

Garant**Jobber drill, extra long HSS-E FS, uncoated, Ø DC h8 × overall length L:
4,5X235mm****Order data**

Order number	116250 4,5X235
GTIN	4062406265847
Item class	11B

Description**Version:**

With precision ground point.

Special 4-chamfer relief ground for very good guidance within the bore. Bright finish flutes, nitrided chamfers.

With point geometry shape C.

Advantage:

Special deep hole drills. For particularly deep or recessed holes. Good chip evacuation due to parabolic flutes, resulting in fewer chip evacuations even in particularly deep holes.

Recommendation:**Maximum drilling depth:**

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

Note:

Suitable NC spotting drills No. 112120, 112140 and 112170 with **142° tip angle** for enhanced process reliability

Technical description

Flute length L_c	160 mm
Shank $\varnothing D_s$	4.5 mm
Standard	DIN 1869
Nominal $\varnothing D_c$	4.5 mm
Tolerance nominal \varnothing	h8
Number of cutting edges Z	2

Feed f in steel < 750 N/mm ²	0.05 mm/rev.
recommended maximum drilling depth L ₂	153.3 mm
Overall length L	235 mm
Point angle	130 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 only under restricted conditions	55 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	30 m/min	N
Steel < 500 N/mm ²	suitable	32 m/min	P
Steel < 750 N/mm ²	suitable	25 m/min	P
Steel < 900 N/mm ²	suitable	20 m/min	P
Steel < 1100 N/mm ²	suitable	5 m/min	P
INOX < 900 N/mm ²	suitable only under restricted conditions	8 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	4 m/min	M
GG(G)	suitable only under restricted conditions	20 m/min	K
Oil	suitable		

wet maximum

suitable