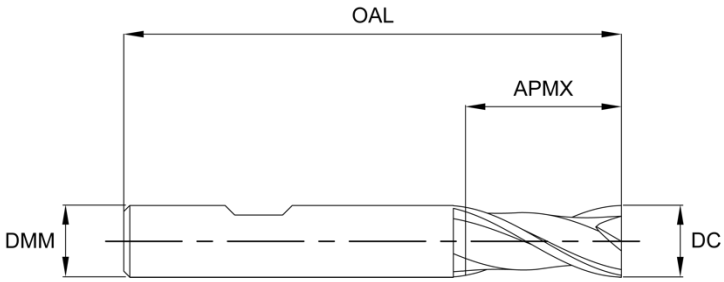
Features

- Manufactured from powder-metallurgy high-speed steel for enhanced hardness, wear resistance, and toughness, resulting in longer tool life and consistent performance.
- Provides excellent chip evacuation and smooth cutting action, making it ideal for slotting, pocketing, and machining steels and stainless steels.
- Offers a good balance between rigidity and reach, reducing tool deflection while remaining versatile for general-purpose milling applications.

RS PRO 2 Flute Standard Length



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

The RS PRO 2-Flute Standard Length End Mill is manufactured from HSS-E-PM (high-speed steel – enhanced - powder-metallurgy) to provide excellent wear resistance, toughness and extended tool life. Designed for machining ISO P and M materials, it is suitable for cutting steels and stainless steels in general milling, slotting, pocketing and plunge profiling applications. The 2 flute geometry ensures efficient chip evacuation and stable cutting performance, while the standard length provides increased reach and versatility over the RS PRO 2 Flute Short Length end mill without compromising machining accuracy, making it ideal for both manual and CNC machining operations.

General Specifications

Brand	RS PRO
Material	High Speed Steel – Enhanced - Powder Metallurgy (HSS-E-PM)
Cutter Diameter	3mm – 16mm
Product Type	End Mill
Overall Length	52mm – 92mm
Diameter	6mm – 16mm
Cut Length	8mm – 32mm
Number of Pieces	1
Cutter Type	Long Length
Cutter Application	Steels Stainless steel Cast irons

Mechanical Specifications

Cutter Diameter	DC– See table below and detailed image below
Cut Length	APMX – See table below and detailed image below
Number of Flutes	2
Overall Length	OAL – See table below and detailed image below
Shank Type	Plain / Straight
Shank Diameter	DDM – See table below and detailed image below
Centre Cutting	Yes

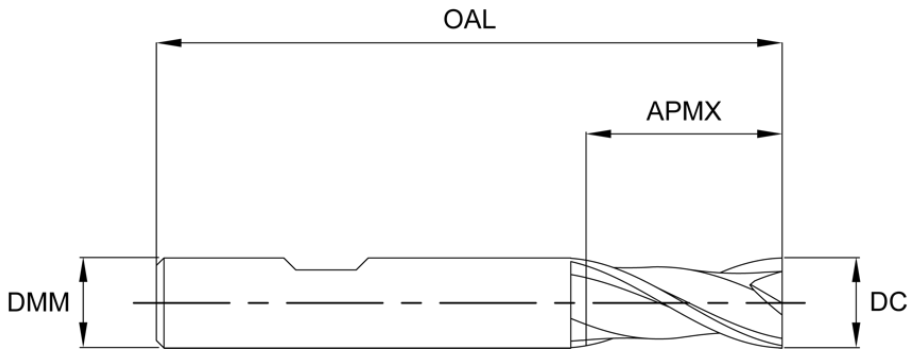
Approvals

Declarations	N/A
Hazardous Area Certification	N/A
Standards Met	DIN 1835B

Stock No.	Brand	Diameter DC / DMM	Shank Diameter DDM	Length of Cut APMX	O/ALL OAL
XXX-XXXX 900505	RS PRO	14.0	14	-	-
XXX-XXXX 900506	RS PRO	16.0	16	32.0	92

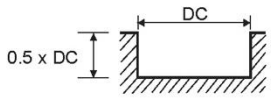
Similar Products

Stock No.	Brand	Diameter DC / DMM	Shank Diameter DMM	Length of Cut APMX	O/ALL OAL
XXX-XXXX 900359	RS PRO	7.0	10	10.0	60
XXX-XXXX 900498	RS PRO	8.0	8	11.0	61
XXX-XXXX 900499	RS PRO	9.0	10	11.0	61
XXX-XXXX 900500	RS PRO	10.0	10	13.0	63
XXX-XXXX 900501	RS PRO	12.0	12	16.0	73
XXX-XXXX 900502	RS PRO	14	12	16.0	73
XXX-XXXX 900503	RS PRO	16.0	16	19.0	79
XXX-XXXX 900504	RS PRO	20.0	20	22.0	88



Cutting Data

VDI MATERIAL GROUP		MATERIAL	HRc		Size (mm)									
					3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0
P	1-5	Non-alloy Steel	<25	v_c (m/min)	40	45	50	55	55	55	55	60	50	50
				n	4100	3600	3250	2900	2200	1800	1450	1150	780	630
				f_z	0.016	0.024	0.031	0.036	0.055	0.074	0.083	0.085	0.106	0.111
				f (mm/min)	135	175	2000	210	240	265	240	195	165	140
	6-9	Low alloy Steel	25-35	v_c (m/min)	30	40	40	45	45	45	45	45	45	40
				n	3350	3150	2600	2300	1800	1450	1150	890	700	490
				f_z	0.017	0.025	0.036	0.041	0.056	0.079	0.091	0.101	0.107	0.117
				f (mm/min)	115	160	185	190	200	230	210	180	150	115
	10-11	High alloy Steel, Tool Steel	35-45	v_c (m/min)	45	55	60	65	65	65	70	70	60	60
				n	5000	4300	3900	3500	2600	2100	1800	1350	950	750
				f_z	0.016	0.027	0.033	0.038	0.053	0.071	0.076	0.098	0.116	0.103
				f (mm/min)	160	230	255	265	275	300	275	265	220	155
M	12-14	Stainless Steel		v_c (m/min)	40	45	50	55	55	55	55	60	50	50
				n	4100	3600	3250	2900	2200	1800	1450	1150	780	630
				f_z	0.016	0.024	0.031	0.036	0.055	0.074	0.083	0.085	0.106	0.111
				f (mm/min)	135	175	200	210	240	265	240	195	165	140
K	15-20	Cast Iron		v_c (m/min)	40	45	50	55	55	55	55	60	50	50
				n	4100	3600	3250	2900	2200	1800	1450	1150	780	630
				f_z	0.016	0.024	0.031	0.036	0.055	0.074	0.083	0.085	0.106	0.111
				f (mm/min)	135	175	200	210	240	265	240	195	165	140



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_p - axial depth of cut
a_e - radial depth of cut