



23944 CC/W33 Spherical roller bearing with relubrication features

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	220 mm
Outside diameter	300 mm
Width	60 mm

Performance

Basic dynamic load rating	661 kN
Basic static load rating	1 080 kN
Reference speed	2 000 r/min
Limiting speed	2 200 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	Normal
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With
Candidate for remanufacturing	Yes

Technical Specification

SKF performance class

SKF Explorer

Bore type

Cylindrical



Dimensions

d	220 mm	Bore diameter
D	300 mm	Outside diameter
B	60 mm	Width
d_2	≈ 241 mm	Shoulder diameter of inner ring
D_1	≈ 278 mm	Shoulder/recess diameter of outer ring
b	8.3 mm	Width of lubrication groove
K	4.5 mm	Diameter of lubrication hole
$r_{1,2}$	min. 2.1 mm	Chamfer dimension

Abutment dimensions

d_a	min. 231 mm	Diameter of shaft abutment
D_a	max. 289 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	661 kN
Basic static load rating	C_0	1 080 kN

Fatigue load limit	P_u	93 kN
Reference speed		2 000 r/min
Limiting speed		2 200 r/min
Limiting value	e	0.16
Calculation factor	Y_1	4.2
Calculation factor	Y_2	6.3
Calculation factor	Y_0	4

Mass

Mass		12 kg
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Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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