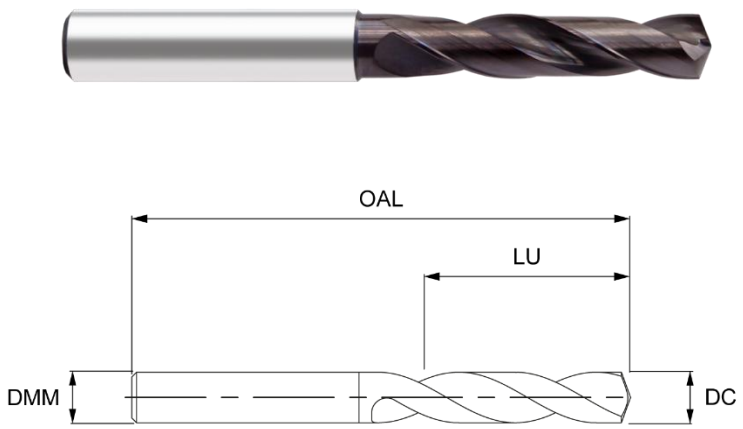
Features

- Solid Carbide Construction provides high rigidity, wear resistance, and long tool life for general-purpose drilling.
- TiAlN Coating enhances heat resistance and reduces friction for improved performance at higher cutting speeds.
- Optimised Geometry features a 140° point angle and 30° flute helix angle for stable cutting and efficient chip evacuation.

RS PRO General Purpose Carbide Drill 3xD



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 General Purpose 3xD Carbide Drill is manufactured from solid micro-grain carbide to deliver high rigidity, wear resistance, and consistent drilling performance. A TiALN coating enhances heat resistance and reduces friction, allowing higher cutting speeds and extended tool life. Featuring a 140° point angle and a 30° flute helix angle, the drill provides stable cutting action, efficient chip evacuation, and accurate hole production across a wide range of materials.

General Specifications

Brand	RS PRO
Material	Carbide
Cutter Diameter	3mm – 14mm
Product Type	Drill Bits
Overall Length	62mm – 107mm
Diameter	6mm – 14mm
Cut Length	20mm – 60mm
Number of Pieces	1
Drill Bit Type	3xD
Drill Application	Steel Stainless steel Cast Iron

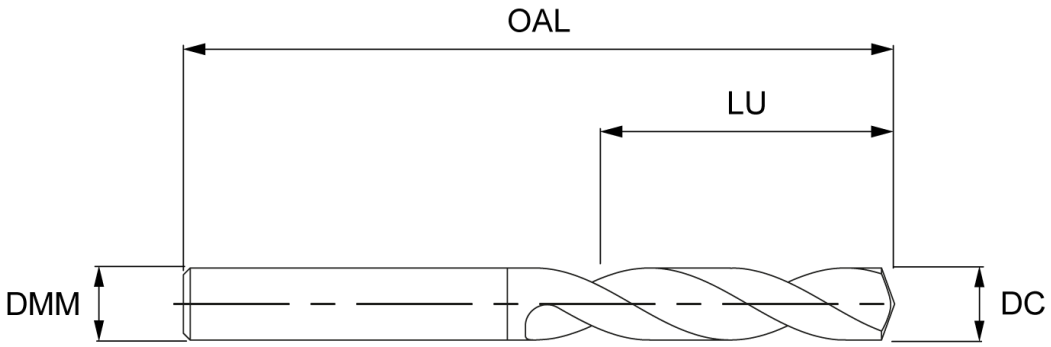
Mechanical Specifications

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 905648	RS PRO	3.0	6.0	20	62
XXX-XXXX 905650	RS PRO	3.3	6.0	20	62
XXX-XXXX 905651	RS PRO	3.5	6.0	20	62
XXX-XXXX 905649	RS PRO	4.0	6.0	24	66



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.