



# 6010-Z Deep groove ball bearings

- SKF Explorer

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

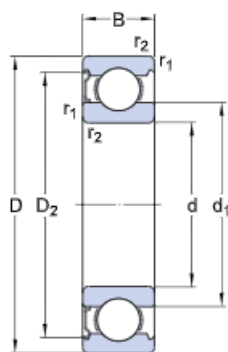
d < 10 mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fits](#)

## Technical specification

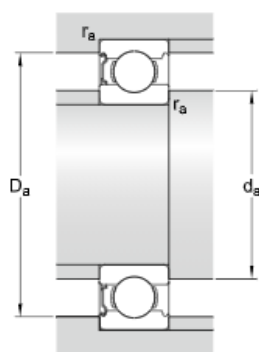


### DIMENSIONS

|                  |            |                   |
|------------------|------------|-------------------|
| d                | 50 mm      | Bore diameter     |
| D                | 80 mm      | Outside diameter  |
| B                | 16 mm      | Width             |
| d <sub>1</sub>   | ≈ 59.75 mm | Shoulder diameter |
| D <sub>2</sub>   | ≈ 72.8 mm  | Recess diameter   |
| r <sub>1,2</sub> | min. 1 mm  | Chamfer dimension |

### ABUTMENT DIMENSIONS

|                             |                                   |
|-----------------------------|-----------------------------------|
| d <sub>c</sub> min. 54.6 mm | Diameter of shaft abutment        |
| d <sub>c</sub> max. 59.7 mm | Diameter of shaft abutment        |
| D <sub>i</sub> max. 75.4 mm | Diameter of housing abutment      |
| r <sub>a</sub> max. 1 mm    | Radius of shaft or housing fillet |



## CALCULATION DATA

|                |              |                           |
|----------------|--------------|---------------------------|
| C              | 22.9 kN      | Basic dynamic load rating |
| C <sub>0</sub> | 15.6 kN      | Basic static load rating  |
| P <sub>u</sub> | 0.71 kN      | Fatigue load limit        |
|                | 18 000 r/min | Reference speed           |
|                | 11 000 r/min | Limiting speed            |
| k <sub>r</sub> | 0.025        | Minimum load factor       |
| f <sub>0</sub> | 14.7         | Calculation factor        |

## MASS

|         |              |
|---------|--------------|
| 0.27 kg | Mass bearing |
|---------|--------------|

## TOLERANCE CLASS

|    |                        |
|----|------------------------|
| P6 | Dimensional tolerances |
| P6 | Radial run-out         |