## Garant

### Solid carbide NC machine reamer, uncoated, Nominal Ø DC: 11,99mm

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### Order data

Order number	164340 11,99		
GTIN	4045197094087		
Item class	11P		

## Description

#### Version:

**Version suitable for NC** similar to DIN 8093 with straight shank Ø for standard chucking especially in hydraulic chucks or high precision collet chucks. This ensures the highest concentricity.

#### **Tolerance specifications:**

Size 0.6 – 0.9: Manufacturing or cutting edge tolerance **0/+0.004 mm.** 

Size 0.98 – 20: Reamer manufacturing or cutting edge tolerance to DIN1420 for **H7 bore tolerance.** 

**No need to procure special collets when using GARANT-NC reamers.** With long flutes and left-hand helix.

#### **Application:**

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

#### Note:

For reamers like No. 164340 and 164341 but with other diameters and fits see No. 164344 and 164345.

## **Technical description**

Feed f in steel < 1100 N/mm <sup>2</sup>	0.18 mm/rev.	
Shank tolerance	h6	
Overhang L <sub>1</sub>	99 mm	
Nominal Ø D <sub>c</sub>	11.99 mm	
Shank Ø D <sub>s</sub>	12 mm	
Overall length L	150 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	uncoated		
Tool material	Solid carbide		
Standard	Manufacturer's standard		
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	Ν
Aluminium (short chipping)	suitable	30 m/min	Ν
Steel < 500 N/mm <sup>2</sup>	suitable	20 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	13 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	10 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	8 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	6 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	10 m/min	М
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	М
Ti > 850 N/mm²	suitable	8 m/min	S
GG(G)	suitable	8 m/min	К
CuZn	suitable	20 m/min	Ν

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# Data sheet

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suitable