

**Garant**
**Roughing end mill HSS-Co8, uncoated, Ø DC: 19 mm**

**Order data**

Order number	192600 19
GTIN	4045197107060
Item class	11W

**Description**
**Version:**
**With relief ground knuckle form profile.**

Up to size 20 with end cutting teeth profile for plunging.

The wide teeth lands permit multiple re-grinding without losing the profile.

Through-coolant: no

Tolerance nominal Ø: k12

No. of teeth Z: 4

Helix angle: 30 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 1835 B to h6

No. of teeth Z: 4

Flute length  $L_c$ : 32 mm

Overall length L: 92 mm

Shank Ø  $D_s$ : 16 mm

Corner chamfer width at 45°: 0.5 mm

Feed  $f_z$  for slot milling in steel < 750 N/mm<sup>2</sup>: 0.025 mm

**Technical description**

No. of teeth Z	4
Feed $f_z$ for slot milling in steel < 750 N/mm <sup>2</sup>	0.025 mm
Cutting edge Ø $D_c$	19 mm
Corner chamfer width at 45°	0.5 mm
Shank Ø $D_s$	16 mm

Overall length L	92 mm
Flute length L <sub>c</sub>	32 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal Ø	k12
Helix angle	30 degrees
Corner chamfer angle	45 degrees
Coating	uncoated
Tool material	HSS Co 8
Standard	DIN 844 B
Milling profile	NR
Through-coolant	no
Colour ring	without
Type of product	End mill