

### Overview

# 22214 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

#### Dimensions

Bore diameter	70 mm
Outside diameter	125 mm
Width	31 mm

#### Performance

Basic dynamic load rating	213 kN
Basic static load rating	228 kN
Reference speed	5 000 r/min
Limiting speed	6 700 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



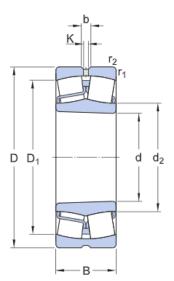
SKF Explorer

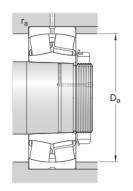
Tapered 1:12

# Technical Specification

SKF performance class

Bore type





### Dimensions

d	70 mm	Bore diameter
D	125 mm	Outside diameter
В	31 mm	Width
d <sub>2</sub>	≈83 mm	Shoulder diameter of inner ring
$D_1$	≈111 mm	Shoulder/recess diameter of outer ring
b	6 mm	Width of lubrication groove
Κ	3 mm	Diameter of lubrication hole
r <sub>1,2</sub>	min. 1.5 mm	Chamfer dimension

### Abutment dimensions

<sup>D</sup> a max. 116 mm	Diameter of housing abutment
<sup>r</sup> a max. 1.5 mm	Radius of fillet

# Calculation data

Basic dynamic load rating	С	213 kN
Basic static load rating	CO	228 kN



Fatigue load limit	P <sub>u</sub>	25.5 kN
Reference speed		5 000 r/min
Limiting speed		6 700 r/min
Limiting value	е	0.23
Calculation factor	Y <sub>1</sub>	2.9
Calculation factor	Y <sub>2</sub>	4.4
Calculation factor	Υ <sub>0</sub>	2.8

# Mass

Mass	1.6 kg

# Mounting information

Recommended tightening angle for lock nut	α	130 °

# Tolerance class

Dimensional tolerances	Normal
Radial run-out	P5



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