# PLAIN BEARINGS IN GENERAL

### Requiring maintenance

### Steel/Steel

Spherical plain bearings: GE..E/ES, GEG..E/ES, GEZ..ES, GEEM..ES, GEEW..ES

Rod ends: SA..E/ES, SI..E/ES, T.P.N, T.A.C



e.g GEG..ES

# Spherical plain bea-

rings: GE..C, GE..ET, GEG..C

Hard chromium/PTFE

Rod ends: SA..C, SI..C, TSF..C,

TSM..C



e.g GEG..C

### Steel/Bronze

Sliding contact surface combination

Has better emergency running properties than a steel/ steel sliding contact surface combination.

Spherical plain bearings: SSR Rod ends: TSM, TSF



e.g SSR..

# Grease lubrication required prior to initial operation and relubrication

Spherical plain bearings with the suffix **ES** have lubrication grooves and lubrication holes in the inner and outer ring. The same applies to rod ends with the suffix **ES**, they can be lubricated by a grease nipple or a lubricating hole.



e.g GEG..ES



e.g GEG..ES

Small spherical plain bearings with the suffix **E** without lubrication holes must be lubricated from the side.



e.g GEG..E

### No lubrication and relubrication required

Important note:

Nevertheless, these bearings should be checked regularly during maintenance inspections.

Maintenance-free

available **open** without se-

als and with lip seals on

both sides - 2RS.



e.g GEG..ES-2RS

available **open** without seals and with lip seals on both sides – **2RS**.



e.g GE..ET-2RS

# Seals

# • for swivelling, tilting and rotational movements

- for high static loads
- for heavy alternating loads
- for shock loads

- for swivelling, tilting and rotational movements with a constant load direction (react more sensitive to shock- and alternating loads than steel/steel bearings)
- when low friction coefficients are required
- if relubrication is not possible or very difficult

# Use cases

# SPECIAL SPHERICAL PLAIN BEARINGS

Properties

### Extended inner ring

A special case are spherical plain bearings with an extended inner ring on both sides. They are suitable for bearing arrangements in which a withdrawal sleeve is normally used on both sides of the inner ring.





GEEW..ES

GEEM..ES

# **ROD ENDS**

### Type of rod ends

Rod ends are bearing units that consist of a spherical plain bearing and a rod head.

### Mounting types of rod ends

Rod ends are screwed by means of a thread or welded at a welding end.

By default, threaded rod ends have a right-hand thread.



external thread

SA..C, SA..E/ES, TSM, TSM..C



inner thread

SI..C, SI..E/ES, TSF, TSF..C



welding end

T.A.C, T.P.N

Properties