Features

- Solid Carbide construction with 5xD flute length provides high rigidity, excellent wear resistance, and extended tool life for general-purpose drilling applications
- TiAlN coating enhances heat resistance and reduces friction, enabling reliable performance at higher cutting speeds and improved tool life.
- Optimised general purpose geometry with a 140° point angle and 30° flute helix angle ensures stable cutting, accurate hole formation, and efficient chip evacuation at increased drilling depths.

RS PRO General Purpose 5xD Carbide Drill



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 5xD General Purpose Drill is manufactured from solid carbide (MG HM) to provide high rigidity, excellent wear resistance, and extended tool life in a wide range of drilling applications. A TiALN coating enhances heat resistance and reduces friction, allowing reliable performance at higher cutting speeds. Featuring an optimised general purpose geometry with 140° point angle and a 30° flute helix angle, the drill delivers stable cutting action, accurate hole formation, and efficient chip evacuation, even at increased drilling depths.

General Specifications

Brand	RS PRO
Material	Carbide
Cutter Diameter	3mm – 16mm
Product Type	Drill Bits
Overall Length	66mm – 133mm
Diameter	6mm – 16mm
Cut Length	28mm – 83mm
Number of Pieces	1
Drill Bit Type	3xD
Drill Application	Steel Stainless steel Cast Iron

Mechanical Specifications

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

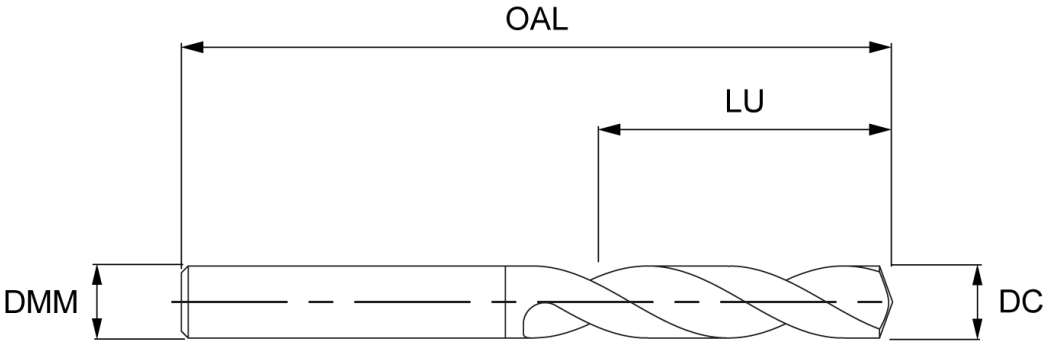
Approvals

Declarations	N/A
Hazardous Area Certification	N/A
Standards Met	DIN 6537

Stock No.	Brand	Diameter DC	Shank Diameter DMM	Flute Length LU	O/ALL OAL
XXX-XXXX 908143	RS PRO	3.0	6.0	28	66
XXX-XXXX 908145	RS PRO	3.3	6.0	28	66
XXX-XXXX 908144	RS PRO	4.0	6.0	36	74
XXX-XXXX 908147	RS PRO	4.2	6.0	36	74
XXX-XXXX 908146	RS PRO	5.0	6.0	44	82
XXX-XXXX 908148	RS PRO	6.0	6.0	44	82
XXX-XXXX 908149	RS PRO	6.5	8.0	53	91
XXX-XXXX 908153	RS PRO	7.5	8.0	53	91
XXX-XXXX 908150	RS PRO	10.0	10.0	61	103
XXX-XXXX 908154	RS PRO	10.2	12.0	71	118
XXX-XXXX 908151	RS PRO	12.0	12.0	71	118
XXX-XXXX 908152	RS PRO	14.0	14.0	77	124

Similar Products

Stock No.	Brand	Diameter DC	Shank Diameter DMM	Flute Length LU	O/ALL OAL
XXX-XXXX 908127	RS PRO	4.2	6.0	24	66
XXX-XXXX 908129	RS PRO	4.5	6.0	24	66
XXX-XXXX 908126	RS PRO	5.0	6.0	28	66
XXX-XXXX 908132	RS PRO	5.5	6.0	28	66
XXX-XXXX 908130	RS PRO	6.0	6.0	28	66
XXX-XXXX 908131	RS PRO	6.5	8.0	34	79
XXX-XXXX 908134	RS PRO	7.0	8.0	34	79
XXX-XXXX 908133	RS PRO	7.5	8.0	41	79
XXX-XXXX 908135	RS PRO	8.0	8.0	41	79
XXX-XXXX 908136	RS PRO	8.5	10.0	47	89
XXX-XXXX 908137	RS PRO	9.0	10.0	47	89
XXX-XXXX 908139	RS PRO	9.5	10.0	47	89
XXX-XXXX 908138	RS PRO	10.0	10.0	47	89
XXX-XXXX 908141	RS PRO	11.0	12.0	55	102
XXX-XXXX 908142	RS PRO	12.0	12.0	55	102
XXX-XXXX 908140	RS PRO	13.0	14.0	60	107



Cutting Data

VDI MATERIAL GROUP			HRc	v_c (m/min)	f_n (mm/rev)													
					ø1.0 -1.9	ø2.0 -2.9	ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.5	ø14.0 -15.5	ø16.0 -17.5	ø18.0 -19.5	ø20.0
P	1-5	Non-alloy Steel	<25	**100 (100-120)**	0.04	0.06	0.09	0.11	0.15	0.17	0.18	0.19	0.23	0.25	0.26	0.29	0.33	0.35
P	6-9	Low alloy Steel	25-35	**95 (85-105)**	0.04	0.06	0.09	0.11	0.15	0.17	0.18	0.19	0.23	0.25	0.26	0.29	0.33	0.35
P	10-11	High alloy Steel, Tool Steel	35-45	**80 (70-90)**	0.03	0.05	0.08	0.10	0.12	0.13	0.14	0.16	0.19	0.21	0.22	0.24	0.25	0.26
M	12-13	Ferritic/ Martensitic Stainless Steel		**60 (45-70)**	0.03	0.05	0.08	0.10	0.14	0.16	0.17	0.18	0.21	0.23	0.24	0.26	0.29	0.31
K	15-16	Grey Cast Iron		**90 (80-100)**	0.05	0.05	0.09	0.13	0.16	0.19	0.20	0.21	0.25	0.28	0.30	0.32	0.35	0.37
K	17-20	Nodular/ Malleable Cast Iron		**85 (70-100)**	0.05	0.05	0.09	0.13	0.16	0.19	0.20	0.21	0.25	0.28	0.30	0.32	0.35	0.37

▸ For drills <3.0mm reduce v_c by 30%

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