

## Garant

### Solid carbide NC machine reamer Configurable, uncoated, Nominal Ø DC: 13mm



#### Order data

Order number	164345 13
GTIN	4045197444844
Item class	10N

#### Description

##### Version:

**Version suitable for NC DIN 8093-2 with straight shank** Ø for **standard chucking** especially in **hydraulic chucks** or **high precision collet chucks**. This ensures **very high concentricity** and **process reliability**,

**The use of GARANT-NC reamers eliminates the need to procure special collets.** With long flutes and left-hand helix.

**Reamers finish ground to match your specification.**

##### Application:

For reaming through holes, as the chips are evacuated in the cutting direction. Lead taper is suitable also for blind holes.

##### Note:

For H7 fit see No. 164340 and 164341.

#### Technical description

Overhang $L_1$	104 mm
Shank tolerance	h6
Feed $f$ in steel < 1100 N/mm <sup>2</sup>	0.18 mm/rev.
Nominal Ø $D_c$	13 mm
Shank Ø $D_s$	12 mm
Overall length $L$	151 mm
Flute length $L_c$	44 mm
Ø range	12.21 - 13.2 mm

Number of cutting edges Z	8
Reaming oversize in diameter	0.2 - 0.3 mm
Coating	uncoated
Tool material	Solid carbide
Standard	DIN 8093
Through-coolant	no
Shank	DIN 6535 HA with h6
Application for type of drilling	for through holes
Colour ring	green
Type of product	Phillips bit

## User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium	suitable	35 m/min	N
Aluminium (short chipping)	suitable	30 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	20 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	13 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	10 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	8 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	6 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	10 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	8 m/min	S
GG(G)	suitable	8 m/min	K
CuZn	suitable	20 m/min	N
Uni	suitable		
wet maximum	suitable		

