



FAG

**22338-BE-XL-K**

## Spherical Roller Bearing

Spherical roller bearings 223...-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

X-life

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | BE           | With lose center lip ring |
| Bore type                 | K            | Tapered, taper 1:12       |
| Cage                      | JPB          | Sheet metal cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility    | Standard     |                           |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 190 mm      | Bore diameter                     |
| D           | 400 mm      | Outside diameter                  |
| B           | 132 mm      | Width                             |
| $C_r$       | 2.220.000 N | Basic dynamic load rating, radial |
| $C_{0r}$    | 2.650.000 N | Basic static load rating, radial  |
| $C_{ur}$    | 213.000 N   | Fatigue load limit, radial        |
| $n_G$       | 1.940 1/min | Limiting speed                    |
| $n_{gr}$    | 1.160 1/min | Reference speed                   |
| $\approx m$ | 76,135 kg   | Weight                            |



### Mounting dimensions

|              |        |                                       |
|--------------|--------|---------------------------------------|
| $d_{a \min}$ | 210 mm | Minimum diameter shaft shoulder       |
| $d_{a \max}$ | 228 mm | Maximum diameter of shaft shoulder    |
| $D_{a \max}$ | 380 mm | Maximum diameter of housing shoulder  |
| $r_{a \max}$ | 4 mm   | Maximum recess radius                 |
| $d_{b \min}$ | 206 mm | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 9 mm   | Minimum cavity width of the sleeve    |

### Dimensions

|            |          |                                    |
|------------|----------|------------------------------------|
| $r_{\min}$ | 5 mm     | Minimum chamfer dimension          |
| $D_1$      | 338,1 mm | Bore diameter outer ring           |
| $d_2$      | 236,8 mm | Raceway diameter of the inner ring |
| $d_s$      | 12,5 mm  | Diameter lubrication hole          |
| $n_s$      | 23,5 mm  | Width of lubricating groove        |

### Temperature range

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

### Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,34 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 1,96 | Dynamic axial load factor  |
| $Y_2$ | 2,92 | Dynamic axial load factor  |
| $Y_0$ | 1,92 | Static axial load factor   |

### Additional information

|         |                   |
|---------|-------------------|
| H2338   | Adapter sleeve    |
| AH2338G | Withdrawal sleeve |



### Characteristics

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-  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