

**Garant****Stub drill with 3 clamping faces HSS-E, uncoated, Ø DC h8: 13mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 113001 13     |
| GTIN         | 4045197749895 |
| Item class   | 11B           |

**Description****Version:**

Stable and sturdy stub drill with **strengthened core diameter**. Ground flutes, with high concentricity. Precision ground point.

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

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

**Note:**

Three **drive flats on the shank** for use in a 3-jaw chuck.

**Technical description**

|                                                   |                         |
|---------------------------------------------------|-------------------------|
| Feed f in steel < 900 N/mm <sup>2</sup>           | 0.16 mm/rev.            |
| Number of cutting edges Z                         | 2                       |
| Flute length L <sub>c</sub>                       | 51 mm                   |
| Tolerance nominal Ø                               | h8                      |
| Nominal Ø D <sub>c</sub>                          | 13 mm                   |
| Standard                                          | DIN 1897                |
| Overall length L                                  | 102 mm                  |
| Shank Ø D <sub>s</sub>                            | 13 mm                   |
| recommended maximum drilling depth L <sub>2</sub> | 31.5 mm                 |
| Point angle                                       | 130 degrees             |
| Shank                                             | Three drive flats shank |

|                 |              |
|-----------------|--------------|
| Coating         | uncoated     |
| Tool material   | HSS E        |
| Type            | N            |
| 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 | 70 m/min       | N        |
| Aluminium (short chipping)     | suitable only under restricted conditions | 45 m/min       | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 40 m/min       | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 40 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 30 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 25 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 10 m/min       | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 8 m/min        | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 12 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 8 m/min        | M        |
| GG(G)                          | suitable only under restricted conditions | 25 m/min       | K        |
| CuZn                           | suitable only under restricted conditions | 80 m/min       | N        |
| Uni                            | suitable                                  |                |          |
| Oil                            | suitable                                  |                |          |
| wet maximum                    | suitable                                  |                |          |

