

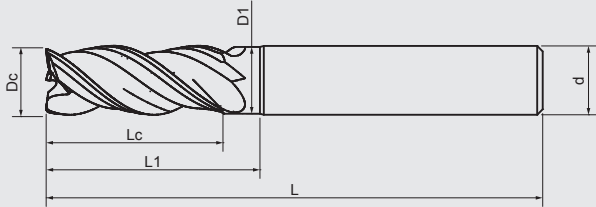
F631ZX / F631 / F632

End Mills For Aluminium

Designed with three variable helix geometry and three unequal flutes.

Designed with sharp cutting edge, high removal cutting geometry, and fine grinding smooth surface to prevent sticking problem.

Adopting ZrN coating without AlTi in the formula would prevent from chemical affinity with Alu metal and enhance tool life by gaining better surface hardness.



VHM Carbide

Bright ZrN



90°

Aluminium



Suitable for cutting aluminium.

Application for HPC/ roughing cutting process with high chip removal rate as well as for HSC/ finishing cutting with fine and smooth surface finishing.

N

N

N

DIN 6527 Standard Length

Dc 0 -0.02	Lc mm	L mm	d h5	L1 mm	D1 mm	F631ZX ZrN	F631 Bright				
3	8	57	6	14	2.8	●	●				
4	11	57	6	16	3.8	●	●				
5	13	57	6	18	4.8	●	●				
6	13	57	6	20	5.8	●	●				
8	19	63	8	26	7.7	●	●				
10	22	72	10	31	9.7	●	●				
12	26	83	12	37	11.6	●	●				
16	32	92	16	43	15.5	●	●				
20	38	104	20	53	19.5	●	●				

Long Length

Dc 0 -0.02	Lc mm	L mm	d h5	L1 mm	D1 mm			F632 Bright			
6	19	63	6	26	5.8			●			
8	28	72	8	35	7.7			●			
10	34	84	10	43	9.7			●			
12	40	97	12	51	11.6			●			
16	48	108	16	59	15.5			●			
20	56	122	20	71	19.5			●			

Cutting Conditions

F631ZX F631 F632									
	cutting speed Vc (m/min)	feed per tooth fz (mm)	cutting speed Vc (m/min)	feed per tooth fz (mm)	cutting speed Vc (m/min)	feed per tooth fz (mm)	cutting speed Vc (m/min)	feed per tooth fz (mm)	
Aluminium Steel Materials									
N	GRI0-1 Wrought Aluminium alloys	400	0.005xDc	400	0.006xDc	400	0.007xDc	400	0.008xDc
	GRI0-2 Aluminium cast alloys <10%	400	0.005xDc	400	0.006xDc	400	0.007xDc	400	0.008xDc
	GRI0-3 Aluminium cast alloys >10%	350	0.005xDc	380	0.006xDc	380	0.007xDc	380	0.008xDc

All cutting data serve for orientation only and should be adapted individually to the technical conditions on location

1. Please work with good rigidity / high precision facilities and collet chuck.
2. Please choose proper cutting fluid.
3. The cutting data is reference value only. Please adjust it according to your real working conditions.
4. If RPM is lower the reference value, the Feed rate (fz) and RPM should be reduced by the same proportion.
5. If vibration occurs during cutting, please reduce cutting parameter.