

**Garant****High-precision countersink, long 90°, uncoated, External Ø Dc: 31mm****Order data**

Order number	150371 31
GTIN	4045197710765
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 DIN 335-C **with long plain shank**.

**Technical description**

Shank tolerance	h9
Pre-drill Ø	4.2 mm
External Ø	31 mm
Feed f in steel < 500 N/mm <sup>2</sup>	0.2 mm/rev.
smallest countersink Ø for holes from	4.2 mm
for countersunk screws DIN 7991	M16
Shank Ø D <sub>s</sub>	12 mm
Overall length L	140 mm
Number of cutting edges Z	3
Coating	uncoated
Countersink tip angle	90 degrees
Tool material	HSS
Standard	Manufacturer's standard

Shank	Plain shank with h9
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
Alu > 10% Si	suitable only under restricted conditions	20 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	28 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	27 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	27 m/min	P
wet maximum	suitable		
dry	suitable only under restricted conditions		