



22311 EK

Spherical roller bearing with tapered bore and 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	2.165 in
Outside diameter	4.724 in
Width	1.693 in

Performance

Basic dynamic load rating	62 947 lbf
Basic static load rating	62 947 lbf
Limiting speed	5 600 r/min
Reference speed	4 300 r/min
SKF performance class	SKF Explorer

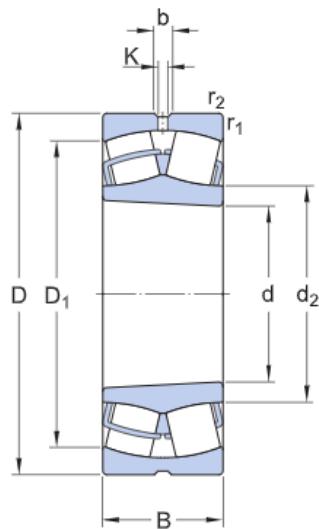
Properties

Bore type	Tapered 1:12
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

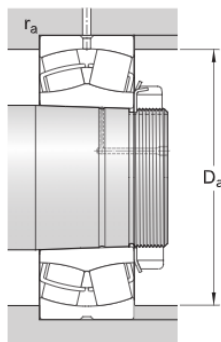
SKF performance class	SKF Explorer
Bore type	Tapered 1:12

Dimensions



d	2.165 in	Bore diameter
D	4.724 in	Outside diameter
B	1.693 in	Width
d ₂	≈ 2.76 in	Shoulder diameter of inner ring
D ₁	≈ 4.016 in	Shoulder/recess diameter of outer ring
b	0.217 in	Width of lubrication groove
K	0.118 in	Diameter of lubrication hole
r _{1,2}	min. 0.079 in	Chamfer dimension

Abutment dimensions



D _a	max. 4.291 in	Diameter of housing abutment
r _a	max. 0.079 in	Radius of fillet

Calculation data

Basic dynamic load rating	C	62 947 lbf
Basic static load rating	C ₀	62 947 lbf

Fatigue load limit	P_u	6 744 lbf
Reference speed		4 300 r/min
Limiting speed		5 600 r/min
Limiting value	e	0.35
Calculation factor	Y_1	1.9
Calculation factor	Y_2	2.9
Calculation factor	Y_0	1.8

Mass

Mass	5.071 lb
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Mounting information

Recommended tightening angle for lock nut	α	115 °
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