



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

## BS2-2216-2RSK/VT143

**Spherical roller bearing with tapered bore, 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	80 mm
Outside diameter	140 mm
Width	40 mm

## Performance

Basic dynamic load rating	243 kN
Basic static load rating	270 kN
Limiting speed	2 100 r/min
SKF performance class	SKF Explorer

## Properties

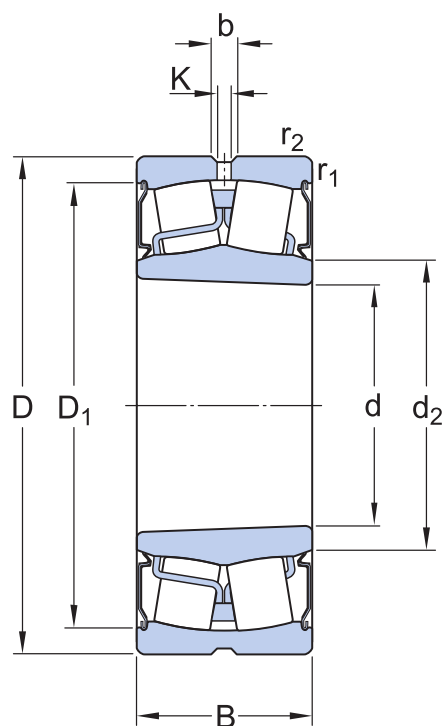
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
Cage	Sheet metal
Radial internal clearance	CN
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	With

## Logistics

Product net weight	2.36 kg
eClass code	23-05-09-11
UNSPSC code	31171510

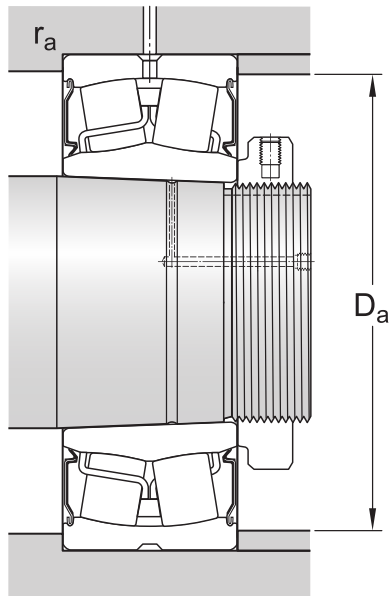
# Technical specification

Bore type	Tapered 1:12
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## Dimensions

d	80 mm	Bore diameter
D	140 mm	Outside diameter
B	40 mm	Width
d <sub>2</sub>	≈ 91.7 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 129 mm	Shoulder/recess diameter of outer ring
b	6 mm	Width of lubrication groove
K	3 mm	Diameter of lubrication hole
r <sub>1,2</sub>	min. 2 mm	Chamfer dimension



## Abutment dimensions

$d_a$	max. 91.5 mm	Diameter of shaft abutment
$D_a$	max. 129 mm	Diameter of housing abutment
$r_a$	max. 2 mm	Radius of fillet

## Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	243 kN
Basic static load rating	$C_0$	270 kN
Fatigue load limit	$P_u$	29 kN
Limiting speed		2 100 r/min
Limiting value	e	0.22
Calculation factor	$Y_1$	3
Calculation factor	$Y_2$	4.6
Calculation factor	$Y_0$	2.8

## Mounting information

Recommended tightening angle for lock nut	$\alpha$	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

Adapter sleeve with KMFE lock nut, metric dimensions	<a href="#">H 316 E</a>
Adapter sleeve	<a href="#">HA 316 E</a>
Adapter sleeve	<a href="#">HE 316 E</a>
Adapter sleeve with AN or N lock nut and W lock washer, inch dimensions	<a href="#">SNW 16X2.11/16</a>
Adapter sleeve with AN or N lock nut and W lock washer, inch dimensions	<a href="#">SNW 16X2.3/4</a>
Adapter sleeve with AN or N lock nut and W lock washer, inch dimensions	<a href="#">SNW 16X2.5/8</a>

# More Information

<div> Product details</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> Engineering information</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> Tools</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>
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