

Overview

22210 E

Spherical roller bearing with 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	50 mm
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	107 kN
Basic static load rating	108 kN
Reference speed	7 000 r/min
Limiting speed	9 500 r/min
SKF performance class	SKF Explorer

Properties

Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
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





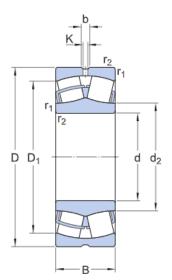
SKF Explorer

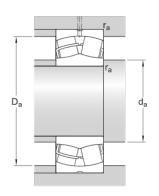
Cylindrical

Technical Specification

SKF performance class

Bore type





Calculation data

Basic dynamic load rating	С	107 kN
Basic static load rating	C ₀	108 kN



d	50 mm	Bore diameter
D	90 mm	Outside diameter
В	23 mm	Width
d_2	≈60 mm	Shoulder diameter of inner ring
D_1	≈79 mm	Shoulder/recess diameter of outer ring
b	5.5 mm	Width of lubrication groove
Κ	3 mm	Diameter of lubrication hole
r _{1,2}	min. 1.1 mm	Chamfer dimension

Abutment dimensions

^d a min. 57 mm	Diameter of shaft abutment
D _a max. 83 mm	Diameter of housing abutment
r _a max. 1 mm	Radius of fillet

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Fatigue load limit	Pu	12 kN
Reference speed		7 000 r/min
Limiting speed		9 500 r/min
Limiting value	е	0.24
Calculation factor	Y ₁	2.8
Calculation factor	Y ₂	4.2
Calculation factor	Y ₀	2.8

Mass

Mass		0.62 kg
1 1000		0.01 Ng

Tolerance class

Dimensional tolerances	Normal
Radial run-out	P5



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