



FAG

**22312-E1-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                    | E1           | Without central rip       |
| Bore type                 | K            | Tapered, taper 1:12       |
| Cage                      | JPA          | Sheet metal cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication             | Standard     |                           |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 60 mm       | Bore diameter                     |
| D           | 130 mm      | Outside diameter                  |
| B           | 46 mm       | Width                             |
| $C_r$       | 310.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$    | 310.000 N   | Basic static load rating, radial  |
| $C_{ur}$    | 29.000 N    | Fatigue load limit, radial        |
| $n_G$       | 5.400 1/min | Limiting speed                    |
| $n_{gr}$    | 4.200 1/min | Reference speed                   |
| $\approx m$ | 2,7 kg      | Weight                            |



### Mounting dimensions

|              |        |                                       |
|--------------|--------|---------------------------------------|
| $d_{a \min}$ | 72 mm  | Minimum diameter shaft shoulder       |
| $d_{a \max}$ | 74 mm  | Maximum diameter of shaft shoulder    |
| $D_{a \max}$ | 118 mm | Maximum diameter of housing shoulder  |
| $r_{a \max}$ | 2,1 mm | Maximum recess radius                 |
| $d_{b \min}$ | 66 mm  | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 5 mm   | Minimum cavity width of the sleeve    |

### Dimensions

|            |          |                                    |
|------------|----------|------------------------------------|
| $r_{\min}$ | 2,1 mm   | Minimum chamfer dimension          |
| $D_1$      | 110,1 mm | Bore diameter outer ring           |
| $d_2$      | 74,8 mm  | Raceway diameter of the inner ring |
| $d_s$      | 3,2 mm   | Diameter lubrication hole          |
| $n_s$      | 6,5 mm   | Width of lubricating groove        |

### Temperature range

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

### Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,35 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 1,91 | Dynamic axial load factor  |
| $Y_2$ | 2,85 | Dynamic axial load factor  |
| $Y_0$ | 1,87 | Static axial load factor   |

### Additional information

|         |                   |
|---------|-------------------|
| H2312   | Adapter sleeve    |
| AHX2312 | 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



Static angular error and misalignment



Dynamic angular error and misalignment