View product details on medias

20.04.2026, 10:25:24 UTC

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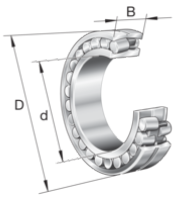



FAG

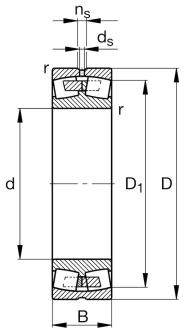
# 22220-E1A-XL-M

Spherical Roller Bearing

Spherical roller bearing 222..-E1A-XL-M,
symmetric 2 outer ribs

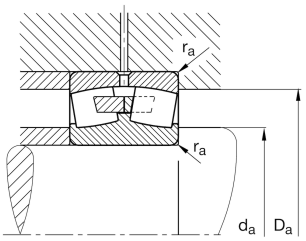
X-life

## Technical information




### Your current product variant

| | | |
|---|---|---|
| Design | E1A | Without central rip |
| Bore type | Z | Cylindrical |
| Cage | M | Brass Cage |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility | Standard | |




### Main Dimensions & 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 |
| $n_{\vartheta r}$ | 3.150 1/min | Reference speed |
| ≈m | 4,931 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 Fa/Fr 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


Static angular error and misalignment