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■ **Harmonizing of Lubrication Nipples for INA Radial Insert Ball Bearings**

Products affected: Radial insert ball bearing housing units

Start of changeover: 11/1/2014



Starting on November 1, 2014, each catalog type will be delivered with M6 lubrication nipple thread as standard. Most units will be delivered with a lubrication nipple kit as standard. The lubrication nipples are not premounted.

The lubrication nipple kit consists of the following components:

- Thread: M6 (steel, galvanized)
- Plugs: Plugs with the new X-life logo (During the changeover phase, a few connectors may be delivered with the old logo.)
- Protective cap: Standard type A (0°) with protective cap, special types (45° and 90°) without protective cap



The lubrication nipple kit

This changeover results in the following benefits for you:

- **Maximum Flexibility:**
You personally decide on how individual parts will be used.
- **Optimum Replacement Part Supply:**
Along with the standard type, special lubrication nipple types are also available for delivery in a kit.
- **Simple Reordering:**
All lubrication nipple types can be reordered more easily and mounted individually.

For further information, please contact your Schaeffler sales team.

■ **Lower Operating Temperatures and Reduced Contact Angle Deviations for Optimized FAG B Spindle Bearings**

FAG spindle bearings of dimension series B719 and B70 are being overhauled in the course of continuous product development. Since the beginning of the year, the first bearings of dimension series B719 have gone through numerous improvements, leading to the following increased benefits:

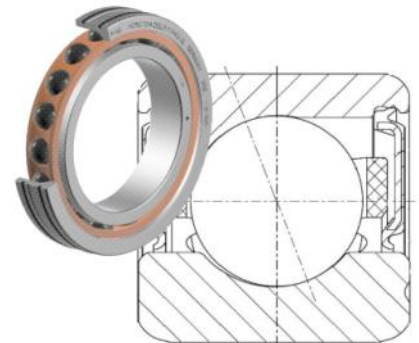
- A design-based restriction of the admissible contact angle deviation results in greater uniformity with regard to rigidity, kinematics, and preload.
- A new cage design has produced a higher degree of uniformity and consistency for running and temperature behavior.
- In addition, thanks to material optimization, the cage's dimensional stability has been further improved.
- Reduced cage friction leads to a lower frictional torque and up to 15% lower running temperatures.
- Less likelihood of cage noises occurring (so-called "cage rattling")
- The new cage has been thoroughly tested and has successfully proved itself for years in RS bearings in many customer applications.
- Reduced ball tolerances ensure lower noise excitation.

The implemented measures represent a thorough improvement to FAG spindle bearings with respect to uniformity and performance. No internal design characteristics that affect rigidity, load ratings, or preload forces are being changed with this product overhaul. Nor are any changes being made to injection tooth flanks. Therefore, all types can be used as before, and a mixed installation is always permissible.

The changeover will start with all of the bearings at the Schweinfurt production site, successively involving both dimension series for sizes ≤ 160 mm outside diameter. The changeover phase is planned for the period of 1/1/2014 – 12/31/2015, with the changeover sequence following internal Schaeffler priorities. There are no specific plans concerning the availability of previous products or revised versions.

The overhaul will affect both catalog and special bearings in the same way. If you are affected by the overhaul of special bearings (F numbers), you will receive a separate letter informing you of the product changeover.

For further information, or if you have any questions, please contact your Schaeffler sales force.



FAG B spindle bearing

■ **Optimum Gearbox Protection through Continuous Oil and Vibration Monitoring**

Maintenance requirements are stringent for industrial gearboxes subjected to heavy loads. Smooth operation is frequently the deciding factor with regard to the overall availability of the installation. Along with the costs of repair, damage to this kind of gearbox usually results in high breakdown costs and possible consequential losses. By combining the new **FAG Wear Debris Check oil sensor** with time-tested FAG condition monitoring solutions, damage can be detected early on and more easily.

Operating Mode:

FAG Wear Debris Check can be installed at little expense and integrated into existing condition monitoring or control systems. The way it works is based on the fact that signs of wear from components such as bearings or gears already appear as metal wear debris months before a breakdown becomes imminent. The wear debris particles are clearly detectable in the oil. The sensor differentiates between ferric and non-ferric particles, monitors the particle quantity in the oil, and classifies the particles according to size and material. Thus, FAG Wear Debris Check is already able to expose damage at an early stage. This can prevent a malfunction, and a replacement can be made with planned maintenance.

Typical applications:

- Steel and aluminum: e.g. pinion stand gearboxes and reduction gearboxes
- Raw material extraction and preparation, e.g. mills and rotary kiln gearboxes
- Cellulose and paper, e.g. dry cylindrical roller and sieve drive roller gearboxes
- Wind power: planetary gear
- Navy: ship drives, etc.
- Oil and gas: top drive, drawworks gearboxes, etc.

Additional services:

- Determining the actual extent of the damage via video endoscopy
- Reducing downtimes through a professional assembly service
- Increasing gearbox operating life and performance by means of component-related engineering

For further information, please contact your Schaeffler sales team.

