

**Garant****Machine reamer H7, TiN, Nominal Ø DC: 12mm****Order data**

Order number	163500 12
GTIN	4045197251435
Item class	110

**Description****Version:**

With long flutes and left-hand helix. Even number of teeth with irregular spacing.

**Application:**

For reaming through holes, as the swarf is evacuated in the direction of cutting.

**Technical description**

Nominal Ø D <sub>c</sub>	12 mm
Shank tolerance	h9
Overhang L <sub>1</sub>	106 mm
Feed f in steel < 750 N/mm <sup>2</sup>	0.23 mm/rev.
Shank Ø D <sub>s</sub>	10 mm
Overall length L	151 mm
Flute length L <sub>c</sub>	44 mm
Number of cutting edges Z	6
Tolerance	H7
Reaming oversize in diameter	0.1 - 0.2 mm
Coating	TiN
Tool material	HSS E
Standard	DIN 212 B

Through-coolant	no
Shank	Plain shank with h9
Application for type of drilling	for through holes
Colour ring	without
Type of product	Phillips bit

### User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	15 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	10 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	9 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	7 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	5 m/min	P
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	7 m/min	S
GG(G)	suitable only under restricted conditions	7 m/min	K
CuZn	suitable only under restricted conditions	18 m/min	N
Oil	suitable		
wet maximum	suitable		