



SKF® CONCENTRA BALL BEARING UNITS WITH UNIQUE DESIGN CAN REDUCE NOISE AND VIBRATION IN AIR-HANDLING APPLICATIONS

SKF® ConCentra ball bearing units for high-speed air handling applications integrate unique concentric locking technology to form a near 360° interference fit with the shaft. This serves to reduce noise, vibration, and potential fretting corrosion; reduce risks of uneven load distribution, imbalance, and shaft damage; and enable units to run at their bearing's full dynamic load capacity.

Unlike conventional set-screw bearing units used in fans and blowers (which contact the shaft in only two or three places), ConCentra ball bearing units feature a patented multi-step sleeve arrangement. As the special mounting screws are tightened during installation, the bearing unit's inner ring is driven up a series of inclined planes, compressing a sleeve around the shaft. The resulting secure and concentric fit delivers the optimized performance benefits.

For removal, the mounting screws are loosened and dismounting screws tightened to reverse the process. This eliminates a need to cut bearings from shafting during removal.

The bearing unit's concentric mounting technology creates a high locking force without requiring extremely close shaft tolerances. Shaft tolerances of ISO h9/IT5 can be used. Shafts further can be specified as commercial-grade or hollow to provide cost-effective alternatives to typically expensive ground, specially machined, or polished shafts normally mandated with set-screw air-handling units.

ConCentra ball bearing units incorporate SKF deep groove ball bearings either pre-lubricated for the life of the bearing (with special air-handling quality grease) or equipped with lubrication fittings. Their two-part sealing arrangement consists of a low-friction contact seal and phosphated metallic flinger to prevent intrusion of solid and liquid contaminants, enhance grease retention, and minimize maintenance demands.

ConCentra ball bearing units mount and dismount easily and are available in pillow block and two- and four-bolt flange versions. Bore sizes (1 in. to 2-15/16 in.) fit most standard fans and blowers. Customized bearing units can be developed to satisfy particular application requirements.

