



# W 61806-2RZ Deep groove ball bearings

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

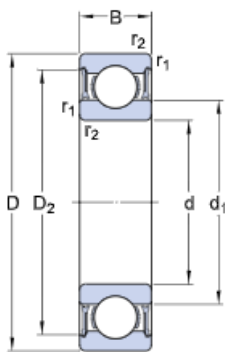
Matched bearing pairs, Stainless steel  
 $d < 10$  mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fits](#)

## Technical specification

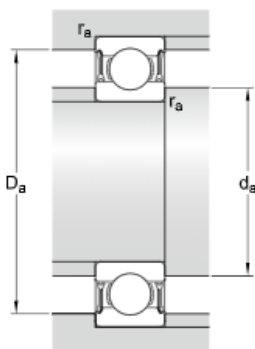


### DIMENSIONS

|           |             |                   |
|-----------|-------------|-------------------|
| d         | 30 mm       | Bore diameter     |
| D         | 42 mm       | Outside diameter  |
| B         | 7 mm        | Width             |
| $d_1$     | ≈ 33.11 mm  | Shoulder diameter |
| $d_2$     | ≈ 33.11 mm  | Recess diameter   |
| $D_2$     | ≈ 39.2 mm   | Recess diameter   |
| $r_{1,2}$ | min. 0.3 mm | Chamfer dimension |

### ABUTMENT DIMENSIONS

|                        |        |                                   |
|------------------------|--------|-----------------------------------|
| $d_{\varepsilon}$ min. | 32 mm  | Diameter of shaft abutment        |
| $d_{\varepsilon}$ max. | 33 mm  | Diameter of shaft abutment        |
| $D_i$ max.             | 40 mm  | Diameter of housing abutment      |
| $r_a$ max.             | 0.3 mm | Radius of shaft or housing fillet |



## CALCULATION DATA

|                |              |                           |
|----------------|--------------|---------------------------|
| C              | 3.58 kN      | Basic dynamic load rating |
| C <sub>0</sub> | 2.9 kN       | Basic static load rating  |
| P <sub>u</sub> | 0.125 kN     | Fatigue load limit        |
|                | 34 000 r/min | Reference speed           |
|                | 17 000 r/min | Limiting speed            |
| k <sub>r</sub> | 0.02         | Minimum load factor       |
| f <sub>0</sub> | 14.1         | Calculation factor        |

## MASS

|  |          |              |
|--|----------|--------------|
|  | 0.024 kg | Mass bearing |
|--|----------|--------------|

## TOLERANCE CLASS

|        |                        |
|--------|------------------------|
| Normal | Dimensional tolerances |
| Normal | Radial run-out         |