

Garant

GARANT Master Steel solid carbide high-performance reamer HPC through hole, TiAlN, Nominal \varnothing DC: 12mm



Order data

Order number	164420 12
GTIN	4062406284282
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 \varnothing 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 \varnothing D_c.

Application:

Special version for through holes.

Technical description

Overhang L ₁	75 mm
Nominal \varnothing D _c	12 mm
\varnothing range	11.701 - 12.2 mm
Overall length L	120 mm
Feed f in stainless steel < 900 N/mm ²	0.5 mm/rev.
Number of cutting edges Z	6
Flute length L _c	12 mm

Series	Master Steel
Shank $\varnothing D_s$	12 mm
Feed f in steel $< 1100 \text{ N/mm}^2$	1.7 mm/rev.
Tolerance	Configurable
Reaming oversize in diameter	0.2 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		