



Uncoated

\*This is an interactive PDF. Click on the part number to order or check stock.

### Aluminum & Non-Ferrous, Solid Carbide, 2-Flute, Double Margin, 140° Point, 5X Dia., 30° Helix

Drill Size	Decimal Equiv	Flute Length	Drill Depth	OAL	Shank ø	Uncoated Part #
3.00MM	.1181	28	.23	66	6	RDZ1000
#31	.1200	1.102	.905	2.600	.2362	RDZ1001
3.10MM	.1220	28	.23	66	6	RDZ1002
1/8	.1250	1.102	.905	2.600	.2362	RDZ1003
3.20MM	.1260	28	.23	66	6	RDZ1004
#30	.1285	1.102	.905	2.600	.2362	RDZ1005
3.30MM	.1299	28	.23	66	6	RDZ1006
3.40MM	.1339	28	.23	66	6	RDZ1007
#29	.1360	1.102	.905	2.600	.2362	RDZ1008
3.50MM	.1378	28	.23	66	6	RDZ1009
9/64	.1406	1.102	.905	2.600	.2362	RDZ1010
3.60MM	.1417	28	.23	66	6	RDZ1011
#27	.1440	1.102	.905	2.600	.2362	RDZ1012
3.70MM	.1457	28	.23	66	6	RDZ1013
#26	.1470	1.102	.905	2.600	.2362	RDZ1014
#25	.1495	1.417	1.141	2.910	.2362	RDZ1015
3.80MM	.1496	36	.29	74	6	RDZ1016
#24	.1520	1.417	1.141	2.910	.2362	RDZ1017
3.90MM	.1535	36	.29	74	6	RDZ1018
5/32	.1562	1.417	1.141	2.910	.2362	RDZ1019
4.00MM	.1575	36	.29	74	6	RDZ1020
#21	.1590	1.417	1.141	2.910	.2362	RDZ1021
#20	.1610	1.417	1.141	2.910	.2362	RDZ1022
4.10MM	.1614	36	.29	74	6	RDZ1023
4.20MM	.1654	36	.29	74	6	RDZ1024
#19	.1660	1.417	1.141	2.910	.2362	RDZ1025
4.30MM	.1693	36	.29	74	6	RDZ1026
11/64	.1719	1.417	1.141	2.910	.2362	RDZ1027
#17	.1730	1.417	1.141	2.910	.2362	RDZ1028
4.40MM	.1732	36	.29	74	6	RDZ1029
#16	.1770	1.417	1.141	2.910	.2362	RDZ1030
4.50MM	.1772	36	.29	74	6	RDZ1031
4.60MM	.1811	36	.29	74	6	RDZ1032
4.70MM	.1850	36	.29	74	6	RDZ1033
3/16	.1875	1.732	1.378	3.230	.2362	RDZ1034
4.80MM	.1890	44	.35	82	6	RDZ1035
#11	.1910	1.732	1.378	3.230	.2362	RDZ1036
4.90MM	.1929	44	.35	82	6	RDZ1037
#10	.1935	1.732	1.378	3.230	.2362	RDZ1038



## Aluminum & Non-Ferrous



Uncoated

### Aluminum & Non-Ferrous, Solid Carbide, 2-Flute, Double Margin, 140° Point, 5X Dia., 30° Helix

Drill Size	Decimal Equiv	Flute Length	Drill Depth	OAL	Shank ø	Uncoated Part #
5.00MM	.1968	44	35	82	6	RDZ1039
5.10MM	.2008	44	35	82	6	RDZ1040
13/64	.2031	1.732	1.378	3.230	.2362	RDZ1041
5.20MM	.2047	44	35	82	6	RDZ1042
5.30MM	.2087	44	35	82	6	RDZ1043
5.40MM	.2126	44	35	82	6	RDZ1044
5.50MM	.2165	44	35	82	6	RDZ1045
7/32	.2187	1.732	1.378	3.230	.2362	RDZ1046
5.60MM	.2205	44	35	82	6	RDZ1047
5.70MM	.2244	44	35	82	6	RDZ1048
5.80MM	.2283	44	35	82	6	RDZ1049
5.90MM	.2323	44	35	82	6	RDZ1050
A	.2340	1.732	1.378	3.230	.2362	RDZ1051
6.00MM	.2362	44	35	82	6	RDZ1052
6.10MM	.2402	53	43	91	8	RDZ1053
6.20MM	.2441	53	43	91	8	RDZ1054
6.30MM	.2480	53	43	91	8	RDZ1055
1/4	.2500	2.087	1.693	3.580	.3150	RDZ1056
6.40MM	.2520	53	43	91	8	RDZ1057
6.50MM	.2559	53	43	91	8	RDZ1058
F	.2570	2.087	1.693	3.580	.3150	RDZ1059
6.60MM	.2598	53	43	91	8	RDZ1060
6.70MM	.2638	53	43	91	8	RDZ1061
17/64	.2656	2.087	1.693	3.580	.3150	RDZ1062
6.80MM	.2677	53	43	91	8	RDZ1063
6.90MM	.2717	53	43	91	8	RDZ1064
I	.2720	2.087	1.693	3.580	.3150	RDZ1065
7.00MM	.2756	53	43	91	8	RDZ1066
7.10MM	.2795	53	43	91	8	RDZ1067
9/32	.2812	2.087	1.693	3.580	.3150	RDZ1068
7.20MM	.2835	53	43	91	8	RDZ1069
7.30MM	.2874	53	43	91	8	RDZ1070
7.40MM	.2913	53	43	91	8	RDZ1071
7.50MM	.2953	53	43	91	8	RDZ1072
19/64	.2969	2.087	1.693	3.580	.3150	RDZ1073
7.60MM	.2992	53	43	91	8	RDZ1074
7.70MM	.3031	53	43	91	8	RDZ1075
7.80MM	.3071	53	43	91	8	RDZ1076
7.90MM	.3110	53	43	91	8	RDZ1077



Carbide Drills



Uncoated

**Aluminum & Non-Ferrous, Solid Carbide, 2-Flute, Double Margin, 140° Point, 5X Dia., 30° Helix**

Drill Size	Decimal Equiv	Flute Length	Drill Depth	OAL	Shank ø	Uncoated Part #
5/16	.3125	2.087	1.693	3.580	.3150	RDZ1078
8.00MM	.3150	53	43	91	8	RDZ1079
8.10MM	.3189	61	49	103	10	RDZ1080
8.20MM	.3228	61	49	103	10	RDZ1081
8.30MM	.3268	61	49	103	10	RDZ1082
21/64	.3281	2.402	1.929	4.060	.3937	RDZ1083
8.40MM	.3307	61	49	103	10	RDZ1084
Q	.3320	2.402	1.929	4.060	.3937	RDZ1085
8.50MM	.3346	61	49	103	10	RDZ1086
8.60MM	.3386	61	49	103	10	RDZ1087
8.70MM	.3425	61	49	103	10	RDZ1088
11/32	.3438	2.402	1.929	4.060	.3937	RDZ1089
8.80MM	.3465	61	49	103	10	RDZ1090
8.90MM	.3504	61	49	103	10	RDZ1091
9.00MM	.3543	61	49	103	10	RDZ1092
9.10MM	.3583	61	49	103	10	RDZ1093
23/64	.3594	2.402	1.929	4.060	.3937	RDZ1094
9.20MM	.3622	61	49	103	10	RDZ1095
9.30MM	.3661	61	49	103	10	RDZ1096
U	.3680	2.402	1.929	4.060	.3937	RDZ1097
9.40MM	.3701	61	49	103	10	RDZ1098
9.50MM	.3740	61	49	103	10	RDZ1099
3/8	.3750	2.402	1.929	4.060	.3937	RDZ1100
9.60MM	.3780	61	49	103	10	RDZ1101
9.70MM	.3819	61	49	103	10	RDZ1102
9.80MM	.3858	61	49	103	10	RDZ1103
9.90MM	.3898	61	49	103	10	RDZ1104
25/64	.3906	2.402	1.929	4.060	.3937	RDZ1105
10.00MM	.3937	61	49	103	10	RDZ1106
10.10MM	.3976	71	56	118	12	RDZ1107
10.20MM	.4016	71	56	118	12	RDZ1108
10.30MM	.4055	71	56	118	12	RDZ1109
13/32	.4062	2.795	2.205	4.650	.4724	RDZ1110
10.40MM	.4094	71	56	118	12	RDZ1111
10.50MM	.4134	71	56	118	12	RDZ1112
10.60MM	.4173	71	56	118	12	RDZ1113
10.70MM	.4213	71	56	118	12	RDZ1114
27/64	.4219	2.795	2.205	4.650	.4724	RDZ1115
10.80MM	.4252	71	56	118	12	RDZ1116



## Aluminum & Non-Ferrous



Uncoated

### Aluminum & Non-Ferrous, Solid Carbide, 2-Flute, Double Margin, 140° Point, 5X Dia., 30° Helix

Drill Size	Decimal Equiv	Flute Length	Drill Depth	OAL	Shank ø	Uncoated Part #
10.90MM	.4291	71	56	118	12	RDZ1117
11.00MM	.4331	71	56	118	12	RDZ1118
11.10MM	.4370	71	56	118	12	RDZ1119
7/16	.4375	2.795	2.205	4.650	.4724	RDZ1120
11.20MM	.4409	71	56	118	12	RDZ1121
11.30MM	.4449	71	56	118	12	RDZ1122
11.40MM	.4488	71	56	118	12	RDZ1123
11.50MM	.4528	71	56	118	12	RDZ1124
29/64	.4531	2.795	2.205	4.650	.4724	RDZ1125
11.60MM	.4567	71	56	118	12	RDZ1126
11.70MM	.4606	71	56	118	12	RDZ1127
11.80MM	.4646	71	56	118	12	RDZ1128
11.90MM	.4685	71	56	118	12	RDZ1129
15/32	.4688	2.795	2.205	4.650	.4724	RDZ1130
12.00MM	.4724	71	56	118	12	RDZ1131
31/64	.4844	3.031	2.362	4.880	.5512	RDZ1132
12.50MM	.4921	77	60	124	14	RDZ1133
1/2	.5000	3.031	2.362	4.880	.5512	RDZ1134

Carbide Drills



## Aluminum & Non-Ferrous Drills Technical Information

- RedLine Aluminum & Non-Ferrous Extra High Performance Drills have been specifically designed for high penetration rates, great chip evacuation, and improved hole quality, speed and performance for lower hole costs!
- All shanks are manufactured to h6 tolerance, suitable for use in shrink-fit holders.

Aluminum & Non-Ferrous, Speeds & Feeds							
Material	Grades	SFM	Tool Diameter (IPR)				
			1/8 (.1250)	3/16 (.1875)	1/4 (.2500)	3/8 (.3750)	1/2 (.5000)
N - Non-Ferrous							
Aluminum Alloys	2014, 2024, 6061, 7075	750	.005 - .010	.006 - .011	.007 - .014	.011 - .020	.013 - .022
Aluminum High Silicon	A380, A390	590	.005 - .007	.006 - .007	.006 - .010	.011 - .015	.013 - .017
Brass/Bronze	Aluminum Bronze, Low Silicon Bronze	430	.004 - .006	.005 - .007	.006 - .009	.007 - .013	.008 - .014
Composites	G-10, Fiberglass, Graphite, Graphite Epoxy, Plastics	300	.001 - .002	.001 - .002	.001 - .003	.002 - .004	.003 - .005
Copper		430	.004 - .006	.005 - .007	.006 - .009	.007 - .013	.008 - .014

NOTE: Speeds and Feeds listed are estimated and will vary by application.

Aluminum & Non-Ferrous Tolerances (Inch)		
Drill Size	Tolerance by Drill $\phi$ (m7)	Tolerance by Shank $\phi$ (h6)
.0000-.1181	+0.0008/+0.00047	+0/-0.00024
.1182-.2362	+0.0016/+0.00063	+0/-0.00031
.2363-.3937	+0.0024/+0.00083	+0/-0.00035
.3938-.5000	+0.0027/+0.00098	+0/-0.00043

Aluminum & Non-Ferrous Tolerances (Metric)		
Drill Size	Tolerance by Drill $\phi$ (m7)	Shank $\phi$ (h6)
0-3.0	+0.002/+0.012	+0/-0.006
3.01-6.00	+0.004/+0.016	+0/-0.008
6.01-10.00	+0.006/+0.021	+0/-0.009
10.01-12.70	+0.007/+0.025	+0/-0.011