



# 22318 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	90 mm
Outside diameter	190 mm
Width	64 mm

### Performance

Basic dynamic load rating	637 kN
Basic static load rating	695 kN
Reference speed	2 600 r/min
Limiting speed	3 600 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

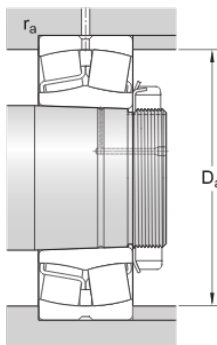


## Dimensions

d	90 mm	Bore diameter
D	190 mm	Outside diameter
B	64 mm	Width
$d_2$	≈ 113 mm	Shoulder diameter of inner ring
$D_1$	≈ 161 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. 176 mm	Diameter of housing abutment
$r_a$	max. 2.5 mm	Radius of fillet



## Calculation data

Basic dynamic load rating	C	637 kN
Basic static load rating	$C_0$	695 kN

Fatigue load limit	$P_u$	67 kN
Reference speed		2 600 r/min
Limiting speed		3 600 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		667 m/s <sup>2</sup>
Permissible linear acceleration for oil lubrication		206 m/s <sup>2</sup>

## Mass

Mass		8.85 kg
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## Mounting information

Recommended tightening angle for lock nut	$\alpha$	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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