

**Garant**
**HiPer-Drill base body, 5×D, Ø DC: 9 mm**

**Order data**

Order number	231610 9
GTIN	4045197716163
Item class	21S

**Description**
**Version:**

- **Very high feed rates and maximum performance due to optimally matched geometries and materials.**
- **Precise positioning of the cutter insert due to Vee insert seating and secure clamping by the centre bore.**
- **High concentricity when assembled.**
- **Shank support for optimum stability in operation.**

Created by an additive procedure.

**Application:**

For stationary and rotating use. For holes up to IT9 accuracy.

**Note:**

The insert screw must be replaced after every fifth change of cutter insert.

Further sizes up to Ø 50.99 mm available on request.

Clamp in a hydraulic chuck (such as No. 302026 size 20) for optimum radial run-out.

For optimum stability, clamp the drill so the overhang is as short as possible.

Number of cutting edges Z: 2

Dia. range D<sub>c</sub>: 9 - 9.49 mm

Reach L<sub>1</sub>: 48 mm

Shank Ø D<sub>s</sub>: 12 mm

Shank length L<sub>s</sub>: 45 mm

Clamping screw: 231999\_5IP1 (0.2 Nm)

**Technical description**

Dia. range D <sub>c</sub>	9 - 9.49 mm
Shank Ø D <sub>s</sub>	12 mm

Clamping screw	231999_5IP1 (0.2 Nm)
Reach L <sub>1</sub>	48 mm
Shank length L <sub>s</sub>	45 mm
Number of cutting edges Z	2
Drill depth up to	5×D
Shank	ISO 9766
Use for drilling	limited drilling through a stack
Use for drilling	limited oblique spot drilling
Use for drilling	limited drilling with oblique exit
Use for drilling	limited cross-drilling
Through-coolant	yes
Type of product	Indexable drill

## Accessories

Torx Plus® screw Drive 5IP1	231999 5IP1
Torque screwdriver, fixed setting set torque 0,2 Nm	211750 0,2