

# 22205 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	25 mm
Outside diameter	52 mm
Width	18 mm

## Performance

Basic dynamic load rating	49.9 kN
Basic static load rating	44 kN
Reference speed	13 000 r/min
Limiting speed	17 000 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

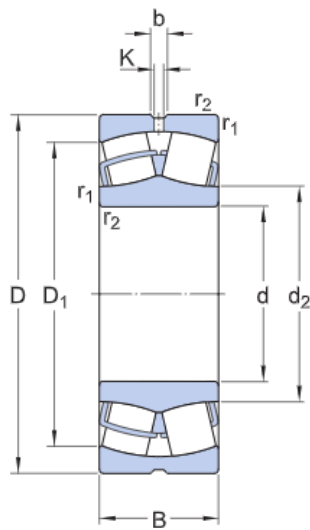
SKF performance class

SKF Explorer

Bore type

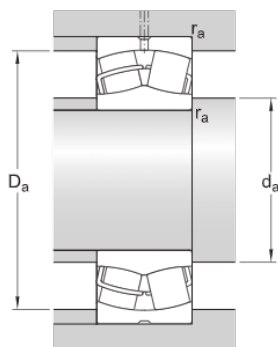
Cylindrical

## Dimensions



d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	18 mm	Width
d <sub>2</sub>	≈ 31.3 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 44.2 mm	Shoulder/recess diameter of outer ring
b	3.7 mm	Width of lubrication groove
K	2 mm	Diameter of lubrication hole
r <sub>1,2</sub>	min. 1 mm	Chamfer dimension

## Abutment dimensions



d <sub>a</sub>	min. 30.6 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 46.4 mm	Diameter of housing abutment
r <sub>a</sub>	max. 1 mm	Radius of fillet

## Calculation data

Basic dynamic load rating	C	49.9 kN
Basic static load rating	C <sub>0</sub>	44 kN

Fatigue load limit	$P_u$	4.75 kN
Reference speed		13 000 r/min
Limiting speed		17 000 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		0.18 kg
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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