

**FAG****23960-B-K-MB**

## Spherical Roller Bearing

Spherical roller bearings 239...-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | B            | With fixed central rib    |
| Bore type                 | K            | Tapered, taper 1:12       |
| Cage                      | MB           | Solid brass cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication             | Standard     |                           |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 300 mm      | Bore diameter                     |
| D           | 420 mm      | Outside diameter                  |
| B           | 90 mm       | Width                             |
| $C_r$       | 1.270.000 N | Basic dynamic load rating, radial |
| $C_{0r}$    | 2.650.000 N | Basic static load rating, radial  |
| $C_{ur}$    | 170.000 N   | Fatigue load limit, radial        |
| $n_G$       | 1.780 1/min | Limiting speed                    |
| $n_{gr}$    | 1.000 1/min | Reference speed                   |
| $\approx m$ | 37,825 kg   | Weight                            |





### Mounting dimensions

|              |          |                                       |
|--------------|----------|---------------------------------------|
| $d_{a \min}$ | 312,4 mm | Minimum diameter shaft shoulder       |
| $D_{a \max}$ | 407,6 mm | Maximum diameter of housing shoulder  |
| $r_{a \max}$ | 2,5 mm   | Maximum recess radius                 |
| $d_{a \max}$ | 329 mm   | Maximum diameter of shaft shoulder    |
| $d_{b \min}$ | 311 mm   | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 12 mm    | Minimum cavity width of the sleeve    |

### Dimensions

|            |          |                             |
|------------|----------|-----------------------------|
| $r_{\min}$ | 3 mm     | Minimum chamfer dimension   |
| $D_1$      | 384,6 mm | Bore diameter outer ring    |
| $d_s$      | 9,5 mm   | Diameter lubrication hole   |
| $n_s$      | 17,7 mm  | Width of lubricating groove |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 200 °C | Operating temperature max. |

### Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,2  | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 3,42 | Dynamic axial load factor  |
| $Y_2$ | 5,09 | Dynamic axial load factor  |
| $Y_0$ | 3,34 | Static axial load factor   |










### Additional information

|         |                   |
|---------|-------------------|
| H3960   | Adapter sleeve    |
| AH3960G | Withdrawal sleeve |



### Characteristics

---

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed
-  Large bearing
-  Static angular error and misalignment
-  Dynamic angular error and misalignment