

**Garant****GARANT Uni Hero solid carbide drill plain shank DIN 6535 HA, TiAlSiN, Ø DC h7: 16mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 122450 16     |
| GTIN         | 4069515010047 |
| Item class   | 13M           |

**Description****Version:**

**The ultimate in universality and profitability** in one tool. **Robust tool design** and **convex-concave curved cutting edge design** for optimum tool stability and chip breakage behaviour in a wide range of materials. **Special flute geometry** and **polished flutes** for ideal chip evacuation and maximum process reliability. **Ultra-smooth TiAlSiN high-performance coating** to effectively reduce wear and the formation of built-up edges.

**Note:**

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

HB and HE shanks are available at the same price as HA.

For **HB shanks**: use order **no. 122451**.

For **HE shanks**: order with **No. 122450** and **12900HE**.

Articles with prices in brackets: Different delivery time and minimum order quantity is 3 pieces.

**Technical description**

|                                           |              |
|-------------------------------------------|--------------|
| Shank Ø $D_s$                             | 16 mm        |
| recommended maximum drilling depth $L_2$  | 41 mm        |
| Standard                                  | DIN 6537 K   |
| Feed $f$ in steel $< 1100 \text{ N/mm}^2$ | 0.27 mm/rev. |
| Nominal Ø $D_c$                           | 16 mm        |
| Flute length $L_c$                        | 65 mm        |
| Overall length $L$                        | 115 mm       |

## Data sheet

|                           |                   |
|---------------------------|-------------------|
| Number of cutting edges Z | 2                 |
| Tolerance nominal Ø       | h7                |
| Series                    | Uni               |
| Coating                   | TiAlSiN           |
| Tool material             | Solid carbide     |
| Version                   | 4xD               |
| Point angle               | 140 degrees       |
| Shank                     | DIN 6535 HA to h6 |
| Through-coolant           | yes, with 25 bar  |
| Machining strategy        | HPC               |
| Semi-Standard             | yes               |
| Colour ring               | orange            |
| Type of product           | Jobber drill      |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|-------------------------------------------|----------------|----------|
| Alu plastics                   | suitable only under restricted conditions | 190 m/min      | N        |
| Aluminium (short chipping)     | suitable                                  | 200 m/min      | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 160 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 150 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 140 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 110 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 90 m/min       | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 90 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 80 m/min       | M        |
| Ti > 850 N/mm <sup>2</sup>     | suitable                                  | 40 m/min       | S        |
| GG(G)                          | suitable                                  | 130 m/min      | K        |

|             |                                              |
|-------------|----------------------------------------------|
| Uni         | suitable                                     |
| wet maximum | suitable                                     |
| wet minimum | suitable                                     |
| Air         | suitable only under<br>restricted conditions |

**Suitable products**

<https://www.hoffmann-group.com/GB/en/hom/p/122450-16>