

**Garant**
**GARANT Master Steel SPEED solid carbide drill, Weldon shank DIN 6535 HB, TiAlN, Ø DC h7: 13mm**

**Order data**

Order number	123026 13
GTIN	4045197846952
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**

Overall length L	178 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	0.23 mm/rev.
recommended maximum drilling depth L <sub>2</sub>	113.5 mm
Tolerance nominal Ø	h7
Shank Ø D <sub>s</sub>	14 mm
Nominal Ø D <sub>c</sub>	13 mm
Number of cutting edges Z	2
Standard	Manufacturer's standard

Flute length $L_c$	133 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	8×D
Point angle	135 degrees
Shank	DIN 6535 HB 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	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	195 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	135 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	125 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	80 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	65 m/min	M
GG	suitable	120 m/min	K
GGG	suitable	115 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		