

Garant
HiPer-Drill base body, 12xD, Ø DC: 16 mm

Order data

Order number	231620 16
GTIN	4045197687685
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:

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 40 %.

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.**

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 : 16 - 16.99 mm

Reach L_1 : 204 mm

Shank Ø D_s : 20 mm

Shank length L_s : 50 mm

Clamping screw: 231999_8IP1 (1.2 Nm)

Technical description

Clamping screw	231999_8IP1 (1.2 Nm)
Shank $\varnothing D_s$	20 mm
Dia. range D_c	16 - 16.99 mm
Reach L_1	204 mm
Shank length L_s	50 mm
Number of cutting edges Z	2
Drill depth up to	12xD
Shank	ISO 9766
Use for drilling	limited cross-drilling
Use for drilling	limited drilling through a stack
Use for drilling	limited oblique spot drilling
Use for drilling	limited drilling with oblique exit
Through-coolant	yes
Type of product	Indexable drill

Accessories

Torx Plus® screw Drive 8IP1	231999 8IP1
PrecisionBit for Torx Plus®, shank E 6.3 Torx Plus® profile 8IP	674252 8IP
Torque screwdriver, fixed setting set torque 1,2 Nm	211750 1,2