

We pioneer motion

# TS Seal for the highest demands

With its TS seal, Schaeffler offers the most efficient sealing system for spherical plain bearings. The TS seal was developed specifically for maintenance-free and maintenance-required spherical plain bearings with diameters ranging from  $d=25\,\text{mm}$  to  $140\,\text{mm}$ .

## TS Seal for the highest demands

A characteristic feature of the TS seal is its triple-lip design. The outer two seal lips keep contamination and moisture away from the bearing. The inner seal lip ensures that in the case of maintenance-free bearings, any abrasion is retained in the bearing. In bearings that require maintenance, the function of the seal is to keep the lubricant inside the bearing. Using spherical plain bearings equipped with the high-performance TS seal enables you to achieve a longer service life in your application.

### Characteristics

- Triple-lip high-performance seal made of nitrile butadiene rubber (NBR) with a steel reinforcement ring
- Meets the highest requirements for sealing performance
- Protection against water, dust, and contamination in the interior and exterior area
- Wide operating temperature range from -30°C to +100°C (up to 130°C for short periods)

### **Technical benefits**

- Effective protection of the internal tribological plain bearing system by:
  - Preventing the ingress of external contamination
  - Preventing the egress of lubricant
- Increased mechanical resistance provided by the steel reinforcement ring

### **Customer benefits**

- Lower operating costs due to extended life cycle of the bearing
- Lower maintenance costs, since longer lubrication intervals are possible for spherical plain bearings requiring maintenance
- Better environmental compatibility due to less egress of lubricant
- Use in heavily contaminated environment is possible, in contrast to RS seal

## **Applications**

- Hydraulic cylinders
- Agricultural and forestry machinery
- Buildings and bridges
- Wind and solar energy systems
- Steel and cement plants
- Construction machines
- Railroad applications
- Offshore applications

TS seal from Schaeffler
RS seal from Schaeffler

TS seal from Schaeffler

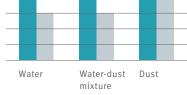
Comparison of the sealing effect of RS and TS seals with different media

Dust

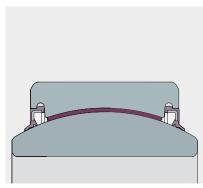
Dust-water

• Competitor's seal

TS seal from Schaeffler



Comparison of the sealing effect of triple-lip high-performance seals from Schaeffler to the competition



Cross section of maintenance-free spherical plain bearing with TS seal

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