



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

## 22207 EK

### Spherical roller bearing 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. 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
- Relubrication features
- Low friction and long service life
- Increased wear resistance

Overview

Dimensions

Bore diameter	35 mm
Outside diameter	72 mm
Width	23 mm

Performance

Basic dynamic load rating	88.8 kN
Basic static load rating	83 kN
Reference speed	9 000 r/min
Limiting speed	12 000 r/min
SKF performance class	SKF Explorer

Properties

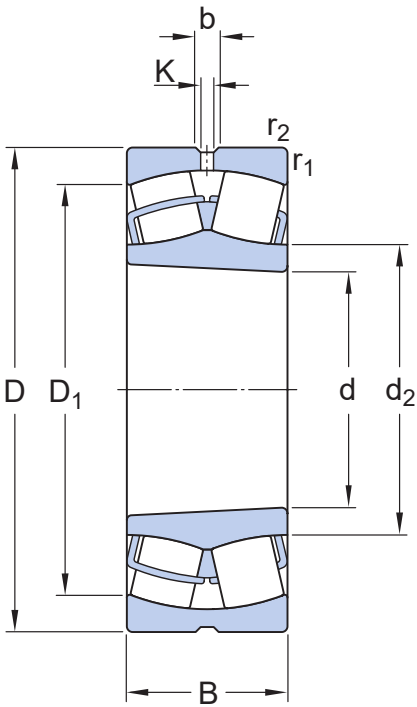
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
Cage	Sheet metal
Radial internal clearance	CN
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With

Logistics

Product net weight	0.43 kg
eClass code	23-05-09-11
UNSPSC code	31171510

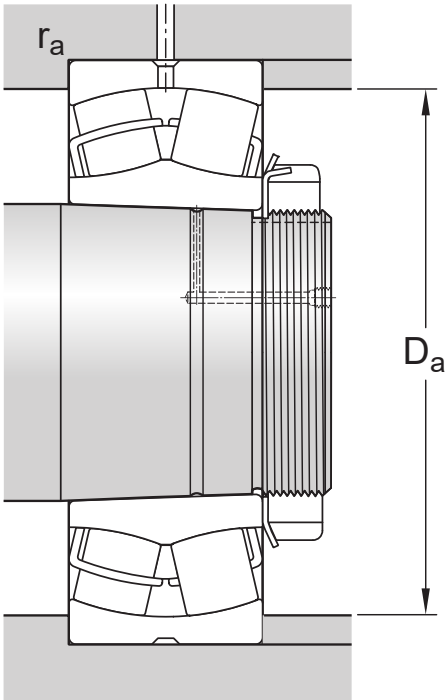
Technical specification

Bore type	Tapered 1:12
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Dimensions

d	35 mm	Bore diameter
t <sub>Δdmp</sub>	0 – 0.025 mm	Deviation limits of mid-range bore diameter
t <sub>ΔSL</sub>	0 – 0.025 mm	Deviation limits of tapered slope
D	72 mm	Outside diameter
t <sub>ΔDmp</sub>	-0.013 – 0 mm	Deviation limits of mid-range outside diameter
B	23 mm	Width
t <sub>ΔBs</sub>	-0.06 – 0 mm	Deviation limits of ring width
d <sub>2</sub>	≈ 44.5 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 61.8 mm	Shoulder/recess diameter of outer ring
b	3.7 mm	Width of lubrication groove
K	2 mm	Diameter of lubrication hole
r <sub>1,2</sub>	min. 1.1 mm	Chamfer dimension
Normal		ISO tolerance class for dimensions



Abutment dimensions

D <sub>a</sub>	max. 65 mm	Diameter of housing abutment
r <sub>a</sub>	max. 1 mm	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	88.8 kN
Basic static load rating	C <sub>0</sub>	83 kN
Fatigue load limit	P <sub>u</sub>	9.15 kN
Reference speed		9 000 r/min
Limiting speed		12 000 r/min
Limiting value	e	0.31
Calculation factor	Y <sub>1</sub>	2.2
Calculation factor	Y <sub>2</sub>	3.3
Calculation factor	Y <sub>0</sub>	2.2

## Tolerances of run-out

Range of section height at inner ring of assembled bearing	$t_{Kia}$	5 $\mu\text{m}$
Maximum run-out of inner ring side face to the bore	$t_{Sd}$	8 $\mu\text{m}$
Range of section height at outer ring of assembled bearing	$t_{Kea}$	8 $\mu\text{m}$
Perpendicularity of outer ring outside surface	$t_{SD}$	4 $\mu\text{m}$
ISO tolerance class for geometrical tolerances		P5

## Radial internal clearance

Minimum initial clearance	35 $\mu\text{m}$
Maximum initial clearance	50 $\mu\text{m}$

## Mounting information

Recommended tightening angle for lock nut	$\alpha$	115 °
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## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5, tapered bore 1:12, tapered bore 1:30
- Radial internal clearance: cylindrical bore, tapered bore

### BEARING INTERFACES




- Seat tolerances for standard conditions
- Tolerances and resultant fit

Compatible products

Recommended product

Adapter sleeve with KM lock nut and MB lock washer, metric dimensions	<a href="#">H 307</a>
Adapter sleeve with KMFE lock nut, metric dimensions	<a href="#">H 307 E</a>
Adapter sleeve with KM lock nut and MB lock washer, metric dimensions with inch bore	<a href="#">HA 307</a>
Adapter sleeve	<a href="#">HA 307 E</a>
Adapter sleeve with AN or N lock nut and W lock washer, inch dimensions	<a href="#">SNW 7X1.3/16</a>

More Information

<div> <b>Product details</b></div> <div><div><a href="#">Designs and variants</a></div><div><a href="#">General bearing specifications</a></div><div><a href="#">Loads</a></div><div><a href="#">Temperature limits</a></div><div><a href="#">Permissible speed</a></div><div><a href="#">Design considerations</a></div><div><a href="#">Mounting</a></div><div><a href="#">Designation system</a></div></div>	<div> <b>Engineering information</b></div> <div><div><a href="#">Principles of rolling bearing selection</a></div><div><a href="#">General bearing knowledge</a></div><div><a href="#">Bearing selection process</a></div><div><a href="#">Bearing failure and how to prevent it</a></div></div>	<div> <b>Tools</b></div> <div><div><a href="#">SimPro Quick</a></div><div><a href="#">SKF Product select - Select and evaluate bearing</a></div><div><a href="#">SKF Product select - Combine housing with bearing</a></div><div><a href="#">LubeSelect for SKF greases</a></div><div><a href="#">Drive-up Method Program</a></div><div><a href="#">Heater selection tool</a></div><div><a href="#">Oil Injection Method Program</a></div><div><a href="#">Tool and Accessory Selector for sleeves and shafts</a></div></div>
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