# Garant

### High-precision countersink 90°, uncoated, External Ø Dc: 23mm



### Order data

Order number	150152 23	
GTIN	4045197717054	
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. Three **drive flats on the shank** for use in a 3-jaw chuck.

#### **Application:**

High precision countersinks for chatter-free countersinking.

### **Technical description**

Shank tolerance	h9		
smallest countersink Ø for holes from	3.8 mm		
Feed f in steel < 500 N/mm <sup>2</sup>	0.16 mm/rev.		
External Ø	23 mm		
for countersunk screws ISO 2009, 2010, 7046, 7047	M12		
Shank Ø D <sub>s</sub>	10 mm		
Overall length L	67 mm		
Number of cutting edges Z	3		
Coating	uncoated		
Countersink tip angle	90 degrees		

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Tool material	HSS		
Standard	DIN 335 C		
Shank	Shank with h9 and three drive flats		
Through-coolant	no		
Colour ring	without		
Type of product	Stepped drill and countersink		

## User data

	Suitability	V <sub>c</sub>	ISO code
Alu plastics	suitable	70 m/min	Ν
Aluminium (short chipping)	suitable	33 m/min	Ν
Steel < 500 N/mm <sup>2</sup>	suitable	28 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	27 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	27 m/min	Р
wet maximum	suitable		
dry	suitable only under restricted conditions		