

24024-2CS5/VT143



Spherical roller bearing with integral sealing 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. Under normal operating conditions, sealed bearings are almost maintenance-free, keeping service costs and grease consumption low. The design includes features to facilitate relubrication.

- Accommodate misalignment
- High load carrying capacity
- Sealed for increased reliability, with relubrication features
- Low friction and long service life
- Increased wear resistance

Overview

Dimensions

Bore diameter	120 mm
Outside diameter	180 mm
Width	60 mm

Performance

Basic dynamic load rating	457 kN
Basic static load rating	670 kN
Limiting speed	730 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	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	With
Candidate for remanufacturing	Yes mm

Technical Specification

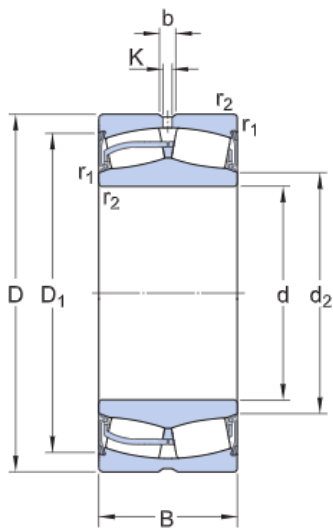
SKF performance class

SKF Explorer

Bore type

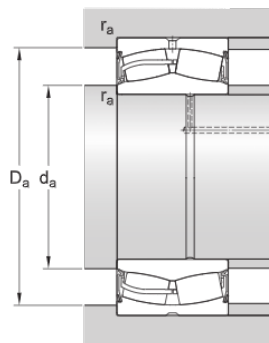
Cylindrical

Dimensions



d	120 mm	Bore diameter
D	180 mm	Outside diameter
B	60 mm	Width
d ₂	≈ 130 mm	Shoulder diameter of inner ring
D ₁	≈ 166 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. 2 mm	Chamfer dimension

Abutment dimensions



d _a	min. 129 mm	Diameter of shaft abutment
d _a	max. 130 mm	Diameter of shaft abutment
D _a	max. 171 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	457 kN
Basic static load rating	C ₀	670 kN

Fatigue load limit	P_u	68 kN
Limiting speed		730 r/min
Limiting value	e	0.28
Calculation factor	Y_1	2.4
Calculation factor	Y_2	3.6
Calculation factor	Y_0	2.5

Mass

Mass		5.45 kg
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Tolerance class

Dimensional tolerances		Normal
Radial run-out		P5

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