

# 23228 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    | 140 mm |
| Outside diameter | 250 mm |
| Width            | 88 mm  |

#### Performance

|                           |              |
|---------------------------|--------------|
| Basic dynamic load rating | 962 kN       |
| Basic static load rating  | 1 250 kN     |
| Limiting speed            | 2 400 r/min  |
| Reference speed           | 1 700 r/min  |
| SKF performance class     | SKF Explorer |

#### Properties

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

# Technical Specification

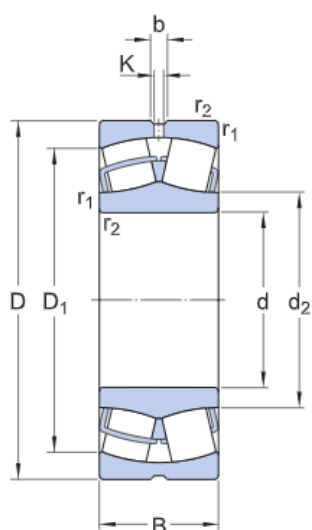
SKF performance class

SKF Explorer

Bore type

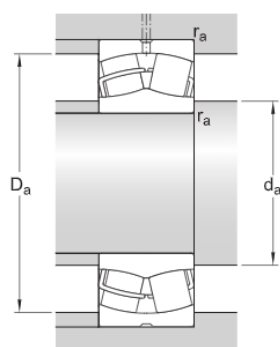
Cylindrical

## Dimensions



|                  |           |  |
|------------------|-----------|--|
| d                | 140 mm    | Bore diameter                          |
| D                | 250 mm    | Outside diameter                       |
| B                | 88 mm     | Width                                  |
| d <sub>2</sub>   | ≈ 165 mm  | Shoulder diameter of inner ring        |
| D <sub>1</sub>   | ≈ 212 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. 3 mm | Chamfer dimension                      |

## Abutment dimensions



|                |             |                              |
|----------------|-------------|------------------------------|
| d <sub>a</sub> | min. 154 mm | Diameter of shaft abutment   |
| D <sub>a</sub> | max. 236 mm | Diameter of housing abutment |
| r <sub>a</sub> | max. 2.5 mm | Radius of fillet             |

## Calculation data

|                           |                |          |
|---------------------------|----------------|----------|
| Basic dynamic load rating | C              | 962 kN   |
| Basic static load rating  | C <sub>0</sub> | 1 250 kN |

|                    |       |             |
|--------------------|-------|-------------|
| Fatigue load limit | $P_u$ | 120 kN      |
| Reference speed    |       | 1 700 r/min |
| Limiting speed     |       | 2 400 r/min |
| Limiting value     | $e$   | 0.33        |
| Calculation factor | $Y_1$ | 2           |
| Calculation factor | $Y_2$ | 3           |
| Calculation factor | $Y_0$ | 2           |

## Mass

|      |  |         |
|------|--|---------|
| Mass |  | 18.5 kg |
|------|--|---------|

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