

Garant

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7 (mm or inch): 13


Order data

Order number	122435 13
GTIN	4045197787293
Item class	11E

Description
Version:

3-flute drill, specially developed for **use at very high feed rates**. Extremely suitable for **machines with high power** output and stable machining conditions.

- **Special point geometry with stable cutting edges and large clearance at the centre permits very high feed rates.**
- **The patented point geometry is optimised for chip flow and generates low cutting forces with good chip breakage.**
- **With 145° point angle for low burr formation when drilling through holes.**

The **sector-leading technology of the chisel point** guarantees **optimum self-centring behaviour** and permits spot drilling on irregular surfaces. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

Note:

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

HB and HE shanks are available at the same price as HA.
For **HB shanks**: use order **No. 122436**.
For **HE shanks**: use order **No. 122435 + 129100HE**.

Standard: DIN 6537 K

Tolerance nominal Ø: h7

Number of cutting edges Z: 3

Tolerance nominal Ø: h7

recommended maximum drilling depth L_2 : 40.5 mm

Overall length L: 107 mm

Shank Ø D_s : 14 mm

Feed f in steel < 1100 N/mm²: 0.56 mm/rev.

Technical description

Feed f in steel < 1100 N/mm ²	0.56 mm/rev.
Overall length L	107 mm
Shank Ø D _s	14 mm
Standard	DIN 6537 K
Number of cutting edges Z	3
Tolerance nominal Ø	h7
Flute length L _c	60 mm
Nominal Ø D _c	13 mm
recommended maximum drilling depth L ₂	40.5 mm
Series	Master Steel
Coating	TiAlN
Tool material	solid carbide
Version	4xD
Point angle	145 °
Shank	DIN 6535 HA to h6
Through-coolant	yes, with 25 bar
Machining strategy	HPC
Semi-Standard	yes
Colour ring	green
Type of product	Jobber drill

User data

	Suitability	V _c	ISO code
Steel < 500 N/mm ²	suitable	160 m/min	P
Steel < 750 N/mm ²	suitable	140 m/min	P
Steel < 900 N/mm ²	suitable	130 m/min	P
Steel < 1100 N/mm ²	suitable	110 m/min	P
Steel < 1400 N/mm ²	suitable	90 m/min	P
Steel < 55 HRC	suitable	60 m/min	H

INOX < 900 N/mm ²	suitable	60 m/min	M
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	130 m/min	K
GGG	suitable	80 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		

Services

Shank grinding Type HE

129100 HE