

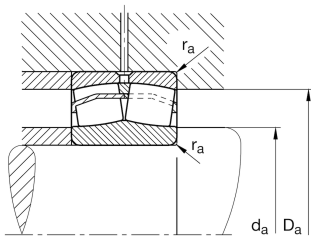
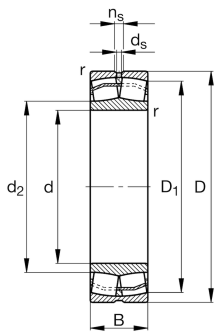
**FAG****22205-E1-XL-C3**

## Spherical Roller Bearing

Spherical roller bearings 222...-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 | C3 (Group 3) | Internal clearance larger than CN |
| Relubrication             | Standard     |                                   |

## Main Dimensions &amp; Performance Data

|             |              |                                   |
|-------------|--------------|-----------------------------------|
| d           | 25 mm        | Bore diameter                     |
| D           | 52 mm        | Outside diameter                  |
| B           | 18 mm        | Width                             |
| $C_r$       | 48.500 N     | Basic dynamic load rating, radial |
| $C_{0r}$    | 42.500 N     | Basic static load rating, radial  |
| $C_{ur}$    | 4.900 N      | Fatigue load limit, radial        |
| $n_G$       | 14.400 1/min | Limiting speed                    |
| $n_{gr}$    | 9.200 1/min  | Reference speed                   |
| $\approx m$ | 0,171 kg     | Weight                            |

## Mounting dimensions

|              |         |                                      |
|--------------|---------|--------------------------------------|
| $d_{a \min}$ | 30,6 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 46,4 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1 mm    | Maximum recess radius                |



### Dimensions

|            |         |                                    |
|------------|---------|------------------------------------|
| $r_{\min}$ | 1 mm    | Minimum chamfer dimension          |
| $D_1$      | 44,4 mm | Bore diameter outer ring           |
| $d_2$      | 31,5 mm | Raceway diameter of the inner ring |
| $d_s$      | 3,2 mm  | Diameter lubrication hole          |
| $n_s$      | 4,8 mm  | Width of lubricating groove        |

### Temperature range

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

### Calculation factors

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,33 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,07 | Dynamic axial load factor                                                            |
| $Y_2$ | 3,09 | Dynamic axial load factor                                                            |
| $Y_0$ | 2,03 | 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 |