

# 23172 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	360 mm
Outside diameter	600 mm
Width	192 mm

### Performance

Basic dynamic load rating	4 515 kN
Basic static load rating	6 950 kN
Limiting speed	1 000 r/min
Reference speed	750 r/min

## Properties

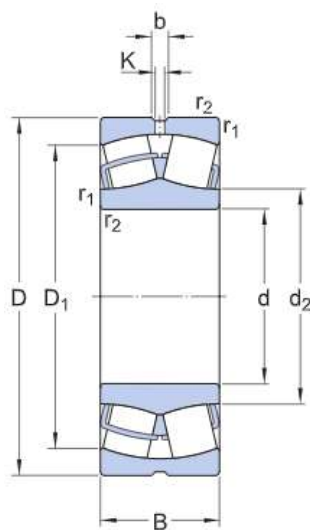
Bore type	Cylindrical
Cage	Sheet metal
Locating feature, bearing outer ring	Without
Lubricant	None
Number of rows	2
Radial internal clearance	CN
Relubrication feature	With
SKF performance class	SKF Explorer
Sealing	Without

# Technical Specification

## Design

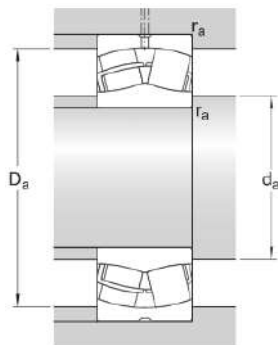
Bore type

Cylindrical



## Dimensions

d	360 mm	Bore diameter
D	600 mm	Outside diameter
B	192 mm	Width
d <sub>2</sub>	≈ 418 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 524 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

da	min. 380 mm	Diameter of shaft abutment
Da	max. 580 mm	Diameter of housing abutment
ra	max. 4 mm	Radius of fillet

## Calculation data

Basic dynamic load rating	C	4 515 kN
Basic static load rating	C <sub>0</sub>	6 950 kN
Fatigue load limit	P <sub>u</sub>	490 kN

Reference speed		750 r/min
Limiting speed		1 000 r/min
Limiting value	e	0.3
Axial load factor	$Y_1$	2.3
Axial load factor	$Y_2$	3.4
Axial load factor	$Y_0$	2.2

## Mass

Mass	230 kg
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# 23180 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	400 mm
Outside diameter	650 mm
Width	200 mm

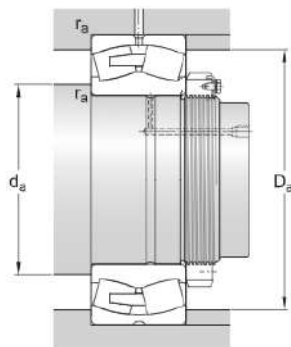
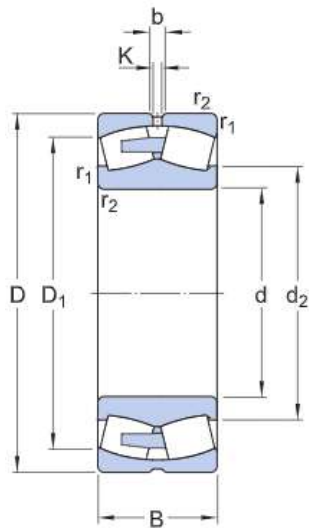
### Performance

Basic dynamic load rating	4 864 kN
Basic static load rating	7 650 kN
Limiting speed	950 r/min
Reference speed	530 r/min

## Properties

Bore type	Cylindrical
Cage	Machined metal
Locating feature, bearing outer ring	Without
Lubricant	None
Number of rows	2
Radial internal clearance	CN
Relubrication feature	With
SKF performance class	SKF Explorer
Sealing	Without

# Technical Specification



## Dimensions

d	400 mm	Bore diameter
D	650 mm	Outside diameter
B	200 mm	Width
d <sub>2</sub>	≈ 475 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 566 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. 6 mm	Chamfer dimension

## Abutment dimensions

d <sub>a</sub>	min. 426 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 624 mm	Diameter of housing abutment
r <sub>a</sub>	max. 5 mm	Radius of fillet

## Calculation data

Basic dynamic load rating	C	4 864 kN
Basic static load rating	C <sub>0</sub>	7 650 kN
Fatigue load limit	P <sub>u</sub>	530 kN
Reference speed		530 r/min
Limiting speed		950 r/min
Limiting value	e	0.28
Axial load factor	Y <sub>1</sub>	2.4

Axial load factor	$Y_2$	3.6
Axial load factor	$Y_0$	2.5

## Mass

Mass	260 kg
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