

**Garant****GARANT Uni Hero solid carbide drill plain shank DIN 6535 HA, TiAlSiN, Ø DC h7: 9,9mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 123020 9,9    |
| GTIN         | 4069515012805 |
| 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. 123021**.

**HE shank**: order with **No. 123020** and **129100HE**.

Items with prices in brackets: Differing delivery time and minimum order quantity 3 pieces.

**Technical description**

|                                          |             |
|------------------------------------------|-------------|
| Number of cutting edges Z                | 2           |
| recommended maximum drilling depth $L_2$ | 80.2 mm     |
| Shank $\varnothing D_s$                  | 10 mm       |
| Feed f in steel $< 1100 \text{ N/mm}^2$  | 0.2 mm/rev. |
| Flute length $L_c$                       | 95 mm       |
| Overall length L                         | 142 mm      |
| Nominal $\varnothing D_c$                | 9.9 mm      |

## Data sheet

|                     |                    |
|---------------------|--------------------|
| Tolerance nominal Ø | h7                 |
| Standard            | Works standard     |
| Series              | Uni                |
| Coating             | TiAlSiN            |
| Tool material       | Solid carbide      |
| Version             | 8xD                |
| 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     | Mono jobber drills |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|-------------------------------------------|----------------|----------|
| Alu plastics                   | suitable only under restricted conditions | 140 m/min      | N        |
| Aluminium (short chipping)     | suitable                                  | 150 m/min      | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 120 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 115 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 110 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 80 m/min       | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 70 m/min       | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 65 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 60 m/min       | M        |
| Ti > 850 N/mm <sup>2</sup>     | suitable                                  | 35 m/min       | S        |
| GG(G)                          | suitable                                  | 95 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/123020-9,9>