

# 24122 CC/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    | 110 mm |
|------------------|--------|
| Outside diameter | 180 mm |
| Width            | 69 mm  |

#### Performance

| Basic dynamic load rating | 539 kN       |
|---------------------------|--------------|
| Basic static load rating  | 750 kN       |
| Reference speed           | 2 000 r/min  |
| Limiting speed            | 3 000 r/min  |
| SKF performance class     | SKF Explorer |

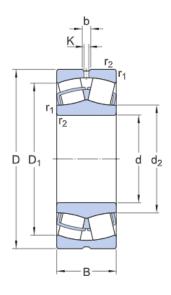
### **Properties**

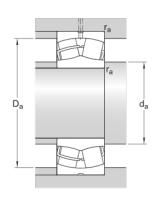
| Number of rows                       | 2           |
|--------------------------------------|-------------|
| Locating feature, bearing outer ring | Without     |
| Bore type                            | Cylindrical |
| Cage                                 | Sheet metal |
| Radial internal clearance            | CN          |
| Tolerance class for dimensions       | Normal      |
| Tolerance class for run-out          | P5          |
| Sealing                              | Without     |
| Lubricant                            | None        |
| Relubrication feature                | With        |
| Candidate for remanufacturing        | Yes mm      |



# Technical Specification

| SKF performance class | SKF Explorer |
|-----------------------|--------------|
| Bore type             | Cylindrical  |





### Dimensions

| d 1                | 110 mm    | Bore diameter                          |
|--------------------|-----------|--|
| D 1                | 180 mm    | Outside diameter                       |
| В                  | 69 mm     | Width                                  |
| d <sub>2</sub> ≈   | 123 mm    | Shoulder diameter of inner ring        |
| D <sub>1</sub> ≈   | 153 mm    | Shoulder/recess diameter of outer ring |
| b 6                | ó mm      | Width of lubrication groove            |
| K 3                | 3 mm      | Diameter of lubrication hole           |
| r <sub>1,2</sub> m | nin. 2 mm | Chamfer dimension                      |

### Abutment dimensions

| d <sub>a</sub> min. 121 mm | Diameter of shaft abutment   |
|----------------------------|------------------------------|
| D <sub>a</sub> max. 169 mm | Diameter of housing abutment |
| r <sub>a</sub> max. 2 mm   | Radius of fillet             |

## Calculation data

| Basic dynamic load rating | С     | 539 kN |
|---------------------------|-------|--------|
| Basic static load rating  | $C_0$ | 750 kN |



| Fatigue load limit | $P_{u}$        | 78 kN       |
|--------------------|----------------|-------------|
| Reference speed    |                | 2 000 r/min |
| Limiting speed     |                | 3 000 r/min |
| Limiting value     | е              | 0.37        |
| Calculation factor | $Y_1$          | 1.8         |
| Calculation factor | Y <sub>2</sub> | 2.7         |
| Calculation factor | $Y_0$          | 1.8         |

## Mass

### Tolerance class

| Dimensional tolerances | Normal |
|------------------------|--------|
| Radial run-out         | P5     |



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