

## Garant

### Solid carbide torus cutter TPC, uncoated, Ø h6 DC / R1: 12/0,5mm



#### Order data

Order number	206210 12/0,5
GTIN	4045197811905
Item class	11X

#### Description

##### Version:

**Eccentric relief ground**, additionally **polish ground** in the flutes for **outstanding chip evacuation** in long-chipping aluminium workpieces.

With double chip-breaker for exemplary chip formation.

##### Application:

Especially for **MTC (Multi Task Cutting)** use on the new generation of turning / milling centres.

##### Note:

$a_{e\max} = 0.12 \times D$  for TPC machining.

$h_{\max}$ : The values stated in the table are maximum values.

#### Technical description

Flute length $L_c$	49 mm
Shank form	HA
No. of teeth Z	3
Overhang length $L_1$ incl. recess	60 mm
Corner radius $R_1$	0.5 mm
Overall length L	109 mm
Shank Ø $D_s$	12 mm
Cutting edge Ø $D_c$	12 mm
Recess Ø $D_1$	11 mm
Average chip thickness $h_{\max}$ for TPC milling in short-chipping aluminium	0.08 mm

Balance quality with shank	G 2.5 with HA
Shank	DIN 6535 HA to h6
Helix angle	45 degrees
Coating	uncoated
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Tolerance nominal $\varnothing$	h6
Helix angle characteristic	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.12×D
Through-coolant	no
Machining strategy	TPC
Colour ring	yellow
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Aluminium	Suitable	130 m/min	N
Aluminium (short chipping)	suitable	100 m/min	N
Alu > 10% Si	suitable	85 m/min	N
PMMA acrylic	suitable	125 m/min	N
PE-HD	Suitable	90 m/min	N
PA 66	Suitable	100 m/min	N
PEEK	suitable	80 m/min	N
PF 31	Suitable	70 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	100 m/min	N

Cu	Suitable	80 m/min	N
CuZn	Suitable	100 m/min	N
wet maximum	suitable		
wet minimum	Suitable only under restricted conditions		
dry	suitable only under restricted conditions		
Air	suitable only under restricted conditions		

**Services**

Shank grinding Type HB

129100 HB