# Garant

### High-precision countersink 90°, uncoated, External Ø Dc: 31mm



#### Order data

Order number	150378 31		
GTIN	4045197086426		
Item class	11M		

#### Description

#### Version:

All countersinks have 3 cutting edges, radially relieved.

Flutes are ground from solid.

High-precision countersink, produced with tight manufacturing tolerances similar to DIN 335-C.

#### **Technical description**

smallest countersink Ø for holes from	4.2 mm		
External Ø	31 mm		
for countersunk screws DIN 7991	M16		
Shank tolerance	h9		
Feed f in stainless steel < 900 N/mm <sup>2</sup>	0.18 mm/rev.		
Pre-drill Ø	4.2 mm		
Shank Ø D <sub>s</sub>	12 mm		
Overall length L	71 mm		
Number of cutting edges Z	3		
Coating	uncoated		
Countersink tip angle	90 degrees		
Tool material	HSS E		

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Standard	DIN 335 C		
Shank	Plain shank with h9		
Through-coolant	no		
Colour ring	blue		
Type of product	Stepped drill and countersink		

## User data

	Suitability	Vc	ISO code
Alu plastics	suitable	70 m/min	Ν
Aluminium (short chipping)	suitable only under restricted conditions	33 m/min	Ν
Alu > 10% Si	suitable only under restricted conditions	25 m/min	Ν
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	28 m/min	Р
Steel < 750 N/mm²	suitable	27 m/min	Р
Steel < 900 N/mm²	suitable	27 m/min	Р
Steel < 1100 N/mm²	suitable	8 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	4 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	7 m/min	Μ
INOX > 900 N/mm <sup>2</sup>	suitable	7 m/min	М
Ti > 850 N/mm²	suitable only under restricted conditions	7 m/min	S
GG(G)	suitable only under restricted conditions	12 m/min	К
CuZn	suitable only under restricted conditions	65 m/min	Ν
wet minimum	suitable		
dry	suitable only under restricted conditions		