

TOLERANCES

<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l₁</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
<i>l₂</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)



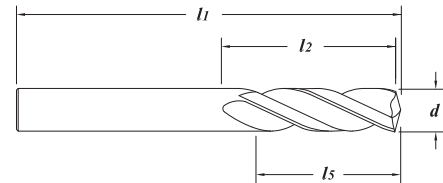
Series 1120H, 1100H

.1094" - .1575"
(2.779mm - 4.000mm)

Recommended for cast iron, tungsten, and materials with high silicon content

BALINIT® Durana Coating

- Solid submicron grain carbide drill
- Self-centering drill point
- Near reamer finishes
- Can be used as a core drill
- Excellent heat resistance and lubricity
- Stub length reduces deflection and vibration
- Tighter tolerance holes
- Improved roundness and straightness
- Live tooling recommended on lathe processes
- Series 1100 Bright Finish - page 92



3xD (1120H) EDP#	5xD (1100H) EDP#	<i>d</i> † Diameter		<i>l₁</i> Overall Length	<i>l₂</i> Flute Length	<i>l₃</i> Max Drill Depth	LIST PRICE	
		Decimal	Metric					
78276		.1094	7/64"	2.779	1-13/16"	13/16"	.343"	14.57
	90276	.1094	7/64"	2.779	2-1/4"	1-1/4"	.562"	15.05
78281		.1100	#35	2.794	1-7/8"	7/8"	.345"	14.70
	90281	.1100	#35	2.794	2-1/4"	1-1/4"	.565"	15.22
78286		.1110	#34	2.819	1-7/8"	7/8"	.348"	14.86
78291		.1130	#33	2.870	1-7/8"	7/8"	.354"	15.07
	90291	.1130	#33	2.870	2-1/4"	1-1/4"	.580"	15.61
78296		.1160	#32	2.946	1-7/8"	7/8"	.364"	15.27
	90296	.1160	#32	2.946	2-1/4"	1-1/4"	.596"	15.76
78301		.1181		3.000	48	22	9	15.39
	90301	.1181		3.000	57	32	15	15.89
78306		.1200	#31	3.048	1-7/8"	7/8"	.376"	15.50
	90306	.1200	#31	3.048	2-1/4"	1-1/4"	.616"	15.99
78311		.1250	1/8"	3.175	1-7/8"	7/8"	.392"	15.67
	90311	.1250	1/8"	3.175	2-1/4"	1-1/4"	.642"	16.15
78316		.1285	#30	3.264	1-15/16"	15/16"	.403"	16.02
	90316	.1285	#30	3.264	2-1/4"	1-1/4"	.660"	16.50
78321		.1360	#29	3.454	1-15/16"	15/16"	.426"	16.39
	90321	.1360	#29	3.454	2-1/2"	1-3/8"	.698"	16.98
78326		.1378		3.500	49	24	11	16.87
	90326	.1378		3.500	63	35	18	17.45
78331		.1405	#28	3.569	1-15/16"	15/16"	.440"	17.05
	90331	.1405	#28	3.569	2-1/2"	1-3/8"	.721"	17.64
78336		.1406	9/64"	3.571	1-15/16"	15/16"	.441"	17.22
	90336	.1406	9/64"	3.571	2-1/2"	1-3/8"	.722"	17.80
78341		.1440	#27	3.658	2-1/16"	1"	.451"	18.42
	90341	.1440	#27	3.658	2-1/2"	1-3/8"	.739"	18.43
78346		.1470	#26	3.734	2-1/16"	1"	.461"	18.63
	90346	.1470	#26	3.734	2-1/2"	1-3/8"	.755"	18.64
78351		.1495	#25	3.797	2-1/16"	1"	.469"	18.79
	90351	.1495	#25	3.797	2-1/2"	1-3/8"	.768"	18.80
78356		.1520	#24	3.861	2-1/16"	1"	.476"	18.82
	90356	.1520	#24	3.861	2-1/2"	1-3/8"	.780"	18.82
78361		.1540	#23	3.912	2-1/16"	1"	.483"	18.98
	90361	.1540	#23	3.912	2-1/2"	1-3/8"	.791"	18.99
78366		.1562	5/32"	3.967	2-1/16"	1"	.490"	19.06
	90366	.1562	5/32"	3.967	2-1/2"	1-3/8"	.802"	19.06
78371		.1570	#22	3.988	2-1/8"	1-1/16"	.492"	20.15
	90371	.1570	#22	3.988	2-1/2"	1-3/8"	.806"	20.15
78376		.1575		4.000	54	27	13	20.15
	90376	.1575		4.000	63	35	21	20.15

continued →

Series 1120H, 1100H (continued)

.1590" - .2362"
(4.039mm - 6.000mm)

3xD (1120H) EDP#	5xD (1100H) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
78381		.1590	#21	4.039	2-1/8"	1-1/16"	.498"	20.56
	90381	.1590	#21	4.039	2-1/2"	1-3/8"	.816"	20.60
78386		.1610	#20	4.089	2-1/8"	1-1/16"	.505"	20.56
	90386	.1610	#20	4.089	2-1/2"	1-3/8"	.827"	20.60
78391		.1660	#19	4.216	2-1/8"	1-1/16"	.520"	20.71
	90391	.1660	#19	4.216	2-3/4"	1-5/8"	.852"	20.72
78396		.1695	#18	4.305	2-1/8"	1-1/16"	.531"	20.84
	90396	.1695	#18	4.305	2-3/4"	1-5/8"	.870"	20.85
78401		.1719	11/64"	4.366	2-1/8"	1-1/16"	.539"	20.96
	90401	.1719	11/64"	4.366	2-3/4"	1-5/8"	.883"	20.96
78406		.1730	#17	4.394	2-3/16"	1-1/8"	.542"	21.82
	90406	.1730	#17	4.394	2-3/4"	1-5/8"	.888"	21.82
78411		.1770	#16	4.496	2-3/16"	1-1/8"	.555"	22.05
	90411	.1770	#16	4.496	2-3/4"	1-5/8"	.909"	22.06
	90416	.1772		4.500	70	41	23	22.15
78421		.1800	#15	4.572	2-3/16"	1-1/8"	.564"	22.23
	90421	.1800	#15	4.572	2-3/4"	1-5/8"	.924"	22.27
78426		.1820	#14	4.623	2-3/16"	1-1/8"	.570"	22.69
	90426	.1820	#14	4.623	2-3/4"	1-5/8"	.934"	22.70
78431		.1850	#13	4.700	2-3/16"	1-1/8"	.580"	22.80
	90431	.1850	#13	4.700	2-3/4"	1-5/8"	.950"	22.80
78436		.1875	3/16"	4.763	2-3/16"	1-1/8"	.588"	22.80
	90436	.1875	3/16"	4.763	2-3/4"	1-5/8"	.963"	22.80
78441		.1890	#12	4.801	2-1/4"	1-3/16"	.592"	24.43
	90441	.1890	#12	4.801	2-3/4"	1-5/8"	.970"	24.41
78446		.1910	#11	4.851	2-1/4"	1-3/16"	.599"	24.64
	90446	.1910	#11	4.851	2-3/4"	1-5/8"	.981"	24.62
78451		.1935	#10	4.915	2-1/4"	1-3/16"	.606"	25.64
	90451	.1935	#10	4.915	2-3/4"	1-5/8"	.993"	25.64
78456		.1960	#9	4.978	2-1/4"	1-3/16"	.614"	26.18
	90456	.1960	#9	4.978	3"	1-3/4"	1.006"	26.18
78461		.1969		5.000	57	30	16	26.32
	90461	.1969		5.000	76	44	26	26.31
78466		.1990	#8	5.055	2-1/4"	1-3/16"	.624"	26.48
	90466	.1990	#8	5.055	3"	1-3/4"	1.022"	26.47
78471		.2010	#7	5.105	2-1/4"	1-3/16"	.630"	27.17
	90471	.2010	#7	5.105	3"	1-3/4"	1.032"	27.17
78476		.2031	13/64"	5.159	2-1/4"	1-3/16"	.637"	28.08
	90476	.2031	13/64"	5.159	3"	1-3/4"	1.043"	28.07
	90481	.2040	#6	5.182	3"	1-3/4"	1.047"	28.23
78486		.2055	#5	5.220	2-3/8"	1-1/4"	.644"	28.35
	90486	.2055	#5	5.220	3"	1-3/4"	1.055"	28.34
78491		.2090	#4	5.309	2-3/8"	1-1/4"	.655"	28.78
	90491	.2090	#4	5.309	3"	1-3/4"	1.073"	28.78
78496		.2130	#3	5.410	2-3/8"	1-1/4"	.668"	29.21
	90496	.2130	#3	5.410	3"	1-3/4"	1.094"	29.21
78501		.2165		5.500	60	32	17	29.41
	90501	.2165		5.500	76	44	28	29.41
78506		.2188	7/32"	5.558	2-3/8"	1-1/4"	.686"	29.59
	90506	.2188	7/32"	5.558	3"	1-3/4"	1.123"	29.59
78511		.2210	#2	5.613	2-7/16"	1-5/16"	.693"	30.26
	90511	.2210	#2	5.613	3"	1-3/4"	1.135"	30.24
78516		.2280	#1	5.791	2-7/16"	1-5/16"	.715"	30.38
	90516	.2280	#1	5.791	3"	1-3/4"	1.171"	30.38
78521		.2340	A	5.944	2-7/16"	1-5/16"	.733"	30.54
	90521	.2340	A	5.944	3-1/4"	2"	1.201"	30.80
78526		.2344	15/64"	5.954	2-7/16"	1-5/16"	.735"	30.66
	90526	.2344	15/64"	5.954	3-1/4"	2"	1.203"	30.90
78531		.2362		6.000	64	35	19	30.74
	90531	.2362		6.000	82	50	31	30.99

3xD (1120H) EDP#	5xD (1100H) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
78536		.2380	B	6.045	2-1/2"	1-3/8"	.746"	30.86
	90536	.2380	B	6.045	3-1/4"	2"	1.222"	31.11
78541		.2420	C	6.147	2-1/2"	1-3/8"	.758"	31.05
	90541	.2420	C	6.147	3-1/4"	2"	1.242"	31.28
78546		.2460	D	6.248	2-1/2"	1-3/8"	.771"	31.23
	90546	.2460	D	6.248	3-1/4"	2"	1.263"	31.50
78551		.2500	1/4" / E	6.350	2-1/2"	1-3/8"	.783"	31.42
	90551	.2500	1/4" / E	6.350	3-1/4"	2"	1.283"	31.69
78556		.2559		6.500	67	37	21	34.79
	90556	.2559		6.500	82	50	33	35.34
78561		.2570	F	6.528	2-5/8"	1-7/16"	.805"	35.38
	90561	.2570	F	6.528	3-1/4"	2"	1.319"	35.93
78566		.2610	G	6.629	2-5/8"	1-7/16"	.818"	35.83
	90566	.2610	G	6.629	3-1/2"	2-1/8"	1.340"	37.46
78571		.2656	17/64"	6.746	2-5/8"	1-7/16"	.832"	36.41
	90571	.2656	17/64"	6.746	3-1/2"	2-1/8"	1.364"	38.07
78576		.2660	H	6.756	2-11/16"	1-1/2"	.834"	37.31
	90576	.2660	H	6.756	3-1/2"	2-1/8"	1.366"	38.99
78581		.2720	I	6.909	2-11/16"	1-1/2"	.852"	37.67
	90581	.2720	I	6.909	3-1/2"	2-1/8"	1.396"	39.40
78586		.2756		7.000	68	38	22	37.89
	90586	.2756		7.000	88	54	36	39.62
	90591	.2770	J	7.036	3-1/2"	2-1/8"	1.422"	39.94
78596		.2810	K	7.137	2-11/16"	1-1/2"	.881"	38.49
	90596	.2810	K	7.137	3-1/2"	2-1/8"	1.443"	40.23
78601		.2812	9/32"	7.142	2-11/16"	1-1/2"	.881"	39.61
	90601	.2812	9/32"	7.142	3-1/2"	2-1/8"	1.444"	41.43
78606		.2900	L	7.366	2-3/4"	1-9/16"	.909"	40.86
	90606	.2900	L	7.366	3-1/2"	2-1/8"	1.489"	42.74
	90611	.2950	M	7.493	3-3/4"	2-3/8"	1.515"	44.96
78616		.2953		7.500	70	40	23	41.88
78621		.2969	19/64"	7.541	2-3/4"	1-9/16"	.930"	41.88
	90621	.2969	19/64"	7.541	3-3/4"	2-3/8"	1.524"	44.96
78626		.3020	N	7.671	2-15/16"	1-5/8"	.946"	43.29
	90626	.3020	N	7.671	3-3/4"	2-3/8"	1.550"	45.26
78631		.3125	5/16"	7.938	2-15/16"	1-5/8"	.979"	43.45
	90631	.3125	5/16"	7.938	3-3/4"	2-3/8"	1.604"	45.29
78636		.3150		8.000	75	43	25	46.16
	90636	.3150		8.000	95	60	41	48.12
78641		.3160	O	8.026	2-15/16"	1-11/16"	.990"	46.16
	90641	.3160	O	8.026	3-3/4"	2-3/8"	1.622"	48.12
78646		.3230	P	8.204	2-15/16"	1-11/16"	1.012"	46.16
	90646	.3230	P	8.204	3-3/4"	2-3/8"	1.658"	48.12
78651		.3281	21/64"	8.334	2-15/16"	1-11/16"	1.028"	47.91
	90651	.3281	21/64"	8.334	4"	2-1/2"	1.684"	50.06
78656		.3320	Q	8.433	3"	1-11/16"	1.040"	48.88
	90656	.3320	Q	8.433	4"	2-1/2"	1.704"	51.09
78661		.3346		8.500	76	43	27	49.28
	90661	.3346		8.500	101	63	44	51.48
78666		.3390	R	8.611	3"	1-11/16"	1.062"	50.62
	90666	.3390	R	8.611	4"	2-1/2"	1.740"	52.90
78671		.3438	11/32"	8.733	3"	1-11/16"	1.077"	52.45
	90671	.3438	11/32"	8.733	4"	2-1/2"	1.765"	54.78
78676		.3480	S	8.839	3-1/16"	1-3/4"	1.091"	59.36
	90676	.3480	S	8.839	4"	2-1/2"	1.787"	58.15
78681		.3543		9.000	78	44	28	59.70
	90681	.3543		9.000	101	63	46	58.49

continued →

Series 1120H, 1100H (continued)

.3580" - .5000"
(9.093mm - 12.700mm)

3xD (1120H) EDP#	5xD (1100H) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE
		Decimal	Metric				
78686		.3580	T	9.093	3-1/16"	1-3/4"	59.84
78691		.3594	23/64"	9.129	3-1/16"	1-3/4"	60.26
	90691	.3594	23/64"	9.129	4-1/4"	2-3/4"	60.92
78696		.3680	U	9.347	3-1/8"	1-13/16"	63.71
	90696	.3680	U	9.347	4-1/4"	2-3/4"	64.40
78701		.3740		9.500	79	46	64.64
	90701	.3740		9.500	107	70	65.33
78706		.3750	3/8"	9.525	3-1/8"	1-13/16"	64.64
	90706	.3750	3/8"	9.525	4-1/4"	2-3/4"	65.33
78711		.3770	V	9.576	3-1/4"	1-7/8"	65.27
	90711	.3770	V	9.576	4-1/4"	2-3/4"	67.97
78716		.3860	W	9.804	3-1/4"	1-7/8"	68.93
	90716	.3860	W	9.804	4-1/2"	2-7/8"	71.69
78721		.3906	25/64"	9.921	3-1/4"	1-7/8"	69.78
	90721	.3906	25/64"	9.921	4-1/2"	2-7/8"	72.58
78726		.3937		10.000	84	49	71.96
	90726	.3937		10.000	114	73	74.83
78736		.4040	Y	10.262	3-5/16"	1-15/16"	74.33
	90736	.4040	Y	10.262	4-1/2"	2-7/8"	77.28
78741		.4062	13/32"	10.317	3-5/16"	1-15/16"	76.68
	90741	.4062	13/32"	10.317	4-1/2"	2-7/8"	79.70
78746		.4130	Z	10.490	3-3/8"	2"	77.37
	90746	.4130	Z	10.490	4-1/2"	2-7/8"	80.41
78751		.4134		10.500	86	51	77.37
	90751	.4134		10.500	114	73	80.41
78756		.4219	27/64"	10.716	3-3/8"	2"	78.16
	90756	.4219	27/64"	10.716	4-1/2"	2-7/8"	81.22
78761		.4331		11.000	87	52	83.29
	90761	.4331		11.000	114	73	87.28
78766		.4375	7/16"	11.113	3-7/16"	2-1/16"	83.29
	90766	.4375	7/16"	11.113	4-1/2"	2-7/8"	87.28
	90771	.4528		11.500	120	76	93.83
78776		.4531	29/64"	11.509	3-9/16"	2-1/8"	89.55
	90776	.4531	29/64"	11.509	4-3/4"	3"	93.83
78781		.4688	15/32"	11.908	3-5/8"	2-1/8"	94.20
	90781	.4688	15/32"	11.908	4-3/4"	3"	98.66
78786		.4724		12.000	94	56	94.46
	90786	.4724		12.000	120	76	98.93
78791		.4844	31/64"	12.304	3-11/16"	2-3/16"	94.74
	90791	.4844	31/64"	12.304	4-3/4"	3"	98.93
78796		.4921		12.500	95	56	96.20
	90796	.4921		12.500	120	76	101.29
78801		.5000	1/2"	12.700	3-3/4"	2-1/4"	96.70
	90801	.5000	1/2"	12.700	4-3/4"	3"	101.29