



Image may differ from product. See technical specification for details.

22308 E/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.

- Accommodate misalignment
- High load carrying capacity
- Accommodate very high vibration levels
- Low friction and long service life
- Increased wear resistance

Overview

Dimensions

Bore diameter	40 mm
Outside diameter	90 mm
Width	33 mm

Performance

Basic dynamic load rating	155 kN
Basic static load rating	140 kN
Reference speed	6 000 r/min
Limiting speed	8 000 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	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

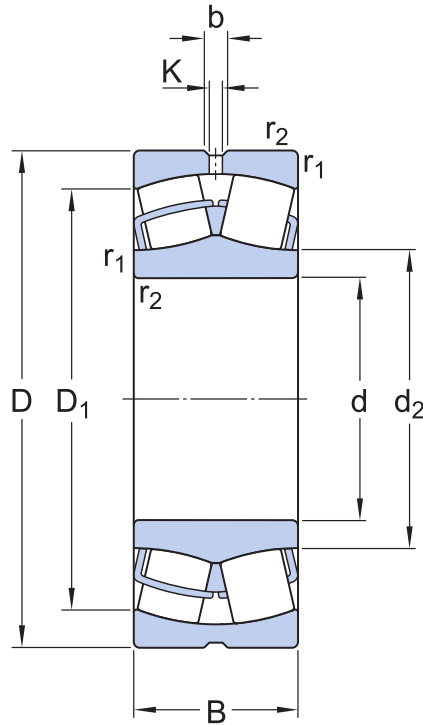
Logistics

Product net weight	1 kg
eClass code	23-05-09-11
UNSPSC code	31171510

Technical specification

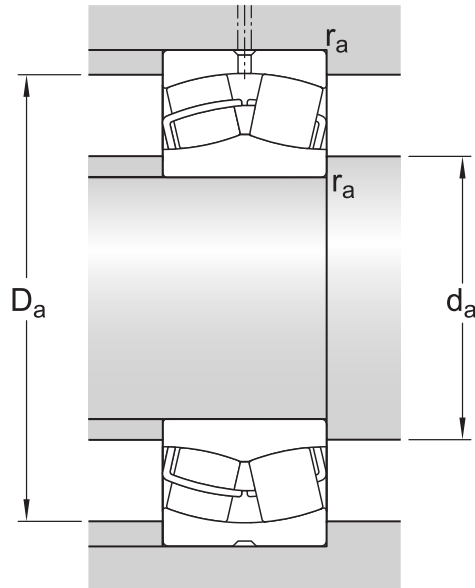
Bore type

Cylindrical



Dimensions

d	40 mm	Bore diameter
D	90 mm	Outside diameter
B	33 mm	Width
d ₂	≈ 49.9 mm	Shoulder diameter of inner ring
D ₁	≈ 74.3 mm	Shoulder/recess diameter of outer ring
b	6 mm	Width of lubrication groove
K	3 mm	Diameter of lubrication hole
r _{1,2}	min. 1.5 mm	Chamfer dimension



Abutment dimensions

d_a	min. 49 mm	Diameter of shaft abutment
D_a	max. 81 mm	Diameter of housing abutment
r_a	max. 1.5 mm	Radius of fillet




Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	155 kN
Basic static load rating	C_0	140 kN
Fatigue load limit	P_u	15 kN
Reference speed		6 000 r/min
Limiting speed		8 000 r/min
Limiting value	e	0.37
Calculation factor	Y_1	1.8
Calculation factor	Y_2	2.7
Calculation factor	Y_0	1.8
Permissible rotational acceleration for oil lubrication		1 128 m/s ²
Permissible linear acceleration for oil lubrication		304 m/s ²

Tolerance class

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

More Information

 Product details	 Engineering information	 Tools
Designs and variants		SimPro Quick
General bearing specifications	Principles of rolling bearing selection	SKF Product select
Loads	General bearing knowledge	SKF Product select
Temperature limits	Bearing selection process	LubeSelect for SKF greases
Permissible speed	Bearing failure and how to prevent it	Drive-up Method Program
Design considerations		Heater selection tool
Mounting		Oil Injection Method Program
Designation system		Tool and Accessory Selector for sleeves and shafts



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