

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

229750 J/C3R505

Spherical roller bearing

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. They can be used in a modular system, including housings, sleeves and nuts.

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

Overview

Dimensions

Bore diameter	130 mm
Outside diameter	220 mm
Width	73 mm

Performance

Basic dynamic load rating	564 kN
Basic static load rating	930 kN
Reference speed	1 600 r/min
Limiting speed	2 400 r/min

Properties

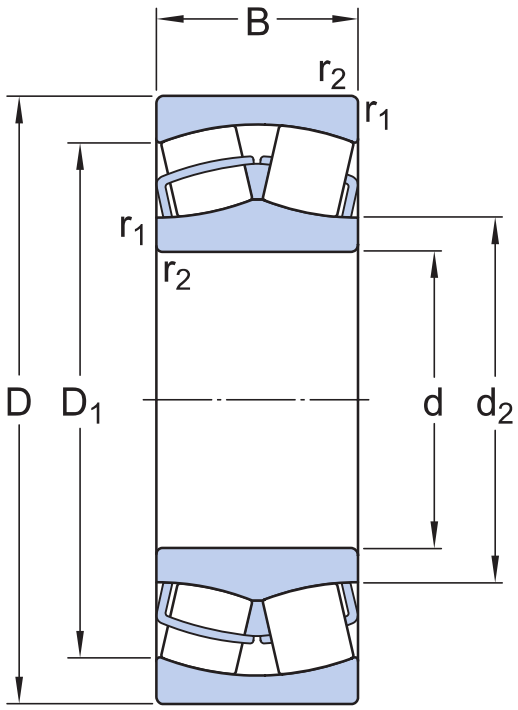
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Sheet metal
Radial internal clearance	C3
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	Without
Candidate for remanufacturing	Yes

Logistics

Product net weight	11.5 kg
eClass code	23-05-09-11
UNSPSC code	31171510

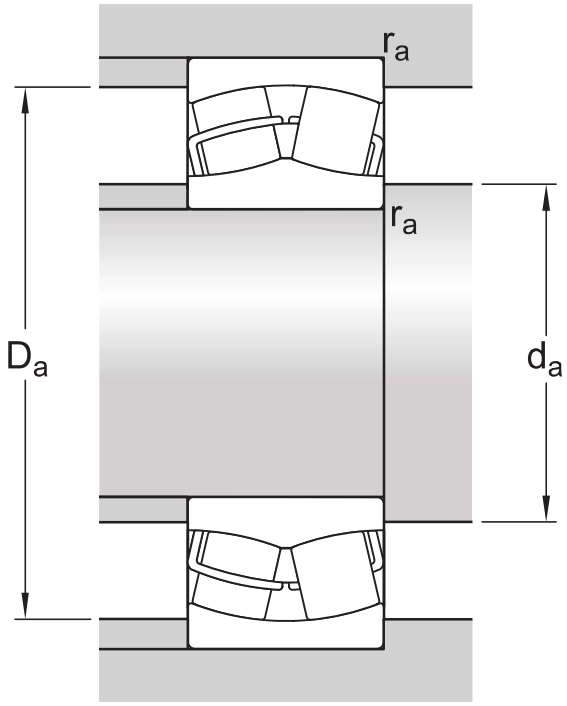
Technical specification

Bore type	Cylindrical



Dimensions

d	130 mm	Bore diameter
D	220 mm	Outside diameter
B	73 mm	Width
d_2	≈ 154 mm	Shoulder diameter of inner ring
D_1	≈ 190 mm	Shoulder/recess diameter of outer ring
$r_{1,2}$	min. 2.1 mm	Chamfer dimension



Abutment dimensions

d_a	min. 142 mm	Diameter of shaft abutment
D_a	max. 208 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	564 kN
Basic static load rating	C_0	930 kN
Fatigue load limit	P_u	93 kN
Reference speed		1 600 r/min
Limiting speed		2 400 r/min
Limiting value	e	0.31
Calculation factor	Y_1	2.2
Calculation factor	Y_2	3.3
Calculation factor	Y_0	2.2

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

More Information

Product details

- Designs and variants
- General bearing specifications
- Loads
- Temperature limits
- Permissible speed
- Design considerations
- Mounting
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing failure and how to prevent it

Tools

- SimPro Quick
- SKF Product select - Select and evaluate bearing
- SKF Product select - Combine housing with bearing
- LubeSelect for SKF greases
- Drive-up Method Program
- Heater selection tool
- Oil Injection Method Program
- Tool and Accessory Selector for sleeves and shafts

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