

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 13,2mm



Order data Order number 123235 13,2 GTIN 4045197841063 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.

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.

Technical description

recommended maximum drilling depth L_2	162.2 mm
Standard	Manufacturer's standard
Shank Ø D _s	14 mm
Overall length L	230 mm
Number of cutting edges Z	3
Tolerance nominal Ø	h7

Feed f in steel < 1100 N/mm ²	0.56 mm/rev.	
Nominal Ø D _c	13.2 mm	
Flute length L _c	182 mm	
Series	Master Steel	
Coating	TiAlN	
Tool material	Solid carbide	
Version	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	

User data

	Suitability	\mathbf{V}_{c}	ISO code
Steel < 500 N/mm ²	suitable	120 m/min	Р
Steel < 750 N/mm ²	suitable	110 m/min	Р
Steel < 900 N/mm ²	suitable	100 m/min	Р
Steel < 1100 N/mm ²	suitable	90 m/min	Р
Steel < 1400 N/mm ²	suitable	70 m/min	Р
Steel < 55 HRC	suitable	60 m/min	Н
INOX < 900 N/mm ²	suitable	55 m/min	M
$INOX > 900 \text{ N/mm}^2$	suitable	50 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	40 m/min	S
GG	suitable	120 m/min	K
GGG	suitable	80 m/min	K

Uni	suitable	
wet maximum	suitable	
wet minimum Services	suitable	

Shank grinding Type HE 129100 HE