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■ **Black Series UK Radial Insert Ball Bearings with Standard Mounted Adapter Sleeve**

In the first quarter of 2013, production of the UK types for Black Series housing units was begun.

With regard to the UK radial insert ball bearings, the inner ring is affixed to the shaft via a concentric adapter sleeve (TPI219 on page 16). They are suited to bearing supports with alternating rotational direction at high speeds and loads as well.

Please note: In order to standardize planning and availability worldwide, the adapter sleeves are already mounted on the Black Series radial insert ball bearings when delivered.

This has the following advantages:

- The housing unit can immediately be mounted on the shaft without any additional assembly work.
- The radial insert ball bearing and the adapter sleeve fit together perfectly.
- As with the rings and the snap ring, the sleeve likewise has Durotect® B surface treatment and thus provides protection against corrosion.
- There is no risk of mixing up customer order types with and without an adapter sleeve.

This results in the following distinct key benefits for customers:

- Simple and rapid assembly
- Savings in time and money
- Greater reliability and safety in use
- Longer operating life due to the protective feature of Durotect® B
- Lower maintenance expenditure thanks to longer intervals between maintenance

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



■ **ELGOTEX® WA – Plain Bearings for Use in Water**

Schaeffler has developed a maintenance-free plain bearing that can be used directly in seawater and which performs very well in water in the sliding contact.

**Innovative Material**

The cylindrical plain bearing bushes that have been developed have a sliding layer made of ELGOTEX® WA (WA = water application) and have a two-layer construction. The outer layer (the back) gives the bush rigidity, while the inner layer allows it to slide.

**Design**

Unlike the standard ELGOTEX® design, ELGOTEX® WA has been especially developed for use in water and salt/seawater. The great advantage of ELGOTEX® WA is that the fiber and matrix are meticulously fine-tuned to the special conditions of application. The high production variability means customer-specific bearing solutions can be up to 1,200 mm in size.



**Technical Data**

Maximum dynamic contact pressure	50 N/mm <sup>2</sup>
Maximum static contact pressure	150 N/mm <sup>2</sup>
Maximum admissible sliding speed	0.024 m/s
Maximum pv value	1.2 N/mm <sup>2</sup> * m/s

**Applications**

Typical areas of application are:

- Ship and marine technology
- Hydromechanical steel structures
- Hydroelectric power plants
- Pumps and turbine construction

**Rudder Bearings**

Load bearing for rudders in modern shipbuilding involves at least two bearing positions. While the upper bearing support is handled by lubricated rolling bearings, it is very involved, complicated, and uneconomical to encapsulate the bearing of the lower bearing support outside of the ship's hull. The use of plain bearings is preferred for this bearing position.

**Certification by Germanischer Lloyd**

Extensive tests by the Germanischer Lloyd certification company have verified the functionality of the bearings.

Besides receiving approval, as the first manufacturer of this application, Schaeffler is obtaining clearance for a **maximum certified contact pressure of 15 N/mm<sup>2</sup>** in plain bearings. In this way, Schaeffler is not only developing a product that has been newly certified by an accreditation service, but is also raising the bar by 50% at the same time!

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■ Available Soon: HG 1 Plain Bearing Catalog

For the first time ever, Schaeffler Group Industrial is presenting a comprehensive HG 1 plain bearing catalog that will be available **from June 2013**.

This compendium of more than 400 pages combines all relevant technical information on ELGES-brand spherical plain bearings and rod ends as well as INA-brand plain bushes, washers, and strips.

The catalog can be ordered from June 2013 and is available in our media library. [LINK](#)

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

