# 23220 CC/W33Spherical roller bearing with relubrication features

## 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 | 100 mm |
| Outside diameter | 180 mm |
| Width | 60.3 mm |

### Performance

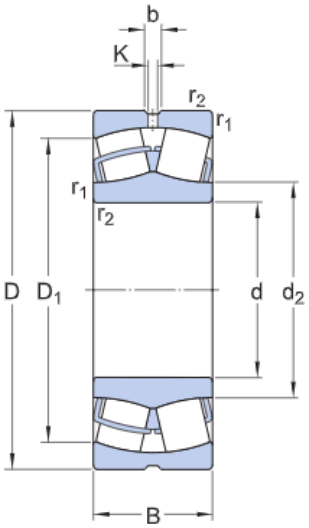
| | |
|---|---|
| Basic dynamic load rating | 498 kN |
| Basic static load rating | 600 kN |
| Reference speed | 2 400 r/min |
| Limiting speed | 3 400 r/min |
| SKF performance class | SKF Explorer |

### 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 |

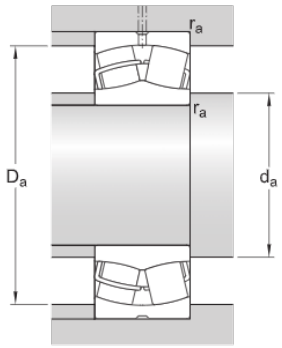
# Technical Specification

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




## Dimensions

| | | |
|---|---|---|
| d | 100 mm | Bore diameter |
| D | 180 mm | Outside diameter |
| B | 60.3 mm | Width |
| $d_2$ | ≈ 117 mm | Shoulder diameter of inner ring |
| $D_1$ | ≈ 153 mm | Shoulder/recess diameter of outer ring |
| b | 8.3 mm | Width of lubrication groove |
| K | 4.5 mm | Diameter of lubrication hole |
| $r_{1,2}$ | min. 2.1 mm | Chamfer dimension |




## Abutment dimensions

| | | |
|---|---|---|
| $d_a$ | min. 112 mm | Diameter of shaft abutment |
| $D_a$ | max. 168 mm | Diameter of housing abutment |
| $r_a$ | max. 2 mm | Radius of fillet |

## Calculation data

| | | |
|---|---|---|
| Basic dynamic load rating | C | 498 kN |
| Basic static load rating | $C_0$ | 600 kN |

| | | |
|---|---|---|
| Fatigue load limit | $P_u$ | 63 kN |
| Reference speed | | 2 400 r/min |
| Limiting speed | | 3 400 r/min |
| Limiting value | e | 0.33 |
| Calculation factor | $Y_1$ | 2 |
| Calculation factor | $Y_2$ | 3 |
| Calculation factor | $Y_0$ | 2 |

## Mass

| | |
|---|---|
| Mass | 6.6 kg |

## Tolerance class

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

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