

## 22308 EK



## Spherical roller bearing with tapered bore 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. 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    | 40 mm |
| Outside diameter | 90 mm |
| Width            | 33 mm |

### Performance

|                           |              |
|---------------------------|--------------|
| Basic dynamic load rating | 155 kN       |
| Basic static load rating  | 140 kN       |
| Reference speed           | 6 000 r/min  |
| Limiting speed            | 8 000 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                              | Without      |
| Lubricant                            | None         |
| Relubrication feature                | With         |

# Technical Specification

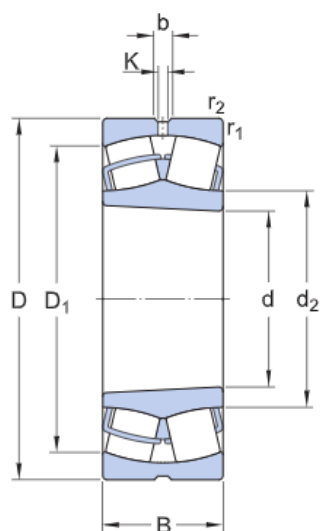
SKF performance class

SKF Explorer

Bore type

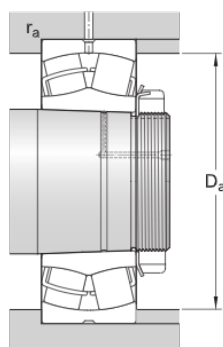
Tapered 1:12

## Dimensions



|                  |             |                                        |
|------------------|-------------|----------------------------------------|
| d                | 40 mm       | Bore diameter                          |
| D                | 90 mm       | Outside diameter                       |
| B                | 33 mm       | Width                                  |
| d <sub>2</sub>   | ≈ 49.9 mm   | Shoulder diameter of inner ring        |
| D <sub>1</sub>   | ≈ 74.3 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. 1.5 mm | Chamfer dimension                      |

## Abutment dimensions



|    |             |                              |
|----|-------------|------------------------------|
| Da | max. 81 mm  | Diameter of housing abutment |
| ra | max. 1.5 mm | Radius of fillet             |

## Calculation data

|                           |                |        |
|---------------------------|----------------|--------|
| Basic dynamic load rating | C              | 155 kN |
| Basic static load rating  | C <sub>0</sub> | 140 kN |

|                    |       |             |
|--------------------|-------|-------------|
| Fatigue load limit | $P_u$ | 15 kN       |
| Reference speed    |       | 6 000 r/min |
| Limiting speed     |       | 8 000 r/min |
| Limiting value     | $e$   | 0.37        |
| Calculation factor | $Y_1$ | 1.8         |
| Calculation factor | $Y_2$ | 2.7         |
| Calculation factor | $Y_0$ | 1.8         |

## Mass

|      |         |
|------|---------|
| Mass | 0.99 kg |
|------|---------|

## Mounting information

|                                           |          |       |
|-------------------------------------------|----------|-------|
| Recommended tightening angle for lock nut | $\alpha$ | 115 ° |
|-------------------------------------------|----------|-------|

## Tolerance class

|                        |        |
|------------------------|--------|
| Dimensional tolerances | Normal |
| Radial run-out         | P5     |

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