

# Solid carbide drill plain shank DIN 6535 HA 180°, TiAIN, Ø DC m7: 10mm



## **Order data**

| Order number | 122506 10     |
|--------------|---------------|
| GTIN         | 4045197647450 |
| 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 1×D 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**

| Feed f in steel < 900 N/mm <sup>2</sup> | 0.15 mm/rev. |
|---|--------------|
| Nominal Ø D <sub>c</sub>                | 10 mm        |
| Flute length L <sub>c</sub>             | 47 mm        |
| Number of cutting edges Z               | 2            |

| Shank tolerance                          | h6                            |  |
|--|-------------------------------|--|
| Tolerance nominal Ø                      | m7                            |  |
| Shank Ø D <sub>s</sub>                   | 10 mm                         |  |
| Overall length L                         | 89 mm                         |  |
| Standard                                 | Manufacturer's standard       |  |
| recommended maximum drilling depth $L_2$ | 32 mm                         |  |
| Coating                                  | TiAlN                         |  |
| Tool material                            | Solid carbide                 |  |
| Version                                  | 3×D                           |  |
| 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                               | <b>V</b> <sub>c</sub> | ISO code |
|--------------------------------|---|-----------------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 85 m/min              | Р        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 75 m/min              | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 60 m/min              | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 50 m/min              | Р        |
| INOX < 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 45 m/min              | М        |
| GG(G)                          | suitable                                  | 90 m/min              | K        |

| Uni             | suitable |  |
|-----------------|----------|--|
| wet maximum     | suitable |  |
| wet minimum     | suitable |  |
| Air<br>Services | suitable |  |

## Services

| Shank grinding Type HB | 129100 HB |
|------------------------|-----------|
| Shank grinding Type HE | 129100 HE |