



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

24160 CC/W33

Spherical roller bearing 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. 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	300 mm
Outside diameter	500 mm
Width	200 mm

Performance

Basic dynamic load rating	3 876 kN
Basic static load rating	6 300 kN
Reference speed	560 r/min
Limiting speed	800 r/min
SKF performance class	SKF Explorer

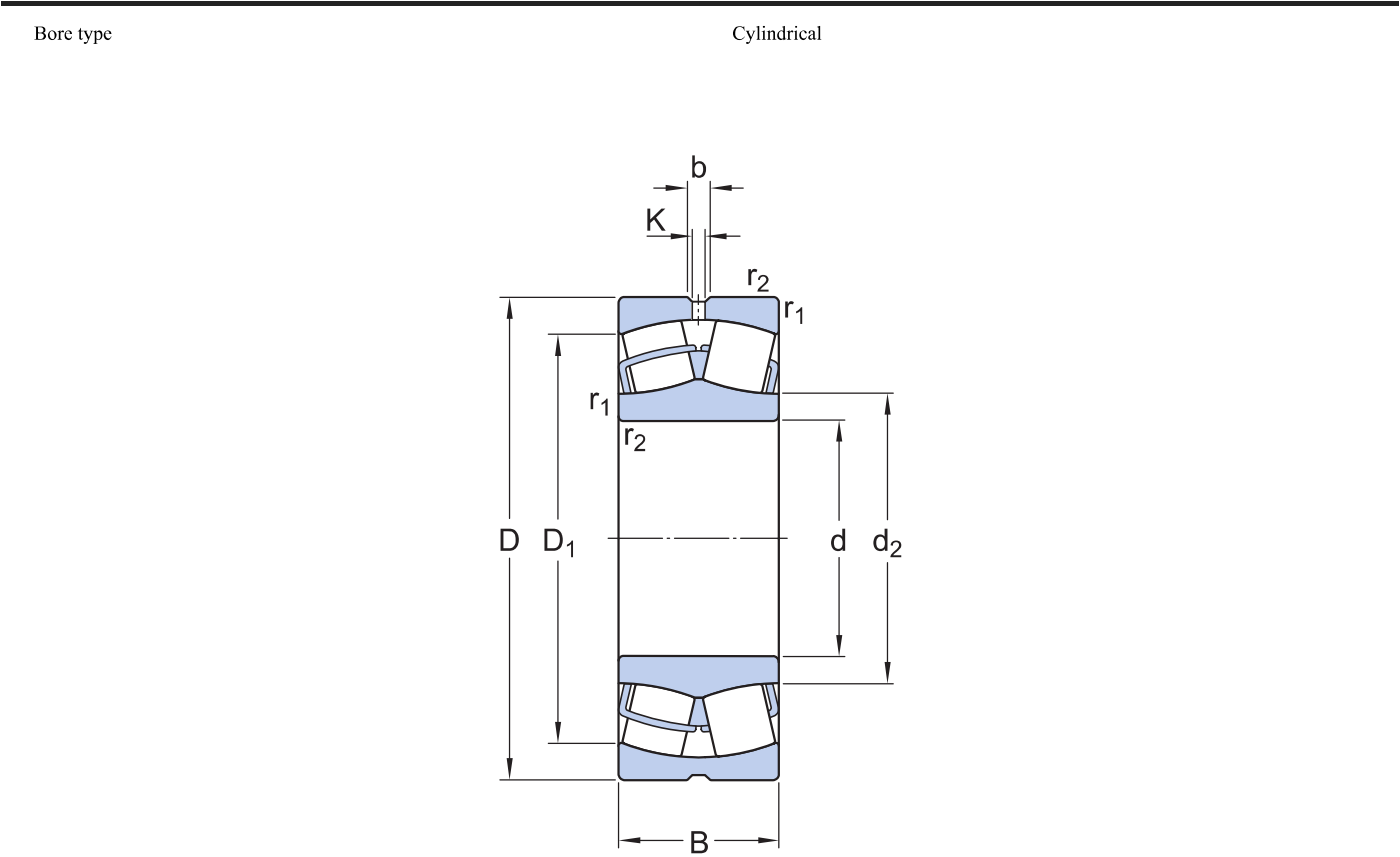
Properties

Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
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
Candidate for remanufacturing	Yes

Logistics

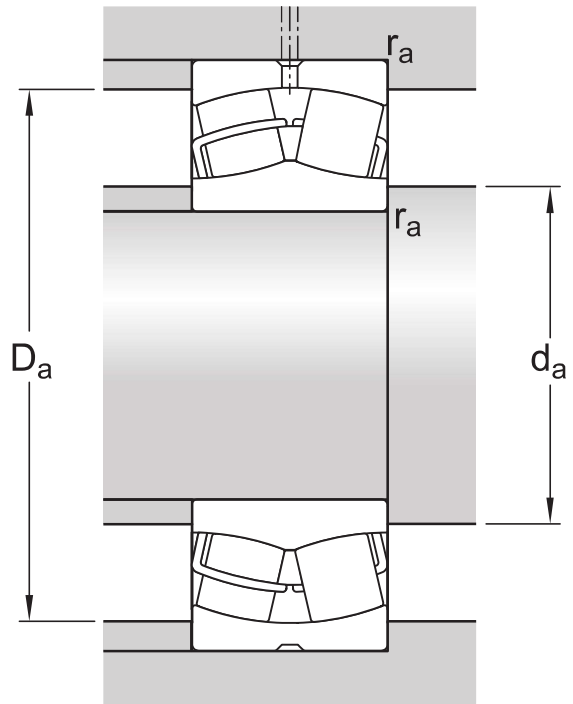
Product net weight	157 kg
eClass code	23-05-09-11
UNSPSC code	31171510

Technical specification



Dimensions

d	300 mm	Bore diameter
D	500 mm	Outside diameter
B	200 mm	Width
d ₂	≈ 338 mm	Shoulder diameter of inner ring
D ₁	≈ 422 mm	Shoulder/recess diameter of outer ring
b	13.9 mm	Width of lubrication groove
K	7.5 mm	Diameter of lubrication hole
r _{1,2}	min. 5 mm	Chamfer dimension



Abutment dimensions

d_a	min. 320 mm	Diameter of shaft abutment
D_a	max. 480 mm	Diameter of housing abutment
r_a	max. 4 mm	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	3 876 kN
Basic static load rating	C_0	6 300 kN
Fatigue load limit	P_u	465 kN
Reference speed		560 r/min
Limiting speed		800 r/min
Limiting value	e	0.4
Calculation factor	Y_1	1.7
Calculation factor	Y_2	2.5
Calculation factor	Y_0	1.6

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

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