

**Garant**
**Roughing end mill, TiAlN, Ø DC: 9mm**

**Order data**

Order number	192710 9
GTIN	4045197107930
Item class	11W

**Description**
**Version:**
**Relief ground knuckle form profile.**

Up to size 20 end cutting teeth profile for plunging.

Through-coolant: no

Tolerance nominal Ø: k12

No. of teeth Z: 4

Helix angle: 27 °

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 1835 B to h6

No. of teeth Z: 4

Flute length  $L_c$ : 38 mm

Overall length L: 88 mm

Shank Ø  $D_s$ : 10 mm

Corner chamfer width at 45°: 0.5 mm

Feed  $f_z$  for slot milling in steel < 750 N/mm<sup>2</sup>: 0.014 mm

**Technical description**

Cutting edge Ø $D_c$	9 mm
No. of teeth Z	4
Feed $f_z$ for slot milling in steel < 750 N/mm <sup>2</sup>	0.014 mm
Corner chamfer width at 45°	0.5 mm
Shank Ø $D_s$	10 mm
Overall length L	88 mm

Flute length $L_c$	38 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal $\varnothing$	k12
Helix angle	27°
Corner chamfer angle	45°
Coating	TiAlN
Tool material	HSS Co 8
Standard	DIN 844 B
Milling profile	NR
Spacing of the cutters	unequal spacing
Through-coolant	no
Colour ring	without
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	120 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	78 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	55 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	55 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	17 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	14 m/min	M
GG(G)	suitable only under restricted conditions	46 m/min	K
CuZn	suitable only under restricted conditions	92 m/min	N
Uni	suitable		

wet maximum	suitable
dry	suitable only under restricted conditions