

# 6005-2Z Deep groove ball bearings

- Popular item

- SKF Explorer

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

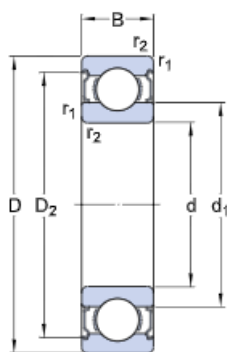
$d < 10$  mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fits](#)

## Technical specification

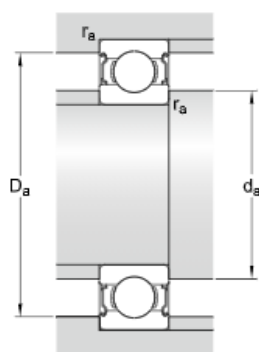


### DIMENSIONS

|           |                   |                   |
|-----------|-------------------|-------------------|
| d         | 25 mm             | Bore diameter     |
| D         | 47 mm             | Outside diameter  |
| B         | 12 mm             | Width             |
| $d_1$     | $\approx 32$ mm   | Shoulder diameter |
| $D_2$     | $\approx 42.2$ mm | Recess diameter   |
| $r_{1,2}$ | min. 0.6 mm       | Chamfer dimension |

### ABUTMENT DIMENSIONS

|                        |                                   |
|------------------------|-----------------------------------|
| $d_{\xi}$ min. 28.2 mm | Diameter of shaft abutment        |
| $d_{\xi}$ max. 31.9 mm | Diameter of shaft abutment        |
| $D_{\xi}$ max. 43.8 mm | Diameter of housing abutment      |
| $r_a$ max. 0.6 mm      | Radius of shaft or housing fillet |



## CALCULATION DATA

|                |              |                           |
|----------------|--------------|---------------------------|
| C              | 11.9 kN      | Basic dynamic load rating |
| C <sub>0</sub> | 6.55 kN      | Basic static load rating  |
| P <sub>u</sub> | 0.275 kN     | Fatigue load limit        |
|                | 32 000 r/min | Reference speed           |
|                | 16 000 r/min | Limiting speed            |
| k <sub>r</sub> | 0.025        | Minimum load factor       |
| f <sub>0</sub> | 14           | Calculation factor        |

## MASS

|          |              |
|----------|--------------|
| 0.083 kg | Mass bearing |
|----------|--------------|

## TOLERANCE CLASS

|    |                        |
|----|------------------------|
| P6 | Dimensional tolerances |
| P5 | Radial run-out         |