

**Garant****Stub drill HSS-Co8 FS, TiAlN, Ø DC h8: 2,2mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 113140 2,2    |
| GTIN         | 4045197003287 |
| Item class   | 11B           |

**Description****Version:**

Particularly **robust and strong** due to **strengthened core**.

Ground flutes, with high concentricity.

With point geometry shape S (special)

**Advantage:**

**Ideal for drilling shallow holes (approx. 2 - 4×D)** on NC machines and automatic machines.

**Recommendation:****Maximum drilling depth:**

$$L_2 = L_c - 1.5 \times D_c.$$

**Technical description**

|                                          |              |
|------------------------------------------|--------------|
| Flute length $L_c$                       | 13 mm        |
| Nominal $\varnothing D_c$                | 2.2 mm       |
| Number of cutting edges Z                | 2            |
| Feed f in steel < 750 N/mm <sup>2</sup>  | 0.03 mm/rev. |
| Tolerance nominal $\varnothing$          | h8           |
| Shank $\varnothing D_s$                  | 2.2 mm       |
| Overall length L                         | 40 mm        |
| Standard                                 | DIN 1897     |
| recommended maximum drilling depth $L_2$ | 9.7 mm       |
| Point angle                              | 130 degrees  |

|                 |              |
|-----------------|--------------|
| Shank           | Plain shank  |
| Coating         | TiAlN        |
| Tool material   | HSS Co 8     |
| Type            | FS           |
| Helix angle     | 38 degrees   |
| Through-coolant | no           |
| Colour ring     | without      |
| Type of product | Jobber drill |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|-------------------------------------------|----------------|----------|
| Alu plastics                   | suitable only under restricted conditions | 87 m/min       | N        |
| Aluminium (short chipping)     | suitable                                  | 56 m/min       | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 50 m/min       | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 50 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 35 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 30 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 12 m/min       | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 15 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 10 m/min       | M        |
| Ti > 850 N/mm <sup>2</sup>     | suitable only under restricted conditions | 6 m/min        | S        |
| Oil                            | suitable                                  |                |          |
| wet maximum                    | suitable                                  |                |          |

