

# Solid carbide roughing end mill MTC, AlCrN, Ø e8 DC: 6 mm



## **Order data**

Order number	203051 6
GTIN	4045197774293
Item class	11X

# **Description**

#### **Version:**

For **roughing and finishing** up to 1.5×D into solid material **at very high feed rates** with smooth cutting action.

For cutting force reduction and better surface quality due to 45° helix.

Improved coating for a further reduction in cutting force combined with increased tool life.

### **Application:**

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

Tolerance nominal Ø: e8

No. of teeth Z: 4

Helix angle: 45 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

Balance quality with shank: G 2.5 with HB

No. of teeth Z: 4

Flute length L<sub>c</sub>: 10 mm

Overhang length L<sub>1</sub> incl. recess: 16 mm

Recess  $\emptyset$  D<sub>1</sub>: 5.8 mm Overall length L: 54 mm Shank  $\emptyset$  D<sub>4</sub>: 6 mm

# **Technical description**

Feed $f_z$ for side milling in steel $< 900 \text{ N/mm}^2$	0.07 mm
Shank	DIN 6535 HB to h6
Tolerance nominal Ø	e8

Flute length L <sub>c</sub> Corner chamfer width at 45°  Outling edge Ø D <sub>c</sub> 6 mm  Overhang length L <sub>1</sub> incl. recess  16 mm  Direction of infeed  Overall length L  Recess Ø D <sub>1</sub> Sa mm  No. of teeth Z  Helix angle  Corner chamfer angle  Corner chamfer angle  Coating  AlCrN  Tool material  Standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width a <sub>e</sub> for milling operation  Machining strategy  MTC	Balance quality with shank	G 2.5 with HB
Corner chamfer width at 45°  Cutting edge Ø Dc  Overhang length L <sub>1</sub> incl. recess  16 mm  Direction of infeed  Overall length L  Recess Ø D <sub>1</sub> No. of teeth Z  Helix angle  Corner chamfer angle  Coating  Tool material  Standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width a <sub>e</sub> for milling operation  Cutting width a <sub>e</sub> for milling operation  Machining strategy  Colour ring  O.1 mm  O.1 mm	Shank Ø D <sub>s</sub>	6 mm
Cutting edge Ø D <sub>c</sub> Overhang length L <sub>1</sub> incl. recess  16 mm  Direction of infeed  Overall length L  S4 mm  Recess Ø D <sub>1</sub> S.8 mm  No. of teeth Z  Helix angle  Corner chamfer angle  Coating  AlCrN  Tool material  Standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width a <sub>e</sub> for milling operation  Cutting width a <sub>e</sub> for milling operation  Through-coolant  Machining strategy  Colour ring  German  16 mm  6 mm  16 mm  16 mm  horizontal  16 mm  horizontal, oblique and vertical  Namifactored  44 mm  44  44  44  45 degrees  45 degrees  AlCrN  AlCrN  Solid carbide  Standard  Manufacturer's standard  Manufacturer's standard  Type  N  Helix angle characteristic  unequal spacing  Spacing of the cutters  Unequal spacing  Cutting width a <sub>e</sub> for milling operation  Full slot cutting depth 1×D  Through-coolant  no  Machining strategy  MTC  Colour ring	Flute length L <sub>c</sub>	10 mm
Overhang length L₁ incl. recess       16 mm         Direction of infeed       horizontal, oblique and vertical         Overall length L       54 mm         Recess Ø D₁       5.8 mm         No. of teeth Z       4         Helix angle       45 degrees         Corner chamfer angle       45 degrees         Coating       AlCrN         Tool material       solid carbide         Standard       Manufacturer's standard         Type       N         Helix angle characteristic       unequal spacing         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       MTC         Colour ring       green	Corner chamfer width at 45°	0.1 mm
Direction of infeedhorizontal, oblique and verticalOverall length L $54 \text{ mm}$ Recess $\varnothing$ D1 $5.8 \text{ mm}$ No. of teeth Z4Helix angle $45 \text{ degrees}$ Corner chamfer angle $45 \text{ degrees}$ CoatingAlCrNTool materialsolid carbideStandardManufacturer's standardTypeNHelix angle characteristicunequal spacingSpacing 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 strategyMTCColour ringgreen	Cutting edge Ø D <sub>c</sub>	6 mm
Overall length L  Recess Ø D₁  Solution  No. of teeth Z  Helix angle  Corner chamfer angle  Coating  AlCrN  Tool material  Standard  Manufacturer's standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width ae for milling operation  Cutting width ae for milling operation  Machining strategy  MTC  Colour ring  Solid carbide  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Full slot cutting depth 1×D  MTC  Golour ring  Green	Overhang length L <sub>1</sub> incl. recess	16 mm
Recess $\varnothing$ D <sub>1</sub> No. of teeth Z  Helix angle  Corner chamfer angle  Coating  AlCrN  Tool material  Standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width $a_e$ for milling operation  Cutting width $a_e$ for milling operation  Through-coolant  Machining strategy  MTC  Colour ring	Direction of infeed	horizontal, oblique and vertical
No. of teeth Z Helix angle Corner chamfer angle Coating AlCrN Tool material Standard Manufacturer's standard Type N Helix angle characteristic unequal spacing Spacing of the cutters unequal spacing Cutting width ae for milling operation Cutting width ae for milling operation Through-coolant Machining strategy MTC Colour ring  4  4  4  4  4  4  4  4  4  4  4  4  4	Overall length L	54 mm
Helix angle  Corner chamfer angle  Coating  AlCrN  Tool material  Standard  Manufacturer's standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width ae for milling operation  Cutting width ae for milling operation  Through-coolant  Machining strategy  MTC  Colour ring  AlCrN  AlCrN  Manufacturer's  standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Manufacturer's standard  Full slot cutting depth 1×D  MTC  Colour ring	Recess Ø D₁	5.8 mm
Corner chamfer angle  Coating  AICrN  Tool material  Standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width ae for milling operation  Cutting width ae for milling operation  Type  Cutting width ae for milling operation  Machining strategy  MTC  Colour ring  AICrN  AICrN  AICRN  AICRN  AICRN  AICRN  Manufacturer's standard  Manufacturer's standard  unequal spacing  unequal spacing  O.5×D for side milling  Full slot cutting depth 1×D  MTC  Green	No. of teeth Z	4
Coating  Tool material  Solid carbide  Standard  Manufacturer's standard  Type  N  Helix angle characteristic  Spacing of the cutters  Cutting width ae for milling operation  Cutting width ae for milling operation  Type  Cutting width ae for milling operation  Through-coolant  Machining strategy  MTC  Colour ring  AlCrN  Solid carbide  Standard  N  Manufacturer's standard  N  unequal spacing  Unequal spacing  O.5×D for side milling  Full slot cutting depth 1×D  MTC  Golour ring  Green	Helix angle	45 degrees
Tool material solid carbide  Standard Manufacturer's standard  Type N  Helix angle characteristic unequal spacing  Spacing of the cutters unequal spacing  Cutting width a <sub>e</sub> for milling operation 0.5×D for side milling  Cutting width a <sub>e</sub> for milling operation Full slot cutting depth 1×D  Through-coolant no  Machining strategy MTC  Colour ring green	Corner chamfer angle	45 degrees
Standard Manufacturer's standard  Type N  Helix angle characteristic unequal spacing  Spacing of the cutters unequal spacing  Cutting width a <sub>e</sub> for milling operation 0.5×D for side milling  Cutting width a <sub>e</sub> for milling operation Full slot cutting depth 1×D  Through-coolant no  Machining strategy MTC  Colour ring green	Coating	AlCrN
Type N Helix angle characteristic unequal spacing Spacing of the cutters unequal spacing Cutting width a <sub>e</sub> for milling operation 0.5×D for side milling Cutting width a <sub>e</sub> for milling operation Full slot cutting depth 1×D Through-coolant no Machining strategy MTC Colour ring green	Tool material	solid carbide
Helix angle characteristic  Spacing of the cutters  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  Full slot cutting depth 1×D  Through-coolant  no  Machining strategy  MTC  Colour ring  green	Standard	Manufacturer's standard
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 strategyMTCColour ringgreen	Туре	N
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 strategyMTCColour ringgreen	Helix angle characteristic	unequal spacing
Cutting width a <sub>e</sub> for milling operation  Through-coolant  Machining strategy  Colour ring  Full slot cutting depth 1×D  no  MTC  green	Spacing of the cutters	unequal spacing
Through-coolant no  Machining strategy MTC  Colour ring green	Cutting width a <sub>e</sub> for milling operation	0.5×D for side milling
Machining strategy MTC Colour ring green	Cutting width a <sub>e</sub> for milling operation	Full slot cutting depth 1×D
Colour ring green	Through-coolant	no
	Machining strategy	MTC
Type of product End mill	Colour ring	green
	Type of product	End mill