



# 22316 EK Spherical roller bearing with tapered bore and relubrication features

## 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	80 mm
Outside diameter	170 mm
Width	58 mm

### Performance

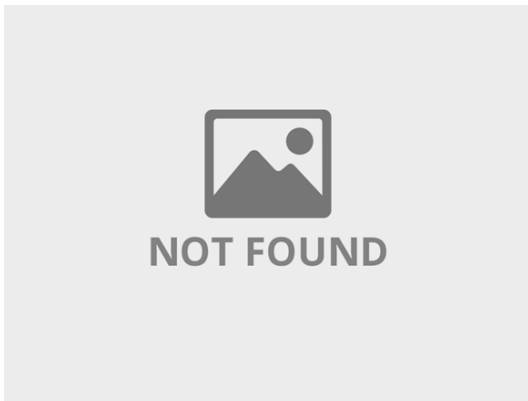
Basic dynamic load rating	516 kN
Basic static load rating	540 kN
Reference speed	3 000 r/min
Limiting speed	4 000 r/min
SKF performance class	SKF Explorer

### 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	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	Tapered 1:12

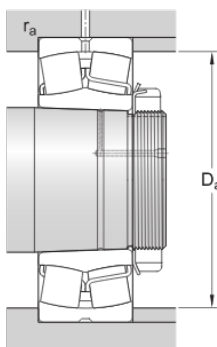


## Dimensions

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	58 mm	Width
$d_2$	≈ 98.3 mm	Shoulder diameter of inner ring
$D_1$	≈ 143 mm	Shoulder/recess diameter of outer ring
b	8.3 mm	Width of lubrication groove
K	4.5 mm	Diameter of lubrication hole
$r_{1,2}$	min. 2.1 mm	Chamfer dimension

## Abutment dimensions

$D_a$	max. 158 mm	Diameter of housing abutment
$r_a$	max. 2 mm	Radius of fillet



## Calculation data

Basic dynamic load rating	C	516 kN
Basic static load rating	$C_0$	540 kN

Fatigue load limit	$P_u$	54 kN
Reference speed		3 000 r/min
Limiting speed		4 000 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		6.15 kg
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## Mounting information

Recommended tightening angle for lock nut	$\alpha$	130 °
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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