



# 6209 N

SKF Explorer

## Deep groove ball bearings

### Bearing data

[Tolerances](#),

Normal (metric), P6, P5, Normal (inch),

[Radial internal clearance](#),

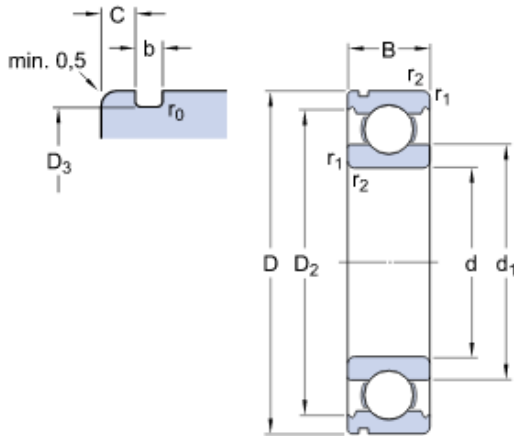
Matched bearing pairs, Stainless steel  
 $d < 10$  mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions](#),

[Tolerances and resultant fits](#)

## Technical specification

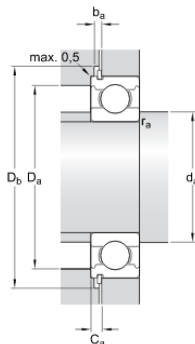


### DIMENSIONS

|           |             |
|-----------|-------------|
| d         | 45 mm       |
| D         | 85 mm       |
| B         | 19 mm       |
| $d_1$     | ≈ 57.6 mm   |
| $D_2$     | ≈ 75.19 mm  |
| $D_3$     | 81.81 mm    |
| b         | 1.9 mm      |
| C         | 3.28 mm     |
| $r_0$     | max. 0.6 mm |
| $r_{1,2}$ | min. 1.1 mm |

### ABUTMENT DIMENSIONS

|       |              |
|-------|--------------|
| $d_a$ | min. 52 mm   |
| $D_a$ | max. 78 mm   |
| $D_b$ | min. 93 mm   |
| $b_a$ | min. 2.2 mm  |
| $C_a$ | max. 4.98 mm |
| $r_a$ | max. 1 mm    |



## CALCULATION DATA

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 35.1 kN     |
| Basic static load rating  | $C_0$ | 21.6 kN     |
| Fatigue load limit        | $P_u$ | 0.915 kN    |
| Reference speed           |       | 17000 r/min |
| Limiting speed            |       | 11000 r/min |
| Calculation factor        | $k_f$ | 0.025       |
| Calculation factor        | $f_0$ | 14          |

## MASS

|              |  |         |
|--------------|--|---------|
| Mass bearing |  | 0.41 kg |
|--------------|--|---------|

More information

| Product details  | Product details  | Engineering information   | Engineering information   | Tools  | Tools  |
|--|--|---|---|--|--|
| <a href="#">Single row deep groove ball bearings Stainless steel deep groove ball bearings Single row deep groove ball bearings with filling slots Double row deep groove ball bearings Bearing data</a> | <a href="#">Single row deep groove ball bearings Stainless steel deep groove ball bearings Single row deep groove ball bearings with filling slots Double row deep groove ball bearings Bearing data</a> | <a href="#">Principles of rolling bearing selection General bearing knowledge</a> | <a href="#">Principles of rolling bearing selection General bearing knowledge</a> | <a href="#">Bearing Select</a>   | <a href="#">Bearing Select</a>   |
|  |  | <a href="#">Bearing selection process</a>   | <a href="#">Bearing selection process</a>   | <a href="#">SimPro Quick</a>   | <a href="#">SimPro Quick</a>   |
|  |  | <a href="#">Bearing interfaces</a>  | <a href="#">Bearing interfaces</a>  | <a href="#">Engineering Calculator</a>                                 | <a href="#">Engineering Calculator</a>                                 |
|  |  | <a href="#">Seat tolerances for standard condition</a>                            | <a href="#">Seat tolerances for standard condition</a>                            | <a href="#">LubeSelect for SKF greases</a>                             | <a href="#">LubeSelect for SKF greases</a>                             |
|  |  | <a href="#">Selecting internal clearance</a>                                      | <a href="#">Selecting internal clearance</a>                                      | <a href="#">Heater selection tool</a>                                  | <a href="#">Heater selection tool</a>                                  |
| <a href="#">Loads</a>  | <a href="#">Loads</a>  | <a href="#">Lubrication</a>   | <a href="#">Lubrication</a>   | <a href="#">Rolling bearings mounting and dismounting instructions</a> | <a href="#">Rolling bearings mounting and dismounting instructions</a> |
| <a href="#">Temperature limits</a>   | <a href="#">Temperature limits</a>   | <a href="#">Sealing, mounting and dismounting</a>                                 | <a href="#">Sealing, mounting and dismounting</a>                                 |  |  |
| <a href="#">Permissible speed</a>  | <a href="#">Permissible speed</a>  | <a href="#">Bearing failure and how to prevent it</a>                             | <a href="#">Bearing failure and how to prevent it</a>                             |  |  |
| <a href="#">Designation system</a>   | <a href="#">Designation system</a>   |   |   |  |  |

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