

Garant**HiPer-Drill base body, 8xD, Ø DC: 12,5 mm****Order data**

Order number	231615 12,5
GTIN	4045197716316
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.

Recommendation:

Drill the pilot hole.

Note:

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 v_f values by 20 %.

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.

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

Number of cutting edges Z: 2

Dia. range D_c : 12.5 - 12.99 mm

Reach L_1 : 104 mm

Shank Ø D_s : 16 mm

Shank length L_s : 48 mm

Clamping screw: 231999_6IP (0.4 Nm)

Technical description

Reach L_1	104 mm
Clamping screw	231999_6IP (0.4 Nm)
Dia. range D_c	12.5 - 12.99 mm
Shank $\varnothing D_s$	16 mm
Shank length L_s	48 mm
Number of cutting edges Z	2
Drill depth up to	8×D
Shank	ISO 9766
Use for drilling	limited drilling with oblique exit
Use for drilling	limited drilling through a stack
Use for drilling	limited oblique spot drilling
Use for drilling	limited cross-drilling
Through-coolant	yes
Type of product	Indexable drill

Accessories

Torx Plus® screw Drive 6IP	231999 6IP
PrecisionBit for Torx Plus®, shank E 6.3 Torx Plus® profile 6IP	674252 6IP
8 mm blade with magnet with 1/4 inch bit holder overall length 50 mm	659874 50
Torque screwdriver with scale, to take interchangeable blades maximum torque 200 cNm	659906 200