

# Overview

# 21313 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	65 mm
Outside diameter	140 mm
Width	33 mm

#### Performance

Basic dynamic load rating	243 kN
Basic static load rating	270 kN
Reference speed	4 300 r/min
Limiting speed	6 000 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 for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With



SKF Explorer

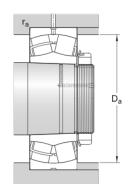
Tapered 1:12

# Technical Specification

SKF performance class

Bore type

 $F_2$   $F_2$   $F_1$   $F_1$   $F_1$   $F_1$   $F_1$   $F_1$   $F_1$   $F_1$   $F_2$   $F_1$   $F_1$   $F_1$   $F_2$   $F_1$   $F_1$   $F_2$   $F_1$   $F_2$   $F_1$   $F_2$   $F_1$   $F_2$   $F_1$   $F_2$   $F_1$   $F_2$   $F_2$   $F_1$   $F_2$   $F_2$ 



## Dimensions

d	65 mm	Bore diameter
D	140 mm	Outside diameter
В	33 mm	Width
d <sub>2</sub>	≈ 94.7 mm	Shoulder diameter of inner ring
$D_1$	≈124 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. 2.1 mm	Chamfer dimension

#### Abutment dimensions

D <sub>a</sub> max. 128 mm	Diameter of housing abutment
r <sub>a</sub> max. 2 mm	Radius of fillet

# Calculation data

Basic dynamic load rating	С	243 kN
Basic static load rating	CO	270 kN



Fatigue load limit	Pu	29 kN
Reference speed		4 300 r/min
Limiting speed		6 000 r/min
Limiting value	е	0.22
Calculation factor	Y <sub>1</sub>	3
Calculation factor	Y <sub>2</sub>	4.6
Calculation factor	Y <sub>0</sub>	2.8

# Mass

Mass		2.5 kg

# Mounting information

Recommended tightening angle for lock nut	α	115 °

## Tolerance class

Dimensional tolerances	Normal
Radial run-out	P5



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