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Uniform Brand Strategy for Deep Groove Ball Bearings

Starting from 06/01/2013, single row deep groove ball bearings of series 618 and 619 will be available in the FAG brand.

The following external changes have been made:

- Bearing markings acc. to FAG standard
- Packaging acc. to FAG standard
- Packaging units acc. to FAG standard
- Rust-proofing

Rust-proofing has been switched from dry to wet. This has positive consequences for how long rust protection lasts.

The product design, its characteristics, and ball bearing function will not change. The performance of our products still knows no bounds.

Contact your sales team for more information.









Unique: New Calculation Options for all Plain Bearing Materials

Extensive and innovative calculation options are available for Schaeffler plain bearings.

Uniform Operating Life Calculation

In contrast to rolling bearings, the process of calculating the operating life of plain bearings is not standardized. Therefore, there are widely different approaches, depending on the manufacturer.

For this reason, Schaeffler has developed a uniform operating life calculation concept for all plain bearing materials in its product portfolio. It is now possible for the user to configure plain bearings with the same basic operating life characteristics – no matter whether they are maintenance-free, low-maintenance, or require some maintenance – with a simple and yet precise method.

Catalog Calculation

The completely revised calculations are now available in the new HG1 plain bearing catalog as well.

No matter whether INA metal-polymer combination plain bearings, ELGES spherical plain bearings, or ELGOTEX wound bushes are involved, all types and materials share the same calculation basis. A flowchart and several calculation examples lead the user straight through the easy-to-understand calculation process and ultimately to the point of being able to calculate his/her own plain bearings.

The catalog is available online in the Media Library <u>LINK</u> and able to be ordered in printed form from June 2013. A translation into English will be produced, based on the first edition in German.

BEARINX®-online

BEARINX®-online now makes it possible to conduct professional calculations of plain bearings in the shaft system in addition to purely catalog-based calculations.

- Calculates several plain and rolling bearings together in one shaft system.
- Takes deflection and thus load distribution into account.







- Takes combined stresses from axial and radial forces into account, as well as induced moments.
- Wide range of calculation results (operating life, load safety, stress, shifting, specific bearing load, sliding speed, PV value).
- The different plain bearings can either be conveniently downloaded from the BEARINX® database or individually compiled. In this way, it is possible for you to combine type, design size, and material yourself, while BEARINX®-online takes care of calculating the load rating.

You therefore not only get rolling and plain bearings from one source, but can also configure them with one single tool.



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



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Technical Product Information "SNS Split Plummer Block Housings" (TPI 231)

The spherical roller bearings Business Unit has published technical product information (TPI) on SNS split plummer block housings.

The PDF version of the TPI 231 is immediately available and can be downloaded from the Media Library online at the following link: LINK

The TPI provides a comprehensive overview of all available SNS housings:

Modular Principle:

The housings are constructed according to the modular principle. Each housing permits spherical roller bearings of various diameters and widths to be installed. Moreover, when mounting the bearing to the shaft, it can rest directly on the shaft or using adapter sleeves. This results in varying shaft diameters with the same borehole diameter. Specially designed seals compensate for the gaps between the shaft and the housing.

The seals, covers, and locating rings required for the SNS housing have to be **ordered separately**.

Labeling Key:

The system of abbreviations for SNS plummer block housings is based on the system of abbreviations for rolling bearings. The housing series designation is followed by bearing series specifications, the bearing's bore code, and finally the abbreviation for the different models.

Order Examples:

Please observe the following directions when combining split FAG plummer block housings of the SNS series with FAG rolling bearings and accessories. The SNS plummer block housings are available in series for non-locating bearing models. Locating bearings can be achieved by inserting NFR locating rings.

Due to the modular system, the same covers and seals are used for different housing models in some cases!

Important: FAG rolling bearings and accessories must be ordered separately.

For this reason, it is necessary to consult the measurement chart when selecting seals and covers.



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Locating Bearing Example:

Plummer block housings made of spheroidal graphite cast iron, closed on one side, spherical roller bearings 23148-E1A-K-M as locating bearings, adapter sleeve mounting, labyrinth seal.

Order Example of Previous SD3148 Housings as Locating Bearings: SD3148-H-TS-AF-D

Order Example of SNS Housings and Accessories

Order: 1 plummer block housing SNS3148-H-D 2 locating rings NFR400/10 1 cover NDK48 1 labyrinth seal NTS48

Like before, bearings and adapter sleeves have to be ordered separately!

Non-locating Bearing Order:

SNS plummer block housings made of spheroidal graphite cast iron as the standard material, shaft along the entire length, spherical roller bearings 23148-E1A-K-M as non-locating bearings, adapter sleeve mounting, taconite seal.

Order Example of Previous SD3148 Housings as Non-Locating Bearings: SD3148-H-TC-BL-D

Order Example of SNS Housings and Accessories Order 1 plummer block housing SNS3148-H-D

2 taconite seals NTC48

Like before, bearings and adapter sleeves have to be ordered separately!

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







FAG CONCEPT8 – The Compact Lubrication System for Industrial Applications

Owing to eight outlets and four individual pump units that can be controlled separately, FAG CONCEPT8 represents a unique solution for relubricating electric motors, machine tools, printing machines, wind turbines, and many other industrial applications. FAG CONCEPT8 is a reliable and precise grease or oil feed system that is simple to install thanks to its compact dimensions and integrated assembly boreholes. Despite a great many programming options, it is quick and easy to operate. Affordable investment costs make for rapid amortization. Other benefits are reduced service costs and increased plant availability.

Advantages and Characteristics in Detail:

Pump units can be controlled individually.

→ by individually setting the quantity for the pump units

- Easy to operate and monitor
 thanks to a simple menu setup via an LCD display with only two switches
- Grease-conserving conveyance to the point of lubrication
 low pressure load on the grease due to direct conveyance to the point of lubrication
- Wide range of programming options
 for example, settings for lubrication quantities, time intervals, and activation in impulse operation
- Timely alarm for malfunctions and serious errors
 when the plant is empty, for excess current, or in case of cable breakage
- Visible filling stand check (besides a reserve warning)
 through a transparent housing
- Proactive damage avoidance
 for example, ability to integrate FAG grease sensor GreaseCheck via the sensor input





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FAG CONCEPT8 with cartridge



Top view of the pump unit

For further information, please contact your Schaeffler sales team.

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FAG GreaseCheck – Innovative Grease Sensor Sounds an Alarm Before Rolling Bearing Damage Occurs

For the first time, FAG GreaseCheck makes it possible to continually monitor the condition of the grease while operating the rolling bearing without any involved sampling or laboratory testing being necessary. This enables lubrication to be done as needed instead of being time-controlled and, most importantly, you can react before any rolling bearing damage is incurred. This can result in considerable cost and time savings, especially for plants that are difficult to access or of critical importance.

Operating Mode:

The FAG GreaseCheck sensor head is directly immersed in the grease. By means of the optical infrared reflection technique, four parameters can be measured: water content, turbidity, thermal or mechanical wear, and temperature. An intelligent electronic evaluation system turns this data into an analog signal that quickly and easily informs the user as to the current condition of the grease. Threshold values can also be set that are able to trigger alarms in the monitoring systems if these threshold values are undershot. Schaeffler application technicians provide support to determine the position of the sensor, since the optimum installation site varies from application to application and has to be ascertained precisely.

Areas of Application:

As a rule, FAG GreaseCheck can be employed anywhere that bearings lubricated with grease are used. In addition, it is particularly suited to locations where accessibility is limited, such as offshore plants for wind energy or for applications in interlinked processes, such as in the steel, paper, or mining industries.



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Overview of the Advantages:

- Always staying one step ahead of bearing damage
- No more excess greasing
- Always well informed thanks to online monitoring
- Proactive reduction of costs
- Maintenance scheduling possible thanks to documentation
- 360 degree monitoring possible



For further information, please contact your Schaeffler sales team.

