





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

Overview

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

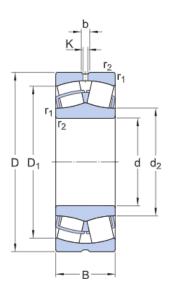
Properties

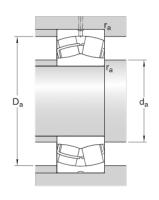
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Sheet metal
Radial internal clearance	CN
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With



Technical Specification

SKF performance class	SKF Explorer
Bore type	Cylindrical





Dimensions

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
K	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

Calculation data

Basic dynamic load rating	С	107 kN
Basic static load rating	C_0	108 kN



Fatigue load limit	P _u	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	2 kg
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Tolerance class

Dimensional tolerances	Normal
Radial run-out	P5



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