

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

Order data

Order number	150170 19
GTIN	4045197301352
Item class	11M

Description
Version:

All countersinks have 3 cutting edges, radially relieved.

Flutes are ground from solid.

Precision countersink for considerable performance improvement.

Application:

High precision countersinks for chatter-free countersinking.

Technical description

Shank tolerance	h9
for countersunk screws ISO 2009, 2010, 7046, 7047	M10
External Ø	19 mm
Feed f in steel < 500 N/mm ²	0.14 mm/rev.
smallest countersink Ø for holes from	3.5 mm
Shank Ø D _s	10 mm
Overall length L	63 mm
Number of cutting edges Z	3
Coating	TiAlN
Countersink tip angle	90 degrees
Tool material	HSS

Standard	DIN 335 C
Shank	Plain shank with h9
Through-coolant	no
Colour ring	green
Type of product	Stepped drill and countersink

User data

	Suitability	V _c	ISO code
Alu > 10% Si	suitable only under restricted conditions	25 m/min	N
Steel < 500 N/mm ²	suitable	34 m/min	P
Steel < 750 N/mm ²	suitable	32 m/min	P
Steel < 900 N/mm ²	suitable	32 m/min	P
INOX < 900 N/mm ²	suitable	9 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	8 m/min	M
CuZn	suitable only under restricted conditions	80 m/min	N
Uni	suitable		
wet maximum	suitable		
dry	suitable only under restricted conditions		