

**FAG****6309-C-Z-C4>V**

## Deep groove ball bearing

Deep groove ball bearing 63.-C-Z, single row, Generation C, shield, steel sheet metal cage

## Technical information



## Your current product variant

|                                  |              |   |
|----------------------------------|--------------|---|
| Version code                     | >V           | Not marked on bearing                   |
| Changed internal design          | C            | GenerationC                             |
| Sealing                          | Z            | Non-contact shield on one Side          |
| Cage                             | JN           | Steel sheet metal                       |
| Tolerance class                  | P6           | Class 6 (ISO 492:2023)                  |
| Dimensional / heat stabilization | S0           | Rings dimensional stabilized up to 150° |
| Lubricant                        | Without      | Bearing not greased                     |
| Radial internal clearance        | C4 (Group 4) | Internal clearance larger than C3       |
| Bore type                        | Z            | Cylindrical                             |

## Main Dimensions &amp; Performance Data

|             |              |                                   |
|-------------|--------------|-----------------------------------|
| d           | 45 mm        | Bore diameter                     |
| D           | 100 mm       | Outside diameter                  |
| B           | 25 mm        | Width                             |
| $C_r$       | 62.000 N     | Basic dynamic load rating, radial |
| $C_{0r}$    | 31.500 N     | Basic static load rating, radial  |
| $C_{ur}$    | 2.190 N      | Fatigue load limit, radial        |
| $n_G$       | 10.500 1/min | Limiting speed                    |
| $n_{gr}$    | 9.100 1/min  | Reference speed                   |
| $\approx m$ | 0,818 kg     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 54 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 91 mm  | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius                |

### Dimensions

|            |          |                              |
|------------|----------|------------------------------|
| $r_{\min}$ | 1,5 mm   | Minimum chamfer dimension    |
| $D_1$      | 83,6 mm  | Shoulder diameter outer ring |
| $D_2$      | 86,37 mm | Caliber diameter outer ring  |
| $d_1$      | 62,25 mm | Shoulder diameter inner ring |
| $d_2$      | 60,33 mm | Caliber diameter inner ring  |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 150 °C | Operating temperature max. |

### Calculation factors

|       |      |                    |
|-------|------|--------------------|
| $f_0$ | 12,9 | Calculation factor |
|-------|------|--------------------|

### Characteristics

|   |                              |
|---|------------------------------|
|  | Radial load                  |
|  | Axial load in one direction  |
|  | Axial load in two directions |
|  | Grease Lubrication           |
|  | Oil Lubrication              |
|  | Sealed on one side           |