

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 11,7mm



Order data Order number 123235 11,7 GTIN 4045197840981 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

Number of cutting edges Z	3
Tolerance nominal Ø	h7
Shank Ø D _s	12 mm
recommended maximum drilling depth L_2	138.5 mm
Nominal Ø D _c	11.7 mm
Overall length L	204 mm



Feed f in steel < 1100 N/mm ²	0.5 mm/rev.		
Standard	Manufacturer's standard		
Flute length L _c	156 mm		
Series	Master Steel		
Coating	TiAIN		
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	М
INOX > 900 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