

**Garant****Cermet reaming head HPC H7 steel Through hole, uncoated, Nominal Ø D: 13mm****Order data**

Order number	239710 13
GTIN	4062406114053
Item class	23A

**Description****Version:**

Interchangeable head reamer system **finish ground for fit IT7**. Cutter geometry matched to the application.

**System concentricity  $\leq 5 \mu\text{m}$  (depending on the head and holder) when mounted.**

With short flutes and left-hand helix.

**Application:**

**For through holes.**

For HPC/HSC reaming.

**Note:**

**Total usable length** =  $L_1$  (arbor No. 239740 / 239745) +  $l$  (interchangeable head No. 239710 to 239720).

Suitable assembly wrench No. 219987. Insert for torque wrench No. 219986.

Further sizes available on request.

**Technical description**

Arbor size	12 mm
Number of cutting edges Z	6
Feed f in steel < 1100 N/mm <sup>2</sup>	0.36 mm/rev.
Head length l	22 mm

Nominal $\varnothing$ D	13 mm
Cutter length $l_1$	8 mm
Width across flats	10 mm
Series	TopCut
Coating	uncoated
Tool material	Cermet
Standard	Manufacturer's standard
Hole tolerance	H7
Application for type of drilling	for through hole
Machining strategy	HPC
Through-coolant	yes
Semi-Standard	yes
suitable arbor	GARANT TopCut
Type of product	Cutter insert for reaming

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	120 m/min	P
GG	suitable only under restricted conditions	160 m/min	K
GGG	suitable only under restricted conditions	140 m/min	K
Oil	suitable		
wet maximum	suitable		