

## Garant

### Solid carbide barrel milling cutter, tangential form PPC, TiAlN, Ø f8 DC / R2: 12/40mm



#### Order data

Order number	207523 12/40
GTIN	4062406286699
Item class	11X

#### Description

##### Version:

Innovative coating concept for **machining hardened materials**.

High-performance tool for **exceptionally efficient finish machining of free-form surfaces**. For outstanding surface qualities in a **very short machining time**. For use on modern 5-axis milling machines with CAD / CAM support.

The end face geometry is designed so that the chips, especially those formed by the end radius, are of optimum shape and have optimum evacuation characteristics. For this purpose the number of cutting edges is reduced to the number of effective end face cutting edges.

##### Recommendation:

We recommend 0.05 to 0.2mm as an allowance for finishing operations.

##### Note:

R<sub>2</sub> represents the effective radius on the tool.

Cannot be reground!

**Successor product to No. 207522.**

#### Technical description

Feed $f_z$ for copy milling in steel < 60 HRC	0.04 mm
Flute length $L_c$	18.5 mm
Shank Ø $D_s$	12 mm
Overall length $L$	90 mm
Helix angle	30 degrees
Effective radius $R_2$	40 mm

No. of teeth Z	6
Corner radius R <sub>1</sub>	2 mm
Cutting edge Ø D <sub>c</sub>	12 mm
Feed f <sub>z</sub> for side milling in steel < 60 HRC	0.035 mm
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal Ø	f8
Direction of infeed	horizontal
Cutting width a <sub>e</sub> for milling operation	0.05×D for copy milling
Cutting width a <sub>e</sub> for milling operation	0.05×D for side milling
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	PPC
Colour ring	yellow
Type of product	Ball-nosed slot drill

## User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 1400 N/mm <sup>2</sup>	suitable	200 m/min	P
Steel < 55 HRC	suitable	170 m/min	H
Steel < 60 HRC	suitable	150 m/min	H
Steel < 65 HRC	suitable only under restricted conditions	110 m/min	H
wet maximum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

