

**Garant**
**High performance end mill, uncoated, Ø js12 DC: 20mm**


## Order data

Order number	191850 20
GTIN	4045197105578
Item class	11W

## Description

### Version:

Multi-flute mills **with ground chip breaker on flutes.**

End cutting teeth for plunging.

Special surface treatment.

### Advantage:

**Applicable as finishing cutter with particularly high cutting performance.**

## Technical description

No. of teeth Z	4
Cutting edge Ø D <sub>c</sub>	20 mm
Feed f <sub>z</sub> for slot milling in steel < 750 N/mm <sup>2</sup>	0.06 mm
Shank Ø D <sub>s</sub>	20 mm
Overall length L	110 mm
Flute length L <sub>c</sub>	45 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 1835 B to h6
Tolerance nominal Ø	js12
Helix angle	30 degrees
Corner chamfer angle	90 degrees
Coating	uncoated

Tool material	HSS Co 8
Standard	Manufacturer's standard
Milling profile	NF
Through-coolant	no
Colour ring	without
Type of product	End / face mill

## User data

	Suitability	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	83 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	28 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	23 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	23 m/min	P
GG(G)	suitable only under restricted conditions	23 m/min	K
CuZn	suitable only under restricted conditions	55 m/min	N
Uni	suitable		
wet maximum	suitable		