# Garant

# GARANT Master Steel DEEP solid carbide pilot drill, plain shank DIN 6535 HA 6×D, TiAIN, Ø DC: 4,2mm

denner denner

## Order data

| Order number | 123885 4,2    |  |  |
|--------------|---------------|--|--|
| GTIN         | 4062406267278 |  |  |
| Item class   | 11E           |  |  |

## Description

#### Version:

**Excellent chip evacuation** due to the unequal helical pitch of the flutes, guide rings and additional guide chamfers for very high precision when drilling. **Maximum process reliability** due to exactly matching tools within the overall system. Drilling up to the maximum depth without a pilot drill. **Significantly increased tool stability** due to the substantially strengthened core. **Increased metal removal rates** and **outstanding tool lives** lead to an economical highend drilling process.

Strong core and special point geometry for high centring accuracy. 140° tip angle and special p6 cutting tolerance for optimum generation of a pilot hole for subsequent use of the GARANT Master Steel deep hole drill.

#### 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. 123886**. Form **HE:** order with **No. 123885 + 129100HE**.

## **Technical description**

| Number of cutting edges Z               | 2                       |  |  |
|---|-------------------------|--|--|
| Standard                                | Manufacturer's standard |  |  |
| Overall length L                        | 74 mm                   |  |  |
| Shank Ø D <sub>s</sub>                  | 6 mm                    |  |  |
| Feed f in steel < 900 N/mm <sup>2</sup> | 0.15 mm/rev.            |  |  |

# Data sheet

| Nominal $Ø D_c$                          | 4.2 mm            |  |  |
|--|-------------------|--|--|
| Tolerance nominal Ø                      | рб                |  |  |
| recommended maximum drilling depth $L_2$ | 29.7 mm           |  |  |
| Flute length $L_c$                       | 36 mm             |  |  |
| Series                                   | Master Steel      |  |  |
| Coating                                  | TiAIN             |  |  |
| Tool material                            | Solid carbide     |  |  |
| Version                                  | 6×D               |  |  |
| Point angle                              | 140 degrees       |  |  |
| Shank                                    | DIN 6535 HA to h6 |  |  |
| Through-coolant                          | yes, with 40 bar  |  |  |
| Machining strategy                       | HPC               |  |  |
| Colour ring                              | green             |  |  |
| Type of product                          | Jobber drill      |  |  |

# User data

|                                | Suitability                               | Vc        | ISO code |
|--------------------------------|---|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 170 m/min | Р        |
| Steel < 750 N/mm²              | suitable                                  | 150 m/min | Р        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 130 m/min | Р        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 110 m/min | Р        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 90 m/min  | Р        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 75 m/min  | М        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 70 m/min  | М        |
| Ti > 850 N/mm²                 | suitable only under restricted conditions | 35 m/min  | S        |
| GG(G)                          | suitable                                  | 120 m/min | К        |
| Uni                            | suitable                                  |           |          |
| wet maximum                    | suitable                                  |           |          |

© Hoffmann GmbH Qualitätswerkzeuge

#### wet minimum

suitable only under restricted conditions