

Garant
GARANT Master UNI solid carbide milling cutter HPC, TiSiN, Ø e8 DC: 12mm

Order data

Order number	203067 12
GTIN	4062406569679
Item class	11Z

Description
Version:

For **roughing and finishing at very high feed rates** with smooth cutting action. **Newly developed geometry and high-performance coating** for outstanding production results and very long tool life with a variety of materials. Unequal spacing gives **high intrinsic stability** and smooth cutting action.

Advantage:

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

Technical description

Cutting edge Ø D _c	12 mm
Tolerance nominal Ø	e8
Corner rounding r _v	0.3 mm
Helix angle	42 degrees
Shank Ø D _s	12 mm
No. of teeth Z	4
Shank	DIN 6535 HB to h6
Recess Ø D ₁	11.6 mm
Feed f _z for slot milling in stainless steel > 900 N/mm ²	0.04 mm
Feed f _z for slot milling in steel < 900 N/mm ²	0.07 mm
Overhang length L ₁ incl. recess	36 mm

Flute length L_c	26 mm
Feed f_z for side milling in steel $< 900 \text{ N/mm}^2$	0.09 mm
Overall length L	83 mm
Direction of infeed	horizontal, oblique and vertical
Feed f_z for side milling in INOX $> 900 \text{ N/mm}^2$	0.05 mm
Series	Master Uni
Coating	TiSiN
Tool material	solid carbide
Standard	Manufacturer's standard
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.3 \times D$ for side milling
Cutting width a_e for milling operation	Full slot cutting depth $1 \times D$
Through-coolant	no
Machining strategy	MTC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	280 m/min	N
Steel $< 500 \text{ N/mm}^2$	suitable	260 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	240 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	190 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	180 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	150 m/min	P
INOX $< 900 \text{ N/mm}^2$	suitable	90 m/min	M

INOX > 900 N/mm ²	suitable	80 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	40 m/min	S
GG(G)	suitable	250 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		