



# WBB1-8708-2Z

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

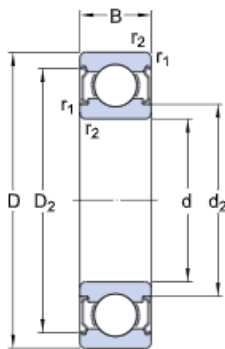
$d < 10$  mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

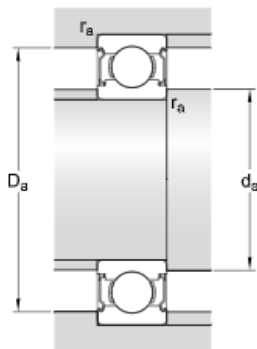
[Tolerances and resultant fits](#)

## Technical specification



### DIMENSIONS

|           |                     |
|-----------|---------------------|
| $d$       | 0.315 in            |
| $D$       | 0.5512 in           |
| $B$       | 0.1575 in           |
| $d_2$     | $\approx 0.3646$ in |
| $D_2$     | $\approx 0.5032$ in |
| $r_{1,2}$ | min. 0.0059 in      |



### ABUTMENT DIMENSIONS

|       |                |
|-------|----------------|
| $d_a$ | min. 0.3504 in |
| $d_a$ | max. 0.3622 in |
| $D_a$ | max. 0.5079 in |
| $r_a$ | max. 0.0059 in |

## CALCULATION DATA

|                           |                |             |
|---------------------------|----------------|-------------|
| Basic dynamic load rating | C              | 104 lbf     |
| Basic static load rating  | C <sub>0</sub> | 43 lbf      |
| Fatigue load limit        | P <sub>u</sub> | 0.45 lbf    |
| Reference speed           |                | 95000 r/min |
| Limiting speed            |                | 48000 r/min |
| Calculation factor        | k <sub>r</sub> | 0.015       |
| Calculation factor        | f <sub>0</sub> | 7.8         |

## MASS

|              |            |
|--------------|------------|
| Mass bearing | 0.0045 lbs |
|--------------|------------|

## More information

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

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