

**Garant**
**High-precision countersink 90°, uncoated, External Ø Dc: 20,5mm**

**Order data**

Order number	150152 20,5
GTIN	4045197717030
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**

for countersunk screws DIN 7991	M10
External Ø	20.5 mm
smallest countersink Ø for holes from	3.5 mm
Shank tolerance	h9
Feed f in steel < 500 N/mm <sup>2</sup>	0.16 mm/rev.
Shank Ø D <sub>s</sub>	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 <sub>c</sub>	ISO code
Alu plastics	suitable	70 m/min	N
Aluminium (short chipping)	suitable	33 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		