



FAG

**24152-BE-XL-K30**

## Spherical Roller Bearing

Spherical roller bearings 241...-BE-K30, main dimensions to DIN 635-2, with tapered bore, taper 1:30

X-life

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | BE           | With lose center lip ring |
| Bore type                 | K30          | Tapered, taper 1:30       |
| Cage                      | JPB          | Sheet metal cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility    | Standard     |                           |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 260 mm      | Bore diameter                     |
| D           | 440 mm      | Outside diameter                  |
| B           | 180 mm      | Width                             |
| $C_r$       | 3.150.000 N | Basic dynamic load rating, radial |
| $C_{0r}$    | 4.900.000 N | Basic static load rating, radial  |
| $C_{ur}$    | 400.000 N   | Fatigue load limit, radial        |
| $n_G$       | 1.290 1/min | Limiting speed                    |
| $n_{gr}$    | 560 1/min   | Reference speed                   |
| $\approx m$ | 107,94 kg   | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 277 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 423 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 3 mm   | Maximum recess radius                |

### Dimensions

|            |          |                                    |
|------------|----------|------------------------------------|
| $r_{\min}$ | 4 mm     | Minimum chamfer dimension          |
| $D_1$      | 370,6 mm | Bore diameter outer ring           |
| $d_2$      | 292,2 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

|       |      |  |
|-------|------|--|
| $e$   | 0,4  | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 1,67 | Dynamic axial load factor  |
| $Y_2$ | 2,49 | Dynamic axial load factor  |
| $Y_0$ | 1,63 | Static axial load factor   |

### Additional information

|         |                   |
|---------|-------------------|
| AH24152 | 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