

# 21311 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	55 mm
Outside diameter	120 mm
Width	29 mm

### Performance

Basic dynamic load rating	159 kN
Basic static load rating	166 kN
Reference speed	5 600 r/min
Limiting speed	7 500 r/min
SKF performance class	SKF Explorer

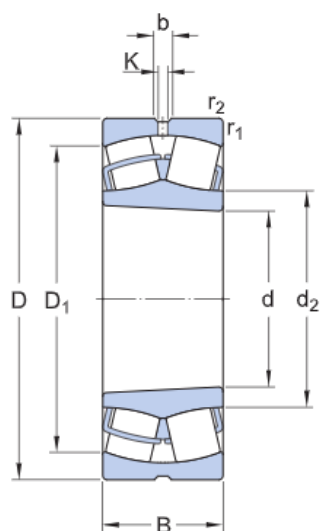
### Properties

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

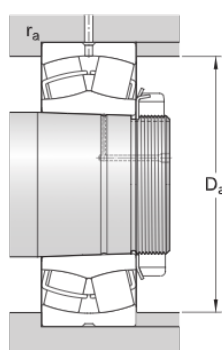
SKF performance class	SKF Explorer
Bore type	Tapered 1:12

## Dimensions



d	55 mm	Bore diameter
D	120 mm	Outside diameter
B	29 mm	Width
d <sub>2</sub>	≈ 72.7 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 96.2 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. 109 mm	Diameter of housing abutment
r <sub>a</sub>	max. 2 mm	Radius of fillet

## Calculation data

Basic dynamic load rating	C	159 kN
Basic static load rating	C <sub>0</sub>	166 kN

Fatigue load limit	$P_u$	18.6 kN
Reference speed		5 600 r/min
Limiting speed		7 500 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		1.65 kg
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## Mounting information

Recommended tightening angle for lock nut	$\alpha$	115 °
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## Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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