

# Solid carbide micro slot drill, DLC, Ø Dc×L1: 2,5X8 mm



# **Order data**

Order number	201141 2,5X8
GTIN	4062406387488
Item class	11X

### **Description**

#### **Version:**

With advanced DLC sp<sup>2</sup> 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/> br> Values for:<br/> 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/> 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: 30 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HA to h5

No. of teeth Z: 2

Flute length L<sub>c</sub>: 3.7 mm

Overhang length L<sub>1</sub> incl. recess: 8 mm

Recess  $\emptyset$  D<sub>1</sub>: 2.41 mm Overall length L: 55 mm Shank  $\emptyset$  D<sub>4</sub>: 6 mm

# **Technical description**

Direction of infeed       horizontal, oblique and vertical         Correction factor apcorr       1         Feed f₂ for slot milling in cast aluminium       0.04 mm         Recess Ø D₁       2.41 mm         Helix angle       30 degrees         No. of teeth Z       2         Flute length L₂       3.7 mm         Overall length L       55 mm         Shank       DIN 6535 HA to h5         Corner chamfer angle       90 degrees         Feed f₂ for side milling in cast aluminium       0.045 mm         Shank Ø D₃       6 mm         Cutting edge Ø D₂       2.5 mm         Overhang length L₁ incl. recess       8 mm         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	Tolerance nominal ∅	0 / -0.005
Feed $f_z$ for slot milling in cast aluminium $0.04 \text{ mm}$ Recess $\varnothing$ $D_1$ $2.41 \text{ mm}$ Helix angle $30 \text{ degrees}$ No. of teeth $Z$ $2$ Flute length $L_c$ $3.7 \text{ mm}$ Overall length L $55 \text{ mm}$ ShankDIN 6535 HA to h5Corner chamfer angle $90 \text{ degrees}$ Feed $f_z$ for side milling in cast aluminium $0.045 \text{ mm}$ Shank $\varnothing$ $D_z$ $6 \text{ mm}$ Cutting edge $\varnothing$ $D_c$ $2.5 \text{ mm}$ Overhang length $L_1$ incl. recess $8 \text{ mm}$ Coating $DLC$ Tool materialSolid carbideStandardManufacturer's standardType $W$ Cutting width $a_c$ for milling operationFull slot cutting depth $1 \times D$ Cutting width $a_c$ for milling operation $0.5 \times D$ for side millingThrough-coolant $no$ Colour ringyellow	Direction of infeed	horizontal, oblique and vertical
Recess $\varnothing$ D12.41 mmHelix angle30 degreesNo. of teeth Z2Flute length L23.7 mmOverall length L55 mmShankDIN 6535 HA to h5Corner chamfer angle90 degreesFeed $f_z$ for side milling in cast aluminium0.045 mmShank $\varnothing$ D26 mmCutting edge $\varnothing$ D22.5 mmOverhang length L1 incl. recess8 mmCoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width $a_z$ for milling operationFull slot cutting depth 1×DCutting width $a_z$ for milling operation0.5×D for side millingThrough-coolantnoColour ringyellow	Correction factor a <sub>p corr</sub>	1
Helix angle  No. of teeth Z  Flute length L₂  Shank  Overall length L  Somm  Shank  DIN 6535 HA to h5  Corner chamfer angle  Feed f₂ for side milling in cast aluminium  Shank Ø D₃  Cutting edge Ø D₂  Overhang length L₁ incl. recess  Smm  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Cutting width a₂ for milling operation  Cutting width a₂ for milling operation  Colour ring  Colour ring  Pull slot cutting depth 1×D  Cutting width a₂ for milling operation  Colour ring  Yellow	Feed f <sub>z</sub> for slot milling in cast aluminium	0.04 mm
No. of teeth Z 2 Flute length $L_c$ 3.7 mm  Overall length L 55 mm  Shank DIN 6535 HA to h5  Corner chamfer angle 90 degrees  Feed $f_z$ for side milling in cast aluminium 0.045 mm  Shank $\varnothing$ D <sub>s</sub> 6 mm  Cutting edge $\varnothing$ D <sub>c</sub> 2.5 mm  Overhang length $L_1$ incl. recess 8 mm  Coating DLC  Tool material Solid carbide  Standard Manufacturer's standard  Type W  Cutting width $a_e$ for milling operation Full slot cutting depth $1 \times D$ Cutting width $a_e$ for milling operation 0.5×D for side milling  Through-coolant no	Recess Ø D <sub>1</sub>	2.41 mm
Flute length L <sub>c</sub> Overall length L  Shank  DIN 6535 HA to h5  Corner chamfer angle  Feed f <sub>z</sub> for side milling in cast aluminium  Shank Ø D <sub>s</sub> 6 mm  Cutting edge Ø D <sub>c</sub> 2.5 mm  Overhang length L <sub>1</sub> incl. recess  8 mm  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Cutting width a <sub>e</sub> for milling operation  Cutting width a <sub>e</sub> for milling operation  Colour ring  Colour ring  yellow	Helix angle	30 degrees
Overall length L55 mmShankDIN 6535 HA to h5Corner chamfer angle90 degreesFeed $f_z$ for side milling in cast aluminium0.045 mmShank $\varnothing$ Ds6 mmCutting edge $\varnothing$ Dc2.5 mmOverhang length L1 incl. recess8 mmCoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width $a_c$ for milling operationFull slot cutting depth $1 \times D$ Cutting width $a_c$ for milling operation0.5 $\times D$ for side millingThrough-coolantnoColour ringyellow	No. of teeth Z	2
ShankDIN 6535 HA to h5Corner chamfer angle90 degreesFeed $f_z$ for side milling in cast aluminium0.045 mmShank $\varnothing$ D $_s$ 6 mmCutting edge $\varnothing$ D $_c$ 2.5 mmOverhang length L $_1$ incl. recess8 mmCoatingDLCTool materialSolid carbideStandardManufacturer's standardTypeWCutting width $a_e$ for milling operationFull slot cutting depth 1×DCutting width $a_e$ for milling operation0.5×D for side millingThrough-coolantnoColour ringyellow	Flute length L <sub>c</sub>	3.7 mm
Corner chamfer angle90 degreesFeed $f_z$ for side milling in cast aluminium0.045 mmShank $\emptyset$ $D_s$ 6 mmCutting edge $\emptyset$ $D_c$ 2.5 mmOverhang length $L_1$ incl. recess8 mmCoatingDLCTool 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
Feed $f_z$ for side milling in cast aluminium  Shank $\varnothing$ D <sub>s</sub> 6 mm  Cutting edge $\varnothing$ D <sub>c</sub> 2.5 mm  Overhang length L <sub>1</sub> incl. recess  8 mm  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Cutting width a <sub>e</sub> for milling operation  O.5×D for side milling  Through-coolant  no  Colour ring  yellow	Shank	DIN 6535 HA to h5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Corner chamfer angle	90 degrees
$ \begin{array}{cccc} \text{Cutting edge} \varnothing  D_c & 2.5  \text{mm} \\ \\ \text{Overhang length}  L_1  \text{incl. recess} & 8  \text{mm} \\ \\ \text{Coating} & DLC \\ \\ \text{Tool material} & \text{Solid carbide} \\ \\ \text{Standard} & \text{Manufacturer's standard} \\ \\ \text{Type} & & & & & & & & & \\ \\ \text{Cutting width}  a_e  \text{for milling operation} & & \text{Full slot cutting depth 1} \times D \\ \\ \text{Cutting width}  a_e  \text{for milling operation} & & 0.5 \times D  \text{for side milling} \\ \\ \text{Through-coolant} & & & & & & & & \\ \\ \text{Colour ring} & & & & & & & & \\ \end{array} $	Feed f <sub>z</sub> for side milling in cast aluminium	0.045 mm
Overhang length $L_1$ incl. recess8 mmCoatingDLCTool 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 <sub>s</sub>	6 mm
Coating DLC Tool material Solid carbide Standard Manufacturer's standard Type W Cutting width a <sub>e</sub> for milling operation Full slot cutting depth 1×D Cutting width a <sub>e</sub> for milling operation 0.5×D for side milling Through-coolant no Colour ring yellow	Cutting edge Ø D <sub>c</sub>	2.5 mm
Tool material  Standard  Manufacturer's standard  Type  W  Cutting width a <sub>e</sub> for milling operation  Cutting width a <sub>e</sub> for milling operation  Through-coolant  Colour ring  Solid carbide  Manufacturer's standard  W  Full slot cutting depth 1×D  0.5×D for side milling  no	Overhang length L <sub>1</sub> incl. recess	8 mm
Standard  Type  Cutting width a <sub>e</sub> for milling operation  Cutting width a <sub>e</sub> for milling operation  Cutting width a <sub>e</sub> 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 operation0.5×D for side millingThrough-coolantnoColour ringyellow	Туре	W
Through-coolant no Colour ring yellow	Cutting width a <sub>e</sub> for milling operation	Full slot cutting depth 1×D
Colour ring yellow	Cutting width a <sub>e</sub> 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