



FAG

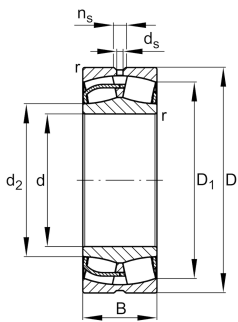
**23044-BE-XL**

## Spherical Roller Bearing

Spherical roller bearings 230...-E1, main dimensions to DIN 635-2

X-life

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | BE           | With lose center lip ring |
| Bore type                 | Z            | Cylindrical               |
| Cage                      | JPB          | Sheet metal cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication             | Standard     |                           |

## Main Dimensions &amp; Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 220 mm      | Bore diameter                     |
| D               | 340 mm      | Outside diameter                  |
| B               | 90 mm       | Width                             |
| C <sub>r</sub>  | 1.260.000 N | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 1.900.000 N | Basic static load rating, radial  |
| C <sub>ur</sub> | 182.000 N   | Fatigue load limit, radial        |
| n <sub>G</sub>  | 2.230 1/min | Limiting speed                    |
| n <sub>gr</sub> | 1.450 1/min | Reference speed                   |
| ≈m              | 29,245 kg   | Weight                            |

## Mounting dimensions

|                    |          |                                      |
|--------------------|----------|--------------------------------------|
| d <sub>a min</sub> | 232,4 mm | Minimum diameter shaft shoulder      |
| D <sub>a max</sub> | 327,6 mm | Maximum diameter of housing shoulder |
| r <sub>a max</sub> | 2,5 mm   | Maximum recess radius                |



Dimensions

|           |          |                                    |
|-----------|----------|------------------------------------|
| $r_{min}$ | 3 mm     | Minimum chamfer dimension          |
| $D_1$     | 304,5 mm | Bore diameter outer ring           |
| $d_2$     | 248,8 mm | Raceway diameter of the inner ring |
| $d_s$     | 8 mm     | Diameter lubrication hole          |
| $n_s$     | 15 mm    | Width of lubricating groove        |

Temperature range

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

Calculation factors

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,24 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,81 | Dynamic axial load factor                                                            |
| $Y_2$ | 4,19 | Dynamic axial load factor                                                            |
| $Y_0$ | 2,75 | Static axial load factor                                                             |

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