

**Garant**

**GARANT Master Steel solid carbide HPC drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 19,5mm**


**Order data**

Order number	122470 19,5
GTIN	4067263120452
Item class	11E

**Description**
**Version:**

**Robust drill design and optimised special point geometry** for the **best possible chip formation and reliable chip breakage** with **higher feed rates at the same time**. **Advanced micro-geometry, convex cutting edge and conical profile grinding** to provide additional stability for the main cutting edge. **Optimised flute geometry and patented face geometry** for **reliable chip evacuation** in steel materials and cast material. **High-performance coating** of the latest generation.

**Note:**

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

HB and HE shanks are available at the same price as HA.

**HB shank:** order with **No. 122471 / 122476**.

**HE shank:** order with **No. 122470 / 122475** and **129100HE**.

**Technical description**

Feed $f$ in steel < 1100 N/mm <sup>2</sup>	0.43 mm/rev.
Shank $\varnothing D_s$	20 mm
Tolerance nominal $\varnothing$	h7
Flute length $L_c$	79 mm
Standard	DIN 6537 K
Overall length $L$	131 mm
Nominal $\varnothing D_c$	19.5 mm

Number of cutting edges Z	2
recommended maximum drilling depth L <sub>2</sub>	49.8 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	4xD
Point angle	140 degrees
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	HPC
Semi-Standard	yes
Colour ring	green
Type of product	Mono jobber drills

### User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	115 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	105 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	100 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	70 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	60 m/min	P
GG	suitable	110 m/min	K
GGG	suitable	75 m/min	K
Uni	suitable		
wet maximum	suitable		
dry	suitable		