

**FAG****51109**

Axial deep groove ball bearing

Axial deep groove ball bearing 511, single direction, steel sheet metal cage

## Technical information

**Your current product variant**

|                                  |    |   |
|----------------------------------|----|---|
| Cage                             | JP | Steel sheet metal                       |
| Tolerance class                  | PN | Normal (ISO 492:2023)                   |
| Dimensional / heat stabilization | S0 | Rings dimensional stabilized up to 150° |

**Main Dimensions & Performance Data**

|          |             |                                  |
|----------|-------------|----------------------------------|
| d        | 45 mm       | Inner diameter shaft washer      |
| D        | 65 mm       | Outer diameter housing washer    |
| T        | 14 mm       | Height                           |
| $C_a$    | 26,500 N    | Basic dynamic load rating, axial |
| $C_{0a}$ | 69,000 N    | Basic static load rating, axial  |
| $C_{ua}$ | 3,100 N     | Fatigue load limit, axial        |
| $n_G$    | 7,100 1/min | Limiting speed                   |
| $n_{gr}$ | 5,800 1/min | Reference speed                  |
| $m$      | 0.151 kg    | Weight                           |

**Mounting dimensions**

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 57 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 53 mm  | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 0.6 mm | Maximum filled radius                |



### Dimensions

|            |        |                               |
|------------|--------|-------------------------------|
| $r_{\min}$ | 0.6 mm | Minimum chamfer dimension     |
| $D_1$      | 47 mm  | Inner diameter housing washer |
| $d_1$      | 65 mm  | Outer diameter shaft washer   |

### Temperature range

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

### Calculation factors

|   |       |                     |
|---|-------|---------------------|
| A | 0.025 | Minimum load factor |
|---|-------|---------------------|

### Characteristics

-  Axial load in one direction
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed