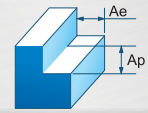
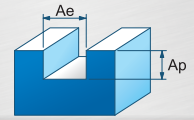


AL SE Single Flute Series Endmills



1 Z Side Milling									
Work Material	Material Groups	D (mm)	Z	Vc (m/min)	Fz (mm)	Ap (mm)	Ae (mm)	n (min-1)	Vf (mm/min)
ALUMINIUM	M02	2	1	251	0.041 ~ 0.048	≤1.0D	≤0.25D	40000	1640 ~ 1920
		3	1	377	0.067 ~ 0.076	≤1.0D	≤0.25D	40000	2680 ~ 3040
		4	1	500 ~ 503	0.092 ~ 0.103	≤1.0D	≤0.5D	39790	3660 ~ 4120
		5	1	500 ~ 600	0.118 ~ 0.131	≤1.0D	≤0.5D	31830 ~ 38200	3760 ~ 5000
		6	1	500 ~ 600	0.144 ~ 0.158	≤1.0D	≤0.5D	26530 ~ 31830	3820 ~ 5030
		8	1	500 ~ 600	0.179 ~ 0.197	≤1.0D	≤0.5D	19890 ~ 23870	3560 ~ 4700
		10	1	500 ~ 600	0.215 ~ 0.236	≤1.0D	≤0.5D	15920 ~ 19100	3420 ~ 4510
ALUMINIUM ALLOYS SI <8%	M04, M05, M06, M07	2	1	251	0.035 ~ 0.042	≤1.0D	≤0.25D	40000	1400 ~ 1680
		3	1	350 ~ 377	0.058 ~ 0.066	≤1.0D	≤0.25D	37140 ~ 40000	2150 ~ 2640
		4	1	350 ~ 400	0.080 ~ 0.090	≤1.0D	≤0.5D	27850 ~ 31830	2230 ~ 2860
		5	1	350 ~ 400	0.103 ~ 0.114	≤1.0D	≤0.5D	22280 ~ 25460	2290 ~ 2900
		6	1	350 ~ 400	0.126 ~ 0.139	≤1.0D	≤0.5D	18570 ~ 21220	2340 ~ 2950
		8	1	350 ~ 400	0.157 ~ 0.173	≤1.0D	≤0.5D	13930 ~ 15920	2190 ~ 2750
		10	1	350 ~ 400	0.188 ~ 0.207	≤1.0D	≤0.5D	11140 ~ 12730	2090 ~ 2640
COPPER	M03	2	1	251	0.035 ~ 0.042	≤1.0D	≤0.25D	40000	1400 ~ 1680
		3	1	300 ~ 350	0.058 ~ 0.066	≤1.0D	≤0.25D	31830 ~ 37140	1850 ~ 2450
		4	1	300 ~ 350	0.080 ~ 0.090	≤1.0D	≤0.5D	23870 ~ 27850	1910 ~ 2510
		5	1	300 ~ 350	0.103 ~ 0.114	≤1.0D	≤0.5D	19100 ~ 22280	1970 ~ 2540
		6	1	300 ~ 350	0.126 ~ 0.139	≤1.0D	≤0.5D	15920 ~ 18570	2010 ~ 2580
		8	1	300 ~ 350	0.157 ~ 0.173	≤1.0D	≤0.5D	11940 ~ 13930	1870 ~ 2410
		10	1	300 ~ 350	0.188 ~ 0.207	≤1.0D	≤0.5D	9550 ~ 11140	1800 ~ 2310
BRASS, BRONZE	M08, M09	2	1	200 ~ 250	0.035 ~ 0.042	≤1.0D	≤0.25D	31830 ~ 39790	1110 ~ 1670
		3	1	200 ~ 250	0.058 ~ 0.066	≤1.0D	≤0.25D	21220 ~ 26530	1230 ~ 1750
		4	1	200 ~ 250	0.080 ~ 0.090	≤1.0D	≤0.5D	15920 ~ 19890	1270 ~ 1790
		5	1	200 ~ 250	0.103 ~ 0.114	≤1.0D	≤0.5D	12730 ~ 15920	1310 ~ 1810
		6	1	200 ~ 250	0.126 ~ 0.139	≤1.0D	≤0.5D	10610 ~ 13260	1340 ~ 1840
		8	1	200 ~ 250	0.157 ~ 0.173	≤1.0D	≤0.5D	7960 ~ 9950	1250 ~ 1720
		10	1	200 ~ 250	0.188 ~ 0.207	≤1.0D	≤0.5D	6370 ~ 7960	1200 ~ 1650
THERMOPLASTICS	M01	2	1	251	0.056 ~ 0.065	≤1.0D	≤0.25D	40000	2240 ~ 2600
		3	1	377	0.092 ~ 0.103	≤1.0D	≤0.25D	40000	3680 ~ 4120
		4	1	503	0.127 ~ 0.141	≤1.0D	≤0.5D	40000	5080 ~ 5640
		5	1	628	0.163 ~ 0.180	≤1.0D	≤0.5D	40000	6520 ~ 7200
		6	1	754	0.198 ~ 0.218	≤1.0D	≤0.5D	40000	7920 ~ 8720
		8	1	800 ~ 850	0.247 ~ 0.271	≤1.0D	≤0.5D	31830 ~ 33820	7860 ~ 9170
		10	1	800 ~ 850	0.295 ~ 0.325	≤1.0D	≤0.5D	25460 ~ 27060	7510 ~ 8790
12	1	800 ~ 850	0.344 ~ 0.378	≤1.0D	≤0.5D	21220 ~ 22550	7300 ~ 8520		

AL SE Single Flute Series Endmills



1 Z Slotting									
Work Material	Material Groups	D (mm)	Z	Vc (m/min)	Fz (mm)	Ap (mm)	Ae (mm)	n (min ⁻¹)	Vf (mm/min)
ALUMINIUM	M02	2	1	251	0.033 ~ 0.039	≤0.75D	≤1.0D	40000	1320 ~ 1560
		3	1	377	0.053 ~ 0.061	≤0.75D	≤1.0D	40000	2120 ~ 2440
		4	1	500 ~ 503	0.074 ~ 0.083	≤1.0D	≤1.0D	39790 ~ 40000	2940 ~ 3320
		5	1	500 ~ 600	0.095 ~ 0.105	≤1.0D	≤1.0D	31830 ~ 38200	3020 ~ 4010
		6	1	500 ~ 600	0.115 ~ 0.127	≤1.0D	≤1.0D	26530 ~ 31830	3050 ~ 4040
		8	1	500 ~ 600	0.143 ~ 0.158	≤1.0D	≤1.0D	19890 ~ 23870	2840 ~ 3770
		10	1	500 ~ 600	0.172 ~ 0.189	≤1.0D	≤1.0D	15920 ~ 19100	2740 ~ 3610
		12	1	500 ~ 600	0.200 ~ 0.220	≤1.0D	≤1.0D	13260 ~ 15920	2650 ~ 3500
ALUMINIUM ALLOYS SI <8%	M04, M05, M06, M07	2	1	251	0.028 ~ 0.034	≤0.75D	≤1.0D	40000	1120 ~ 1360
		3	1	350 ~ 377	0.046 ~ 0.053	≤0.75D	≤1.0D	37140 ~ 40000	1710 ~ 2120
		4	1	350 ~ 400	0.064 ~ 0.072	≤1.0D	≤1.0D	27850 ~ 31830	1780 ~ 2290
		5	1	350 ~ 400	0.083 ~ 0.092	≤1.0D	≤1.0D	22280 ~ 25460	1850 ~ 2340
		6	1	350 ~ 400	0.101 ~ 0.111	≤1.0D	≤1.0D	18570 ~ 21220	1880 ~ 2360
		8	1	350 ~ 400	0.126 ~ 0.138	≤1.0D	≤1.0D	13930 ~ 15920	1760 ~ 2200
		10	1	350 ~ 400	0.150 ~ 0.165	≤1.0D	≤1.0D	11140 ~ 12730	1670 ~ 2100
		12	1	350 ~ 400	0.175 ~ 0.193	≤1.0D	≤1.0D	9280 ~ 10610	1620 ~ 2050
COPPER	M03	2	1	251	0.028 ~ 0.034	≤0.75D	≤1.0D	40000	1120 ~ 1360
		3	1	300 ~ 350	0.046 ~ 0.053	≤0.75D	≤1.0D	31830 ~ 37140	1460 ~ 1970
		4	1	300 ~ 350	0.064 ~ 0.072	≤1.0D	≤1.0D	23870 ~ 27850	1530 ~ 2010
		5	1	300 ~ 350	0.083 ~ 0.092	≤1.0D	≤1.0D	19100 ~ 22280	1590 ~ 2050
		6	1	300 ~ 350	0.101 ~ 0.111	≤1.0D	≤1.0D	15920 ~ 18570	1610 ~ 2060
		8	1	300 ~ 350	0.126 ~ 0.138	≤1.0D	≤1.0D	11940 ~ 13930	1500 ~ 1920
		10	1	300 ~ 350	0.150 ~ 0.165	≤1.0D	≤1.0D	9550 ~ 11140	1430 ~ 1840
		12	1	300 ~ 350	0.175 ~ 0.193	≤1.0D	≤1.0D	7960 ~ 9280	1390 ~ 1790
BRASS, BRONZE	M08, M09	2	1	200 ~ 250	0.028 ~ 0.034	≤0.75D	≤1.0D	31830 ~ 39790	890 ~ 1350
		3	1	200 ~ 250	0.046 ~ 0.053	≤0.75D	≤1.0D	21220 ~ 26530	980 ~ 1410
		4	1	200 ~ 250	0.064 ~ 0.072	≤1.0D	≤1.0D	15920 ~ 19890	1020 ~ 1430
		5	1	200 ~ 250	0.083 ~ 0.092	≤1.0D	≤1.0D	12730 ~ 15920	1060 ~ 1460
		6	1	200 ~ 250	0.101 ~ 0.111	≤1.0D	≤1.0D	10610 ~ 13260	1070 ~ 1470
		8	1	200 ~ 250	0.126 ~ 0.138	≤1.0D	≤1.0D	7960 ~ 9950	1000 ~ 1370
		10	1	200 ~ 250	0.150 ~ 0.165	≤1.0D	≤1.0D	6370 ~ 7960	960 ~ 1310
		12	1	200 ~ 250	0.175 ~ 0.193	≤1.0D	≤1.0D	5310 ~ 6630	930 ~ 1280
THERMOPLASTICS	M01	2	1	251	0.045 ~ 0.052	≤0.75D	≤1.0D	40000	1800 ~ 2080
		3	1	377	0.073 ~ 0.083	≤0.75D	≤1.0D	40000	2920 ~ 3320
		4	1	503	0.102 ~ 0.113	≤1.0D	≤1.0D	40000	4080 ~ 4520
		5	1	628	0.130 ~ 0.144	≤1.0D	≤1.0D	40000	5200 ~ 5760
		6	1	754	0.158 ~ 0.174	≤1.0D	≤1.0D	40000	6320 ~ 6960
		8	1	800 ~ 850	0.197 ~ 0.217	≤1.0D	≤1.0D	31830 ~ 33820	6270 ~ 7340
		10	1	800 ~ 850	0.236 ~ 0.260	≤1.0D	≤1.0D	25460 ~ 27060	6010 ~ 7040
		12	1	800 ~ 850	0.275 ~ 0.303	≤1.0D	≤1.0D	21220 ~ 22550	5840 ~ 6830