

**Garant**
**HiPer-Drill base body, 10×D, Ø DC: 22mm**

**Order data**

Order number	231617 22
GTIN	4045197869036
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.**

Polished flutes.

**Application:**

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

**Note:**

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.

Further sizes up to Ø 50.99 mm available on request.

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

Reduce feed rates  $f$  by 10 % and  $v_c$  values by 30 %.

For process reliability when using the drill, initial pilot drilling to 1.5×D with the drill No. 231600 with the same cutter insert size and type is necessary. **The generation of a pilot hole improves process reliability.**

**Technical description**

Shank Ø $D_s$	25 mm
Dia. range $D_c$	22 - 22.99 mm
Reach $L_1$	230 mm
Shank length $L_s$	56 mm

Clamping screw	231999 10IP (3.3 Nm)
Series	HiPer-Drill
Number of cutting edges Z	2
Overall length L	320 mm
Version	10xD
Shank	ISO 9766
Use for drilling	limited drilling through a stack
Use for drilling	limited drilling with oblique exit
Use for drilling	limited cross-drilling
Use for drilling	limited oblique spot drilling
Through-coolant	yes
Type of product	Indexable drill

## Accessories

8 mm blade with magnet with 1/4 inch bit holder overall length 50 mm	659874 50
PrecisionBit for Torx Plus®, 1/4 inch E 6.3 Torx Plus® profile 10IP	674252 10IP
Torx Plus® screw Drive 10IP	231999 10IP
Torque screwdriver with scale, to take interchangeable blades maximum torque 1600 cNm	659906 1600
Torque screwdriver with scale, to take interchangeable blades maximum torque 1600 cNm	659957 1600