

**Garant**

**GARANT Uni Hero solid carbide drill, plain shank DIN 6535 HB, TiAlSiN, Ø DC h7: 13,8mm**



## Order data

|              |               |
|--------------|---------------|
| Order number | 123021 13,8   |
| GTIN         | 4069515035187 |
| 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 in a wide range of materials. **Special chip chamber geometry** and **polished chip chambers** 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  $L_c = L_2 + 1.5 \times D_c$ .

## Technical description

| Standard                                  | Manufacturer's standard |
|-------------------------------------------|-------------------------|
| Flute length $L_c$                        | 133 mm                  |
| Feed $f$ in steel $< 1100 \text{ N/mm}^2$ | 0.23 mm/rev.            |
| Nominal $\varnothing D_c$                 | 13.8 mm                 |
| Tolerance nominal $\varnothing$           | h7                      |
| Overall length $L$                        | 178 mm                  |
| Number of cutting edges $Z$               | 2                       |
| recommended maximum drilling depth $L_2$  | 112.3 mm                |
| Shank $\varnothing D_s$                   | 14 mm                   |
| Series                                    | Uni                     |

## Data sheet

|                    |                    |
|--------------------|--------------------|
| Coating            | TiAlSiN            |
| Tool material      | Solid carbide      |
| Version            | 4xD                |
| Point angle        | 140 degrees        |
| Shank              | DIN 6535 HB 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  
restricted conditions