

**Garant**

**GARANT Master Steel FEED solid carbide stepped drill, configurable from a quantity of 3 pieces, TiAlN, Nominal Ø range from - to: 11,51-13,5mm**


**Order data**

Order number	125040 11,51-13,5
GTIN	4062406159740
Item class	11E

**Description**
**Version:**

Stepped drill, finish ground to your specifications.

For producing a drilled hole and 90° countersink in a single operation.

**3-flute drill**, specially developed for **use at very high feed rates**. Outstandingly suitable for machines with high installed power and stable machining conditions.

Diameter tolerance first level: h7.

Drill tolerance ( $\varnothing D_1$ ): m7.

First level tolerance ( $\varnothing D_2$ ) h7.

**Note:**

Nominal Ø and step length are configurable (freely selectable within the range stated in the table) and ground to specification.

**Technical description**

Flute length $L_c$	60 mm
No. of teeth Z	3
Through-coolant	yes, with 25 bar
Shank $\varnothing D_s$	14 mm
Feed f in steel < 1100 N/mm <sup>2</sup>	0.5 mm/rev.
$\varnothing D_2$ 2nd step with chamfer h7	14 mm
Overall length L	107 mm
Step height $L_1$ min - max	13.5 - 33 mm

Nominal Ø D <sub>c</sub>	11.51 - 13.5 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Tolerance nominal Ø	m7
Point angle	145 degrees
Shank	DIN 6535 HA to h6
Countersink angle	90 degrees
Machining strategy	HPC
Colour ring	green
Type of product	Stepped drill

## User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	160 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	130 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	90 m/min	P
Steel < 55 HRC	suitable	60 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	60 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	50 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	40 m/min	S
GG	suitable	130 m/min	K
GGG	suitable	80 m/min	K
Uni	suitable		
wet maximum	suitable		

wet minimum

suitable