## Garant

## Stub subland drill HSS $90^{\circ}$, vaporised, for screws: M8

## Order data

| Order number | 117120 M 8 |
| :--- | :---: |
| GTIN | 4045197035936 |
| Item class | 11 C |

## Description

## Version:

Very sturdy. Tight concentricity tolerances between drill $\varnothing$ and counterbore $\varnothing$ guarantee exact alignment.
Special surface treatment, resulting in reduced tendency to edge build-up and improved chip evacuation.

## Application:

Particularly suitable for NC machines due to high positional accuracy, excellent centring properties and great sturdiness. The preceding centring operation can thus often be omitted. For through holes for screws to DIN-ISO 273 and countersinks to DIN 74, sheet 1 form A, fine version.
For screws to ISO 2009, 2010, 7046, 7047 (DIN 963, 964, 965 and 966).
Number of cutting edges Z: 2
$\varnothing D_{1} 1$ st step with chamfer h8: 8.4 mm
$\varnothing \mathrm{D}_{2}$ 2nd step with chamfer h8: 15 mm
Step height $\mathrm{L}_{1} 1$ st step: 19 mm
Flute length $L_{c}: 56 \mathrm{~mm}$
Overall length L: 111 mm
Shank $\varnothing D_{s}: 15 \mathrm{~mm}$

## Technical description

| Flute length $L_{c}$ | 56 mm |
| :--- | :---: |
| Number of cutting edges $Z$ | 2 |
| for screws | M 8 |
| $\varnothing D_{1}$ 1st step with chamfer h8 | 8.4 mm |


| Feed f in steel < $750 \mathrm{~N} / \mathrm{mm}^{2}$ | $0.1 \mathrm{~mm} / \mathrm{rev}$. |
| :--- | :---: |
| $\varnothing \mathrm{D}_{2}$ 2nd step with chamfer h8 | 15 mm |
| Shank $\varnothing \mathrm{D}_{\mathrm{s}}$ | 15 mm |
| Overall length L | 111 mm |
| Step height $\mathrm{L}_{1}$ 1st step | 19 mm |
| Coating | vaporised |
| Tool material | HSS |
| Standard | DIN 1897 |
| Tolerance nominal $\varnothing$ | h8 |
| Point angle | $118^{\circ}$ |
| Shank | Parallel shank to h8 |
| Countersink angle | $90^{\circ}$ |
| Through-coolant | no |
| Shank tolerance | h8 |
| Colour ring | without |
| Type of product | Stepped drill |

## User data

|  | Suitability | V | ISO code |
| :--- | :---: | :---: | :---: |
| Aluminium (short <br> chipping) | suitable only under <br> restricted conditions | $45 \mathrm{~m} / \mathrm{min}$ | N |
| Steel $<500 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $40 \mathrm{~m} / \mathrm{min}$ | P |
| Steel $<750 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $30 \mathrm{~m} / \mathrm{min}$ | P |
| Steel $<900 \mathrm{~N} / \mathrm{mm}^{2}$ | suitable | $25 \mathrm{~m} / \mathrm{min}$ | P |
| GG(G) | suitable | $25 \mathrm{~m} / \mathrm{min}$ | K |
| CuZn | suitable only under <br> restricted conditions | $80 \mathrm{~m} / \mathrm{min}$ | N |
| Oil | suitable |  |  |
| wet maximum | suitable |  |  |

