

SKF ConCentra ball bearings and units

Design..... 249

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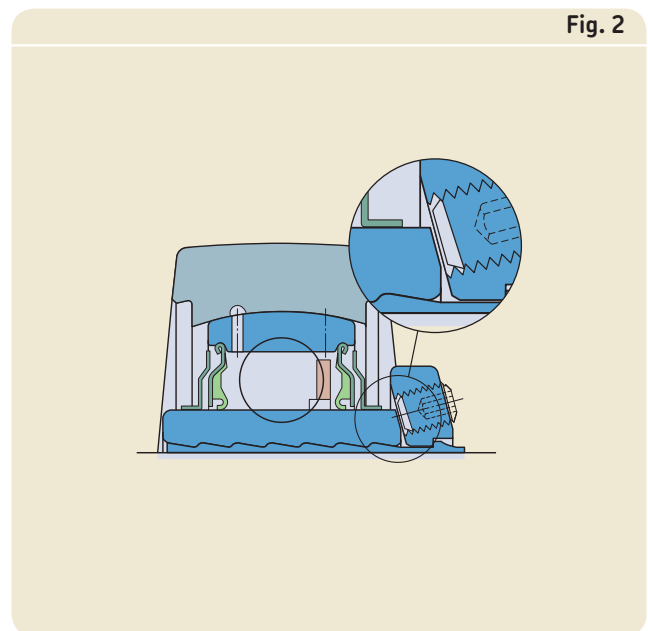
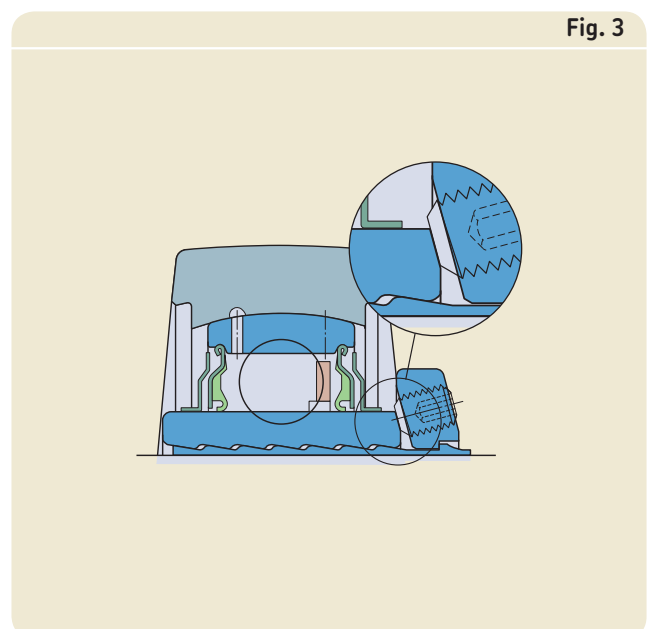
SKF ConCentra ball bearings and units (→ **fig. 1**) are part of SKF's extensive line of ready-to-install mounted products. SKF ConCentra ball bearings and units, with true concentric location on the shaft, are particularly well suited for applications where there are relatively high speeds and moderate loads and where vibration, low noise, and minimal maintenance are key operational parameters. SKF ConCentra ball bearings are available as single bearings or assembled with plummer block or flanged housings.

What sets the SKF ConCentra ball bearing unit apart from any other Y-bearing unit is its unique 360° locking mechanism. The locking mechanism is based on two mating surfaces, each with precision engineered inclined serrations. One set of serrations is machined into the bearing bore; the other set is machined into the outside diameter of the shaft sleeve. The shaft sleeve is also equipped with a mounting pressure ring (→ **fig. 2**).

The 360° grip on the shaft virtually eliminates the possibility of shaft damage and fretting corrosion.

By tightening the grub (set) screws in the mounting collar using the appropriate hexagonal key, the bearing inner ring is forced up the inclined planes of the stepped sleeve, thus providing a true concentric tight fit on the shaft (→ **fig. 3**).

In order to assist the mounting of SKF ConCentra ball bearing units, mounting kits are available from SKF (designation 626830) which include mounting instructions, hexagonal keys and torque indicators. Typical applications of SKF ConCentra ball bearings and units are industrial fans, conveyor systems, textile machines and agricultural machinery.

Fig. 1**Fig. 2****Fig. 3**

Design

SKF ConCentra ball bearing units are ready-to-mount and ready-to-operate. They are filled with a high-quality, long-lasting grease that provides maintenance-free operation in most cases. For operating conditions that make relubrication necessary, the units are provided with a grease fitting.

SKF ConCentra ball bearings and units are based on:

- SKF Y-bearings in the YSP 2 SB series
- the patented SKF ConCentra stepped sleeve
- cast iron housings in the SY 5(00) M, FY 5(00) M and FYTB 5(00) M series, SY 5(00) M, FY 5(00) M, FYTB 5(00) M series for metric shafts
- cast iron housings in the SY 5(00) U/AH, FY 5(00) U/AH, FYTB 5(00) U/AH series for inch shafts

Detailed information about these bearing units can be found in the publication *SKF ConCentra ball bearing units – true concentric locking, for fast and reliable mounting* and online at skf.com/bearings.

