

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

Order data

Order number	203062 12
GTIN	4062406569587
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:

- **Particularly low vibration running.**
- **Special flute profile, large flutes.**
- **Specially matched edge honing.**
- **Optimised substrate for hardness and toughness.**

Technical description

Shank	DIN 6535 HB to h6
Flute length L_c	16 mm
No. of teeth Z	4
Direction of infeed	horizontal, oblique and vertical
Cutting edge $\varnothing D_c$	12 mm
Shank $\varnothing D_s$	12 mm
Feed f_z for slot milling in stainless steel $> 900 \text{ N/mm}^2$	0.04 mm
Helix angle	42 degrees
Recess $\varnothing D_1$	11.5 mm

Feed f_z for side milling in INOX > 900 N/mm ²	0.05 mm
Overall length L	73 mm
Feed f_z for side milling in steel < 900 N/mm ²	0.09 mm
Feed f_z for slot milling in steel < 900 N/mm ²	0.07 mm
Overhang length L_1 incl. recess	26 mm
Corner rounding r_v	0.3 mm
Tolerance nominal \varnothing	e8
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	Full slot cutting depth 1xD
Cutting width a_e for milling operation	Full slot cutting depth 1xD
Through-coolant	no
Machining strategy	HPC
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 N/mm ²	suitable	260 m/min	P
Steel < 750 N/mm ²	suitable	240 m/min	P
Steel < 900 N/mm ²	suitable	190 m/min	P
Steel < 1100 N/mm ²	suitable	180 m/min	P

Steel < 1400 N/mm ²	suitable	150 m/min	P
INOX < 900 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		