

SPIRAL BEVEL GEARBOXES



GENERAL

Spiral bevel gearboxes BG incorporate the most modern advances in bevel gearbox design and construction.

These gearboxes offer an extensive range of ratios together with an excellent power to size relationship as well as low noise levels even at high speed operation.

1. CONSTRUCTION FEATURES:

- The gearbox, which is made in cast iron, is of cuboid design with all external faces machined and with threaded fixing positions on each face (usable depth of threaded hole = twice the diameter).
- Input and output covers and housing are supplied with two location spigot diameters (h7) together with threaded fixing holes (except size BG75) for possible co-axial fixing.
- The alloy steel spiral bevel gears are cut in the GLEASON system, case hardened, tempered and lapped to the exact mounting position.
- Input and output shafts are manufactured in hardened and tempered steel with all surfaces ground.
- Input and output shaft tolerance (j6). Hollow shaft tolerance (H7).
- All shafts supplied with threaded end to UNI 3221 - DIN 332.
- Keyways to UNI 6604 - DIN 6885.

On request and dependent upon speed type BG spiral bevel gearboxes may be assembled with minimum backlash.

Due to the quality of the gears and machining tolerances, an overall efficiency of between 94 and 97% can be expected.

The modular construction of BG spiral bevel gearboxes permits up to six input/output shafts (except ratio 1:1).

2. LUBRICATION

BG spiral bevel gearboxes are supplied grease lubricated for input speeds up to 1000 rpm, for higher speeds or on request oil lubrication is available.

In this case the gearboxes will be supplied with a filler/breather plug, level indicator and drain plug.

Filler, level and drain positions are indicated as follows:

- - Filler/breather plug
- ◐ - Level indicator plug
- - Drain plug

Motorised spiral bevel gearboxes, reversing bevel gearboxes and disengaging bevel gearboxes are usually oil lubricated.

For high speed and/or high ambient temperature conditions it may be necessary to apply external cooling. Please consult our technical department.