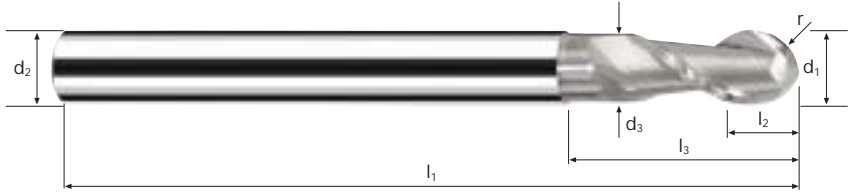


# Ball nose end mills Sphericut-Alu

Tolerance r f8 (-/-), 3xd

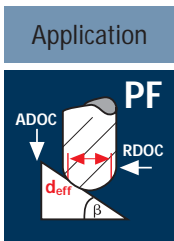
HM  
MG10     λ 40°  
                  γ 20°



HRC < 24     AI Aluminum > 99%     AI Aluminum Alloy     AI Aluminum Cast     Cu Copper     Plastic Thermoplast



Order-N°	d1 -/-	d2 h6	d3	l1	l2	l3	l4	r f8	α	fl	CELERO
C5292180	3	6	2.8	75	6	9	15.6	1.5	6.4°	2	●
C5292220	4	6	3.7	75	8	12	17.0	2.0	4.0°	2	●
C5292300	6	6	5.5	80	12	20	-	3.0	0.0°	2	●
C5292391	8	8	7.4	90	16	26	-	4.0	0.0°	2	●
C5292450	10	10	9.2	100	20	31	-	5.0	0.0°	2	●
<b>CNC Radius R</b>											
	d1	r	Tolerance f8		Radius						
					Minimum	Maximum					<b>R</b>
	3	1.5	-0.006	-0.020	<b>1.480</b>	<b>1.494</b>					<b>1.487</b>
	4	2.0			<b>1.980</b>	<b>1.994</b>					<b>1.987</b>
	6	3.0			<b>2.980</b>	<b>2.994</b>					<b>2.987</b>
	8	4.0	-0.010	-0.028	<b>3.972</b>	<b>3.990</b>					<b>3.981</b>
	10	5.0			<b>4.972</b>	<b>4.990</b>					<b>4.981</b>

VII





Material

Wrought aluminum alloys Si < 6%


d1 [mm]	f1	Speed [m/min]	FPT [mm]	ADOC [mm]	RDOC [mm]	d <sub>eff</sub> [mm]	RPM [min <sup>-1</sup> ]	Feed [mm/min]	β [°]
3	2	500	0.090	0.36	0.36	2.99	53230	9580	45°
4	2	500	0.090	0.48	0.48	3.99	39890	7180	45°
6	2	500	0.100	0.72	0.72	5.98	26615	5325	45°
8	2	500	0.110	0.96	0.96	7.98	19945	4390	45°
10	2	500	0.130	1.20	1.20	9.97	15965	4150	45°

Unalloyed copper


3	2	350	0.080	0.36	0.36	2.99	37260	5960	45°
4	2	350	0.080	0.48	0.48	3.99	27925	4470	45°
6	2	350	0.090	0.72	0.72	5.98	18630	3355	45°
8	2	350	0.100	0.96	0.96	7.98	13960	2790	45°
10	2	350	0.115	1.20	1.20	9.97	11175	2570	45°

Thermoplastics

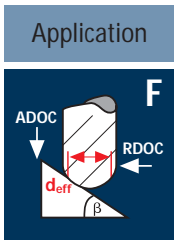


3	2	800	0.090	0.36	0.36	2.99	60000	10800	45°
4	2	800	0.090	0.48	0.48	3.99	60000	10800	45°
6	2	800	0.100	0.72	0.72	5.98	42585	8515	45°
8	2	800	0.110	0.96	0.96	7.98	31910	7020	45°
10	2	800	0.130	1.20	1.20	9.97	25540	6640	45°

Cast aluminum Si 6%-15%






3	2	300	0.065	0.36	0.36	2.99	31940	4150	45°
4	2	300	0.065	0.48	0.48	3.99	23935	3110	45°
6	2	300	0.070	0.72	0.72	5.98	15970	2235	45°
8	2	300	0.075	0.96	0.96	7.98	11965	1795	45°
10	2	300	0.090	1.20	1.20	9.97	9580	1725	45°





Material

Wrought aluminum alloys Si < 6%


d1 [mm]	f1	Speed [m/min]	FPT [mm]	ADOC [mm]	RDOC [mm]	d <sub>eff</sub> [mm]	RPM [min <sup>-1</sup> ]	Feed [mm/min]	β [°]
3	2	700	0.050	0.12	0.12	2.78	60000	6000	45°
4	2	700	0.045	0.15	0.15	3.69	60000	5400	45°
6	2	700	0.065	0.20	0.20	5.48	40660	5285	45°
8	2	700	0.075	0.22	0.22	7.20	30950	4645	45°
10	2	700	0.080	0.24	0.24	8.90	25035	4005	45°

Unalloyed copper



3	2	500	0.045	0.12	0.12	2.78	57250	5155	45°
4	2	500	0.040	0.15	0.15	3.69	43135	3450	45°
6	2	500	0.060	0.20	0.20	5.48	29045	3485	45°
8	2	500	0.070	0.22	0.22	7.20	22105	3095	45°
10	2	500	0.070	0.24	0.24	8.90	17885	2505	45°

Thermoplastics



3	2	900	0.050	0.12	0.12	2.78	60000	6000	45°
4	2	900	0.045	0.15	0.15	3.69	60000	5400	45°
6	2	900	0.065	0.20	0.20	5.48	52280	6795	45°
8	2	900	0.075	0.22	0.22	7.20	39790	5970	45°
10	2	900	0.080	0.24	0.24	8.90	32190	5150	45°

Cast aluminum Si 6%-15%

3	2	400	0.035	0.12	0.12	2.78	45800	3205	45°
4	2	400	0.030	0.15	0.15	3.69	34505	2070	45°
6	2	400	0.045	0.20	0.20	5.48	23235	2090	45°
8	2	400	0.055	0.22	0.22	7.20	17685	1945	45°
10	2	400	0.055	0.24	0.24	8.90	14305	1575	45°