

## Anti-friction bearings

Our motors in basic design are fitted with Series 3 (medium) anti-friction bearings.

Exception: 2-pole frame 500 motors are always fitted with sleeve bearings.

IMB3 motors in basic design are provided at the D-end with a grooved ball bearing (locating) and at the N-end with a pre-loaded grooved ball bearing (non-locating).

**For particularly high radial loads, all motors are provided with a cylindrical roller bearing at the D-end.**

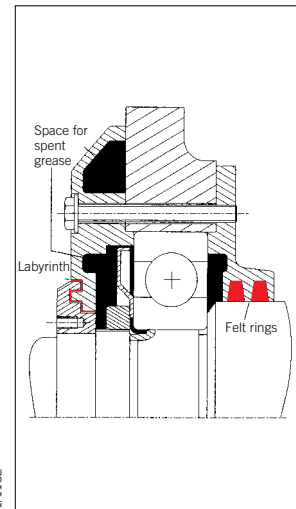
For lubrication, lithium-soap grease is used. All motors are fitted with standard lubricators M10x1. Outer bearing covers are designed to accommodate 5 years' quantity of spent grease.

The shaft seal on the bearing inside is a felt ring; on the bearing outside a labyrinth seal is used.

**Shaft seals are maintenance-free. They protect the bearings against the ingress of dust and spray water, to degree of protection IP55.**



Anti-friction bearing with lubricator



Shaft seals for anti-friction bearings



Self-lubricated sleeve bearing

## Sleeve bearings

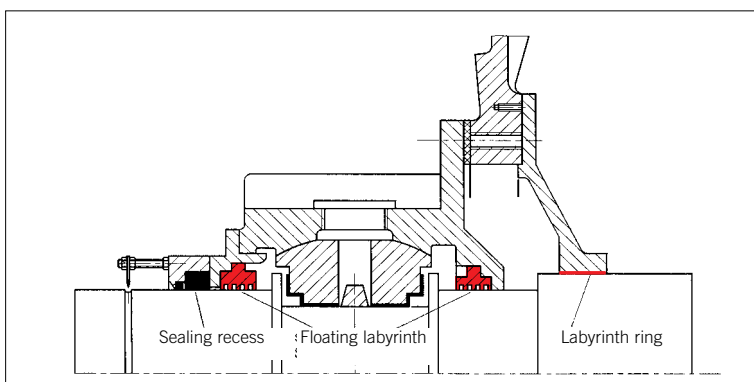
On request, all motors can be fitted with sleeve bearings. (Sleeve bearings are always provided on 2-pole frame 500 motors). All sleeve bearings are of the split, flanged type.

**Depending on the bearing load in service, bearings with loose ring oilers (self lubrication) or with force-feed lubrication are used. Subsequent conversion from self to force-feed lubrication is possible.**

Sleeve bearings are non-locating. Shaft end float is  $\pm 3$  mm. On request, a locating bearing can be provided at the D-end.

**On the bearing inside, a floating labyrinth seal and a labyrinth ring is used. The shaft seal on the bearing outside consists of a floating labyrinth and an additional seal.**

Shaft seals are maintenance-free. They protect the bearings against the ingress of dust and spray water, to degree of protection IP55.



Shaft seals for sleeve bearings