

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

Overview

Dimensions

Bore diameter	50 mm
Outside diameter	90 mm

Performance

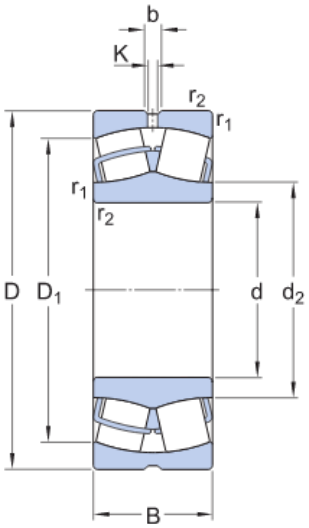
Basic dynamic load rating	107 kN
Basic static load rating	108 kN
Reference speed	7 000 r/min
Limiting speed	9 500 r/min
SKF performance class	SKF Explorer

Properties

Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Width	23 mm
Cage	Sheet metal
Radial internal clearance	CN
Tolerance class for dimensions	Normal
Toleranace class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With

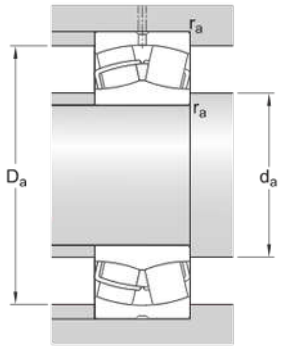
Technical Specification

SKF performance class	SKF Explorer
Bore type	Cylindrical



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	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	C	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	e	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

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