



FAG

**22313-E1-XL-C4**

Spherical Roller Bearing

Spherical roller bearings 223...-E1, main dimensions to DIN 635-2

X-life

## Technical information



## Your current product variant

|                           |              |                                   |
|---------------------------|--------------|-----------------------------------|
| Design                    | E1           | Without central rip               |
| Bore type                 | Z            | Cylindrical                       |
| Cage                      | JPA          | Sheet metal cage                  |
| Radial internal clearance | C4 (Group 4) | Internal clearance larger than C3 |
| Relubrication facility    | Standard     |                                   |



## Main Dimensions &amp; Performance Data

|          |             |                                   |
|----------|-------------|-----------------------------------|
| d        | 65 mm       | Bore diameter                     |
| D        | 140 mm      | Outside diameter                  |
| B        | 48 mm       | Width                             |
| $C_r$    | 350.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$ | 365.000 N   | Basic static load rating, radial  |
| $C_{ur}$ | 33.500 N    | Fatigue load limit, radial        |
| $n_G$    | 5.000 1/min | Limiting speed                    |
| $n_{gr}$ | 3.800 1/min | Reference speed                   |
| $m$      | 3,566 kg    | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 77 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 128 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2,1 mm | Maximum recess radius                |

### Dimensions

|            |          |                                    |
|------------|----------|------------------------------------|
| $r_{\min}$ | 2,1 mm   | Minimum chamfer dimension          |
| $D_1$      | 119,3 mm | Bore diameter outer ring           |
| $d_2$      | 83,2 mm  | Raceway diameter of the inner ring |
| $d_s$      | 4,8 mm   | Diameter lubrication hole          |
| $n_s$      | 9,5 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 |
| $Y_1$ | 2    | Dynamic axial load factor  |
| $Y_2$ | 2,98 | Dynamic axial load factor  |
| $Y_0$ | 1,96 | Static axial load factor   |



### Characteristics

---

-  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