

Garant
**GARANT Diabolo solid carbide torus cutter HPC, TiAlN, Ø e8 DC / R1:
12/3,0mm**

Order data

Order number	206342 12/3,0
GTIN	4045197598998
Item class	11X

Description
Version:
GARANT Diabolo:

Special geometry, coating and carbide, specially for hard machining.

Double relief ground side clearance angle.

Tolerance: Corner radius $R_1 = \pm 0.005 \text{ mm}$.

Technical description

Overhang length L_1 incl. recess	75 mm
Recess Ø D_1	11 mm
Corner radius R_1	3 mm
Cutting edge Ø D_c	12 mm
No. of teeth Z	4
Feed f_z for side milling in steel < 65 HRC	0.08 mm
Feed f_z for copy milling in steel < 65 HRC	0.08 mm
Shank Ø D_s	12 mm
Flute length L_c	12 mm
Overall length L	120 mm
Shank	DIN 6535 HA to h6
Helix angle	30 degrees

Series	Diabolo
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal Ø	e8
Spacing of the cutters	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width a_e for milling operation	$0.05 \times D$ for copy milling
Cutting width a_e for milling operation	$0.2 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Shank tolerance	h6
Colour ring	red
Type of product	Torus cutter

User data

	Suitability	V_c	ISO code
Steel < 1400 N/mm ²	suitable	160 m/min	P
Steel < 50 HRC	suitable	150 m/min	H
Steel < 55 HRC	suitable	135 m/min	H
Steel < 60 HRC	suitable	120 m/min	H
Steel < 65 HRC	suitable	90 m/min	H
wet maximum	suitable only under restricted conditions		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

Services

Shank grinding Type HB

129100 HB