

Garant
High-precision countersink 90°, uncoated, External Ø Dc: 19mm

Order data

Order number	150152 19
GTIN	4045197717023
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

smallest countersink Ø for holes from	3.5 mm
External Ø	19 mm
Shank tolerance	h9
Feed f in steel < 500 N/mm ²	0.14 mm/rev.
for countersunk screws ISO 2009, 2010, 7046, 7047	M10
Shank Ø D _s	10 mm
Overall length L	63 mm
Number of cutting edges Z	3
Coating	uncoated
Countersink tip angle	90 degrees
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 _c	ISO code
Alu plastics	suitable	70 m/min	N
Aluminium (short chipping)	suitable	33 m/min	N
Steel < 500 N/mm ²	suitable	28 m/min	P
Steel < 750 N/mm ²	suitable	27 m/min	P
Steel < 900 N/mm ²	suitable only under restricted conditions	27 m/min	P
wet maximum	suitable		
dry	suitable only under restricted conditions		