

**Garant**

**GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7 (mm or inch): 5/8**


**Order data**

Order number	122435 5/8
GTIN	4062406108922
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. <br>For **HB shanks**: use order **No. 122436**. <br>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  $L_2$ : 41.3 mm

Overall length L: 115 mm

Shank Ø  $D_s$ : 16 mm

Feed f in steel < 1100 N/mm<sup>2</sup>: 0.61 mm/rev.

**Technical description**

Shank $\varnothing D_s$	16 mm
Standard	DIN 6537 K
recommended maximum drilling depth $L_2$	41.3 mm
Overall length $L$	115 mm
Feed $f$ in steel $< 1100 \text{ N/mm}^2$	0.61 mm/rev.
Number of cutting edges $Z$	3
Tolerance nominal $\varnothing$	h7
Flute length $L_c$	65 mm
Inch nominal $\varnothing$ corresponds to	15,88 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 $< 500 \text{ N/mm}^2$	suitable	160 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	140 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	130 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	110 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	90 m/min	P
Steel $< 55 \text{ HRC}$	suitable	60 m/min	H

INOX < 900 N/mm <sup>2</sup>	suitable	60 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	50 m/min	M
Ti > 850 N/mm <sup>2</sup>	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