

**Garant**

**Diabolo solid carbide HPC drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7 (mm or inch): 5/16**


**Order data**

|              |               |
|--------------|---------------|
| Order number | 122371 5/16   |
| GTIN         | 4062406116903 |
| 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.

**Recommendation:**
**Maximum drilling depth:**

flute length (see table) less 1.5×nominal Ø.

**Note:**

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

Form HB and HE supplied at the same price as HA.

Form **HB**: order with **No. 122362 / 122372**.

Form **HE**: order with **No. 122361 / 122371 + 129100HE**.

Standard: DIN 6537 K

Tolerance nominal Ø: h7

Number of cutting edges Z: 2

Tolerance nominal Ø: h7

recommended maximum drilling depth  $L_2$ : 29.09 mm

Overall length L: 79 mm

Shank Ø  $D_s$ : 8 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.2 mm/rev.

Feed f in steel < 60 HRC: 0.08 mm/rev.

**Technical description**

|                                          |             |
|------------------------------------------|-------------|
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.2 mm/rev. |
|------------------------------------------|-------------|

|                                                   |                   |
|---------------------------------------------------|-------------------|
| Feed f in steel < 60 HRC                          | 0.08 mm/rev.      |
| Flute length L <sub>c</sub>                       | 41 mm             |
| Overall length L                                  | 79 mm             |
| Inch nominal Ø corresponds to                     | 7,94 mm           |
| recommended maximum drilling depth L <sub>2</sub> | 29.09 mm          |
| Tolerance nominal Ø                               | h7                |
| Standard                                          | DIN 6537 K        |
| Number of cutting edges Z                         | 2                 |
| Shank Ø D <sub>s</sub>                            | 8 mm              |
| Series                                            | Diabolo           |
| Coating                                           | TiAlN             |
| Tool material                                     | Solid carbide     |
| Version                                           | 4xD               |
| Type                                              | H                 |
| Point angle                                       | 140 °             |
| Shank                                             | DIN 6535 HA to h6 |
| Through-coolant                                   | yes, with 25 bar  |
| 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 | 120 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 100 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 85 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 70 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 | 30 m/min | H |
| TOOLOX 44                           | suitable | 28 m/min | H |
| HARDOX 500 < 1600 N/mm <sup>2</sup> | suitable | 28 m/min | H |
| GG(G)                               | suitable | 70 m/min | K |
| Uni                                 | suitable |          |   |
| wet maximum                         | suitable |          |   |
| wet minimum                         | suitable |          |   |
| Air                                 | suitable |          |   |

## Services

Shank grinding Type HE

129100 HE