

Garant
Solid carbide torus cutter, uncoated, Ø h6 DC / R1: 20/3,0mm

Order data

Order number	206190 20/3,0
GTIN	4045197853073
Item class	11X

Description
Version:

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

Tolerances:

- **Corner radius**

$R_1 = 0.5$ tolerance ± 0.02 .

$R_1 > 0.5 - 1.5$ tolerance ± 0.03 .

$R_1 > 1.5$ tolerance ± 0.05 .

Technical description

Flute length L_c	41 mm
Cutting edge $\varnothing D_c$	20 mm
Overhang length L_1 incl. recess	52 mm
Balance quality with shank	G 2.5 with HA
Corner radius R_1	3 mm
Feed f_z for copy milling in short-chipping aluminium	0.13 mm
Shank $\varnothing D_s$	20 mm
No. of teeth Z	3
Recess $\varnothing D_1$	19 mm
Shank	DIN 6535 HA to h6
Feed f_z for side milling in short-chipping aluminium	0.12 mm

Overall length L	104 mm
Helix angle	45 degrees
Coating	uncoated
Tool material	Solid carbide
Standard	DIN 6527
Type	W
Tolerance nominal \varnothing	h6
Direction of infeed	horizontal, oblique and vertical
Cutting width a_e for milling operation	0.05×D for copy milling
Cutting width a_e for milling operation	0.5×D for side milling
Through-coolant	no
Shank tolerance	h6
Colour ring	yellow
Type of product	Torus cutter

User data

	Suitability	V_c	ISO code
Aluminium	Suitable	180 m/min	N
Aluminium (short chipping)	suitable	140 m/min	N
Alu > 10% Si	suitable	105 m/min	N
PMMA acrylic	Suitable	180 m/min	N
PE-HD	Suitable	130 m/min	N
PA 66	Suitable	150 m/min	N
PEEK	Suitable	130 m/min	N
PF 31	Suitable	110 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