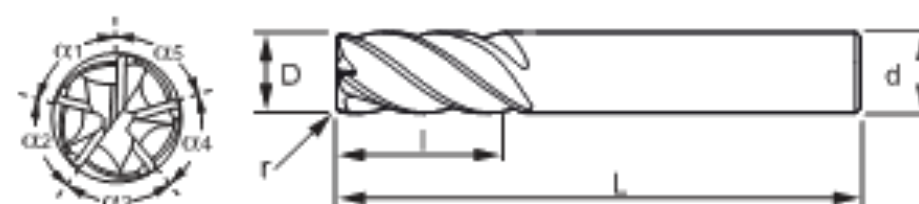


WIDIA HANITA END MILLS VARIABLE PITCH LONG SERIES Z5



ITEM: A4060

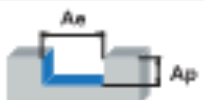
Material Micro-grain Integral hard metal
Standard Factory standard
Tolerance e8
Shank Cylindrical
Helix Right-hand 43° variable pitch
Surface treatment AITiN
Application Roughing and finishing on all materials. Excellent in dynamic milling. Without central cutting.



< 500	< 850	< 1200	< 600	< 850	Duplex	< 240	< 300	< 10% Si	> 10% Si	Brass Copper	Ti6Al4V	HTA	< 45	< 60	< 65
●	●	●	●	●	○	●	●				○		●	○	

FACTORY STANDARD

A4060	Tech. Code		D mm	L mm	l mm	r mm	d mm	Z	
5T - 43° - VARIABLE	A40600605		6	76	24	0,50	6	5	1
	A40600805		8		32		8		
	A40601000		10	100	40	-	10		
	A40601005					0,50			
	A40601200		12	125	48	-	12		
	A40601205					0,50			
	A40601210					1,00			
	A40601605		16	141	64	0,50	16		
	A40601610					1,00			
	A40602005		20	150	80	0,50	20		
	A40602010					1,00			

		Side Milling		Slotting	RANGE								
					A4060								
Material	Feature	Ap	Ae	Ap	Vc m/min. min.	Vc m/min. max.	mm	D/mm 6	D/mm 8	D/mm 10	D/mm 12	D/mm 16	D/mm 20
CARBON STEEL	< 500 N/mm²	4 x D	0.05 x D	-	300	400	fz/mm	0.053	0.072	0.086	0.099	0.121	0.137
	< 850 N/mm²	4 x D	0.05 x D	-	240	320	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
	< 1200 N/mm²	4 x D	0.05 x D	-	120	200	fz/mm	0.030	0.040	0.048	0.056	0.068	0.078
STAINLESS STEEL	< 600 N/mm²	4 x D	0.05 x D	-	180	230	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
	< 800 N/mm²	4 x D	0.05 x D	-	120	160	fz/mm	0.030	0.040	0.048	0.056	0.068	0.078
CAST IRON	< 240 HB	4 x D	0.05 x D	-	240	300	fz/mm	0.053	0.072	0.086	0.099	0.121	0.137
	< 300 HB	4 x D	0.05 x D	-	200	260	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
SUPER ALLOY	Ti6Al4V	4 x D	0.05 x D	-	100	180	fz/mm	0.044	0.060	0.073	0.084	0.105	0.121
	HTA	4 x D	0.05 x D	-	50	80	fz/mm	0.023	0.032	0.038	0.045	0.056	0.065
HARDENED	< 45 HRC	4 x D	0.05 x D	-	160	280	fz/mm	0.039	0.054	0.065	0.075	0.092	0.106

Recommended "fz" values for side milling.
 For slotting, adjust the cutting parameters. (ex: fz x 0.8)