

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


Order data

Order number	203073 12
GTIN	4067263092032
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 excellent production results with maximum tool life in various materials. **High intrinsic stability** and smooth cutting action due to unequal spacing.

Advantage:

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

Technical description

Feed f_z for slot milling in steel < 900 N/mm ²	0.06 mm
Shank Ø D_s	12 mm
Feed f_z for side milling in INOX > 900 N/mm ²	0.04 mm
Direction of infeed	horizontal, oblique and vertical
Helix angle	42 degrees
Overhang length L_1 incl. recess	46 mm
Recess Ø D_1	11.6 mm
Feed f_z for slot milling in stainless steel > 900 N/mm ²	0.035 mm
Feed f_z for side milling in steel < 900 N/mm ²	0.08 mm

Corner rounding r_v	0.3 mm
No. of teeth Z	4
Flute length L_c	36 mm
Overall length L	93 mm
Cutting edge $\varnothing D_c$	12 mm
Tolerance nominal \varnothing	e8
Shank	DIN 6535 HB to h6
Series	Master Uni
Coating	TiSiN
Tool material	Solid carbide
Standard	Works standard
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	0.3×D for side milling
Cutting width a_e for milling operation	0.3×D for side milling
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		