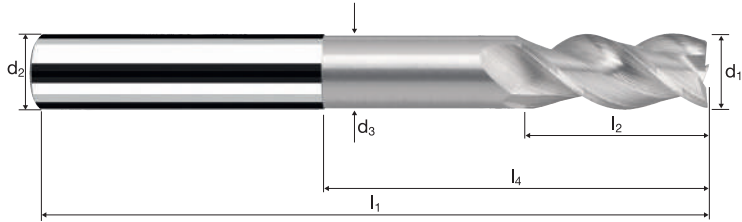
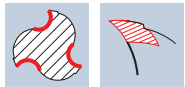
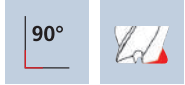


# Cylindrical end mills AX

Smooth-edged, long version, neck



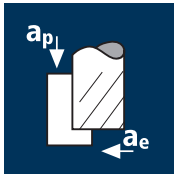
HM  
MG10     λ 40°  
                  γ 20°



Rm < 850		Al Aluminium > 99%	Al Aluminium Alloy	Al Aluminium Cast		Cu Copper	Plastic Thermoplast
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										CELERO	
Example: Order-N°.										15659	C15659
										15559	C15559
Ø Code	d <sub>1</sub> e8	d <sub>2</sub> h6	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	z			
300	6.00	6.00	5.50	70	13.00	32.34	33.00	3	●	●	
391	8.00	8.00	7.40	80	19.00	42.29	43.00	3	●	●	
450	10.00	10.00	9.20	100	22.00	58.20	59.00	3	●	●	
501	12.00	12.00	11.00	110	26.00	63.13	64.00	3	●	●	
610	16.00	16.00	15.00	123	32.00	73.13	74.00	3	●	●	
682	20.00	20.00	19.00	141	38.00	89.13	90.00	3	●	●	

## Application



## Material

Wrought aluminium  
Construction aluminium



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>s</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]	Q [cm <sup>3</sup> /min]
6.00	3	550	0.085	9.000	1.500	29180	7440	100.4
8.00	3	550	0.105	12.000	2.000	21885	6895	165.4
10.00	3	550	0.135	15.000	2.500	17505	7090	265.9
12.00	3	550	0.160	18.000	3.000	14590	7005	378.2
16.00	3	550	0.170	24.000	4.000	10940	5580	535.7
20.00	3	550	0.200	30.000	5.000	8755	5250	787.8

Unalloyed copper



6.00	3	400	0.070	9.000	1.500	21220	4455	60.2
8.00	3	400	0.085	12.000	2.000	15915	4060	97.4
10.00	3	400	0.110	15.000	2.500	12730	4200	157.6
12.00	3	400	0.130	18.000	3.000	10610	4140	223.5
16.00	3	400	0.135	24.000	4.000	7960	3225	309.4
20.00	3	400	0.160	30.000	5.000	6365	3055	458.4

Thermoplastics



6.00	3	792	0.085	9.000	1.500	42015	10715	144.6
8.00	3	1000	0.105	12.000	2.000	39790	12535	300.8
10.00	3	1000	0.135	15.000	2.500	31830	12890	483.4
12.00	3	1000	0.160	18.000	3.000	26525	12730	687.5
16.00	3	1000	0.170	24.000	4.000	19895	10145	974.0
20.00	3	1000	0.200	30.000	5.000	15915	9550	1432.4

Cast aluminium



6.00	3	440	0.085	9.000	1.500	23345	5950	80.4
8.00	3	440	0.105	12.000	2.000	17505	5515	132.4
10.00	3	440	0.135	15.000	2.500	14005	5670	212.7
12.00	3	440	0.160	18.000	3.000	11670	5600	302.5
16.00	3	440	0.170	24.000	4.000	8755	4465	428.6
20.00	3	440	0.200	30.000	5.000	7005	4200	630.3



Wrought aluminium  
Construction aluminium



6.00	3	450	0.060	2.100	6.000	23875	4295	54.1
8.00	3	450	0.075	2.800	8.000	17905	4030	90.2
10.00	3	450	0.095	3.500	10.000	14325	4080	142.9
12.00	3	450	0.110	4.200	12.000	11935	3940	198.5
16.00	3	450	0.120	5.600	16.000	8950	3225	288.8
20.00	3	450	0.140	7.000	20.000	7160	3010	421.1

Unalloyed copper



6.00	3	350	0.050	2.100	6.000	18570	2785	35.1
8.00	3	350	0.060	2.800	8.000	13925	2505	56.1
10.00	3	350	0.075	3.500	10.000	11140	2505	87.7
12.00	3	350	0.090	4.200	12.000	9285	2505	126.3
16.00	3	350	0.095	5.600	16.000	6965	1985	177.8
20.00	3	350	0.110	7.000	20.000	5570	1840	257.4

Thermoplastics



6.00	3	792	0.060	2.100	6.000	42015	7565	95.3
8.00	3	800	0.075	2.800	8.000	31830	7160	160.4
10.00	3	800	0.095	3.500	10.000	25465	7255	254.0
12.00	3	800	0.110	4.200	12.000	21220	7005	352.9
16.00	3	800	0.120	5.600	16.000	15915	5730	513.4
20.00	3	800	0.140	7.000	20.000	12730	5350	748.7

Cast aluminium



6.00	3	360	0.060	2.100	6.000	19100	3440	43.3
8.00	3	360	0.075	2.800	8.000	14325	3225	72.2
10.00	3	360	0.095	3.500	10.000	11460	3265	114.3
12.00	3	360	0.110	4.200	12.000	9550	3150	158.8
16.00	3	360	0.120	5.600	16.000	7160	2580	231.0
20.00	3	360	0.140	7.000	20.000	5730	2405	336.9