

# 22220 E



## 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	46 mm

### Performance

Basic dynamic load rating	433 kN
Basic static load rating	490 kN
Reference speed	3 400 r/min
Limiting speed	4 500 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

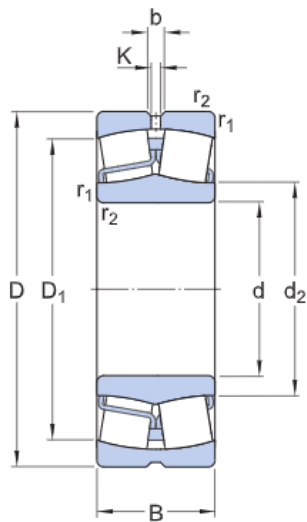
SKF performance class

SKF Explorer

Bore type

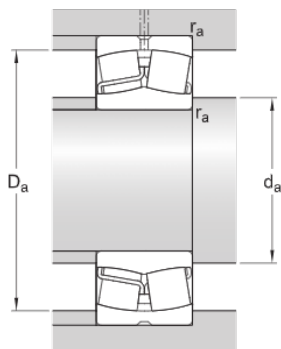
Cylindrical

## Dimensions



d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	46 mm	Width
d <sub>2</sub>	≈ 118 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 159 mm	Shoulder/recess diameter of outer ring
b	8.3 mm	Width of lubrication groove
K	4.5 mm	Diameter of lubrication hole
r <sub>1,2</sub>	min. 2.1 mm	Chamfer dimension

## Abutment dimensions



d <sub>a</sub>	min. 112 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 168 mm	Diameter of housing abutment
r <sub>a</sub>	max. 2 mm	Radius of fillet

## Calculation data

Basic dynamic load rating	C	433 kN
Basic static load rating	C <sub>0</sub>	490 kN

Fatigue load limit	$P_u$	49 kN
Reference speed		3 400 r/min
Limiting speed		4 500 r/min
Limiting value	$e$	0.24
Calculation factor	$Y_1$	2.8
Calculation factor	$Y_2$	4.2
Calculation factor	$Y_0$	2.8

## Mass

Mass		4.95 kg
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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