

Garant
Solid carbide torus cutter TPC, uncoated, Ø h6 DC / R1: 12/1,0mm

Order data

Order number	206210 12/1,0
GTIN	4045197811912
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

Overall length L	109 mm
Cutting edge Ø D_c	12 mm
No. of teeth Z	3
Flute length L_c	49 mm
Overhang length L_1 incl. recess	60 mm
Recess Ø D_1	11 mm
Corner radius R_1	1 mm
Shank Ø D_s	12 mm
Shank form	HA
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
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