

## Garant

### Solid carbide HPC drill plain shank DIN 6535 HA, TiAlN, Ø DC h7: 4,8mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 123301 4,8    |
| GTIN         | 4045197452344 |
| Item class   | 11E           |

#### Description

##### Version:

Cutting chisel edge with **high centring accuracy** due to **strong core and special point geometry**.

Particularly high alignment accuracy due to **4 guide chamfers** which stabilise the drill even at extreme depths!

**Convex cutting edges** with honed edges and special flute profile for **short chips**, even on long chipping materials.

##### Advantage:

**High process reliability and surface quality of the hole.**

##### Note:

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

For process reliability when using the 12xD drill, an initial centre drilling with NC spotting drills No. 121068 – 121130 is necessary.

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

Form **HB**: order with **No. 123302**.

Form **HE**: order with **No. 123301 + 129100HE**.

**NEW GENERATION AVAILABLE!**

**Recommended successor products are No. 123225 and 123235.**

#### Technical description

|  |             |
|--|-------------|
| Nominal Ø $D_c$                          | 4.8 mm      |
| Flute length $L_c$                       | 78 mm       |
| Number of cutting edges Z                | 2           |
| Shank tolerance                          | h6          |
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.1 mm/rev. |

|  |                         |
|--|-------------------------|
| Tolerance nominal $\varnothing$          | h7                      |
| Shank $\varnothing D_s$                  | 6 mm                    |
| Overall length L                         | 116 mm                  |
| Standard                                 | Manufacturer's standard |
| recommended maximum drilling depth $L_2$ | 70.8 mm                 |
| Coating                                  | TiAlN                   |
| Tool material                            | Solid carbide           |
| Version                                  | 12xD                    |
| Point angle                              | 135 degrees             |
| Shank                                    | DIN 6535 HA to h6       |
| Through-coolant                          | yes, with 25 bar        |
| Machining strategy                       | HPC                     |
| Semi-Standard                            | yes                     |
| Colour ring                              | green                   |
| Type of product                          | Jobber drill            |

## User data

|                                | Suitability                               | $V_c$     | ISO code |
|--------------------------------|---|-----------|----------|
| Aluminium (short chipping)     | suitable only under restricted conditions | 180 m/min | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 140 m/min | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable only under restricted conditions | 110 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 90 m/min  | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 80 m/min  | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 50 m/min  | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 35 m/min  | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 40 m/min  | M        |

|                              |   |          |           |
|------------------------------|---|----------|-----------|
| INOX > 900 N/mm <sup>2</sup> | suitable only under restricted conditions | 35 m/min | M         |
| GG(G)                        | suitable                                  | 70 m/min | K         |
| Uni                          | suitable                                  |          |           |
| <del>wet maximum</del>       | <del>suitable</del>                       |          |           |
| <b>Services</b>              |   |          |           |
| Shank grinding Type HE       |   |          | 129100 HE |