



# 21311 E Spherical roller

## bearings

Popular item  
SKF Explorer

### Spherical roller bearings

#### Bearing data

##### Tolerances,

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

##### Radial internal clearance,

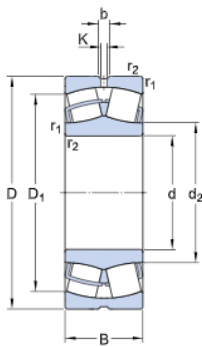
cylindrical bore, tapered bore

#### Bearing interfaces

Seat tolerances for standard  
conditions,

Tolerances and resultant fit

## Technical specification

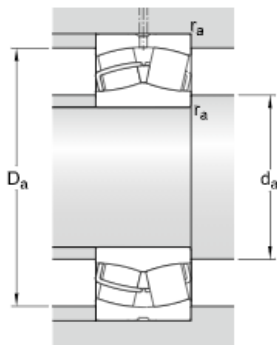


### DIMENSIONS

|                  |           |
|------------------|-----------|
| d                | 55 mm     |
| D                | 120 mm    |
| B                | 29 mm     |
| d <sub>2</sub>   | ≈ 72.7 mm |
| D <sub>1</sub>   | ≈ 96.2 mm |
| b                | 6 mm      |
| K                | 3 mm      |
| r <sub>1,2</sub> | min. 2 mm |

### ABUTMENT DIMENSIONS

|                |             |
|----------------|-------------|
| d <sub>a</sub> | min. 66 mm  |
| D <sub>a</sub> | max. 109 mm |
| r <sub>a</sub> | max. 2 mm   |



## CALCULATION DATA

|                           |                |             |
|---------------------------|----------------|-------------|
| Basic dynamic load rating | C              | 159 kN      |
| Basic static load rating  | C <sub>0</sub> | 166 kN      |
| Fatigue load limit        | P <sub>u</sub> | 18.6 kN     |
| Reference speed           |                | 5 600 r/min |
| Limiting speed            |                | 7 500 r/min |
| Calculation factor        | e              | 0.24        |
| Calculation factor        | Y <sub>1</sub> | 2.8         |
| Calculation factor        | Y <sub>2</sub> | 4.2         |
| Calculation factor        | Y <sub>0</sub> | 2.8         |

## MASS

|              |        |
|--------------|--------|
| Mass bearing | 1.7 kg |
|--------------|--------|

## 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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