

Garant**GARANT Master Steel solid carbide high-performance drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 20mm****Order data**

Order number	123040 20
GTIN	4069515030274
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.

For **HB shanks**: use order **no. 123041**.

HE shank: use order **No. 123040 + 129100 HE**.

Technical description

Shank Ø D_s	20 mm
Feed f in steel $< 1100 \text{ N/mm}^2$	0.4 mm/rev.
Number of cutting edges Z	2
Flute length L_c	190 mm
Tolerance nominal Ø	h7
Overall length L	243 mm
recommended maximum drilling depth L_2	160 mm

Data sheet

Nominal Ø D _c	20 mm
Standard	Works standard
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	8xD
Point angle	135 degrees
Shank	DIN 6535 HA to h6
Through-coolant	yes, with 25 bar
Machining strategy	HPC
Semi-Standard	yes
Type of product	Jobber drill

User data

	Suitability	V _c	ISO code
Steel < 500 N/mm ²	suitable	130 m/min	P
Steel < 750 N/mm ²	suitable	120 m/min	P
Steel < 900 N/mm ²	suitable	110 m/min	P
Steel < 1100 N/mm ²	suitable	100 m/min	P
Steel < 1400 N/mm ²	suitable	80 m/min	P
GG(G)	suitable	95 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		
Air	suitable		

Suitable products

<https://www.hoffmann-group.com/GB/en/hom/p/123040-20>