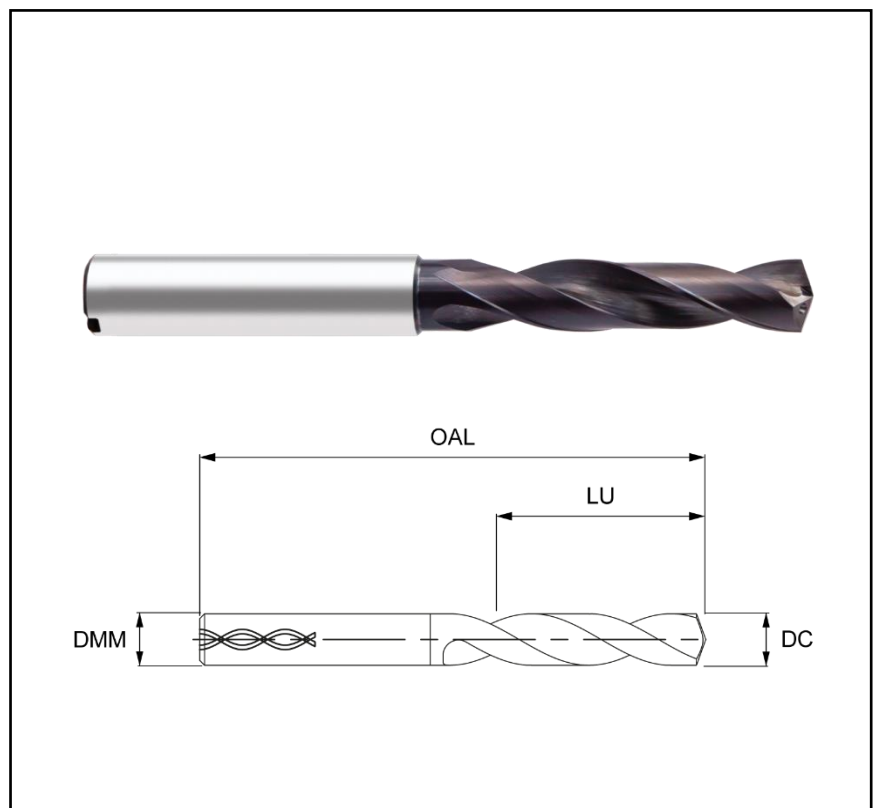


## Features

- Point R-thinning gives superior centering and chip curling.
- Special flute geometry highly suited to machining stainless steels.
- Special RS Pro coating gives better surface finish and longer tool life.
- Excellent chip evacuation due to improved surface treatment.
- Through coolant capability improves heat dissipation and chip removal.

## RS PRO 3xD 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 3xD Carbide Drill is engineered for high performance in stainless steel and other tough materials, featuring a nano-layered TiAlN coating for exceptional tool life and a specialised flute and point geometry for smooth, stable cutting. It's 140° 4-facet point ensures excellent self-centering with reduced burrs, while radius thinning lowers axial forces for softer cutting action. Wide flutes with a tailored core improve chip formation and evacuation, and the straight cutting lip reduces torque for reliable drilling in even in the most demanding applications. The inclusion of the through coolant capability enhances heat dissipation and aids efficient chip evacuation, further improving tool life and performance.*

## General Specifications

|                   |                                                                          |
|-------------------|--------------------------------------------------------------------------|
| Brand             | RS PRO                                                                   |
| Material          | Carbide                                                                  |
| Drill Bit Size    | 3mm – 13.5mm                                                             |
| Product Type      | Drill Bit                                                                |
| Overall Length    | 62mm – 107mm                                                             |
| Shank Diameter    | 6mm – 14mm                                                               |
| Cut Length        | 20mm – 60mm                                                              |
| Number of Pieces  | 1                                                                        |
| Drill Bit Type    | 3xD                                                                      |
| Drill Application | Steel<br>Stainless steel<br>Cast iron<br>Aluminium<br>Plastics, acrylics |

## 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                                            |

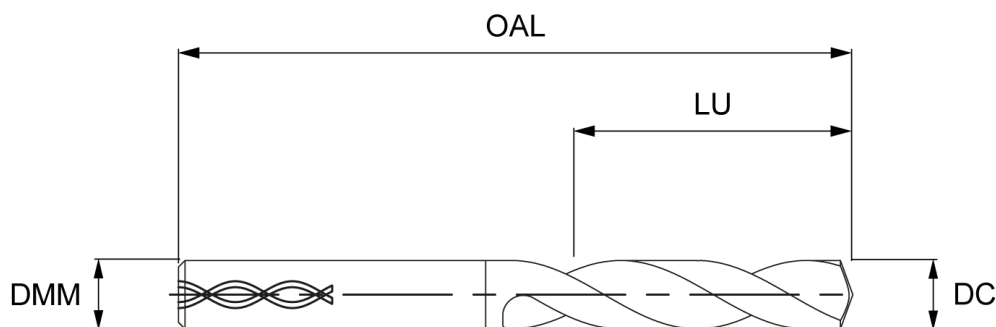
## Approvals

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

| Stock No.          | Brand  | Diameter<br>DC | Shank Diameter<br>DMM | FL.LTH<br>LU | O/ALL<br>OAL |
|--------------------|--------|----------------|-----------------------|--------------|--------------|
| XXX-XXXX<br>905635 | RS PRO | 3.0            | 6.0                   | 20           | 62           |
| XXX-XXXX<br>905636 | RS PRO | 4.0            | 6.0                   | 24           | 66           |
| XXX-XXXX<br>905637 | RS PRO | 4.2            | 6.0                   | 24           | 66           |
| XXX-XXXX<br>905638 | RS PRO | 5.0            | 6.0                   | 28           | 66           |
| XXX-XXXX<br>905639 | RS PRO | 6.0            | 6.0                   | 28           | 66           |
| XXX-XXXX<br>905640 | RS PRO | 7.0            | 8.0                   | 34           | 79           |
| XXX-XXXX<br>905641 | RS PRO | 8.0            | 8.0                   | 41           | 79           |

## Similar Products

| Stock No.          | Brand  | Diameter<br>DC | Shank Diameter<br>DMM | FL.LTH<br>LU | O/ALL<br>OAL |
|--------------------|--------|----------------|-----------------------|--------------|--------------|
| XXX-XXXX<br>905642 | RS PRO | 3.3            | 6.0                   | 28           | 66           |
| XXX-XXXX<br>905643 | RS PRO | 4.0            | 6.0                   | 36           | 74           |
| XXX-XXXX<br>905644 | RS PRO | 5.0            | 6.0                   | 44           | 82           |
| XXX-XXXX<br>905645 | RS PRO | 6.0            | 6.0                   | 44           | 82           |
| XXX-XXXX<br>905647 | RS PRO | 8.5            | 10.0                  | 61           | 103          |



## Cutting Data

| VDI MATERIAL GROUP |                                             | HRc   | V <sub>c</sub> (m/min) | f <sub>n</sub> (mm/rev) |              |              |              |              |              |              |              |                |                |                |                |                |       |
|--------------------|---------------------------------------------|-------|------------------------|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|-------|
|                    |                                             |       |                        | ø1.0<br>-1.9            | ø2.0<br>-2.9 | ø3.0<br>-3.9 | ø4.0<br>-4.9 | ø5.0<br>-5.9 | ø6.0<br>-6.9 | ø7.0<br>-7.9 | ø8.0<br>-9.9 | ø10.0<br>-11.9 | ø12.0<br>-13.5 | ø14.0<br>-15.5 | ø16.0<br>-17.5 | ø18.0<br>-19.5 | ø20.0 |
| <b>P</b>           | 1-5 Non-alloy Steel                         | <25   | 115<br>(105-125)       | 0.02                    | 0.03         | 0.04         | 0.05         | 0.05         | 0.06         | 0.07         | 0.08         | 0.10           | 0.12           | 0.15           | 0.20           | 0.22           | 0.24  |
|                    | 6-9 Low alloy Steel                         | 25-35 | 105<br>(95-115)        | 0.02                    | 0.03         | 0.04         | 0.05         | 0.05         | 0.06         | 0.07         | 0.08         | 0.10           | 0.12           | 0.15           | 0.20           | 0.22           | 0.24  |
|                    | 10-11 High alloy Steel, Tool Steel          | 35-45 | 95<br>(85-105)         | 0.02                    | 0.03         | 0.04         | 0.05         | 0.05         | 0.06         | 0.07         | 0.08         | 0.10           | 0.12           | 0.15           | 0.20           | 0.22           | 0.24  |
| <b>M</b>           | 12-13 Ferritic/ Martensitic Stainless Steel |       | 65<br>(60-70)          | 0.02                    | 0.03         | 0.04         | 0.05         | 0.05         | 0.06         | 0.07         | 0.08         | 0.10           | 0.12           | 0.16           | 0.20           | 0.22           | 0.24  |
|                    | 14 Austenitic Stainless Steel               |       | 40<br>(35-45)          | 0.02                    | 0.03         | 0.03         | 0.03         | 0.03         | 0.04         | 0.05         | 0.06         | 0.08           | 0.10           | 0.12           | 0.15           | 0.17           | 0.19  |
| <b>N</b>           | 21-24 Aluminium Si<12%                      |       | 210<br>(200-220)       | 0.04                    | 0.08         | 0.12         | 0.18         | 0.20         | 0.25         | 0.28         | 0.30         | 0.40           | 0.50           | 0.60           | 0.80           | 1.00           | 1.20  |
|                    | 25 Aluminium Si>12%                         |       | 165<br>(155-175)       | 0.03                    | 0.06         | 0.10         | 0.15         | 0.18         | 0.25         | 0.28         | 0.30         | 0.35           | 0.40           | 0.50           | 0.60           | 0.70           | 0.80  |
| <b>S</b>           | 31-32 HRSA Fe Based                         |       | 30<br>(25-35)          | 0.05                    | 0.05         | 0.06         | 0.08         | 0.08         | 0.10         | 0.10         | 0.11         | 0.12           | 0.14           | 0.14           | 0.15           | 0.15           | 0.15  |
|                    | 33-35 HRSA Ni/Co Based                      |       | 25<br>(20-30)          | 0.03                    | 0.03         | 0.04         | 0.06         | 0.06         | 0.08         | 0.08         | 0.09         | 0.10           | 0.12           | 0.12           | 0.13           | 0.13           | 0.13  |
|                    | 36 Titanium unalloyed                       |       | 45<br>(40-50)          | 0.01                    | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.06         | 0.07         | 0.08           | 0.10           | 0.12           | 0.14           | 0.16           | 0.18  |
|                    | 37 Titanium Alloys                          |       | 40<br>(35-45)          | 0.01                    | 0.02         | 0.03         | 0.04         | 0.05         | 0.06         | 0.06         | 0.07         | 0.08           | 0.10           | 0.12           | 0.14           | 0.16           | 0.18  |

$$\text{To calculate RPM from cutting speed: } n = \frac{V_c \cdot 1000}{\pi \cdot \phi}$$

$$\text{To calculate cutting speed from RPM: } V_c = \frac{n \cdot \pi \cdot \phi}{1000}$$

$V_c$  - cutting speed (m/min)  
 $n$  - RPM (rev/min)  
 $f_n$  - feed rate (mm/rev)  
 $\phi$  - drill diameter (mm)

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.