

22216 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	80 mm
Outside diameter	140 mm
Width	33 mm

Performance

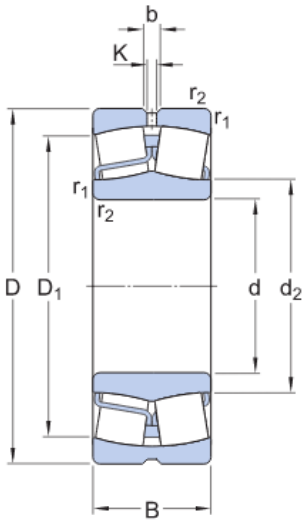
Basic dynamic load rating	243 kN
Basic static load rating	270 kN
Limiting speed	6 000 r/min
Reference speed	4 300 r/min
SKF performance class	SKF Explorer

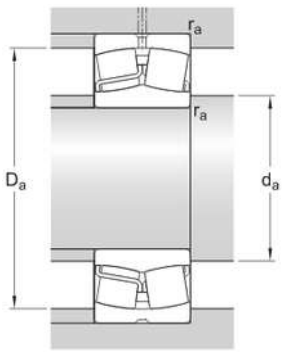
Properties

Bore type	Cylindrical
Cage	Sheet metal
Locating feature, bearing outer ring	Without
Lubricant	None
Number of rows	2
Radial internal clearance	CN
Relubrication feature	With
Sealing	Without

Technical Specification

SKF performance class	SKF Explorer
Bore type	Cylindrical





Dimensions

d	80 mm	Bore diameter
D	140 mm	Outside diameter
B	33 mm	Width
d_2	≈ 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
K	3 mm	Diameter of lubrication hole
$r_{1,2}$	min. 2 mm	Chamfer dimension

Abutment dimensions

d_a	min. 91 mm	Diameter of shaft abutment
D_a	max. 129 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	243 kN
Basic static load rating	C_0	270 kN

Fatigue load limit	P_u	29 kN
Reference speed		4 300 r/min
Limiting speed		6 000 r/min
Limiting value	e	0.22
Calculation factor	Y_1	3
Calculation factor	Y_2	4.6
Calculation factor	Y_0	2.8

Mass

Mass	2.1 kg

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