

**Garant**
**Milling head, sharp-edged HPC, uncoated, Ø D h10: 12mm**

**Order data**

Order number	210345 12
GTIN	4045197557643
Item class	21M

**Description**
**Note:**

Standard application values for slots milled from solid at  $a_{p \max} \leq 0.5 \times D$ .

**Technical description**

Flute length $L_2$	12 mm
Head length $l$	22 mm
Cutter $\varnothing D$	12 mm
Feed $f_z$ for side milling in short-chipping aluminium	0.13 mm
Feed $f_z$ for slot milling in short-chipping aluminium	0.11 mm
Arbor size	12 mm
Corner chamfer angle	90 degrees
Overall length $L$	36.1 mm
Coating	uncoated
Series	TopCut
Grade	HU730
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W

Helix angle	42 degrees
Direction of infeed	horizontal and oblique
Cutting width $a_e$ for milling operation	0.3×D for side milling mm
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D mm
Machining strategy	HPC
Through-coolant	no
suitable arbor	GARANT TopCut
Type of product	Cutter insert for milling

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable	530 m/min	N
Aluminium (short chipping)	suitable	500 m/min	N
Alu > 10% Si	suitable	450 m/min	N
CuZn	suitable only under restricted conditions	320 m/min	N
Oil	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable only under restricted conditions		
Air	suitable only under restricted conditions		

## Accessories

Plug-in adapter for torque wrench Type 10X4	219986 10X4
Assembly wrench Type 10X4	219987 10X4

