

# 22218 EK



## Spherical roller bearing with tapered bore and 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	90 mm
Outside diameter	160 mm
Width	40 mm

### Performance

Basic dynamic load rating	331 kN
Basic static load rating	375 kN
Reference speed	3 800 r/min
Limiting speed	5 300 r/min
SKF performance class	SKF Explorer

### Properties

Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
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

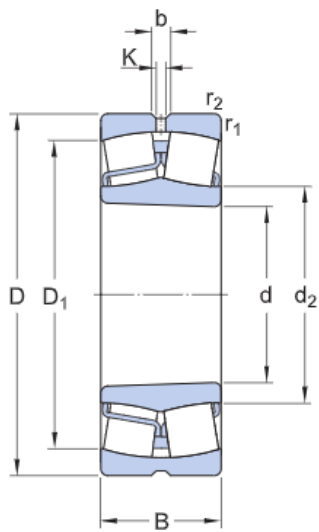
# Technical Specification

SKF performance class

SKF Explorer

Bore type

Tapered 1:12

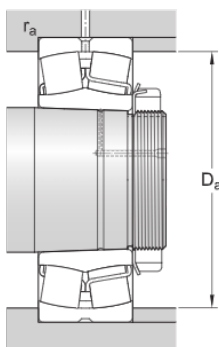


## Dimensions

d	90 mm	Bore diameter
D	160 mm	Outside diameter
B	40 mm	Width
d <sub>2</sub>	≈ 106 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 141 mm	Shoulder/recess diameter of outer ring
b	6 mm	Width of lubrication groove
K	3 mm	Diameter of lubrication hole
r <sub>1,2</sub>	min. 2 mm	Chamfer dimension

## Abutment dimensions

D <sub>a</sub>	max. 149 mm	Diameter of housing abutment
r <sub>a</sub>	max. 2 mm	Radius of fillet



## Calculation data

Basic dynamic load rating	C	331 kN
Basic static load rating	C <sub>0</sub>	375 kN

Fatigue load limit	$P_u$	39 kN
Reference speed		3 800 r/min
Limiting speed		5 300 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		3.35 kg
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## Mounting information

Recommended tightening angle for lock nut	$\alpha$	150 °
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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