Data sheet

GARANT Master Steel solid carbide torus cutter HPC, TiAlN, ∅ e8 DC / R1: 12/5,0mm

Order data

Order number	206335 12/5,0
GTIN	4069515015103
Item class	11X

Description

Version:
HPC milling cutter with **newly developed high-performance coating.** For **outstanding tool life** and **optimum metal removal rates** in a range of materials.
With **double relief ground side clearance angle.**
Tolerance: Corner radius **R_1**
Radius size 0.1 mm – 1 mm: **R_1= ± 0.003 mm.**
Radius size > 1.0 mm: **R_1= ± 0.005 mm.**
Application:
Especially for **high speed machining** in **mould and tool making** for **copy milling.** Excellent results for **dry milling.**
Note:
Successor product to No. 206300.

Technical description

Overall length L	119 mm
Corner radius R_1	5 mm
Cutting edge ∅ D_C	12 mm
minimum shank recess dia. D_5	11 mm
Overhang length L_1 incl. recess	75 mm
No. of teeth Z	5
maximum shank recess dia. D_6	11.8 mm

Feed f_z for copy milling in steel < 1100 N/mm^2	0.05 mm
Shank ⌀ D_s	12 mm
Helix angle	30 degrees
Feed f_z for side milling in steel < 1100 N/mm^2	0.045 mm
Flute length L_c	12 mm
Shank	DIN 6535 HA to h6
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal ⌀	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width a_e for milling operation	0.05×D for side milling
Cutting width a_e for milling operation	Full slot cutting depth 0,2×D
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	Torus cutter

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm^2	suitable only under restricted conditions	180 m/min	P
Steel < 750 N/mm^2	suitable	150 m/min	P
Steel < 900 N/mm^2	suitable	110 m/min	P
Steel < 1100 N/mm^2	suitable	75 m/min	P
Steel < 1400 N/mm^2	suitable	65 m/min	P
Steel < 55 HRC	suitable	35 m/min	H

INOX < 900 N/mm²	suitable	90 m/min	M
INOX > 900 N/mm²	suitable	80 m/min	M
GG(G)	suitable	100 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		