

**Garant**
**Roughing end mill HSS-Co8, uncoated, Ø js12 DC: 20 mm**

**Order data**

Order number	192400 20
GTIN	4045197105981
Item class	11W

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

Centre cutting teeth for plunging.

**Universal end mills** for profile milling or for plunging.

**Advantage:**

Compared to multi-flute cutters, **better chip evacuation due to larger flutes.**

Through-coolant: no

Tolerance nominal Ø: js12

No. of teeth Z: 3

Helix angle: 25 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 1835 B to h6

No. of teeth Z: 3

Flute length  $L_c$ : 38 mm

Overall length L: 104 mm

Shank Ø  $D_s$ : 20 mm

Corner chamfer width at 45°: 0.6 mm

Feed  $f_z$  for slot milling in steel < 750 N/mm<sup>2</sup>: 0.05 mm

**Technical description**

Cutting edge Ø $D_c$	20 mm
Feed $f_z$ for slot milling in steel < 750 N/mm <sup>2</sup>	0.05 mm
Corner chamfer width at 45°	0.6 mm
No. of teeth Z	3

Shank $\varnothing D_s$	20 mm
Overall length L	104 mm
Flute length $L_c$	38 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal $\varnothing$	js12
Helix angle	25 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