



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

22210 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	50 mm
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	107 kN
Basic static load rating	108 kN
Reference speed	7 000 r/min
Limiting speed	9 500 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

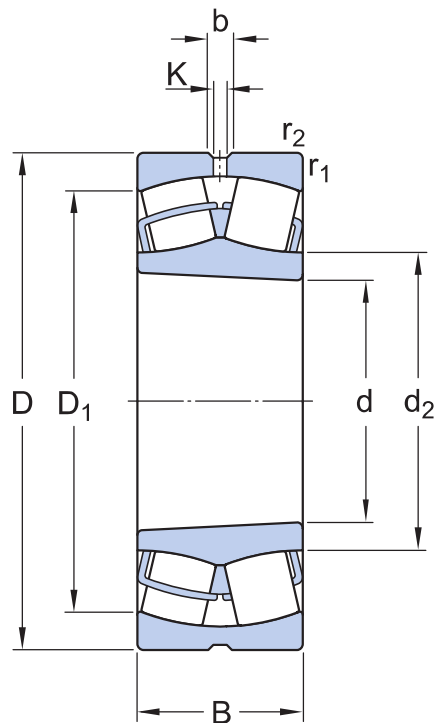
Logistics

Product net weight	0.603 kg
eClass code	23-05-09-11
UNSPSC code	31171510

Technical specification

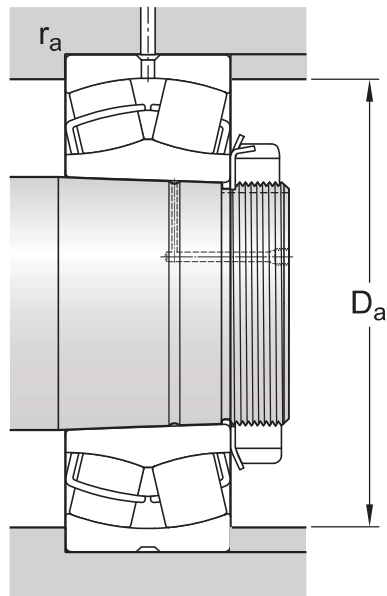
Bore type

Tapered 1:12



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d ₂	≈ 60 mm	Shoulder diameter of inner ring
D ₁	≈ 79 mm	Shoulder/recess diameter of outer ring
b	5.5 mm	Width of lubrication groove
K	3 mm	Diameter of lubrication hole
r _{1,2}	min. 1.1 mm	Chamfer dimension



Abutment dimensions

D_a	max. 83 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	107 kN
Basic static load rating	C_0	108 kN
Fatigue load limit	P_u	12 kN
Reference speed		7 000 r/min
Limiting speed		9 500 r/min
Limiting value	e	0.24
Calculation factor	Y_1	2.8
Calculation factor	Y_2	4.2
Calculation factor	Y_0	2.8

Mounting information

Recommended tightening angle for lock nut	α	130 °
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Tolerance class

Dimensional tolerances	Normal
Radial run-out	P5

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

Withdrawal sleeve, basic design, ISO standards	AHX 310
Adapter sleeve with KM lock nut and MB lock washer, metric dimensions	H 310
Adapter sleeve with KMFE lock nut, metric dimensions	H 310 E
Adapter sleeve with KM lock nut and MB lock washer, metric dimensions with inch bore	HA 310
Adapter sleeve with KM lock nut and MB lock washer, metric dimensions with inch bore	HE 310
Adapter sleeve	HE 310 E
Adapter sleeve with AN or N lock nut and W lock washer, inch dimensions	SNW 10X1.11/16

More Information

 Product details	 Engineering information	 Tools
Designs and variants		SimPro Quick
General bearing specifications	Principles of rolling bearing selection	SKF Product select - Select and evaluate bearing
Loads	General bearing knowledge	SKF Product select - Combine housing with bearing
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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