

**Garant****GARANT Diabolo solid carbide HPC drill, Weldon shank DIN 6535 HB, TiAlN, Ø DC h7: 4,5mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 122362 4,5    |
| GTIN         | 4045197970800 |
| Item class   | 11E           |

**Description****Version:**

Cutting chisel edge with **high centring accuracy** due to strong core and special point geometry. **Convex major cutting edges** with **defined honed edge** ensure the drill has high stability and maximum load capacity.

**Special multi-nano layer coating** for drilling in hardened steels.

**Note:**

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

**Technical description**

|  |              |
|--|--------------|
| Number of cutting edges Z                | 2            |
| Flute length $L_c$                       | 24 mm        |
| Tolerance nominal Ø                      | h7           |
| Standard                                 | DIN 6537 K   |
| recommended maximum drilling depth $L_2$ | 17.3 mm      |
| Overall length L                         | 66 mm        |
| Nominal Ø $D_c$                          | 4.5 mm       |
| Shank Ø $D_s$                            | 6 mm         |
| Feed f in steel < 60 HRC                 | 0.07 mm/rev. |
| Series                                   | Diabolo      |
| Coating                                  | TiAlN        |

## Data sheet

|                    |                   |
|--------------------|-------------------|
| Tool material      | Solid carbide     |
| Version            | 4xD               |
| Type               | H                 |
| Point angle        | 140 degrees       |
| Shank              | DIN 6535 HB to h6 |
| Through-coolant    | no                |
| Machining strategy | HPC               |
| Semi-Standard      | yes               |
| Colour ring        | red               |
| Type of product    | Jobber drill      |

### User data

|                                     | Suitability                               | V <sub>c</sub> | ISO code |
|-------------------------------------|---|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>       | suitable only under restricted conditions | 90 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>       | suitable only under restricted conditions | 80 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>       | suitable                                  | 70 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup>      | suitable                                  | 65 m/min       | P        |
| Steel < 1400 N/mm <sup>2</sup>      | suitable                                  | 55 m/min       | P        |
| Steel < 55 HRC                      | suitable                                  | 28 m/min       | H        |
| Steel < 60 HRC                      | suitable                                  | 16 m/min       | H        |
| Steel < 65 HRC                      | suitable                                  | 14 m/min       | H        |
| Steel < 67 HRC                      | suitable                                  | 10 m/min       | H        |
| TOOLOX 33                           | suitable only under restricted conditions | 30 m/min       | H        |
| TOOLOX 44                           | suitable only under restricted conditions | 28 m/min       | H        |
| HARDOX 500 < 1600 N/mm <sup>2</sup> | suitable only under restricted conditions | 28 m/min       | H        |

## Data sheet

|             |          |          |   |
|-------------|----------|----------|---|
| GG(G)       | suitable | 70 m/min | K |
| Uni         | suitable |          |   |
| wet maximum | suitable |          |   |
| dry         | suitable |          |   |