

Garant
HiPer-Drill base body, 12xD, Ø DC: 28mm

Order data

Order number	231620 28
GTIN	4045197688804
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.**

Technical description

Reach L_1	348 mm
Clamping screw	231999 15IP1 (5.7 Nm)

Shank $\varnothing D_s$	32 mm
Dia. range D_c	28 - 28.99 mm
Shank length L_s	60 mm
Series	HiPer-Drill
Number of cutting edges Z	2
Overall length L	449 mm
Version	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 15IP	231999 15IP
PrecisionBit for Torx Plus®, 1/4 inch E 6.3 Torx Plus® profile 15IP	674252 15IP
Torx Plus® screw Drive 15IP1	231999 15IP1
Torque screwdriver, fixed setting set torque 5,0 N·m	211750 5,0