



22320 EKJA/VA405 Spherical roller bearing for vibratory applications, with tapered bore and relubrication

features

Spherical roller bearing for vibratory applications, 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. 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	100 mm
Outside diameter	215 mm
Width	73 mm

Performance

Basic dynamic load rating	847 kN
Basic static load rating	950 kN
Reference speed	2 400 r/min
Limiting speed	3 000 r/min
SKF performance class	SKF Explorer

Properties

Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
Cage	Surface-hardened sheet metal
Radial internal clearance	C4
Tolerance class	Normal

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

Technical Specification

SKF performance class	SKF Explorer
Bore type	Tapered 1:12

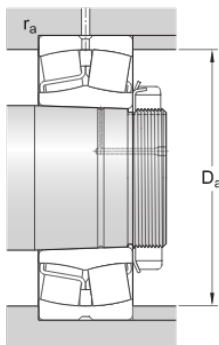


Dimensions

d	100 mm	Bore diameter
D	215 mm	Outside diameter
B	73 mm	Width
d_2	≈ 130 mm	Shoulder diameter of inner ring
D_1	≈ 184 mm	Shoulder/recess diameter of outer ring
b	11.1 mm	Width of lubrication groove
K	6 mm	Diameter of lubrication hole
$r_{1,2}$	min. 3 mm	Chamfer dimension

Abutment dimensions

D_a	max. 201 mm	Diameter of housing abutment
r_a	max. 2.5 mm	Radius of fillet



Calculation data

Basic dynamic load rating	C	847 kN
Basic static load rating	C_0	950 kN

Fatigue load limit	P_u	88 kN
Reference speed		2 400 r/min
Limiting speed		3 000 r/min
Limiting value	e	0.33
Calculation factor	Y_1	2
Calculation factor	Y_2	3
Calculation factor	Y_0	2
Permissible rotational acceleration for oil lubrication		549 m/s ²
Permissible linear acceleration for oil lubrication		196 m/s ²

Mass

Mass		13 kg
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Mounting information

Recommended tightening angle for lock nut	α	150 °
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Tolerance class

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

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