9.804	4-1/2"	2-3/8"	104.36
70773		.3906	25/64"	9.921	3-1/4"	1-5/8"	101.42
	70486	.3906	25/64"	9.921	4-1/2"	2-3/8"	105.52
70775		.3937		10.000	84	43	104.50
	70491	.3937		10.000	114	60	108.38
70777		.3970	X	10.084	3-5/16"	1-11/16"	105.93
	70496	.3970	X	10.084	4-1/2"	2-1/2"	109.49
70779		.4040	Y	10.262	3-5/16"	1-11/16"	106.61
	70501	.4040	Y	10.262	4-1/2"	2-9/16"	112.52
70781		.4062	13/32"	10.317	3-5/16"	1-11/16"	109.90
	70506	.4062	13/32"	10.317	4-1/2"	2-9/16"	113.39
70783		.4134		10.500	85	43	110.92
	70511	.4134		10.500	114	67	114.34
70785		.4219	27/64"	10.716	3-3/8"	1-11/16"	111.98
	70516	.4219	27/64"	10.716	4-1/2"	2-11/16"	115.30
70787		.4331		11.000	87	45	119.86
	70521	.4331		11.000	114	68	123.02
70789		.4375	7/16"	11.113	3-7/16"	1-3/4"	120.18
	70526	.4375	7/16"	11.113	4-3/4"	2-13/16"	123.48
70791		.4528		11.500	90	47	127.45
	70531	.4528		11.500	120	70	131.30
70793		.4531	29/64"	11.509	3-9/16"	1-13/16"	127.45
	70536	.4531	29/64"	11.509	4-3/4"	2-7/8"	131.30
70795		.4688	15/32"	11.909	3-11/16"	2-1/16"	133.92
	70541	.4688	15/32"	11.909	4-3/4"	2-7/8"	137.43
70797		.4724		12.000	93	53	134.31
	70546	.4724		12.000	120	73	137.79
70799		.4844	31/64"	12.304	3-11/16"	2-1/16"	135.24
	70551	.4844	31/64"	12.304	5-5/16"	3"	140.23
70801		.4921		12.500	95	53	136.58
	70556	.4921		12.500	135	75	141.79
70803		.5000	1/2"	12.700	3-3/4"	2-1/16"	137.45
	70561	.5000	1/2"	12.700	5-3/8"	3-1/16"	142.06
70805		.5010		12.725	3-3/4"	2-1/16"	138.91
	70915	.5010		12.725	5-3/8"	3-1/16"	143.65
70807		.5118		13.000	107	55	150.66
	70566	.5118		13.000	136	78	156.31

continued →

Series 1160, 1180 (continued)

.5156" - .6299"
(13.096mm - 16.000mm)

3xD (1160) EDP#	5xD (1180) EDP#	$d \dagger$ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE
		Decimal	Metric				
70809		.5156	33/64"	13.096	4-1/4"	2-3/16"	154.22
	70571	.5156	33/64"	13.096	5-3/8"	3-1/8"	159.64
70811		.5312	17/32"	13.492	4-1/4"	2-1/4"	157.78
	70576	.5312	17/32"	13.492	5-11/16"	3-5/16"	163.09
70813		.5469	35/64"	13.891	4-1/4"	2-1/4"	164.87
	70581	.5469	35/64"	13.891	5-13/16"	3-3/8"	169.72
70815		.5512		14.000	107	59	168.44
	70586	.5512		14.000	148	86	173.09
70817		.5625	9/16"	14.287	4-1/2"	2-3/8"	179.16
	70591	.5625	9/16"	14.287	5-15/16"	3-1/2"	184.97
70819		.5781	37/64"	14.683	4-1/2"	2-1/2"	185.80
	70596	.5781	37/64"	14.683	6"	3-1/2"	191.25
70821		.5906		15.000	115	64	189.22
	70601	.5906		15.000	152	90	194.59
70823		.5938	19/32"	15.082	4-1/2"	2-1/2"	190.24
	70606	.5938	19/32"	15.082	6"	3-9/16"	195.51
70825		.6094	39/64"	15.478	4-1/2"	2-9/16"	191.22
	70611	.6094	39/64"	15.478	6-3/16"	3-11/16"	211.95
70827		.6250	5/8"	15.875	4-1/2"	2-5/8"	193.18
	70616	.6250	5/8"	15.875	6-5/16"	3-3/4"	213.79
70829		.6299		16.000	115	66	197.84
	70621	.6299		16.000	160	95	218.27



*1180 Series
High Performance Drill in aluminum*