

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



### **Order data**

| Order number | 150390 20,5   |  |  |
|--------------|---------------|--|--|
| GTIN         | 4045197086730 |  |  |
| Item class   | 11M           |  |  |

## **Description**

#### **Version:**

Countersinks radially relief ground. Chip flutes are ground from solid up to size 31. Chip angle varies with the countersink  $\emptyset$  for optimum chip formation. Countersink point and circumference are relief ground and cut easily.

High-precision countersink, produced with tight manufacturing tolerances similar to DIN 335-D.

#### Note:

For suitable reducing adapters for tools with MT shanks see **No. 343000-343530**. For countersink bits with shank 6.3 mm (1/4 inch) see Group 67.

## **Technical description**

| Pre-drill Ø                             | 3.5 mm       |  |  |
|---|--------------|--|--|
| External Ø                              | 20.5 mm      |  |  |
| Feed f in steel < 500 N/mm <sup>2</sup> | 0.16 mm/rev. |  |  |
| for countersunk screws DIN 7991         | M10          |  |  |
| smallest countersink Ø for holes from   | 3.5 mm       |  |  |
| Overall length L                        | 100 mm       |  |  |
| Morse taper MT                          | 2            |  |  |
| Number of cutting edges Z               | 3            |  |  |
| Coating                                 | uncoated     |  |  |
| Countersink tip angle                   | 90 degrees   |  |  |

| Tool material   | HSS                           |  |  |
|-----------------|-------------------------------|--|--|
| Standard        | DIN 335 D                     |  |  |
| Shank           | Morse taper                   |  |  |
| Through-coolant | no                            |  |  |
| Colour ring     | without                       |  |  |
| Type of product | Stepped drill and countersink |  |  |

# **User data**

|                               | Suitability                               | $\mathbf{V}_{c}$ | 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         | Р        |
| Steel < 750 N/mm <sup>2</sup> | suitable                                  | 27 m/min         | Р        |
| Steel < 900 N/mm <sup>2</sup> | suitable only under restricted conditions | 27 m/min         | Р        |
| wet maximum                   | suitable                                  |                  |          |
| dry                           | suitable only under restricted conditions |                  |          |