## Garant

GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, $\varnothing$ DC h7: 10,2mm

## Order data

| Order number | 12322510,2 |
| :--- | :---: |
| GTIN | 4045197845511 |
| Item class | 11 E |

## Description

## Version:

Developed for use with very high cutting speeds. Outstandingly suitable for machines with low installed power and high speeds.

- Clear reduction in cutting forces due to special cutter geometry.
- Coating for best wear resistance even at high process temperatures.
- Polished flutes for good chip clearance.

A slim chisel point and the special arrangement of the $\mathbf{4}$ guide chamfers ensure high
positioning and alignment accuracy. Optimised micro-geometry for increased working life and performance capability.

## Note:

Flute length $L_{c}=L_{2}+1.5 \times D_{c}$.
For process reliability when using the $12 \times$ D 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.
Order form HB: with No. 123226.
Order form HE: with No. 123225 + 129100HE.

## Technical description

| Flute length $L_{c}$ | 156 mm |
| :--- | :---: |
| recommended maximum drilling depth $L_{2}$ | 140.7 mm |
| Overall length L | 204 mm |
| Number of cutting edges $Z$ | 2 |
| Nominal $\varnothing \mathrm{D}_{\mathrm{C}}$ | 10.2 mm |


| Feed f in steel $<1100 \mathrm{~N} / \mathrm{mm}^{2}$ | $0.2 \mathrm{~mm} / \mathrm{rev}$. |
| :--- | :---: |
| Standard | Manufacturer's standard |
| Shank $\varnothing \mathrm{D}_{\mathrm{s}}$ | 12 mm |
| Tolerance nominal $\varnothing$ | h 7 |
| Series | Master Steel |
| Coating | TiAIN |
| Tool material | Solid carbide |
| Version | $12 \times \mathrm{D}$ |
| Point angle | 135 degrees |
| Shank | DIN 6535 HA to h6 |
| Through-coolant | yes, to 25 bar |
| Machining strategy | HPC |
| Semi-Standard | yes |
| Colour ring | green |
| Type of product | Jobber drill |

## User data

|  | Suitability | $\mathbf{V}_{\text {c }}$ | ISO code |
| :---: | :---: | :---: | :---: |
| Steel < $500 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $160 \mathrm{~m} / \mathrm{min}$ | P |
| Steel < $750 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $125 \mathrm{~m} / \mathrm{min}$ | P |
| Steel < $900 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $115 \mathrm{~m} / \mathrm{min}$ | P |
| Steel $<1100 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $105 \mathrm{~m} / \mathrm{min}$ | P |
| Steel < $1400 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $65 \mathrm{~m} / \mathrm{min}$ | P |
| INOX < $900 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable only under restricted conditions | $55 \mathrm{~m} / \mathrm{min}$ | M |
| GG | suitable | $100 \mathrm{~m} / \mathrm{min}$ | K |
| GGG | suitable | $95 \mathrm{~m} / \mathrm{min}$ | K |
| Uni | suitable |  |  |
| wet maximum | suitable |  |  |



