

**Garant**
**Solid carbide milling cutter HPC / TPC, TiAlN, Ø e8 DC: 12mm**

**Order data**

Order number	203023 12
GTIN	4045197857804
Item class	11X

**Description**
**Version:**

 Shank **similar to DIN 6535 HB.**
**Note:**
**Successor product to No. 203018.**
**Technical description**

Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup>	0.065 mm
Direction of infeed	horizontal, oblique and vertical
Flute length $L_c$	51 mm
Corner chamfer width at 45°	0.5 mm
Overall length L	100 mm
Cutting edge Ø $D_c$	12 mm
Shank Ø $D_s$	12 mm
Shank	DIN 6535 HB to h6
No. of teeth Z	4
Tolerance nominal Ø	e8
Helix angle	38 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	0.04xD
Through-coolant	no
Machining strategy	HPC
Machining strategy	TPC
Colour ring	blue
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	210 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	195 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	145 m/min	P
TOOLOX 33	suitable	95 m/min	H
TOOLOX 44	suitable	70 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	85 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	75 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	50 m/min	S
Uni	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	Suitable		

dry

suitable only under  
restricted conditions