

GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 9 mm



Order data

Order number	205548 9
GTIN	4045197853547
Item class	11X

Description

Version:

With a new-type knurled profile, optimised for higher feed rates. Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultrafine grain substrate.

Feed rate per tooth up to 0.1 mm up to a depth of 2×D (in the slot milled from solid).

Advantage:

The tool geometry produces particularly tightly rolled swarf that is discharged via flat chip breaker recesses. As a result, the tool maintains an extremely stable core. Plunge angle of up to 10° possible thanks to generous recess on the front face.

Application:

For roughing machining, particularly suitable for full-slot machining.

Tolerance nominal Ø: d11

No. of teeth Z: 5

Helix angle: 42 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 5

Flute length L_c : 13 mm Overall length L: 66 mm Shank \varnothing D_s: 10 mm

Corner chamfer width at 45°: 0.45 mm

Feed f_z for slot milling in steel < 900 N/mm²: 0.06 mm

Technical description

Corner chamfer width at 45° 0.45 mm

Overall length L 66 mm Feed f₂ for side milling in steel < 900 N/mm² 0.08 mm Tolerance nominal Ø d11 Flute length L₂ 13 mm Feed f₂ for slot milling in steel < 900 N/mm² 0.06 mm Direction of infeed horizontal, oblique and vertical Shank Ø D₃ 10 mm Cutting edge Ø D₂ 9 mm Shank DIN 6535 HB to h6 Helix angle 42 degrees Corner chamfer angle 45 degrees Series GARANT Master Steel Coating TIAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width a₂ for milling operation 0.5×D for side milling Cutting width a₂ for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy HPC Colour ring green Type of product End mill	No. of teeth Z	5
Tolerance nominal Ø Flute length L₂ Flute length L₂ Flute length L₂ Feed f₂ for slot milling in steel < 900 N/mm² O.06 mm Direction of infeed horizontal, oblique and vertical Shank Ø D₃ 10 mm Cutting edge Ø D₂ 9 mm Shank DIN 6535 HB to h6 Helix angle 42 degrees Corner chamfer angle 45 degrees Series GARANT Master Steel Coating TiAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width a₂ for milling operation Cutting width a₂ for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy Clour ring Green	Overall length L	66 mm
Flute length L _c Feed f _z for slot milling in steel < 900 N/mm² Direction of infeed Shank Ø D _s Cutting edge Ø D _c Shank DIN 6535 HB to h6 Helix angle Corner chamfer angle Series GARANT Master Steel Coating TiAlN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters Cutting width a _e for milling operation Cutting width a _e for milling operation Through-coolant no Machining strategy Colour ring Mind strict and solid carbide PUI slot cutting depth 1×D Through-coolant no Machining strategy Colour ring Guess of the cutters 13 mm 0.06 mm 0.06 mm horizontal, oblique and vertical horizontal, oblique and vertical And shining strategy 10 mm Achining strategy 11 mm Achining strategy 12 milling one side milling 13 mm Achining strategy 12 milling one side milling 13 mm Achining strategy 14 milling one side milling 15 milling one side milling 16 milling one side milling 17 milling one side milling 18 milling one side milling 18 milling one side milling 19 milling one side milling 10 mm 10	Feed f_z for side milling in steel < 900 N/mm ²	0.08 mm
Feed f₂ for slot milling in steel < 900 N/mm² Direction of infeed Shank Ø D₂ Cutting edge Ø D₂ Shank DIN 6535 HB to h6 Helix angle Corner chamfer angle Series GARANT Master Steel Coating TiAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters Cutting width a₂ for milling operation Cutting width a₂ for milling operation Through-coolant No Machining strategy Clour ring Din 6527 Milcon Full slot cutting depth 1×D Through-coolant No Machining strategy Clour ring Green	Tolerance nominal Ø	d11
Direction of infeed horizontal, oblique and vertical Shank Ø D₅ 10 mm Cutting edge Ø D₀ 9 mm Shank DIN 6535 HB to h6 Helix angle 42 degrees Corner chamfer angle 45 degrees Series GARANT Master Steel Coating TiAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width a₀ for milling operation 0.5×D for side milling Cutting width a₀ for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy HPC Colour ring green	Flute length L _c	13 mm
Shank Ø D₅ 10 mm Cutting edge Ø Dc 9 mm Shank DIN 6535 HB to h6 Helix angle 42 degrees Corner chamfer angle 45 degrees Series GARANT Master Steel Coating TiAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width ae for milling operation 0.5×D for side milling Cutting width ae for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy HPC Colour ring green	Feed f_z for slot milling in steel < 900 N/mm ²	0.06 mm
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Corner chamfer angle Series GARANT Master Steel Coating TiAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width a _e for milling operation Cutting width a _e for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy HPC Colour ring GARANT Master Steel GARANT Master Steel TiAIN Solid carbide NR Spacing of the cutters unequal spacing Unequal spacing Full slot cutting depth 1×D Through-coolant no	Shank	DIN 6535 HB to h6
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Coating TiAIN Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width a _e for milling operation O.5×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 TiAIN Solid carbide NR PIN 6527 NR Spacing of the cutters Unequal spacing Unequal	Corner chamfer angle	45 degrees
Tool material Solid carbide Standard DIN 6527 Milling profile NR Spacing of the cutters unequal spacing Cutting width a _e for milling operation Cutting width a _e for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy HPC Colour ring	Series	GARANT Master Steel
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Milling profile Spacing of the cutters Cutting width a _e for milling operation Cutting width a _e for milling operation Cutting width a _e for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy HPC Colour ring green	Tool material	Solid carbide
Spacing of the cuttersunequal spacingCutting width a_e for milling operation $0.5 \times D$ for side millingCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Through-coolantnoMachining strategyHPCColour ringgreen	Standard	DIN 6527
Cutting width a_e for milling operation $0.5 \times D$ for side millingCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Through-coolantnoMachining strategyHPCColour ringgreen	Milling profile	NR
Cutting width a_e for milling operationFull slot cutting depth $1 \times D$ Through-coolantnoMachining strategyHPCColour ringgreen	Spacing of the cutters	unequal spacing
Through-coolant no Machining strategy HPC Colour ring green	Cutting width a _e for milling operation	0.5×D for side milling
Machining strategy HPC Colour ring green	Cutting width a _e for milling operation	Full slot cutting depth 1×D
Colour ring green	Through-coolant	no
	Machining strategy	HPC
Type of product End mill	Colour ring	green
	Type of product	End mill