

**Garant****Solid carbide drill plain shank DIN 6535 HA 180°, TiAlN, Ø DC m7: 9mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 122506 9      |
| GTIN         | 4045197744326 |
| Item class   | 11E           |

**Description****Version:**

Special point geometry for generating **180° flat-bottomed holes**. Low radial forces even when spot drilling on faces with up to 45° slope. Flute geometry for optimum chip evacuation. With 4 guide chamfers to stabilise the drill in the hole.

**Advantage:**

**The 180° point angle** permits drilling and counterboring in a single operation.

**Recommendation:**

When using the solid carbide 180° drill it is absolutely essential for process reliability:

- **when spot drilling on flat surfaces to drill a pilot hole 1xD using pilot drill No. 122736.**
- **when spot drilling on sloping surfaces up to 15° : reduce the feed rate f to 50 %, up to 30°: reduce the feed rate f to 40 % and up to 45°: reduce the feed rate f to 25 % of the stated value. After spot drilling, the normal feed rate value can be used.**

**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. 122506 + 129100HB**.

Form **HE**: order with **No. 122506 + 129100HE**.

180° solid carbide drills for machining aluminium available on request.

**Not** suitable for generating counterbores for socket-head screws to DIN974-1.

**Technical description**

|                           |                         |
|---------------------------|-------------------------|
| Number of cutting edges Z | 2                       |
| Standard                  | Manufacturer's standard |
| Overall length L          | 89 mm                   |
| Shank tolerance           | h6                      |

## Data sheet

|                                          |                               |
|------------------------------------------|-------------------------------|
| Flute length $L_c$                       | 47 mm                         |
| Nominal $\varnothing D_c$                | 9 mm                          |
| Shank $\varnothing D_s$                  | 10 mm                         |
| Tolerance nominal $\varnothing$          | m7                            |
| Feed $f$ in steel $< 900 \text{ N/mm}^2$ | 0.15 mm/rev.                  |
| recommended maximum drilling depth $L_2$ | 33.5 mm                       |
| Coating                                  | TiAlN                         |
| Tool material                            | Solid carbide                 |
| Version                                  | 3xD                           |
| Point angle                              | 180 degrees                   |
| Shank                                    | DIN 6535 HA to h6             |
| Use for drilling                         | limited convexity             |
| Use for drilling                         | limited cross-drilling        |
| Use for drilling                         | limited oblique spot drilling |
| Through-coolant                          | yes, with 25 bar              |
| Pilot drill required                     | yes, pilot drill              |
| Semi-Standard                            | yes                           |
| Colour ring                              | green                         |
| Type of product                          | Jobber drill                  |

## User data

|                               | Suitability                               | $V_c$    | ISO code |
|-------------------------------|-------------------------------------------|----------|----------|
| Steel $< 500 \text{ N/mm}^2$  | suitable                                  | 85 m/min | P        |
| Steel $< 750 \text{ N/mm}^2$  | suitable                                  | 75 m/min | P        |
| Steel $< 900 \text{ N/mm}^2$  | suitable                                  | 60 m/min | P        |
| Steel $< 1100 \text{ N/mm}^2$ | suitable                                  | 50 m/min | P        |
| INOX $< 900 \text{ N/mm}^2$   | suitable only under restricted conditions | 45 m/min | M        |
| GG(G)                         | suitable                                  | 90 m/min | K        |

|                          |          |
|--------------------------|----------|
| Uni                      | suitable |
| wet maximum              | suitable |
| wet minimum              | suitable |
| Air                      | suitable |
| <b>Suitable products</b> |          |

<https://www.hoffmann-group.com/GB/en/hom/p/122506-9>