

**Garant**
**Ball nose slot drill HSS-PM, TiAlN, Ø e8 DC: 19 mm**

**Order data**

Order number	194302 19
GTIN	4045197110206
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  $L_c$ : 19 mm

Overall length L: 79 mm

Shank Ø  $D_s$ : 16 mm

Feed  $f_z$  for copy milling in steel < 750 N/mm<sup>2</sup>: 0.066 mm

**Technical description**

Feed $f_z$ for copy milling in steel < 750 N/mm <sup>2</sup>	0.066 mm
Cutting edge Ø $D_c$	19 mm
No. of teeth Z	2
Shank Ø $D_s$	16 mm
Overall length L	79 mm
Flute length $L_c$	19 mm

Helix angle	30 degrees
Radius R	9.5 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