



SKF 22319 EJA/VA405

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.

Technical specifications

General	
Bore type	Cylindrical

Dimensions	
Bore diameter	95 mm
Deviation limits of mid-range bore diameter	-0.01..0 mm
Outside diameter	200 mm
Deviation limits of mid-range outside diameter	-0.02..0 mm
Width	67 mm
Deviation limits of ring width	-0.08..0 mm
Shoulder diameter of inner ring	118 mm
Shoulder/recess diameter of outer ring	168 mm
Width of lubrication groove	11.1 mm
Diameter of lubrication hole	6 mm
Chamfer dimension	3 mm
ISO tolerance class for dimensions	Normal, bore to P5 and outside diameter P6

Abutment dimensions	
Diameter of shaft abutment	109 mm
Diameter of housing abutment	186 mm
Radius of fillet	2.5 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	699 kN
Basic static load rating	765 kN
Fatigue load limit	73.5 kN
Reference speed	2600 r/min
Limiting speed	3400 r/min
Limiting value	0.33
Calculation factor	2
Calculation factor	3
Calculation factor	2
Permissible rotational acceleration for oil lubrication	628 m/s ²
Permissible linear acceleration for oil lubrication	196 m/s ²

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	6 µm
Maximum run-out of inner ring side face to the bore	9 µm
Range of section height at outer ring of assembled bearing	15 µm
Perpendicularity of outer ring outside surface	5.5 µm
ISO tolerance class for geometrical tolerances	P5

Radial internal clearance	
Minimum initial clearance	135 µm
Maximum initial clearance	180 µm

Performance	

Basic dynamic load rating	699 kN
Basic static load rating	765 kN
Reference speed	2600 r/min
Limiting speed	3400 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	P5
Sealing	Without
Lubricant	None
Relubrication feature	With
Indicative carbon footprint for new product	37 kg CO ₂ e

Logistics	
Product net weight	10.3 kg
eClass code	23-05-09-11
UNSPSC code	31171510

