## Garant

## High-precision countersink with unequal spacing and 3 drive flats $90^{\circ}, \mathrm{TiAIN}$, External \& Dc: $\mathbf{2 3} \mathbf{~ m m}$



## Order data

| Order number | 15013223 |
| :--- | :---: |
| GTIN | 4045197741998 |
| Item class | 11 M |

## Description

## Version:

All countersinks have 3 cutting edges. Special geometry with extremely unequal spacing and matching cutting edge preparation. Radially relief ground. Flutes ground from solid. Newly developed special TiAIN coating for long service life.
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.

## Advantage:

Very smooth cutting throughout the entire countersinking operation. Chatter-free running for perfect results and optimum tool service life.

## Application:

High-precision countersinks for production of exactly round $90^{\circ}$ countersunk surfaces.
Through-coolant: no
Number of cutting edges Z: 3
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smallest countersink $\varnothing$ for holes from: 3.8 mm
Overall length L: 67 mm
Shank $\varnothing D_{s}: 10 \mathrm{~mm}$
for countersunk screws ISO 2009, 2010, 7046, 7047: M12
Feed f in steel $<500 \mathrm{~N} / \mathrm{mm}^{2}: 0.22 \mathrm{~mm} / \mathrm{rev}$.

## Technical description

External $\varnothing$
23 mm

| Shank tolerance | h9 |
| :--- | :---: |
| smallest countersink $\varnothing$ for holes from | 3.8 mm |
| for countersunk screws ISO 2009, 2010, 7046, 7047 | M12 |
| Feed f in steel < $500 \mathrm{~N} / \mathrm{mm}^{2}$ | $0.22 \mathrm{~mm} / \mathrm{rev}$. |
| Shank $\varnothing \mathrm{D}_{\mathrm{s}}$ | 10 mm |
| Overall length L | 67 mm |
| Number of cutting edges Z | 3 |
| Coating | TiAIN |
| Countersink tip angle | 90 degrees |
| Tool material | HSS |
| Spacing of the countersink cutting edges | unequal spacing |
| Standard | DIN 335 C |
| Shank | Shank with h9 and three drive flats |
| Through-coolant | no |
| Colour ring | green |
| Type of product | Stepped drill and countersink |

