

# 22311 ESpherical 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	55 mm
Outside diameter	120 mm
Width	43 mm

### Performance

Basic dynamic load rating	280 kN
Basic static load rating	280 kN
Reference speed	4 300 r/min
Limiting speed	5 600 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

# Technical Specification

SKF performance class

SKF Explorer

Bore type

Cylindrical

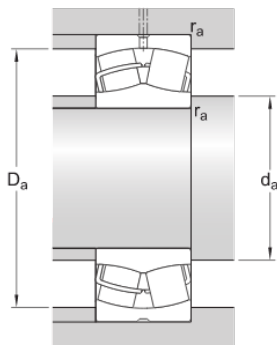


## Dimensions

d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	43 mm	Width
$d_2$	$\approx 70.1$ mm	Shoulder diameter of inner ring
$D_1$	$\approx 102$ mm	Shoulder/recess diameter of outer ring
b	5.5 mm	Width of lubrication groove
K	3 mm	Diameter of lubrication hole
$r_{1,2}$	min. 2 mm	Chamfer dimension

## Abutment dimensions

$d_a$	min. 66 mm	Diameter of shaft abutment
$D_a$	max. 109 mm	Diameter of housing abutment
$r_a$	max. 2 mm	Radius of fillet



## Calculation data

Basic dynamic load rating	C	280 kN
Basic static load rating	$C_0$	280 kN

Fatigue load limit	$P_u$	30 kN
Reference speed		4 300 r/min
Limiting speed		5 600 r/min
Limiting value	$e$	0.35
Calculation factor	$Y_1$	1.9
Calculation factor	$Y_2$	2.9
Calculation factor	$Y_0$	1.8

## Mass

Mass		2.35 kg
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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