

# 239/500 CA/W33



## Spherical roller bearing with relubrication features

Spherical roller bearings can accommodate heavy loads in both directions. They are self-aligning and accommodate misalignment and shaft deflections, with virtually no increase in friction or temperature. The design includes features to facilitate relubrication. The bearings can be used in a modular system, including housings, sleeves and nuts.

- Accommodate misalignment
- High load carrying capacity
- Relubrication features
- Low friction and long service life
- Increased wear resistance

## Overview

### Dimensions

|                  |        |
|------------------|--------|
| Bore diameter    | 500 mm |
| Outside diameter | 670 mm |
| Width            | 128 mm |

## Performance

|                           |              |
|---------------------------|--------------|
| Basic dynamic load rating | 2 967 kN     |
| Basic static load rating  | 6 000 kN     |
| Reference speed           | 530 r/min    |
| Limiting speed            | 950 r/min    |
| SKF performance class     | SKF Explorer |

## Properties

|                                      |                |
|--------------------------------------|----------------|
| Number of rows                       | 2              |
| Locating feature, bearing outer ring | Without        |
| Bore type                            | Cylindrical    |
| Cage                                 | Machined metal |
| Radial internal clearance            | CN             |
| Tolerance class for dimensions       | Normal         |
| Tolerance class for run-out          | Normal         |
| Sealing                              | Without        |
| Lubricant                            | None           |
| Relubrication feature                | With           |
| Candidate for remanufacturing        | Yes mm         |

# Technical Specification

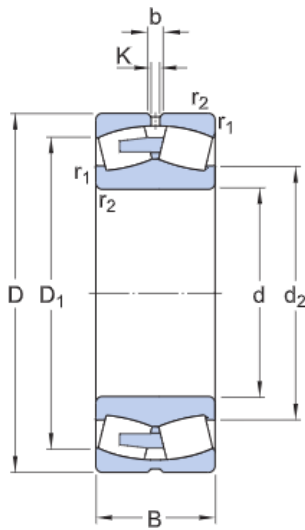
SKF performance class

SKF Explorer

Bore type

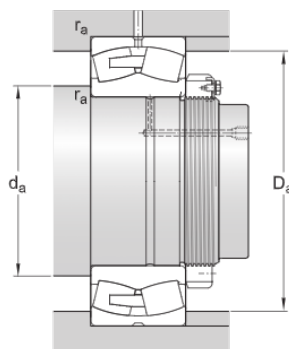
Cylindrical

## Dimensions



|                  |           |  |
|------------------|-----------|--|
| d                | 500 mm    | Bore diameter                          |
| D                | 670 mm    | Outside diameter                       |
| B                | 128 mm    | Width                                  |
| d <sub>2</sub>   | ≈ 561 mm  | Shoulder diameter of inner ring        |
| D <sub>1</sub>   | ≈ 622 mm  | Shoulder/recess diameter of outer ring |
| b                | 22.3 mm   | Width of lubrication groove            |
| K                | 12 mm     | Diameter of lubrication hole           |
| r <sub>1,2</sub> | min. 5 mm | Chamfer dimension                      |

## Abutment dimensions



|                |             |                              |
|----------------|-------------|------------------------------|
| d <sub>a</sub> | min. 518 mm | Diameter of shaft abutment   |
| D <sub>a</sub> | max. 652 mm | Diameter of housing abutment |
| r <sub>a</sub> | max. 4 mm   | Radius of fillet             |

## Calculation data

|                           |                |          |
|---------------------------|----------------|----------|
| Basic dynamic load rating | C              | 2 967 kN |
| Basic static load rating  | C <sub>0</sub> | 6 000 kN |

|                    |       |           |
|--------------------|-------|-----------|
| Fatigue load limit | $P_u$ | 415 kN    |
| Reference speed    |       | 530 r/min |
| Limiting speed     |       | 950 r/min |
| Limiting value     | $e$   | 0.17      |
| Calculation factor | $Y_1$ | 4         |
| Calculation factor | $Y_2$ | 5.9       |
| Calculation factor | $Y_0$ | 4         |

## Mass

|      |  |        |
|------|--|--------|
| Mass |  | 130 kg |
|------|--|--------|

## Tolerance class

|                        |  |        |
|------------------------|--|--------|
| Dimensional tolerances |  | Normal |
| Radial run-out         |  | Normal |

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