

Garant**Solid carbide NC machine reamer, uncoated, Nominal Ø DC: 11,97mm****Order data**

Order number	164340 11,97
GTIN	4045197094063
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 ²	0.18 mm/rev.
Nominal Ø D _C	11.97 mm
Shank tolerance	h6
Overhang L ₁	99 mm
Shank Ø D _s	12 mm
Overall length L	150 mm

Flute length L_c	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_c	ISO code
Aluminium	suitable	35 m/min	N
Aluminium (short chipping)	suitable	30 m/min	N
Steel < 500 N/mm ²	suitable	20 m/min	P
Steel < 750 N/mm ²	suitable	13 m/min	P
Steel < 900 N/mm ²	suitable	10 m/min	P
Steel < 1100 N/mm ²	suitable	8 m/min	P
Steel < 1400 N/mm ²	suitable	6 m/min	P
INOX < 900 N/mm ²	suitable only under restricted conditions	10 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	8 m/min	M
Ti > 850 N/mm ²	suitable	8 m/min	S
GG(G)	suitable	8 m/min	K
CuZn	suitable	20 m/min	N

Uni	suitable
wet maximum	suitable