

**Garant****GARANT Master Steel solid carbide high-performance reamer HPC through hole, TiAlN, Nominal Ø DC: 10mm****Order data**

Order number	164420 10
GTIN	4062406284244
Item class	10P

**Description****Version:**

The latest generation of **universal** HPC reamers. Extra-short teeth for increased cutting performance values. Optimised cooling strategy with radially arranged coolant outlets aligned directly to the teeth. **For uncompromising applications in steel and stainless steel.** Reliable machining of high-tensile steels **up to 60 HRC. Version suitable for NC** with straight shank Ø for standard arbors especially in **hydraulic chucks** or **high precision collet chucks**. Very high concentricity and process reliability due to unequal spacing.

**Tolerance specifications:**

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

**H7:** Version for H7 bore tolerance.

**0/0.005 mm:** Manufacturing or cutting tolerance of nominal Ø D<sub>C</sub>.

**Application:**

Special version for through holes.

**Technical description**

Number of cutting edges Z	6
Series	Master Steel
Flute length L <sub>c</sub>	12 mm
Tolerance	Configurable
Ø range	9.701 - 10.2 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	1.4 mm/rev.
Shank Ø D <sub>s</sub>	10 mm

Overhang $L_1$	80 mm
Feed $f$ in stainless steel $< 900 \text{ N/mm}^2$	0.4 mm/rev.
Overall length $L$	120 mm
Nominal $\varnothing D_c$	10 mm
Reaming oversize in diameter	0.1 mm
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Through-coolant	yes, with 25 bar
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 $< 500 \text{ N/mm}^2$	suitable only under restricted conditions	180 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	180 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	180 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	150 m/min	P
Steel $< 1400 \text{ N/mm}^2$	Suitable	100 m/min	P
Steel $< 55 \text{ HRC}$	Suitable	12 m/min	H
Steel $< 60 \text{ HRC}$	Suitable only under restricted conditions	8 m/min	H
INOX $< 900 \text{ N/mm}^2$	suitable	50 m/min	M
INOX $> 900 \text{ N/mm}^2$	suitable	30 m/min	M
GG	suitable	110 m/min	K

GGG	suitable	90 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		