

**Garant**
**GARANT Diabolo solid carbide ball nose slot drill HPC, TiAlN, Ø f8 DC / DS:  
20mm**

**Order data**

Order number	207472 20
GTIN	4045197600653
Item class	11X

**Description**
**Version:**
**GARANT Diabolo:**

Special geometry, newly developed coating and carbide for hard machining. 4 centre cutting edges to the centre. Therefore can be used as a true **4-edge drill** at all depths of cut.

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

**Technical description**

No. of teeth Z	4
Feed $f_z$ for side milling in steel < 65 HRC	0.1 mm
Cutting edge $\varnothing D_c$	20 mm
Feed $f_z$ for copy milling in steel < 65 HRC	0.1 mm
Shank $\varnothing D_s$	20 mm
Overall length L	92 mm
Flute length $L_c$	26 mm
Helix angle	30 degrees
Radius R	10 mm
Series	Diabolo
Coating	TiAlN
Tool material	Solid carbide

Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	f8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Cutting width $a_e$ for milling operation	0.2×D for side milling
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	HPC
Colour ring	red
Type of product	Ball-nosed slot drill

## User data

	Suitability	$V_c$	ISO code
Steel < 1400 N/mm <sup>2</sup>	suitable	200 m/min	P
Steel < 50 HRC	suitable	190 m/min	H
Steel < 55 HRC	suitable	170 m/min	H
Steel < 60 HRC	suitable	150 m/min	H
Steel < 65 HRC	suitable	110 m/min	H
wet maximum	suitable only under restricted conditions		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

## Services

Shank grinding Type HB	129100 HB
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