

Solid carbide micro slot drill, DLC, Ø Dc×L1: 0,5X6 mm



Order data

| Order number | 201141 0,5X6 |
|--------------|---------------|
| GTIN | 4062406387044 |
| Item class | 11X |

Description

Version:

With advanced DLC sp² coating. For the highest demands regarding performance and precision in aluminium materials. Extremely tight tolerances ensure maximum accuracy. Double relief ground with 2 hollow-ground chamfers. Recess angle $\alpha = 16^{\circ}$. Tolerances:

• Neck Ø: $D_1 = 0 / -0.01 \text{ mm}$.

Extra-sturdy shank to reduce the tendency to vibrate.

Note:

At greater tool overhang lengths, use a reduced value for $a_p!$
 br> Values for:
 br> slots milled from solid: $a_p = 0.25 \times D \times a_{p \text{ corr}} < br>$ side milling: $a_p = 0.5 \times D \times a_{p \text{ corr}} < br>$ To calculate the feed rate vf please use the actual speed of the machine (the maximum possible speed)!
 br> e.g: br> vf = 18000 [rpm]× fz [mm/Z]× z

Through-coolant: no

Tolerance nominal \emptyset : 0 / -0.005

No. of teeth Z: 2

Helix angle: 25 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h5

No. of teeth Z: 2

Flute length L_c: 0.7 mm

Overhang length L₁ incl. recess: 6 mm

Recess \emptyset D₁: 0.48 mm Overall length L: 55 mm Shank \emptyset D₄: 6 mm

Technical description



| Cutting edge Ø Dc 0.5 mm Shank DIN 6535 HA to h5 Feed f₂ for side milling in cast aluminium 0.016 mm Tolerance nominal Ø 0 / −0.005 No. of teeth Z 2 Corner chamfer angle 90 degrees Flute length L₂ 0.7 mm Shank Ø D₃ 6 mm Recess Ø D₁ 0.48 mm Overall length L 55 mm Helix angle 25 degrees Overhang length L₁ incl. recess 6 mm Feed f₂ for slot milling in cast aluminium 0.012 mm Correction factor a₂ corr 0.35 Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Cutting width a₂ for milling operation Full slot cutting depth 1×D Cutting width a₂ for milling operation 0.5×D for side milling Through-coolant no Colour ring yellow Type of product End mill | Direction of infeed | horizontal, oblique and vertical |
|---|--|----------------------------------|
| Feed f₂ for side milling in cast aluminium Tolerance nominal Ø 0 / -0.005 No. of teeth Z 2 Corner chamfer angle Flute length L₂ Shank Ø D₂ Recess Ø D₁ O.48 mm Overall length L Helix angle Overhang length L₁ incl. recess Feed f₂ for slot milling in cast aluminium Correction factor ap₊corr Tool material Standard Manufacturer's standard Type W Cutting width a₂ for milling operation Colour ring No / -0.005 0 / -0.0 | Cutting edge Ø D _c | 0.5 mm |
| Tolerance nominal \varnothing 0 / -0.005 No. of teeth Z 2 Corner chamfer angle 90 degrees Flute length L_c 0.7 mm Shank \varnothing D _s 6 mm Recess \varnothing D ₁ 0.48 mm Overall length L 55 mm Helix angle 25 degrees Overhang length L ₁ incl. recess 6 mm Feed f _s for slot milling in cast aluminium 0.012 mm Correction factor $a_{p.corr}$ 0.35 Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Cutting width a_e for milling operation Full slot cutting depth 1×D Cutting width a_e for milling operation 0.5×D for side milling Through-coolant no | Shank | DIN 6535 HA to h5 |
| No. of teeth Z Corner chamfer angle Flute length L₂ 0.7 mm Shank Ø D₃ Recess Ø D₁ 0.48 mm Overall length L Helix angle 0.7 mm Helix angle 0.48 mm Overhang length L Helix angle 0.48 mm 0.48 mm 0.48 mm Overall length L For slot milling in cast aluminium 0.012 mm Correction factor apcorr 0.35 Coating 0.35 Coating 0.35 Coating 0.35 Coating 0.35 Coating 0.35 Could carbide Standard Manufacturer's standard Type W Cutting width ae for milling operation Full slot cutting depth 1×D Cutting width ae for milling operation $0.5 \times D$ for side milling Through-coolant no Colour ring yellow | Feed f _z for side milling in cast aluminium | 0.016 mm |
| Corner chamfer angle 90 degrees Flute length L_c 0.7 mm Shank Ø D_s 6 mm Recess Ø D_1 0.48 mm Overall length L 55 mm Helix angle 25 degrees Overhang length L_1 incl. recess 6 mm Feed f_z for slot milling in cast aluminium 0.012 mm Correction factor $a_{p.corr}$ 0.35 Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Cutting width a_e for milling operation Full slot cutting depth 1×D Cutting width a_e for milling operation 0.5×D for side milling Through-coolant no Colour ring yellow | Tolerance nominal Ø | 0 / -0.005 |
| | No. of teeth Z | 2 |
| Shank Ø D₂ 6 mm Recess Ø D₁ 0.48 mm Overall length L 55 mm Helix angle 25 degrees Overhang length L₁ incl. recess 6 mm Feed f₂ for slot milling in cast aluminium 0.012 mm Correction factor apcorr 0.35 Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Cutting width ae for milling operation Full slot cutting depth 1×D Cutting width ae for milling operation 0.5×D for side milling Through-coolant no Colour ring yellow | Corner chamfer angle | 90 degrees |
| Recess \varnothing D10.48 mmOverall length L55 mmHelix angle25 degreesOverhang length L1 incl. recess6 mmFeed f_z for slot milling in cast aluminium0.012 mmCorrection factor $a_{p corr}$ 0.35CoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Cutting width a_e for milling operation0.5 \times D for side millingThrough-coolantnoColour ringyellow | Flute length L _c | 0.7 mm |
| Overall length L 55 mm Helix angle 25 degrees Overhang length L1 incl. recess 6 mm Feed f2 for slot milling in cast aluminium 0.012 mm Correction factor $a_{p.corr}$ 0.35 CoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Cutting width a_e for milling operation $0.5 \times D$ for side millingThrough-coolantnoColour ringyellow | Shank Ø D _s | 6 mm |
| Helix angle 25 degrees Overhang length L_1 incl. recess6 mmFeed f_z for slot milling in cast aluminium 0.012 mm Correction factor $a_{p \text{ corr}}$ 0.35 CoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Cutting width a_e for milling operation $0.5 \times D$ for side millingThrough-coolantnoColour ringyellow | Recess Ø D ₁ | 0.48 mm |
| Overhang length L_1 incl. recess6 mmFeed f_z for slot milling in cast aluminium0.012 mmCorrection factor $a_{p corr}$ 0.35CoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Cutting width a_e for milling operation $0.5 \times D$ for side millingThrough-coolantnoColour ringyellow | Overall length L | 55 mm |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | Helix angle | 25 degrees |
| Correction factor $a_{p corr}$ 0.35CoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width a_e for milling operationFull slot cutting depth $1 \times D$ Cutting width a_e for milling operation $0.5 \times D$ for side millingThrough-coolantnoColour ringyellow | Overhang length L₁ incl. recess | 6 mm |
| CoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width ae for milling operationFull slot cutting depth 1×DCutting width ae for milling operation0.5×D for side millingThrough-coolantnoColour ringyellow | Feed f _z for slot milling in cast aluminium | 0.012 mm |
| Tool material Standard Manufacturer's standard Type W Cutting width a _e for milling operation Full slot cutting depth 1×D Cutting width a _e for milling operation 0.5×D for side milling Through-coolant no Colour ring yellow | Correction factor a _{p corr} | 0.35 |
| Standard Type Cutting width a _e for milling operation Cutting width a _e for milling operation Cutting width a _e for milling operation Through-coolant Colour ring Manufacturer's standard W Full slot cutting depth 1×D 0.5×D for side milling no | Coating | DLC |
| Type | Tool material | Solid carbide |
| Cutting width a_e for milling operationFull slot cutting depth $1 \times D$ Cutting width a_e for milling operation $0.5 \times D$ for side millingThrough-coolantnoColour ringyellow | Standard | Manufacturer's standard |
| Cutting width a_e for milling operation $0.5 \times D$ for side millingThrough-coolantnoColour ringyellow | Туре | W |
| Through-coolant no Colour ring yellow | Cutting width a _e for milling operation | Full slot cutting depth 1×D |
| Colour ring yellow | Cutting width a _e for milling operation | 0.5×D for side milling |
| | Through-coolant | no |
| Type of product End mill | Colour ring | yellow |
| | Type of product | End mill |