

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

Order data

Order number	206211 12/0,5
GTIN	4045197812094
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.

With the latest generation of **DLC coating sp²**.

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

Shank Ø D _s	12 mm
Shank form	HA
Corner radius R ₁	0.5 mm
Overall length L	109 mm
Cutting edge Ø D _c	12 mm
Recess Ø D ₁	11 mm
No. of teeth Z	3
Overhang length L ₁ incl. recess	60 mm
Flute length L _c	49 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	DLC
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	280 m/min	N
Aluminium (short chipping)	suitable	270 m/min	N
Alu > 10% Si	suitable	180 m/min	N
PMMA acrylic	suitable	125 m/min	N
PE-HD	Suitable	110 m/min	N
PA 66	Suitable	140 m/min	N
PEEK	suitable	90 m/min	N
PF 31	Suitable	80 m/min	N

PVDF GF20	suitable	125 m/min	N
POM GF25	Suitable	115 m/min	N
PA 66 GF30	suitable	105 m/min	N
PEEK GF30	suitable	90 m/min	N
PTFE CF25	suitable	110 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	120 m/min	N
Cu	Suitable	70 m/min	N
CuZn	Suitable	90 m/min	N
wet maximum	suitable		
wet minimum	suitable		
dry	suitable only under restricted conditions		
Air	Suitable		
Services			

Shank grinding Type HB

129100 HB