

## Garant

### Solid carbide HPC drill type FS Weldon shank DIN 6535 HB, TiAlN, Ø DC h7: 20 mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 122675 20     |
| GTIN         | 4045197398543 |
| Item class   | 11E           |

#### Description

##### Version:

**Particularly strong** due to strengthened core and **special profile**. Special point geometry. **High concentricity** and **long tool life**.

**Precision drilling qualities.**

##### Recommendation:

##### Maximum drilling depth:

Flute length (see table) less 1.5×nominal Ø.

##### Note:

Flute length  $L_c = L_2 + 1.5 \times D_c$ .

Standard: DIN 6537

Tolerance nominal Ø: h7

Number of cutting edges Z: 2

Tolerance nominal Ø: h7

recommended maximum drilling depth  $L_2$ : 71 mm

Overall length L: 153 mm

Shank Ø  $D_s$ : 20 mm

Feed f in titanium > 850 N/mm<sup>2</sup>: 0.2 mm/rev.

#### Technical description

|                           |        |
|---------------------------|--------|
| Flute length $L_c$        | 101 mm |
| Number of cutting edges Z | 2      |
| Nominal Ø $D_c$           | 20 mm  |
| Shank tolerance           | h6     |

|   |                   |
|---|-------------------|
| Feed f in titanium > 850 N/mm <sup>2</sup>        | 0.2 mm/rev.       |
| Tolerance nominal Ø                               | h7                |
| Shank Ø D <sub>s</sub>                            | 20 mm             |
| Overall length L                                  | 153 mm            |
| Standard  | DIN 6537          |
| recommended maximum drilling depth L <sub>2</sub> | 71 mm             |
| Coating   | TiAlN             |
| Tool material                                     | Solid carbide     |
|   | 6×D               |
| Type  | FS                |
| Point angle                                       | 140 °             |
| Shank   | DIN 6535 HB to h6 |
| Through-coolant                                   | yes, with 25 bar  |
| Machining strategy                                | HPC               |
| Semi-Standard                                     | yes               |
| Colour ring                                       | pink              |
| Type of product                                   | Jobber drill      |

## User data

|                                | Suitability | V <sub>c</sub> | ISO code |
|--------------------------------|-------------|----------------|----------|
| Alu plastics                   | suitable    | 260 m/min      | N        |
| Aluminium (short chipping)     | suitable    | 240 m/min      | N        |
| Alu > 10% Si                   | suitable    | 160 m/min      | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 110 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 90 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 85 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 60 m/min       | P        |

|                                |   |          |   |
|--------------------------------|---|----------|---|
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 30 m/min | P |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 40 m/min | M |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 35 m/min | M |
| Ti > 850 N/mm <sup>2</sup>     | suitable                                  | 35 m/min | S |
| wet maximum                    | suitable                                  |          |   |
| wet minimum                    | suitable                                  |          |   |
| Air                            | suitable                                  |          |   |