

Features

- Solid Carbide
- Able to cut a wide range of materials
- Range 1.0mm to 16.0mm
- Carbide able to give high wear resistance and long tool life

RS PRO End Mill, 3 Flute, Solid Carbide



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

RS PRO End Mill, 3 Flute, Solid Carbide

RS PRO solid carbide K30 uncoated 3 flute end mills range designed with features to cut a wide variety of materials. Range starting at a standard 1.0mm diameter to 16.0mm. Ideal for various machining operations, in a wide variety of materials. The sub straight provides high wear resistance and long tool life, making it a reliable tool for multiple applications. Can be used on multiple milling applications including milling and slotting.

Applications

Suitable for the milling of steels, stainless, cast and aluminium. **See cutting data sheet.**

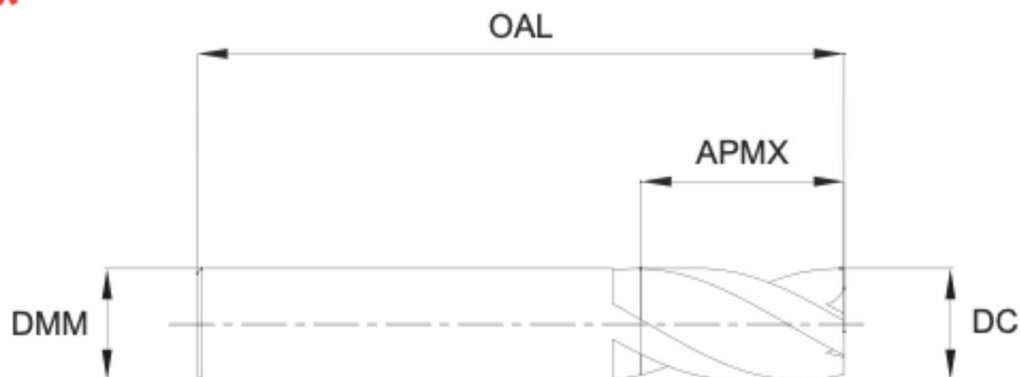
General Specifications

Cutter Diameter	See table and detailed image below (*DC)
Cut Length	See table and detailed image below (*APMX)
Number of Flutes	3
Material	K30 Carbide
Number of Pieces	1
Overall Length	See table and detailed image below (*OAL)
Shank Type	Plain
Shank Diameter	See table and detailed image below (*DMM)
Centre Cutting	Yes

Stock No.	Brand	Product Name	Cutter Diameter (DC)	Cut Length (APMX)	No of Flutes	Material	Overall Length (OAL)	Shank Diameter (DMM)
0316085	RS PRO	End Mill	1.0	4.0	3	Carbide	38.0	3.0
0316086	RS PRO	End Mill	2.0	6.3	3	Carbide	38.0	3.0
0316088	RS PRO	End Mill	3.0	12.0	3	Carbide	38.0	3.0
0316089	RS PRO	End Mill	4.0	14.0	3	Carbide	50.0	4.0
0316090	RS PRO	End Mill	5.0	16.0	3	Carbide	50.0	6.0
0316091	RS PRO	End Mill	6.0	19.0	3	Carbide	58.0	6.0
0316092	RS PRO	End Mill	8.0	20.0	3	Carbide	63.0	8.0
0316094	RS PRO	End Mill	10.0	22.0	3	Carbide	75.0	10.0
0316095	RS PRO	End Mill	12.0	25.0	3	Carbide	75.0	12.0
0316097	RS PRO	End Mill	16.0	32.0	3	Carbide	89.0	16.0

Approvals

Declarations	REACH DoC
Standards Met	DIN 6535HA



CUTTING DATA

VDI MATERIAL GROUP		HRc	SLOTTING	Size (mm)										
				2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0
P	1-5	Non-alloy Steel	<25	v_c (m/min)	50	55	65	70	70	70	70	75	75	70
				n	7960	5835	5170	4455	3715	2785	2230	1855	1705	1115
				f_z	0.005	0.007	0.012	0.015	0.018	0.027	0.03	0.031	0.029	0.029
				f (mm/min)	120	120	185	200	200	225	200	170	150	95
	6-9	Low alloy Steel	25-35	v_c (m/min)	50	55	65	70	70	70	70	75	75	70
				n	7960	5835	5170	4455	3715	2785	2230	1855	1705	1115
				f_z	0.005	0.007	0.012	0.015	0.018	0.027	0.03	0.031	0.029	0.029
				f (mm/min)	120	120	185	200	200	225	200	170	150	95
M	12-13	Ferritic/ Martensitic Stainless Steel		v_c (m/min)	25	30	35	35	35	35	35	35	35	35
				n	3980	3180	2785	2230	1855	1390	1115	930	795	555
				f_z	0.004	0.007	0.011	0.015	0.019	0.025	0.028	0.026	0.027	0.031
				f (mm/min)	45	65	90	100	105	105	95	70	65	50
K	15-20	Cast Iron		v_c (m/min)	60	55	60	55	55	55	60	55	55	55
				n	9550	5835	4775	3500	2920	2190	1910	1460	1250	875
				f_z	0.007	0.011	0.013	0.018	0.026	0.036	0.046	0.063	0.073	0.086
				f (mm/min)	200	190	185	190	230	235	265	275	275	300
N	21-24	Aluminium/ Aluminium Alloys		v_c (m/min)	140	145	140	145	145	145	145	140	145	140
				n	22280	15385	11140	9230	7690	5770	4615	3715	3300	2230
				f_z	0.006	0.009	0.013	0.015	0.019	0.026	0.032	0.038	0.043	0.05
				f (mm/min)	400	415	435	415	435	450	440	420	425	430
	26-27	Copper/ Copper Alloys		v_c (m/min)	105	105	110	105	105	110	105	105	105	110
				n	16710	11140	8755	6685	5570	4375	3340	2785	2385	1670
				f_z	0.006	0.009	0.012	0.015	0.005	0.025	0.032	0.039	0.046	0.05
				f (mm/min)	300	300	315	300	335	330	320	325	330	325



► The feed rate for long, long reach and uncoated tools should be reduced by up to 50%.

Recommended cutting depths are maximum depths, and speeds and feeds are a starting point based on these depths.
All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.
For long series and long necked tools it may be necessary to reduce feed rate by up to 50%.

v_c - cutting speed (m/min)
 n - RPM (rev/min)
 f_z - feed per tooth (mm)
 f - feed rate (mm/min)
 a_e - axial depth of cut
 a_r - radial depth of cut