



# 24144 CC/W33 Spherical 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	220 mm
Outside diameter	370 mm
Width	150 mm

### Performance

Basic dynamic load rating	2 197 kN
Basic static load rating	3 350 kN
Reference speed	850 r/min
Limiting speed	1 200 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	Normal
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With
Candidate for remanufacturing	Yes

# Technical Specification

SKF performance class

SKF Explorer

Bore type

Cylindrical



## Dimensions

d	220 mm	Bore diameter
D	370 mm	Outside diameter
B	150 mm	Width
$d_2$	≈ 248 mm	Shoulder diameter of inner ring
$D_1$	≈ 310 mm	Shoulder/recess diameter of outer ring
b	11.1 mm	Width of lubrication groove
K	6 mm	Diameter of lubrication hole
$r_{1,2}$	min. 4 mm	Chamfer dimension

## Abutment dimensions

$d_a$	min. 237 mm	Diameter of shaft abutment
$D_a$	max. 353 mm	Diameter of housing abutment
$r_a$	max. 3 mm	Radius of fillet



## Calculation data

Basic dynamic load rating	C	2 197 kN
Basic static load rating	$C_0$	3 350 kN

Fatigue load limit	$P_u$	285 kN
Reference speed		850 r/min
Limiting speed		1 200 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

## Mass

Mass		65 kg
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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