

**Garant**
**Solid carbide reamers HPC through hole, TiAlN, Nominal Ø DC: 11,98mm**


## Order data

Order number	164362 11,98
GTIN	4045197363343
Item class	10N

## Description

### Version:

**Version suitable for NC** with straight shank Ø for standard arbors especially in **hydraulic chucks** or **high precision collet chucks**. For **highest concentricity** and **process reliability**. No need to procure special collets. With internal coolant supply for **HPC applications** to reduce manufacturing costs.

### Reamer manufacturing tolerances:

whole number sizes and Ø 0.5: H7 to DIN 1420

1/100 sizes Ø 3.97 – 12.03: +0.004/0

With short flutes and left-hand helix.

### Application:

For **HPC/HSM reaming** of **through holes**.

### Note:

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 164420.**

Application for type of drilling: for through holes

Bore Ø tolerance: 0 / 0.004

Number of cutting edges Z: 6

Bore Ø tolerance: 0 / 0.004

Flute length  $L_c$ : 20 mm

Overhang  $L_1$ : 71 mm

Overall length L: 120 mm

Number of cutting edges Z: 6

Shank Ø  $D_s$ : 12 mm

## Technical description

Shank tolerance	h6
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Feed f in steel < 1100 N/mm <sup>2</sup>	0.7 mm/rev.
Overhang L <sub>1</sub>	71 mm
Nominal Ø D <sub>c</sub>	11.98 mm
Shank Ø D <sub>s</sub>	12 mm
Overall length L	120 mm
Flute length L <sub>c</sub>	20 mm
Number of cutting edges Z	6
recommended drill Ø in steel < 1100 N/mm <sup>2</sup>	11.8 mm
Bore Ø tolerance	0 / 0.004
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Through-coolant	yes
Shank	DIN 6535 HA with h6
Machining strategy	HPC
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
Steel < 750 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	120 m/min	P
GG	suitable	80 m/min	K
GGG	suitable	60 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		

