

**Garant**
**Jobber drill HSS-E VA, uncoated, Ø DC h8: 19,5mm**

**Order data**

Order number	116360 19,5
GTIN	4045197032065
Item class	11C

**Description**
**Version:**
**With strengthened core.**

Specially treated surface, reducing edge build up and improving chip evacuation.  
With point geometry shape C.

**Recommendation:**
**Maximum drilling depth:**

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

**Note:**

For suitable reducing adapters for tools with MT shanks see **No. 343000-343530**.

**Technical description**

Number of cutting edges Z	2
Flute length $L_c$	140 mm
Feed f in steel < 750 N/mm <sup>2</sup>	0.2 mm/rev.
Nominal Ø $D_c$	19.5 mm
Tolerance nominal Ø	h8
Overall length L	238 mm
Morse taper MT size	2
Standard	DIN 345
recommended maximum drilling depth $L_2$	110.8 mm
Point angle	135 degrees

Shank	Morse taper
Coating	uncoated
Tool material	HSS E
Type	INOX
Helix angle	35-40 degrees
Through-coolant	no
Colour ring	without
Type of product	Jobber drill

### User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	40 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	25 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	10 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	12 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	5 m/min	S
GG(G)	suitable	25 m/min	K
CuZn	suitable	80 m/min	N
Oil	suitable		
wet maximum	suitable		