



Solid carbide milling cutter with chip separators TPC, TiSiN, Ø e8 DC: 12mm



Order data

Order number	203085 12
GTIN	4062406569341
Item class	12X

Description

Version:

High-performance end mill for general-purpose applications, **specially designed for TPC applications.**

Strengthened core.

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

Chip breaker for controlled chip breaking.

Note:

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

$a_{e max} = 0.18 \times D$ for TPC machining.

Tolerance nominal Ø: e8

No. of teeth Z: 4

Helix angle: 40 °

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: 4

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

Cutting edge Ø D_c	12 mm
No. of teeth Z	4

Corner chamfer angle	45 °
Helix angle	40 °
Shank	DIN 6535 HB to h6
Recess $\varnothing D_1$	11.8 mm
Overhang length L_1 incl. recess	45 mm
Overall length L	93 mm
Flute length L_c	36 mm
Balance quality with shank	G 2.5 with HB
Shank $\varnothing D_s$	12 mm
Direction of infeed	horizontal and oblique
Tolerance nominal \varnothing	e8
Corner chamfer width at 45°	0.24 mm
Average chip thickness h_{max} for TPC milling in steel < 900 N/mm ²	0.092 mm
Coating	TiSiN
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	0.18×D
Through-coolant	no
Machining strategy	TPC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm ²	suitable	360 m/min	P

Steel < 750 N/mm ²	suitable	330 m/min	P
Steel < 900 N/mm ²	suitable	290 m/min	P
Steel < 1100 N/mm ²	suitable	220 m/min	P
Steel < 1400 N/mm ²	suitable	140 m/min	P
INOX < 900 N/mm ²	suitable	180 m/min	M
INOX > 900 N/mm ²	suitable	150 m/min	M
Uni	suitable		
dry	suitable		
Air	suitable		