

22344 CCJA/W33VA405



Spherical roller bearing for vibratory applications, 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. This bearing design offers excellent performance in many types of vibrating machinery. 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
- Accommodate very high vibration levels
- Low friction and long service life
- Increased wear resistance

Overview

Dimensions

Bore diameter	220 mm
Outside diameter	460 mm
Width	145 mm

Performance

Basic dynamic load rating	2 839 kN
Basic static load rating	3 450 kN
Reference speed	1 000 r/min
Limiting speed	1 400 r/min
SKF performance class	SKF Explorer

Properties

Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Surface-hardened sheet metal
Radial internal clearance	C4
Tolerance class for dimensions	Normal, bore to P5 and outside diameter P6
Tolerance class for run-out	Normal
Sealing	Without
Lubricant	None
Relubrication feature	With
Candidate for remanufacturing	Yes

Technical Specification

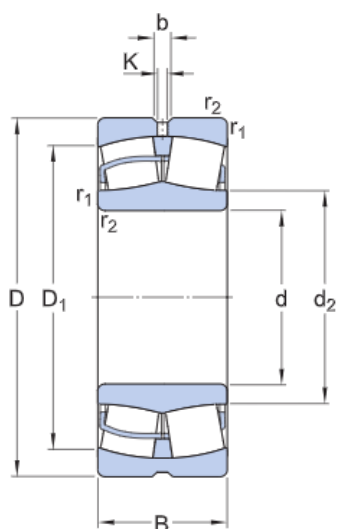
SKF performance class

SKF Explorer

Bore type

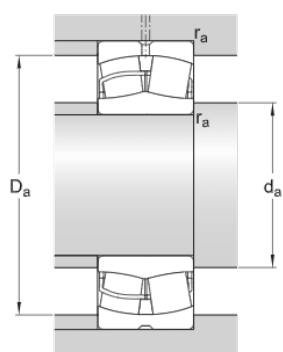
Cylindrical

Dimensions



d	220 mm	Bore diameter
D	460 mm	Outside diameter
B	145 mm	Width
d ₂	≈ 279 mm	Shoulder diameter of inner ring
D ₁	≈ 389 mm	Shoulder/recess diameter of outer ring
b	22.3 mm	Width of lubrication groove
K	12 mm	Diameter of lubrication hole
r _{1,2}	min. 5 mm	Chamfer dimension

Abutment dimensions



d _a	min. 240 mm	Diameter of shaft abutment
D _a	max. 440 mm	Diameter of housing abutment
r _a	max. 4 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	2 839 kN
Basic static load rating	C ₀	3 450 kN

Fatigue load limit	P_u	260 kN
Reference speed		1 000 r/min
Limiting speed		1 400 r/min
Limiting value	e	0.31
Calculation factor	Y_1	2.2
Calculation factor	Y_2	3.3
Calculation factor	Y_0	2.2
Permissible rotational acceleration for oil lubrication		481 m/s
Permissible linear acceleration for oil lubrication		157 m/s

Mass

Mass		120 kg
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Tolerance class

Dimensional tolerances	Normal, bore to P5 and outside diameter P6	
Radial run-out		Normal

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