

Garant

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7 (mm or inch): 20



Order data

Order number	123035 20
GTIN	4045197840219
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 $L_c = L_2 + 1.5 \times D_c$.

Form HB and HE supplied at the same price as HA.

Form **HB**: order with **No. 123036**.

Form **HE**: order with **No. 123035 + 129100HE**.

Standard: Manufacturer's standard

Tolerance nominal Ø: h7

Number of cutting edges Z: 3

Tolerance nominal Ø: h7

recommended maximum drilling depth L_2 : 160 mm

Overall length L: 243 mm

Shank Ø D_s : 20 mm

Feed f in steel < 1100 N/mm²: 0.69 mm/rev.

Technical description

Nominal $\varnothing D_c$	20 mm
Flute length L_c	190 mm
recommended maximum drilling depth L_2	160 mm
Standard	Manufacturer's standard
Feed f in steel $< 1100 \text{ N/mm}^2$	0.69 mm/rev.
Tolerance nominal \varnothing	h7
Number of cutting edges Z	3
Shank $\varnothing D_s$	20 mm
Overall length L	243 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	8xD
Point angle	140°
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	V_c	ISO code
Steel $< 500 \text{ N/mm}^2$	suitable	120 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	110 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	100 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	90 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	70 m/min	P
Steel $< 55 \text{ HRC}$	suitable	60 m/min	H

INOX < 900 N/mm ²	suitable	55 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	120 m/min	K
GGG	suitable	80 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		

Services

Shank grinding Type HE

129100 HE