

**Garant**
**GARANT Master Steel SPEED solid carbide drill, Weldon shank DIN 6535 HB, TiAlN, Ø DC h7: 16mm**

**Order data**

Order number	122416 16
GTIN	4045197791078
Item class	11E

**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 4 guide chamfers** ensure **high positioning and alignment accuracy**. Optimised micro-geometry for increased working life and performance capability.

**Note:**

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

**Technical description**

Number of cutting edges Z	2
Overall length L	115 mm
Nominal Ø D <sub>c</sub>	16 mm
Flute length L <sub>c</sub>	65 mm
Shank Ø D <sub>s</sub>	16 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	0.34 mm/rev.
Tolerance nominal Ø	h7
Shank tolerance	h6

Standard	DIN 6537 K
recommended maximum drilling depth L <sub>2</sub>	41 mm
Series	Master Steel
Coating	TiAlN
Tool material	solid carbide
Version	4xD
Point angle	135 degrees
Shank	DIN 6535 HB to h6
Through-coolant	no
Machining strategy	HPC
Semi-Standard	yes
Colour ring	green
Type of product	Jobber drill

## User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	60 m/min	P
GG	suitable	110 m/min	K
GGG	suitable	100 m/min	K
Uni	suitable		
wet maximum	suitable		