

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

# GE 180 ES

## Radial spherical plain bearing, requiring maintenance, 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. 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
- Suitable for heavy static, alternating or impact loads

# Overview

## Dimensions

| | |
|---|---|
| Bore diameter | 180 mm |
| Outside diameter | 260 mm |
| Width, inner ring | 105 mm |
| Width, outer ring | 80 mm |

## Performance

| | |
|---|---|
| Basic dynamic load rating | 1 530 kN |
| Basic static load rating | 7 650 kN |

## Properties

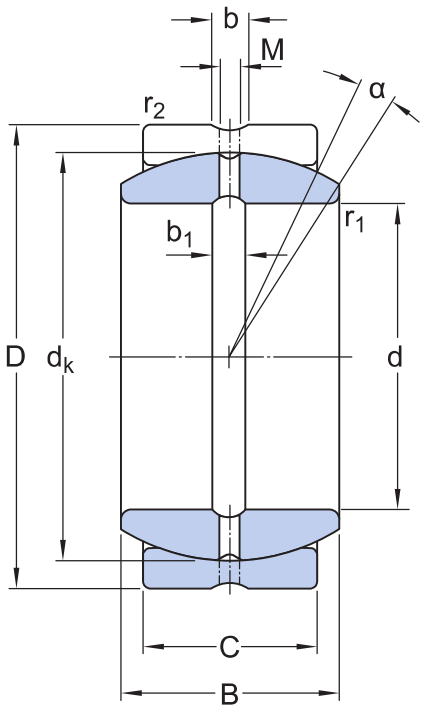
| | |
|---|---|
| Sliding contact surface combination | Steel/steel, standard |
| Material, inner ring | Bearing steel |
| Material, outer ring | Bearing steel |
| Maintenance | Relubrication required |
| Radial internal clearance | CN |
| Sealing | Without |
| Relubrication feature | With |

## Logistics

| | |
|---|---|
| Product net weight | 18 kg |
| eClass code | 23-05-01-06 |
| UNSPSC code | 31171515 |

## Technical specification

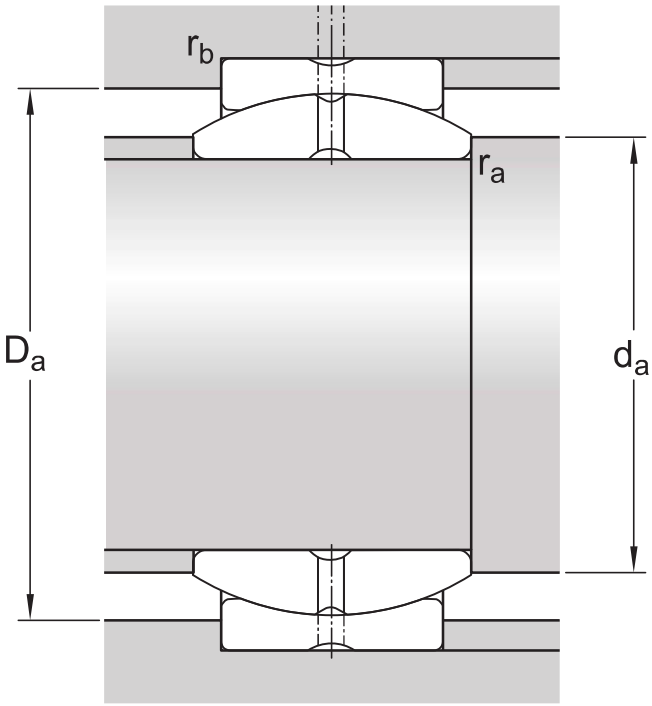
| | |
|---|---|
| Maintenance | Relubrication required |
| Sliding contact surface combination | Steel/steel, standard |
| Material, inner ring | Bearing steel |
| Material, outer ring | Bearing steel |
| Sealing | Without |




## Dimensions

| | | |
|---|---|---|
| d | 180 mm | Bore diameter |
| D | 260 mm | Outside diameter |
| B | 105 mm | Width |
| C | 80 mm | Width outer ring |
| α | 6 ° | Angle of tilt |
| $d_k$ | 225 mm | Raceway diameter inner ring |
| b | 13.5 mm | Width annular lubrication groove at outer ring |
| $b_1$ | 13.5 mm | Width annular lubrication groove at inner ring |

| | | |
|---|---|---|
| M | 6 mm | Diameter lubrication hole (outer ring) |
| $r_1$ | min. 1.1 mm | Chamfer dimension bore |
| $r_2$ | min. 1.1 mm | Chamfer dimension outer ring |




## Abutment dimensions

| | | |
|---|---|---|
| $d_a$ | min. 191 mm | Abutment diameter shaft |
| $d_a$ | max. 199 mm | Abutment diameter shaft |
| $D_a$ | min. 214 mm | Abutment diameter housing |
| $D_a$ | max. 250.5 mm | Abutment diameter housing |
| $r_a$ | max. 1 mm | Fillet radius shaft |
| $r_b$ | max. 1 mm | Fillet radius housing |

## Calculation data

| | | |
|---|---|---|
| Basic dynamic load rating | C | 1 530 kN |
| Basic static load rating | $C_0$ | 7 650 kN |
| Specific dynamic load factor | K | 100 N/mm² |
| Specific static load factor | $K_0$ | 500 N/mm² |

| | | |
|---|---|---|
| Material constant | $K_M$ | 330 |

## Tolerances and clearances

- General bearing specifications

## 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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