



### BS2-2209-2RS/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	45 mm
Outside diameter	85 mm
Width	28 mm

#### Performance

Basic dynamic load rating	104 kN
Basic static load rating	100 kN
Limiting speed	3 600 r/min
SKF performance class	SKF Explorer

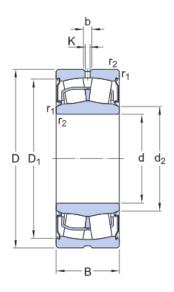
### **Properties**

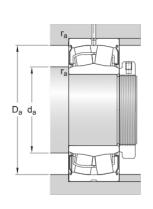
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Sheet metal
Radial internal clearance	CN
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	With



## Technical Specification

SKF performance class	SKF Explorer
Bore type	Cylindrical





### Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
В	28 mm	Width
$d_2$	≈ 52.5 mm	Shoulder diameter of inner ring
$D_1$	≈ 77.8 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. 1.1 mm	Chamfer dimension

### Abutment dimensions

d <sub>a</sub> min. 52 mm	Diameter of shaft abutment
d <sub>a</sub> max. 52.5 mm	Diameter of shaft abutment
D <sub>a</sub> max. 78 mm	Diameter of housing abutment
r <sub>a</sub> max. 1 mm	Radius of fillet

### Calculation data

Basic dynamic load rating	С	104 kN
Basic static load rating	$C_0$	100 kN



Fatigue load limit	$P_{u}$	10.8 kN
Limiting speed		3 600 r/min
Limiting value	е	0.26
Calculation factor	$Y_{1}$	2.6
Calculation factor	Y <sub>2</sub>	3.9
Calculation factor	Y <sub>0</sub>	2.5

### Mass

Mass 0.66 kg

### Tolerance class

Dimensional tolerances	Normal
Radial run-out	P5



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