

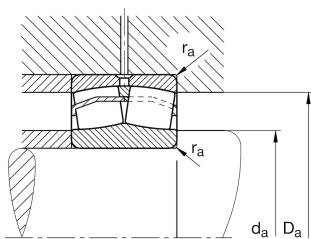
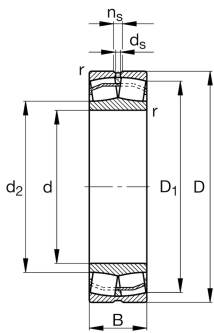
**FAG****22210-E1-XL-C3**

## 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           | 50 mm       | Bore diameter                     |
| D           | 90 mm       | Outside diameter                  |
| B           | 23 mm       | Width                             |
| $C_r$       | 109.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$    | 107.000 N   | Basic static load rating, radial  |
| $C_{ur}$    | 14.600 N    | Fatigue load limit, radial        |
| $n_G$       | 9.800 1/min | Limiting speed                    |
| $n_{gr}$    | 5.100 1/min | Reference speed                   |
| $\approx m$ | 0,585 kg    | Weight                            |

## Mounting dimensions

|              |       |                                      |
|--------------|-------|--------------------------------------|
| $d_{a \min}$ | 57 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 83 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1 mm  | Maximum recess radius                |



Dimensions

|           |         |                                    |
|-----------|---------|------------------------------------|
| $r_{min}$ | 1,1 mm  | Minimum chamfer dimension          |
| $D_1$     | 80,8 mm | Bore diameter outer ring           |
| $d_2$     | 59,9 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

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,23 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,95 | Dynamic axial load factor                                                            |
| $Y_2$ | 4,4  | Dynamic axial load factor                                                            |
| $Y_0$ | 2,89 | 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