

Garant

Roughing end mill with internal cooling, TiAlN, Ø k12 DC: 20 mm



Order data

Order number	192910 20
GTIN	4045197108784
Item class	11W

Description

Version:

Relief ground fine pitch knuckle form profile. Centre cutting edge geometry for plunging. For the most demanding metal removal rates.

Advantage:

The coolant is fed directly **to the cutting edges**, resulting in **longer tool life** and **complete chip clearance**.

Through-coolant: yes

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 : 38 mm

Overall length L: 104 mm

Shank Ø D_s : 20 mm

Corner chamfer width at 45°: 0.5 mm

Feed f_z for slot milling in steel < 1100 N/mm²: 0.048 mm

Technical description

No. of teeth Z	4
Corner chamfer width at 45°	0.5 mm
Cutting edge Ø D_c	20 mm
Shank Ø D_s	20 mm

Overall length L	104 mm
Flute length L _c	38 mm
Feed f _z for slot milling in steel < 1100 N/mm ²	0.048 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	TiAlN
Tool material	HSS PM
Standard	DIN 844
Milling profile	HR
Spacing of the cutters	unequal spacing
Through-coolant	yes
Colour ring	without
Type of product	End mill