

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

Order data

Order number	150386 16,5
GTIN	4045197086631
Item class	11M

Description
Version:

Very **sturdy version**, multi-flute, **special geometry** for **very heavy duty use**. For **chatter-free countersinking** and **deburring**. For **difficult to machine materials**. Solid carbide head with brazed shank.

Suitable even for Hardox 500.

Note:

Ensure stable conditions during operation!

Technical description

External Ø	16.5 mm
Shank tolerance	h9
smallest countersink Ø for holes from	4.5 mm
Pre-drill Ø	4.5 mm
Feed f in steel < 60 HRC	0.05 mm/rev.
Shank Ø D _s	10 mm
Overall length L	60 mm
Number of cutting edges Z	5
Coating	uncoated
Countersink tip angle	90 degrees
Tool material	Solid carbide

Standard	Manufacturer's standard
Type	H
Shank	Plain shank with h9
Through-coolant	no
Colour ring	red
Type of product	Stepped drill and countersink

User data

	Suitability	V _c	ISO code
Steel < 900 N/mm ²	suitable only under restricted conditions	30 m/min	P
Steel < 1100 N/mm ²	suitable only under restricted conditions	18 m/min	P
Steel < 1400 N/mm ²	suitable	8 m/min	P
Steel < 55 HRC	suitable	8 m/min	H
Steel < 60 HRC	suitable	8 m/min	H
TOOLOX 33	suitable	8 m/min	H
TOOLOX 44	suitable	8 m/min	H
HARDOX 500 < 1600 N/mm ²	suitable	6 m/min	H
Ti > 850 N/mm ²	suitable	6 m/min	S
Graphite, GRP, CRP	suitable	5 m/min	N
wet maximum	suitable		
Air	suitable		