

### Solid carbide torus cutter TPC, DLC, Ø h6 DC / R1: 8/2,0 mm



### **Order data**

Order number	206211 8/2,0
GTIN	4045197812049
Item class	11X

## **Description**

#### **Version:**

**Eccentric relief ground**, additionally **polish ground** in the flutes for **outstanding chip evacuation** in long-chipping aluminium workpieces.

With double chip-breaker for exemplary chip formation.

With the latest generation of **DLC coating sp** $^2$ .

#### **Application:**

Especially for MTC (Multi Task Cutting) use on the new generation of turning / milling centres.

#### **Note:**

 $a_{e max}$  = 0.12×D for TPC machining.

h<sub>max</sub>: The values stated in the table are maximum values.

No. of teeth Z: 3

Helix angle: 45 degrees Shank: DIN 6535 HA to h6

Balance quality with shank: G 2.5 with HA

No. of teeth Z: 3

Flute length  $L_c$ : 33 mm Corner radius  $R_1$ : 2 mm

Overhang length  $L_1$  incl. recess: 40 mm

Recess Ø D<sub>1</sub>: 7.4 mm Overall length L: 80 mm

# **Technical description**

Recess Ø D <sub>1</sub>	7.4 mm
Overhang length $L_1$ incl. recess	40 mm
No. of teeth Z	3



Cutting edge Ø Dc       8 mm         Overall length L       80 mm         Flute length Lc       33 mm         Corner radius R₁       2 mm         Shank Ø D₀       8 mm         Average chip thickness hmax for TPC milling in shortchipping aluminium       0.045 mm         Balance quality with shank       G 2.5 with HA         Shank       DIN 6535 HA to h6         Helix angle       45 degrees         Coating       DLC         Tool material       Solid carbide         Standard       Manufacturer's standard         Type       W         Tolerance nominal Ø       h6         Helix angle characteristic       unequal spacing         Direction of infeed       horizontal, oblique and vertical         Cutting width a₅ for milling operation       0.12×D         Through-coolant       no         Machining strategy       TPC         Colour ring       yellow         Type of product       End mill	Shank form	НА
Flute length $L_c$ 33 mm  Corner radius $R_1$ 2 mm  Shank $\varnothing$ $D_s$ 8 mm  Average chip thickness $h_{max}$ for TPC milling in short-chipping aluminium  Balance quality with shank  Shank  DIN 6535 HA to h6  Helix angle  45 degrees  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal $\varnothing$ Helix angle characteristic  Unequal spacing  Direction of infeed  Cutting width $a_e$ for milling operation  Machining strategy  TPC  Colour ring  yellow	Cutting edge Ø D <sub>C</sub>	8 mm
Corner radius R <sub>1</sub> Shank Ø D <sub>s</sub> 8 mm  Average chip thickness h <sub>max</sub> for TPC milling in short-chipping aluminium  Balance quality with shank  Shank  DIN 6535 HA to h6  Helix angle  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  Helix angle characteristic  Unequal spacing  Direction of infeed  Cutting width a <sub>e</sub> for milling operation  Machining strategy  TPC  Colour ring  S mm  2 mm  8 mm  0.045 mm  0.046 melix angle characteristic unequal spacing  Direction of infeed  Cutting width a <sub>e</sub> for milling operation  TPC  Colour ring  yellow	Overall length L	80 mm
Shank Ø D,  Average chip thickness h <sub>max</sub> for TPC milling in short-chipping aluminium  Balance quality with shank  Shank  DIN 6535 HA to h6  Helix angle  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  Helix angle characteristic  Direction of infeed  Cutting width a₀ for milling operation  Machining strategy  TPC  Colour ring  S mm  8 mm  0.045 mm  0.045 mm  0.045 mm  A mu  A g. 5 with HA  Shank  DIN 6535 HA to h6  Helix angle  45 degrees  Coating  DLC  Solid carbide  Standard  Manufacturer's standard  Manufacturer's standard  h6  Helix angle characteristic  unequal spacing  horizontal, oblique and vertical  Cutting width a₀ for milling operation  7 pc  TPC  Colour ring  yellow	Flute length L <sub>c</sub>	33 mm
Average chip thickness h <sub>max</sub> for TPC milling in short-chipping aluminium  Balance quality with shank  Shank  DIN 6535 HA to h6  Helix angle  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  Helix angle characteristic  Direction of infeed  Cutting width a <sub>e</sub> for milling operation  Machining strategy  TPC  Colour ring  Solid carbide  Manufacturer's standard  Manufacturer's standard  Monufacturer's standard  Type  Through-coolant  No  Yellow	Corner radius R <sub>1</sub>	2 mm
chipping aluminium  Balance quality with shank  Shank  DIN 6535 HA to h6  Helix angle  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  Helix angle characteristic  unequal spacing  Direction of infeed  Cutting width a₅ for milling operation  Through-coolant  Machining strategy  TPC  Colour ring  V DIN 6535 HA to h6  As general As to he  As degrees  As June 19  As degrees  As June 20  As degrees  As June 20  As	Shank Ø D <sub>s</sub>	8 mm
Shank  DIN 6535 HA to h6  Helix angle  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  Helix angle characteristic  unequal spacing  Direction of infeed  Cutting width ae for milling operation  Machining strategy  TPC  Colour ring  DIN 6535 HA to h6  45 degrees  About	<u> </u>	0.045 mm
Helix angle  Coating  DLC  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  Helix angle characteristic  unequal spacing  Direction of infeed  Cutting width ae for milling operation  Machining strategy  TPC  Colour ring  A 5 degrees  DLC  DLC  DLC  Nanufacturer's standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  16  Helix angle characteristic  Unequal spacing  Direction of infeed  Trough-coolant  No  Machining strategy  TPC	Balance quality with shank	G 2.5 with HA
Coating DLC  Tool material Solid carbide  Standard Manufacturer's standard  Type W  Tolerance nominal Ø h6  Helix angle characteristic unequal spacing  Direction of infeed horizontal, oblique and vertical  Cutting width ae for milling operation 0.12×D  Through-coolant no  Machining strategy TPC  Colour ring yellow	Shank	DIN 6535 HA to h6
Tool material  Solid carbide  Standard  Manufacturer's standard  Type  W  Tolerance nominal Ø  h6  Helix angle characteristic  unequal spacing  Direction of infeed  horizontal, oblique and vertical  Cutting width ae for milling operation  Through-coolant  no  Machining strategy  TPC  Colour ring	Helix angle	45 degrees
StandardManufacturer's standardTypeWTolerance nominal Øh6Helix angle characteristicunequal spacingDirection of infeedhorizontal, oblique and verticalCutting width ae for milling operation0.12×DThrough-coolantnoMachining strategyTPCColour ringyellow	Coating	DLC
Type W Tolerance nominal Ø h6 Helix angle characteristic unequal spacing Direction of infeed horizontal, oblique and vertical Cutting width ae for milling operation 0.12×D Through-coolant no Machining strategy TPC Colour ring yellow	Tool material	Solid carbide
Tolerance nominal Ø  Helix angle characteristic  Direction of infeed  Cutting width a <sub>e</sub> for milling operation  Through-coolant  Machining strategy  TPC  Colour ring  h6  unequal spacing  horizontal, oblique and vertical  0.12×D  no  TPC	Standard	Manufacturer's standard
Helix angle characteristic  Direction of infeed  Cutting width a <sub>e</sub> for milling operation  Through-coolant  Machining strategy  Colour ring  unequal spacing  horizontal, oblique and vertical  0.12×D  no  TPC	Туре	W
$\begin{array}{ll} \mbox{Direction of infeed} & \mbox{horizontal, oblique and vertical} \\ \mbox{Cutting width $a_e$ for milling operation} & \mbox{0.12}{\times}\mbox{D} \\ \mbox{Through-coolant} & \mbox{no} \\ \mbox{Machining strategy} & \mbox{TPC} \\ \mbox{Colour ring} & \mbox{yellow} \end{array}$	Tolerance nominal Ø	h6
Cutting width $a_e$ for milling operation $0.12 \times D$ Through-coolantnoMachining strategyTPCColour ringyellow	Helix angle characteristic	unequal spacing
Through-coolant no  Machining strategy TPC  Colour ring yellow	Direction of infeed	horizontal, oblique and vertical
Machining strategy TPC Colour ring yellow	Cutting width a <sub>e</sub> for milling operation	0.12×D
Colour ring yellow	Through-coolant	no
·	Machining strategy	TPC
Type of product End mill	Colour ring	yellow
	Type of product	End mill

# **Services**

Shank grinding Type HB 129100 HB