

**Garant**
**Solid carbide ball nose roughing end mill, TiAlN, Ø d11 DC: 12mm**


## Order data

Order number	207507 12
GTIN	4045197883049
Item class	11X

## Description

### Version:

Round **knuckle form profile** for roughing, **including machining radii.**

### Note:

**Successor product to No. 207512**

## Technical description

Feed $f_z$ for copy milling in steel < 900 N/mm <sup>2</sup>	0.09 mm
Cutting edge Ø $D_c$	12 mm
No. of teeth Z	4
Shank Ø $D_s$	12 mm
Overall length L	73 mm
Flute length $L_c$	26 mm
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.08 mm
Helix angle	45 degrees
Radius R	6 mm
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	HR

Tolerance nominal $\varnothing$	d11
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.05×D for copy milling
Cutting width $a_e$ for milling operation	0.5×D for side milling
Shank	DIN 6535 HB to h6
Through-coolant	no
Colour ring	without
Type of product	Ball-nosed slot drill

### User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	350 m/min	N
Alu > 10% Si	suitable only under restricted conditions	250 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	160 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	130 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	80 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	80 m/min	M
GG(G)	suitable	120 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable only under restricted conditions		
Air	suitable only under restricted conditions		

