











































Alu-cut

High-performance end mills for HSC and general machining of aluminum, magnesium, copper alloys and plastic.

Hochleistungs-Schaftfräser für die HSC und die Bearbeitung von Aluminium, Magnesium, Kupfer und Kunststoff.

97 - 104

Alu-cut

			<i>New</i> 					
Tool code		AE 250	AE 350	AE 255	AE 355	AB 240	ABLN 240	
Number of teeth		Z=2	Z=3	Z=2	Z=3	Z=2	Z=2	
Page		99	100	101	101	102	103	
		VHM	VHM	VHM	VHM	VHM	VHM	
								
								
		 50°	 50°	 55°	 55°	 40°	 40°	
		 90°	 90°	 90°	 90°			
								
								
		HSC	HSC	HSC	HSC	HSC	HSC	
N	Al and Al-alloy	⊙	⊙	⊙	⊙	⊙	⊙	
	Al cast alloy	○	○	○	○	○	○	
	Copper alloy	○	○	○	○	○	○	
	Brass, Bronze	○	○	○	○	○	○	
	Magnesium alloy	○	○	○	○	○	○	
	Plastic	⊙	⊙	⊙	⊙	⊙	⊙	

VHM	50°	HSC
	90°	

End mills
For HSC of aluminum, magnesium, copper alloys and plastic.

Schaftfräser
Für die HSC von Aluminium, Magnesium, Kupfer und Kunststoff.



AE 250

Z=2

Example: Order code AE 250 030-09006

d-Code	d x H x D	L
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N	Al and Al-alloy	<input checked="" type="radio"/>
	Al cast alloy	<input type="radio"/>
	Copper alloy	<input type="radio"/>
	Brass, Bronze	<input type="radio"/>
	Magnesium alloy	<input type="radio"/>
	Plastic	<input checked="" type="radio"/>

030-09006	3.0 x 9.0 x C 6	50
040-12006	4.0 x 12.0 x C 6	50
050-15006	5.0 x 15.0 x C 6	50
060-18006	6.0 x 18.0 x C 6	50

•	
•	
•	
•	

080-20008	8.0 x 20.0 x C 8	60
100-25010	10.0 x 25.0 x C10	75
120-30012	12.0 x 30.0 x C12	75

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•	
•	

Long cut length / Lange schneidkantenlänge

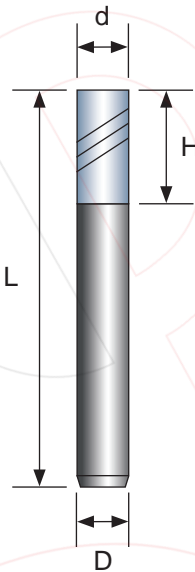
030-12006	3.0 x 12.0 x C 6	60
040-16006	4.0 x 16.0 x C 6	60
050-20006	5.0 x 20.0 x C 6	60
060-24006	6.0 x 24.0 x C 6	75

•	
•	
•	
•	

080-32008	8.0 x 32.0 x C 8	75
100-40010	10.0 x 40.0 x C10	100
120-50012	12.0 x 50.0 x C12	100

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•	
•	

Cutting data, P104



Tolerance / Toleranz

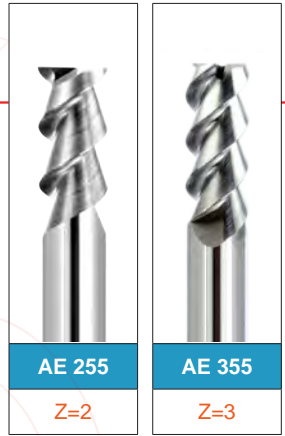
Range	Diameter
1 ≤ d < 8	0 / -0.02
8 ≤ d < 18	0 / -0.03

Alu-cut

VHM	55°	HSC
	90°	

End mills
For general machining of aluminum, magnesium, copper alloys and plastic.

Schaftfräser
Für die Bearbeitung von Aluminium, Magnesium, Kupfer und Kunststoff.



Example: Order code AE 255 010-03004		
d-Code	d x H x D	L

N	Al and Al-alloy	⊙
	Al cast alloy	○
	Copper alloy	○
	Brass, Bronze	○
	Magnesium alloy	○
	Plastic	⊙

010-03004	1.0 x 3.0 x C 4	50
015-04004	1.5 x 4.0 x C 4	50
020-06004	2.0 x 6.0 x C 4	50
025-07004	2.5 x 7.0 x C 4	50
030-08004	3.0 x 8.0 x C 4	50
040-11004	4.0 x 11.0 x C 4	50
050-13006	5.0 x 13.0 x C 6	50
060-15006	6.0 x 15.0 x C 6	50
080-20008	8.0 x 20.0 x C 8	60
100-25010	10.0 x 25.0 x C10	75
120-30012	12.0 x 30.0 x C12	75
160-40016	16.0 x 40.0 x C16	100
200-40020	20.0 x 40.0 x C20	100

AE 255	AE 355
Z=2	Z=3
◇	●
◇	●
◇	●
◇	●
◇	●
●	●
●	●
●	●
●	●
◇	◇
●	●
●	●
●	●
●	●
◇	◇

Long cut length / Lange schneidkantenlänge

030-12006	3.0 x 12.0 x C 6	75
040-16006	4.0 x 16.0 x C 6	75
050-20006	5.0 x 20.0 x C 6	75
060-24006	6.0 x 24.0 x C 6	75
080-35008	8.0 x 35.0 x C 8	100
100-40010	10.0 x 40.0 x C10	100
120-45012	12.0 x 45.0 x C12	100

◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	
◇	

Cutting data, P104

Tolerance / Toleranz

Range	Diameter
1 ≤ d < 8	0 / -0.02
8 ≤ d < 18	0 / -0.03

Alu-cut



Ball nose end mills, long neck

For machining of aluminum, magnesium, copper alloys and plastic.

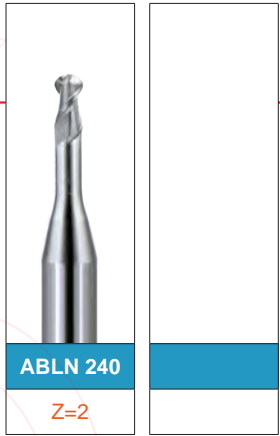


Kugelkopfräser, überlaufhals

Für die Bearbeitung von Aluminium, Magnesium, Kupfer und Kunststoff.

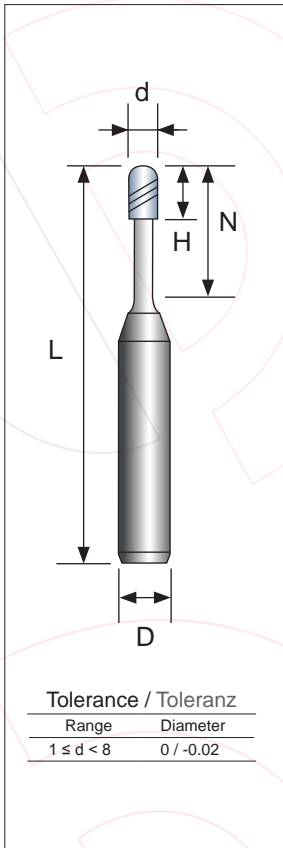


Example: Order code ABLN 240 010-06004			
d-Code	d x N x D	H	L



N	Al and Al-alloy	⊙
	Al cast alloy	○
	Copper alloy	○
	Brass, Bronze	○
	Magnesium alloy	○
	Plastic	⊙

010-06004	R0.5 x N 6 x C 4	1.5	50	◇	
010-08004	R0.5 x N 8 x C 4	1.5	50	◇	
010-10004	R0.5 x N 10 x C 4	1.5	50	◇	
010-12004	R0.5 x N 12 x C 4	1.5	50	◇	
015-08004	R0.75 x N 8 x C 4	2.3	50	◇	
015-12004	R0.75 x N 12 x C 4	2.3	50	◇	
015-16004	R0.75 x N 16 x C 4	2.3	50	◇	
020-08004	R1.0 x N 8 x C 4	3.0	50	◇	
020-12004	R1.0 x N 12 x C 4	3.0	50	◇	
020-16004	R1.0 x N 16 x C 4	3.0	50	◇	



Alu-cut

Cutting data / Alu-cut

Alu-cut		Slotting / Roughing												
		$A_p = 0.5 \times d$ [mm] $A_e = 1 \times d$ [mm]		AE 250, AE 350, AE 255 (#1), AE 355 (#2)										
		V_c [m / min]		f_z feed [mm / tooth] by diameter										
				2	3	4	5	6	8	10	12	16		
N	Al and Al-alloy	300 - 400	0.011	0.015	0.020	0.025	0.031	0.042	0.050	0.060	0.082			
	Al cast alloy	120 - 160	0.007	0.010	0.018	0.022	0.027	0.035	0.044	0.052	0.071			
	Copper alloy	80 - 110	0.011	0.015	0.020	0.025	0.031	0.042	0.050	0.060	0.082			
	Brass, Bronze	60 - 80	0.007	0.010	0.016	0.020	0.025	0.032	0.039	0.048	0.066			
	Magnesium alloy	160 - 210	0.012	0.016	0.021	0.026	0.029	0.042	0.053	0.063	0.086			
	Plastic	80 - 100	0.007	0.010	0.016	0.020	0.024	0.032	0.038	0.046	0.063			

Alu-cut		Side milling / Roughing												
		$A_p = 1 \times d$ [mm] $A_e = 0.5 \times d$ [mm]		AE 250, AE 350, AE 255 (#1), AE 355 (#2)										
		V_c [m / min]		f_z feed [mm / tooth] by diameter										
				2	3	4	5	6	8	10	12	16		
N	Al and Al-alloy	300 - 400	0.011	0.015	0.020	0.025	0.031	0.042	0.050	0.060	0.082			
	Al cast alloy	120 - 160	0.007	0.010	0.018	0.022	0.027	0.035	0.044	0.052	0.071			
	Copper alloy	80 - 110	0.011	0.015	0.020	0.025	0.031	0.042	0.050	0.060	0.082			
	Brass, Bronze	60 - 80	0.007	0.010	0.016	0.020	0.025	0.032	0.039	0.048	0.066			
	Magnesium alloy	160 - 210	0.012	0.015	0.020	0.025	0.031	0.042	0.050	0.060	0.082			
	Plastic	80 - 100	0.007	0.010	0.016	0.020	0.024	0.032	0.038	0.046	0.063			

Alu-cut		Side milling / Pre-finishing												
		$A_p = 1 \times d$ [mm] $A_e = 0.1 \times d$ [mm]		AE 250, AE 350, AE 255 (#1), AE 355 (#2)										
		V_c [m / min]		f_z feed [mm / tooth] by diameter										
				2	3	4	5	6	8	10	12	16		
N	Al and Al-alloy	380 - 500	0.016	0.024	0.026	0.032	0.041	0.058	0.073	0.090	0.120			
	Al cast alloy	160 - 210	0.013	0.019	0.022	0.028	0.039	0.053	0.065	0.079	0.105			
	Copper alloy	90 - 120	0.016	0.024	0.026	0.032	0.041	0.058	0.073	0.090	0.120			
	Brass, Bronze	75 - 100	0.009	0.013	0.021	0.026	0.033	0.047	0.059	0.072	0.096			
	Magnesium alloy	200 - 260	0.016	0.024	0.026	0.032	0.041	0.058	0.073	0.090	0.120			
	Plastic	85 - 110	0.011	0.016	0.021	0.026	0.029	0.042	0.053	0.063	0.084			

Notes	<p>#1: For AE 255, adjust feed (f_z) and cutting speed (n) 15% - 25% lower.</p> <p>#2: For AE 355, adjust feed (f_z) and cutting speed (n) 15% - 25% lower.</p>
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