

**Garant**
**Solid carbide reamers HPC through hole, TiAlN, Nominal Ø DC: 11,97mm**

**Order data**

Order number	164362 11,97
GTIN	4045197363336
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**

Feed f in steel < 1100 N/mm <sup>2</sup>	0.7 mm/rev.
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Nominal $\varnothing D_c$	11.97 mm
Shank tolerance	h6
Overhang $L_1$	71 mm
Shank $\varnothing D_s$	12 mm
Overall length L	120 mm
Flute length $L_c$	20 mm
Number of cutting edges Z	6
recommended drill $\varnothing$ in steel < 1100 N/mm <sup>2</sup>	11.8 mm
Bore $\varnothing$ 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	$V_c$	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		

