

## Garant

### High-precision countersink, long 90°, TiAlN, External Ø Dc: 16,5 mm



#### Order data

Order number	150377 16,5
GTIN	4045197868015
Item class	11M

#### Description

##### Version:

**All countersinks have 3 cutting edges**, radially relief ground. Flutes ground from solid. High-precision countersink, produced to tight manufacturing tolerances similar to DIN335-C, **with long plain shank.**

**Special geometry with extremely unequal spacing** and matching cutting edge preparation. Newly developed, **special TiAlN coating** for long tool life.

##### Application:

High-precision countersinks for chatter-free production of **precise, round 90° countersunk surfaces.**

Through-coolant: no

Number of cutting edges Z: 3

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smallest countersink Ø for holes from: 3.2 mm

Overall length L: 111 mm

Shank Ø D<sub>s</sub>: 10 mm

for countersunk screws DIN 7991: M8

Feed f in steel < 500 N/mm<sup>2</sup>: 0.18 mm/rev.

#### Technical description

Overall length L	111 mm
Shank Ø D <sub>s</sub>	10 mm
smallest countersink Ø for holes from	3.2 mm
Shank tolerance	h9

Feed f in steel < 500 N/mm <sup>2</sup>	0.18 mm/rev.
Pre-drill Ø	3.2 mm
External Ø	16.5 mm
Number of cutting edges Z	3
for countersunk screws DIN 7991	M8
Coating	TiAlN
Countersink tip angle	90 degrees
Tool material	HSS
Spacing of the countersink cutting edges	unequal spacing
Standard	Manufacturer's standard
Shank	Parallel shank to h9
Through-coolant	no
Colour ring	green
Type of product	Stepped drill and countersink