

Garant
Stub drill HSS-E FS, uncoated, Ø DC h8: 3,1 mm

Order data

Order number	113020 3,1
GTIN	4045197002075
Item class	11B

Description
Version:

Particularly **robust and strong** due to **strengthened core**.

Ground flutes, with high concentricity.

Bright finish flutes, nitrided lands.

With point geometry shape C up to 3.9 mm; shape S (special) from 4 mm.

Advantage:

Ideal for drilling shallow holes (approx. 2 - 4xD) on NC machines and automatic machines.

Recommendation:
Maximum drilling depth:

$$L_2 = L_c - 1.5 \times D_c$$

Technical description

Nominal Ø D _c	3.1 mm
Number of cutting edges Z	2
Flute length L _c	18 mm
Feed f in steel < 750 N/mm ²	0.03 mm/rev.
Tolerance nominal Ø	h8
Shank Ø D _s	3.1 mm
Overall length L	49 mm
Standard	DIN 1897
recommended maximum drilling depth L ₂	13.4 mm
Point angle	135 degrees

Shank	Plain shank
Coating	uncoated
Tool material	HSS E
Type	FS
Helix angle	38 degrees
Through-coolant	no
Colour ring	without
Type of product	Jobber drill

User data

	Suitability	V _c	ISO code
Alu plastics	suitable	70 m/min	N
Aluminium (short chipping)	suitable	45 m/min	N
Steel < 500 N/mm ²	suitable	40 m/min	P
Steel < 750 N/mm ²	suitable	30 m/min	P
GG(G)	suitable	25 m/min	K
Oil	suitable		
wet maximum	suitable		