



Image may differ from product. See technical specification for details.

# **GE 50 ES-2LS**

#### Radial spherical plain bearing, requiring maintenance, sealed, metric sizes

Radial spherical plain bearings are designed to accommodate radial and combined radial and axial loads, and also misalignment. This specific design includes a steel/steel sliding contact surface combination and has a triple-lip, heavy-duty contact seal on both sides. The bearings require maintenance and can be relubricated via lubrication holes and an annular groove in both rings.

- Designed for radial and combined radial and axial loads
- Long service life
- Minimal maintenance
- Suitable for heavy static, alternating or impact loads

# Overview

#### **Dimensions**

| Bore diameter     | 50 mm |
|-------------------|-------|
| Outside diameter  | 75 mm |
| Width, inner ring | 35 mm |
| Width, outer ring | 28 mm |

### Performance

| Basic dynamic load rating | 156 kN |
|---------------------------|--------|
| Basic static load rating  | 780 kN |

## **Properties**

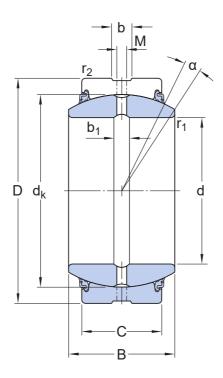
| Sliding contact surface combination | Steel/steel, standard  |
|-------------------------------------|------------------------|
| Material, inner ring                | Bearing steel          |
| Material, outer ring                | Bearing steel          |
| Maintenance                         | Relubrication required |
| Radial internal clearance           | CN                     |
| Sealing                             | Seal on both sides     |
| Sealing type                        | Triple-lip             |
| Relubrication feature               | With                   |

# Logistics

| Product net weight | 0.538 kg    |
|--------------------|-------------|
| eClass code        | 23-05-01-06 |
| UNSPSC code        | 31171515    |

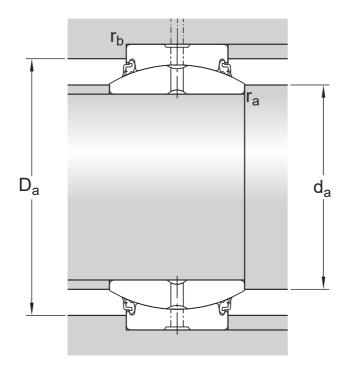
# **Technical specification**

| Maintenance                         | Relubrication required |
|-------------------------------------|------------------------|
| Sliding contact surface combination | Steel/steel, standard  |
| Material, inner ring                | Bearing steel          |
| Material, outer ring                | Bearing steel          |
| Sealing                             | Seal on both sides     |
| Sealing type                        | Triple-lip             |



# Dimensions

| d          | 50 mm       | Bore diameter                                  |
|------------|-------------|--|
| D          | 75 mm       | Outside diameter                               |
| В          | 35 mm       | Width  |
| С          | 28 mm       | Width outer ring                               |
| α          | 6°          | Angle of tilt                                  |
| $d_k$      | 66 mm       | Raceway diameter inner ring                    |
| b          | 4.6 mm      | Width annular lubrication groove at outer ring |
| $b_1$      | 4.8 mm      | Width annular lubrication groove at inner ring |
| М          | 3 mm        | Diameter lubrication hole (outer ring)         |
| r <u>ı</u> | min. 0.6 mm | Chamfer dimension bore                         |



## Abutment dimensions

| d <sub>a</sub> | min. 54.6 mm | Abutment diameter shaft   |
|----------------|--------------|---------------------------|
| d <sub>a</sub> | max. 56 mm   | Abutment diameter shaft   |
| Da             | min. 66.2 mm | Abutment diameter housing |
| D <sub>a</sub> | max. 70.5 mm | Abutment diameter housing |
| r <sub>a</sub> | max. 0.6 mm  | Fillet radius shaft       |
| r <sub>b</sub> | max. 1 mm    | Fillet radius housing     |

## Calculation data

| Basic dynamic load rating    | С              | 156 kN    |
|------------------------------|----------------|-----------|
| Basic static load rating     | $C_0$          | 780 kN    |
| Specific dynamic load factor | К              | 100 N/mm² |
| Specific static load factor  | Κ <sub>0</sub> | 500 N/mm² |
| Material constant            | K <sub>M</sub> | 330       |

#### Tolerances and clearances



#### RADIAL LOCATION OF BEARINGS

Recommended fits

### **More Information**

## Product details

Radial spherical plain bearings requiring maintenance

Maintenance-free radial spherical plain bearings

General bearing specifications

Temperature limits

# Engineering information

Principles of selection

## Tools

SKF Product select

Heater selection tool



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