



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

## 24148 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    | 240 mm |
| Outside diameter | 400 mm |
| Width            | 160 mm |

Performance

|                           |              |
|---------------------------|--------------|
| Basic dynamic load rating | 2 489 kN     |
| Basic static load rating  | 3 900 kN     |
| Reference speed           | 750 r/min    |
| Limiting speed            | 1 100 r/min  |
| SKF performance class     | SKF Explorer |

Properties

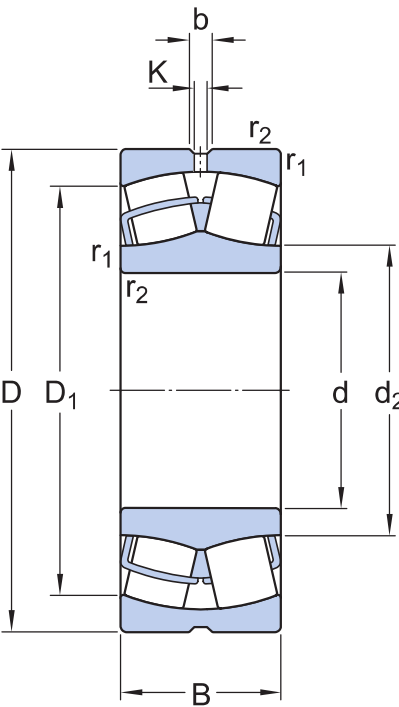
|                                      |             |
|--------------------------------------|-------------|
| Number of rows                       | 2           |
| Locating feature, bearing outer ring | Without     |
| Bore type                            | Cylindrical |
| Cage                                 | 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         |

Logistics

|                    |             |
|--------------------|-------------|
| Product net weight | 80.3 kg     |
| eClass code        | 23-05-09-11 |
| UNSPSC code        | 31171510    |

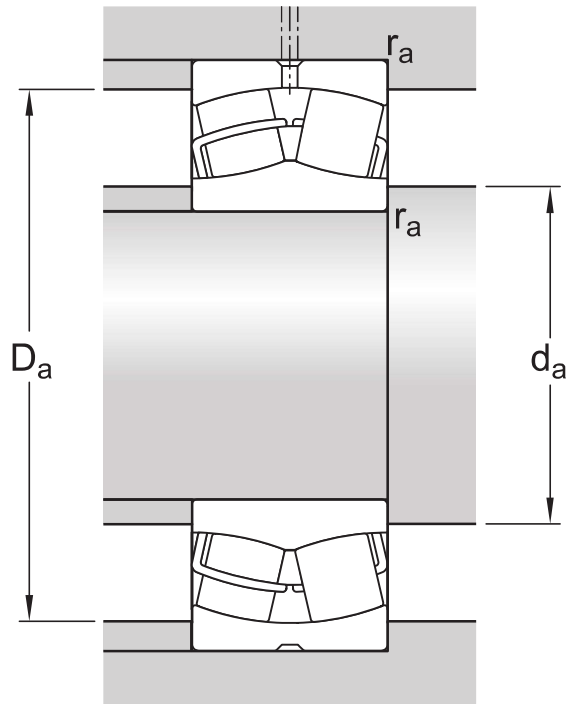
Technical specification

|           |             |
|-----------|-------------|
| Bore type | Cylindrical |
|-----------|-------------|



Dimensions

|                  |           |                                        |
|------------------|-----------|----------------------------------------|
| d                | 240 mm    | Bore diameter                          |
| D                | 400 mm    | Outside diameter                       |
| B                | 160 mm    | Width                                  |
| d <sub>2</sub>   | ≈ 271 mm  | Shoulder diameter of inner ring        |
| D <sub>1</sub>   | ≈ 336 mm  | Shoulder/recess diameter of outer ring |
| b                | 11.1 mm   | Width of lubrication groove            |
| K                | 6 mm      | Diameter of lubrication hole           |
| r <sub>1,2</sub> | min. 4 mm | Chamfer dimension                      |



Abutment dimensions

|       |             |                              |
|-------|-------------|------------------------------|
| $d_a$ | min. 257 mm | Diameter of shaft abutment   |
| $D_a$ | max. 383 mm | Diameter of housing abutment |
| $r_a$ | max. 3 mm   | Radius of fillet             |

Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| SKF performance class     |       | SKF Explorer |
| Basic dynamic load rating | C     | 2 489 kN     |
| Basic static load rating  | $C_0$ | 3 900 kN     |
| Fatigue load limit        | $P_u$ | 315 kN       |
| Reference speed           |       | 750 r/min    |
| Limiting speed            |       | 1 100 r/min  |
| Limiting value            | e     | 0.4          |
| Calculation factor        | $Y_1$ | 1.7          |
| Calculation factor        | $Y_2$ | 2.5          |
| Calculation factor        | $Y_0$ | 1.6          |

Tolerance class

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

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5, tapered bore 1:12, tapered bore 1:30
- Radial internal clearance: cylindrical bore, tapered bore

## BEARING INTERFACES

- [Seat tolerances for standard conditions](#)
- [Tolerances and resultant fit](#)

More Information

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <div> <b>Product details</b></div> <div><div><a href="#">Designs and variants</a></div><div><a href="#">General bearing specifications</a></div><div><a href="#">Loads</a></div><div><a href="#">Temperature limits</a></div><div><a href="#">Permissible speed</a></div><div><a href="#">Design considerations</a></div><div><a href="#">Mounting</a></div><div><a href="#">Designation system</a></div></div> | <div> <b>Engineering information</b></div> <div><div><a href="#">Principles of rolling bearing selection</a></div><div><a href="#">General bearing knowledge</a></div><div><a href="#">Bearing selection process</a></div><div><a href="#">Bearing failure and how to prevent it</a></div></div> | <div> <b>Tools</b></div> <div><div><a href="#">SimPro Quick</a></div><div><a href="#">SKF Product select - Select and evaluate bearing</a></div><div><a href="#">SKF Product select - Combine housing with bearing</a></div><div><a href="#">LubeSelect for SKF greases</a></div><div><a href="#">Drive-up Method Program</a></div><div><a href="#">Heater selection tool</a></div><div><a href="#">Oil Injection Method Program</a></div><div><a href="#">Tool and Accessory Selector for sleeves and shafts</a></div></div> |
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