

**Garant**
**Ball nose slot drill HSS-PM, TiAlN, Ø e8 DC: 20 mm**

**Order data**

Order number	194302 20
GTIN	4045197110213
Item class	11W

**Description**
**Version:**

Centre cutting edge geometry for plunging.  
For the most demanding metal removal rates.

**Note:**

For milling concave slots or for milling radius transitions.  
Suitable for use as a copy mill and for mould making.

$f_z$  for  $a_p$  0.05×D.

No. of teeth Z: 2

Helix angle: 30 degrees

No. of teeth Z: 2

Flute length  $L_c$ : 22 mm

Overall length L: 88 mm

Shank Ø  $D_s$ : 20 mm

Feed  $f_z$  for copy milling in steel < 750 N/mm<sup>2</sup>: 0.076 mm

**Technical description**

Feed $f_z$ for copy milling in steel < 750 N/mm <sup>2</sup>	0.076 mm
No. of teeth Z	2
Cutting edge Ø $D_c$	20 mm
Shank Ø $D_s$	20 mm
Overall length L	88 mm
Flute length $L_c$	22 mm

Helix angle	30 degrees
Radius R	10 mm
Coating	TiAlN
Tool material	HSS PM
Type	N
Tolerance nominal $\varnothing$	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Shank	DIN 1835 B to h6
Through-coolant	no
Colour ring	without
Type of product	End mill