

# GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 20 mm



#### **Order data**

Order number	123235 20
GTIN	4045197841339
Item class	11E

### Description

#### **Version:**

**3-flute drill**, specially developed for **use at very high feed rates**. Outstandingly suitable for **machines with high installed power** and stable operating conditions.

- Special cutter geometry with stable cutting edges and large clearance at the centre enables very high feed rates.
- The patented tip is optimised for chip flow and generates low cutting pressure with good chip breakage.

The sector-leading technology of the drill point guarantees optimum self-centring behaviour. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

#### **Recommendation:**

#### Maximum drilling depth:

flute length (see table) less  $1.5 \times \text{nominal } \emptyset$ .

#### Note:

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

For process reliability when using the 12×D drill, an initial centre drilling with an NC spotting drill No. 121130 with **155° point angle** is necessary.

Standard: Manufacturer's standard

Tolerance nominal Ø: h7 Number of cutting edges Z: 3 Tolerance nominal Ø: h7

recommended maximum drilling depth L₂: 228 mm

Overall length L: 310 mm Shank Ø D<sub>6</sub>: 20 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.69 mm/rev.

## **Technical description**



Number of cutting edges Z	3
Tolerance nominal Ø	h7
Standard	Manufacturer's standard
Flute length L <sub>c</sub>	258 mm
Overall length L	310 mm
recommended maximum drilling depth L <sub>2</sub>	228 mm
Shank Ø D <sub>s</sub>	20 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	0.69 mm/rev.
Nominal Ø D <sub>c</sub>	20 mm
Series	GARANT Master Steel
Coating	TiAIN
Tool material	Solid carbide
Drill depth up to	12×D
Point angle	140 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

## Services

Shank grinding Type HE 129100 HE