

**Garant****Countersink solid carbide 90°, uncoated, External Ø Dc: 11,5mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 150382 11,5   |
| GTIN         | 4045197086501 |
| Item class   | 11M           |

**Description****Version:**

Similar to DIN 335-C. All countersinks have 3 cutting edges, radially relieved.

For chatter-free countersinking and deburring. Ø 6 and 8 as solid carbide version, from Ø 10 solid carbide head with brazed shank.

**Technical description**

|   |               |
|---|---------------|
| External Ø  | 11.5 mm       |
| Feed f in stainless steel < 900 N/mm <sup>2</sup> | 0.14 mm/rev.  |
| smallest countersink Ø for holes from             | 2.8 mm        |
| Shank tolerance                                   | h9            |
| Pre-drill Ø                                       | 2.8 mm        |
| for countersinking to DIN 74 AF                   | M6            |
| Shank Ø D <sub>s</sub>                            | 8 mm          |
| Overall length L                                  | 56 mm         |
| Number of cutting edges Z                         | 3             |
| Coating   | uncoated      |
| Countersink tip angle                             | 90 degrees    |
| Tool material                                     | Solid carbide |
| Standard  | DIN 335 C     |

|                 |                               |
|-----------------|-------------------------------|
| Shank           | Plain shank with h9           |
| Through-coolant | no                            |
| Colour ring     | blue                          |
| Type of product | Stepped drill and countersink |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|---|----------------|----------|
| Aluminium (short chipping)     | suitable only under restricted conditions | 75 m/min       | N        |
| Alu > 10% Si                   | suitable                                  | 50 m/min       | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable only under restricted conditions | 65 m/min       | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 60 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 30 m/min       | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 18 m/min       | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 8 m/min        | P        |
| Steel < 55 HRC                 | suitable only under restricted conditions | 8 m/min        | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable                                  | 16 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable                                  | 10 m/min       | M        |
| Ti > 850 N/mm <sup>2</sup>     | suitable only under restricted conditions | 16 m/min       | S        |
| GG(G)                          | suitable only under restricted conditions | 25 m/min       | K        |
| Graphite, GRP, CRP             | suitable only under restricted conditions |                |          |
| wet maximum                    | suitable                                  |                |          |