

**Garant**
**Countersink solid carbide 90°, uncoated, External Ø Dc: 16,5mm**

**Order data**

Order number	150382 16,5
GTIN	4045197086532
Item class	11M

**Description**
**Version:**

Similar to DIN 335-C. All countersinks have 3 cutting edges, radially relieved. For chatter-free countersinking and deburring. Ø 6 and 8 as solid carbide version, from Ø 10 solid carbide head with brazed shank.

**Technical description**

Pre-drill Ø	3.2 mm
Shank tolerance	h9
Feed f in stainless steel < 900 N/mm <sup>2</sup>	0.14 mm/rev.
External Ø	16.5 mm
smallest countersink Ø for holes from	3.2 mm
for countersinking to DIN 74 BF	M8
Shank Ø D <sub>s</sub>	10 mm
Overall length L	60 mm
Number of cutting edges Z	3
Coating	uncoated
Countersink tip angle	90 degrees
Tool material	Solid carbide
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	V <sub>c</sub>	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	75 m/min	N
Alu > 10% Si	suitable	50 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	65 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	60 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	18 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	8 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	16 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	10 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	16 m/min	S
GG(G)	suitable only under restricted conditions	25 m/min	K
Graphite, GRP, CRP	suitable only under restricted conditions		
wet maximum	suitable		