

# 22309 EK

Popular item  
SKF Explorer

## Spherical roller bearings

### Bearing data

[Tolerances,](#)

Normal, P6, P5, tapered bore 1:12,  
tapered bore 1:30,

[Radial internal clearance,](#)

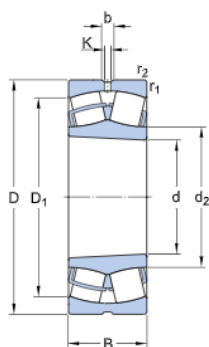
cylindrical bore, tapered bore

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

## Technical specification

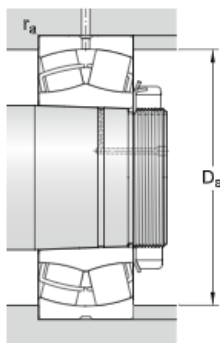


### DIMENSIONS

|                          |             |
|--------------------------|-------------|
| d                        | 45 mm       |
| D                        | 100 mm      |
| B                        | 36 mm       |
| d <sub>2</sub>           | ≈ 57.6 mm   |
| D <sub>1</sub>           | ≈ 83.4 mm   |
| b                        | 6 mm        |
| K                        | 3 mm        |
| r <sub>1,2</sub>         | min. 1.5 mm |
| Tapered bore, taper 1:12 |             |

### ABUTMENT DIMENSIONS

|                |             |
|----------------|-------------|
| D <sub>a</sub> | max. 91 mm  |
| r <sub>a</sub> | max. 1.5 mm |



## CALCULATION DATA

|                           |                |            |
|---------------------------|----------------|------------|
| Basic dynamic load rating | C              | 190 kN     |
| Basic static load rating  | C <sub>0</sub> | 183 kN     |
| Fatigue load limit        | P <sub>u</sub> | 19.6 kN    |
| Reference speed           |                | 5300 r/min |
| Limiting speed            |                | 7000 r/min |
| Calculation factor        | e              | 0.37       |
| Calculation factor        | Y <sub>1</sub> | 1.8        |
| Calculation factor        | Y <sub>2</sub> | 2.7        |
| Calculation factor        | Y <sub>0</sub> | 1.8        |

## MASS

|              |         |
|--------------|---------|
| Mass bearing | 1.35 kg |
|--------------|---------|

## MOUNTING INFORMATION

|                                       |   |       |
|---------------------------------------|---|-------|
| Recommended lock nut tightening angle | α | 130 ° |
|---------------------------------------|---|-------|

## More information

| Product details                       | Engineering information                                 | Tools                                                                  |
|---------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------|
| <a href="#">Designs and variants</a>  | <a href="#">Principles of rolling bearing selection</a> | <a href="#">SimPro Quick</a>                                           |
| <a href="#">Bearing data</a>          | <a href="#">General bearing knowledge</a>               | <a href="#">Bearing Select</a>                                         |
| <a href="#">Loads</a>                 | <a href="#">Bearing selection process</a>               | <a href="#">Engineering Calculator</a>                                 |
| <a href="#">Temperature limits</a>    | <a href="#">Bearing failure and how to prevent it</a>   | <a href="#">Housing Select</a>                                         |
| <a href="#">Permissible speed</a>     |                                                         | <a href="#">LubeSelect for SKF greases</a>                             |
| <a href="#">Design considerations</a> |                                                         | <a href="#">Drive-up Method Program</a>                                |
| <a href="#">Mounting</a>              |                                                         | <a href="#">Heater selection tool</a>                                  |
| <a href="#">Designation system</a>    |                                                         | <a href="#">Oil Injection Method Program</a>                           |
|                                       |                                                         | <a href="#">Rolling bearings mounting and dismounting instructions</a> |
|                                       |                                                         | <a href="#">Tool and Accessory Selector for sleeves and shafts</a>     |

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