

## Garant

### Solid carbide slot drill HPC, TiAlN, Ø DC: 3mm



## Order data

Order number	201648 3
GTIN	4045197641465
Item class	11X

## Description

### Version:

#### **GARANT Diabolo 70:**

**Special solid carbide substrate with extremely high tensile strength** combined with **outstanding wear resistance** for optimum process reliability. Newly developed **nano-crystalline high-tech coating for hard milling up to 70 HRC**. Very suitable for **continuous use** in tool and mould making.

Sizes 0.5 – 5: **Recess angle  $\alpha = 15^\circ$** .

### Application:

Due to the **special hard geometry** ideal for use on hardened materials from 60 HRC to 70 HRC.

### Note:

$f_z$  for  $a_p = 0.05 \times D$ .

## Technical description

Feed $f_z$ for slot milling in steel < 70 HRC	0.006 mm
Feed $f_z$ for side milling in steel < 70 HRC	0.008 mm
Cutting edge Ø $D_c$	3 mm
No. of teeth Z	2
Shank Ø $D_s$	6 mm
Overall length L	50 mm
Flute length $L_c$	7.5 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HA to h6

Tolerance nominal $\varnothing$	0 / -0.02
Helix angle	35 degrees
Corner chamfer angle	90 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Helix angle characteristic	unequal spacing
Cutting width $a_e$ for milling operation	0.05×D for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D
Through-coolant	no
Machining strategy	HPC
Colour ring	red
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Steel < 60 HRC	suitable only under restricted conditions	60 m/min	H
Steel < 65 HRC	suitable	50 m/min	H
Steel < 67 HRC	suitable	40 m/min	H
Steel < 70 HRC	suitable	35 m/min	H
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

## Services

Shank grinding Type HB	129100 HB
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