

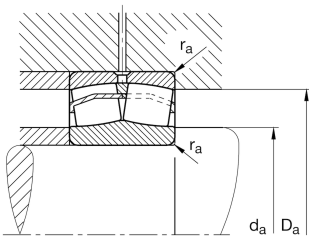
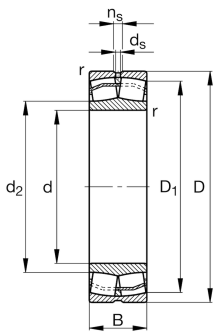
**FAG****22220-E1-XL-C3**

## 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           | 100 mm      | Bore diameter                     |
| D           | 180 mm      | Outside diameter                  |
| B           | 46 mm       | Width                             |
| $C_r$       | 430.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$    | 475.000 N   | Basic static load rating, radial  |
| $C_{ur}$    | 53.000 N    | Fatigue load limit, radial        |
| $n_G$       | 4.550 1/min | Limiting speed                    |
| $n_{gr}$    | 3.150 1/min | Reference speed                   |
| $\approx m$ | 4,962 kg    | Weight                            |

## Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 112 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 168 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2,1 mm | Maximum recess radius                |



Dimensions

|           |          |                                    |
|-----------|----------|------------------------------------|
| $r_{min}$ | 2,1 mm   | Minimum chamfer dimension          |
| $D_1$     | 161,4 mm | Bore diameter outer ring           |
| $d_2$     | 119 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

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,24 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,84 | Dynamic axial load factor                                                            |
| $Y_2$ | 4,23 | Dynamic axial load factor                                                            |
| $Y_0$ | 2,78 | 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