

**Garant**
**Solid carbide torus cutter, TiAlN, Ø e8 DC / R1: 12/1,0mm**

**Order data**

Order number	206280 12/1,0
GTIN	4045197124098
Item class	11X

**Description**
**Version:**

With **double relief ground side clearance angle**.

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

**Application:**

Especially for **high speed machining** in **mould and tool making** for **copy milling**. Excellent results when **milling dry**.

**Note:**

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 206333.**

**Technical description**

Recess Ø $D_1$	11 mm
Feed $f_z$ for copy milling in steel < 1100 N/mm <sup>2</sup>	0.045 mm
Cutting edge Ø $D_c$	12 mm
No. of teeth Z	4
Overhang length $L_1$ incl. recess	38 mm
Feed $f_z$ for side milling in steel < 1100 N/mm <sup>2</sup>	0.04 mm
Corner radius $R_1$	1 mm
Shank Ø $D_s$	12 mm
Flute length $L_c$	12 mm
Overall length L	83 mm

Shank	DIN 6535 HA to h6
Helix angle	30 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	e8
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	0.2×D for side milling
Through-coolant	no
Shank tolerance	h6
Colour ring	without
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Steel < 750 N/mm <sup>2</sup>	suitable	155 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	80 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	65 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
GG(G)	suitable	100 m/min	K
wet maximum	Suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		

Air  
**Services**

Suitable

Shank grinding Type HB

129100 HB