

**Garant****GARANT Uni Hero solid carbide drill plain shank DIN 6535 HA, TiAlSiN, Ø DC h7: 12,8mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 123020 12,8   |
| GTIN         | 4069515012829 |
| 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              |
| Nominal Ø $D_c$                          | 12.8 mm        |
| Flute length $L_c$                       | 133 mm         |
| recommended maximum drilling depth $L_2$ | 113.8 mm       |
| Overall length L                         | 178 mm         |
| Shank Ø $D_s$                            | 14 mm          |
| Standard                                 | Works standard |

## Data sheet

|                                          |                    |
|------------------------------------------|--------------------|
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.22 mm/rev.       |
| Tolerance nominal Ø                      | h7                 |
| 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/123020-12,8>