

Garant
Solid carbide milling cutter with chip separators TPC, TiAlN, Ø f8 DC: 12 mm

Order data

Order number	203089 12
GTIN	4045197640956
Item class	11X

Description
Version:

High-performance milling cutter specially designed for general-purpose TPC applications. Strengthened core.

Optimised bending strength due to the use of ultra-fine grain substrates.

Note:

$a_{e\max} = 0.07 \times D$ for TPC machining.

h_{\max} : The values stated in the table are maximum values.

Tolerance nominal Ø: f8

No. of teeth Z: 5

Helix angle: 40 degrees

Direction of infeed: horizontal and oblique

Shank: DIN 6535 HB to h6

Balance quality with shank: G 2.5 with HB

No. of teeth Z: 5

Flute length L_c : 36 mm

Overhang length L_1 incl. recess: 45 mm

Recess Ø D_1 : 11.8 mm

Overall length L: 93 mm

Shank Ø D_s : 12 mm

Technical description

Corner chamfer width at 45°	0.24 mm
Overhang length L_1 incl. recess	45 mm
No. of teeth Z	5
Recess Ø D_1	11.8 mm

Cutting edge $\varnothing D_c$	12 mm
Average chip thickness h_{max} for TPC milling in Toolox 44 HRC	0.06 mm
Shank $\varnothing D_s$	12 mm
Overall length L	93 mm
Flute length L_c	36 mm
Direction of infeed	horizontal and oblique
Shank	DIN 6535 HB to h6
Tolerance nominal \varnothing	f8
Balance quality with shank	G 2.5 with HB
Helix angle	40 degrees
Corner chamfer angle	45 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.07 \times D$
Through-coolant	no
Machining strategy	TPC
Colour ring	green
Type of product	End mill

Services

Shank recess Type FRST	209900 FRST
Shank clamping flats for shrink-fit chucks, with retainer function Shank \varnothing tool 12 mm	SZ2025 12