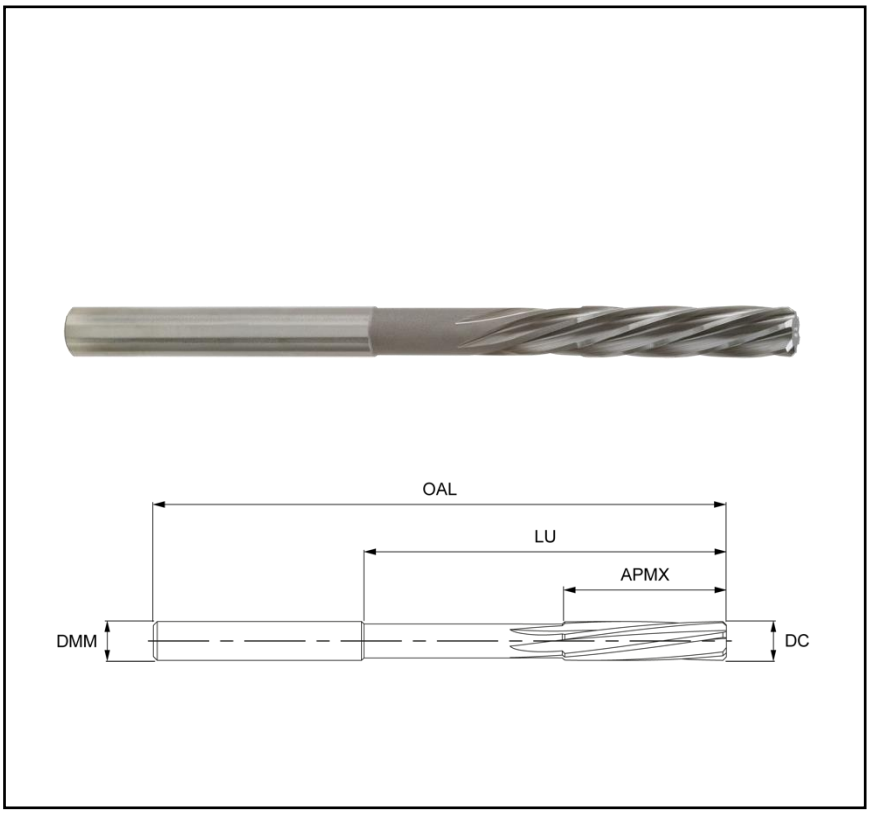
Features

- Premium HSS-E material provides superior heat resistance and wear performance, ideal for stainless steel and other tough materials.
- 45° Cutting geometry ensures smooth, stable cutting with reduced torque and excellent size control.
- High-precision finish delivers accurate hole sizing and outstanding surface quality for demanding machining applications.

RS PRO HSS-E Chucking Reamer



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 HSS-E Chucking Reamer is designed for precise, high-quality finishing in stainless steel and other difficult materials. Manufactured from premium HSS-E for added heat resistance and durability, it delivers consistent hole accuracy and excellent surface finish. Its 45° KCH cutting geometry ensures smooth cutting action, stable performance, and reliable size control, making it ideal for precision machining in demanding applications.

General Specifications

Brand	RS PRO
Material	High Speed Steel – Enhanced (HSS-E)
Cutter Diameter	2mm – 18mm
Product Type	Reamer Bits
Overall Length	49mm – 182mm
Diameter	2mm – 14mm
Cut Length	11mm – 56mm
Number of Pieces	1
Reamer Bit Type	Straight / Cylindrical Shank
Reamer Application	Steel Stainless steel Cast iron Non-ferrous materials (brass, bronze, copper)

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	4 - 8
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

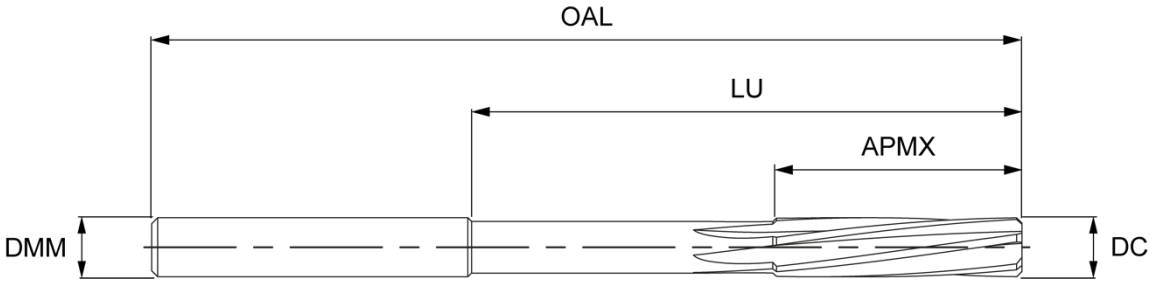
Declarations	N/A
Hazardous Area Certification	N/A
Standards Met	DIN 212

Stock No.	Brand	Nominal Diameter **DC**	Shank Diameter **DMM**	Flute Length **APMX**	Neck Length **LU**	O/ALL **OAL**	No Of Flutes **NOF**
XXX-XXXX 900521	RS PRO	2	2	11	-	49	4
XXX-XXXX 900237	RS PRO	10	10	38	86	133	6
XXX-XXXX 900360	RS PRO	12	10	44	104	151	6

Similar Products

Stock No.	Brand	DC	Flute Length **LU**	Overall Length **OAL**	No Of Flutes **NOF**
XXX-XXXX 900507	RS PRO	2.0	25	50	4
XXX-XXXX 900508	RS PRO	3.0	31	62	6
XXX-XXXX 900509	RS PRO	4.0	38	76	6
XXX-XXXX 900510	RS PRO	5.0	44	87	6
XXX-XXXX 900511	RS PRO	6.0	47	93	6
XXX-XXXX 900512	RS PRO	7.0	54	107	6
XXX-XXXX 900513	RS PRO	8.0	58	115	6
XXX-XXXX 900514	RS PRO	9.0	62	124	6
XXX-XXXX 900515	RS PRO	10.0	66	133	6
XXX-XXXX 900516	RS PRO	12.0	76	152	6
XXX-XXXX 900517	RS PRO	13.0	76	152	6
XXX-XXXX 900518	RS PRO	14.0	81	163	8
XXX-XXXX 900519	RS PRO	16.0	87	175	8
XXX-XXXX 900520	RS PRO	19.0	93	188	8

Connection Diagrams / Assembly Diagrams / Illustrations / Accessories



Cutting Data

VDI MATERIAL GROUP			HRc	v_c (m/min)	f_n (mm/rev)					
					ø2.0 - 4.9	ø5.0 - 8.9	ø9.0 - 12.9	ø13.0 - 19.9	ø20.0 - 30.0	>ø30.0
P	1-5	Non-alloy Steel	<25	**14 (12-16)**	0.10 (0.05-0.15)	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)	0.32 (0.25-0.40)	0.42 (0.35-0.50)
	6-9	Low alloy Steel	25-35	**11 (10-12)**	0.08 (0.05-0.10)	0.12 (0.08-0.16)	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)	0.35 (0.30-0.40)
	10-11	High alloy Steel, Tool Steel	35-45	**5 (4-6)**	0.06 (0.03-0.08)	0.08 (0.06-0.10)	0.12 (0.08-0.15)	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)
M	12-13	Stainless Steel		**5 (4-6)**	0.06 (0.03-0.08)	0.08 (0.06-0.10)	0.12 (0.08-0.15)	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)
K	15-16	Grey Cast Iron		**13 (12-14)**	0.10 (0.05-0.15)	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)	0.32 (0.25-0.40)	0.42 (0.35-0.50)
	17-20	Nodular/ Malleable Cast Iron		**11 (10-12)**	0.08 (0.05-0.10)	0.12 (0.08-0.16)	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)	0.35 (0.30-0.40)
N	21-24	Aluminium Si<12%		**18 (16-20)**	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)	0.32 (0.25-0.40)	0.42 (0.35-0.50)	0.50 (0.40-0.60)
	26-28	Copper, Copper Alloys		**17 (16-18)**	0.15 (0.10-0.20)	0.20 (0.15-0.25)	0.25 (0.20-0.30)	0.32 (0.25-0.40)	0.42 (0.35-0.50)	0.50 (0.40-0.60)
	29.1	Plastics, Acrylics		**10 (8-12)**	0.15 (0.10-0.20)	0.25 (0.20-0.30)	0.35 (0.30-0.40)	0.45 (0.40-0.50)	0.55 (0.50-0.60)	0.70 (0.60-0.80)

v_c - cutting speed (m/min)
n - RPM (rev/min)
f_n - feed rate (mm/rev)
ø - diameter (mm)

To calculate RPM from cutting speed: $n = \frac{v_c * 1000}{\pi * ø}$

To calculate cutting speed from RPM: $v_c = \frac{n * \pi * ø}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in these charts are nominal recommendations and should be considered only as good starting points.