

**Garant**
**Roughing end mill, TiAlN, Ø DC: 11 mm**

**Order data**

Order number	192710 11
GTIN	4045197107718
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 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 1835 B to h6

No. of teeth Z: 4

Flute length  $L_c$ : 45 mm

Overall length L: 102 mm

Shank Ø  $D_s$ : 12 mm

Corner chamfer width at 45°: 0.5 mm

Feed  $f_z$  for slot milling in steel < 750 N/mm<sup>2</sup>: 0.02 mm

**Technical description**

No. of teeth Z	4
Corner chamfer width at 45°	0.5 mm
Feed $f_z$ for slot milling in steel < 750 N/mm <sup>2</sup>	0.02 mm
Cutting edge Ø $D_c$	11 mm
Shank Ø $D_s$	12 mm
Overall length L	102 mm

Flute length $L_c$	45 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal $\varnothing$	k12
Helix angle	27 degrees
Corner chamfer angle	45 degrees
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 mill