

**Garant**
**GARANT Master Steel solid carbide ball nose slot drill HPC, TiAlN, Ø f8 DC: 3mm**

**Order data**

Order number	207492 3
GTIN	4062406285425
Item class	11X

**Description**
**Version:**
**Precision ground for very high accuracy requirements.**

Tolerance: Radius contour =  $\pm 0.005$  mm.

Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.

**Technical description**

No. of teeth Z	4
Shank Ø D <sub>s</sub>	4 mm
Helix angle	30 degrees
Flute length L <sub>c</sub>	5 mm
Cutting edge Ø D <sub>c</sub>	3 mm
Overhang length L <sub>1</sub> incl. recess	12 mm
Feed f <sub>z</sub> for side milling in steel < 900 N/mm <sup>2</sup>	0.02 mm
Feed f <sub>z</sub> for copy milling in steel < 900 N/mm <sup>2</sup>	0.025 mm
Recess Ø D <sub>1</sub>	2.8 mm
Overall length L	75 mm
Radius R	1.5 mm
Series	Master Steel

Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal $\varnothing$	f8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	$0.03 \times D$ for copy milling
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	Ball-nosed slot drill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	270 m/min	P
Steel < 750 N/mm <sup>2</sup>	Suitable	240 m/min	P
Steel < 900 N/mm <sup>2</sup>	Suitable	220 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable only under restricted conditions	190 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	170 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	140 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	80 m/min	M
GG(G)	suitable only under restricted conditions	400 m/min	K

Uni	Suitable
wet maximum	suitable
wet minimum	suitable only under restricted conditions
dry	suitable only under restricted conditions
Air	suitable only under restricted conditions