



FAG

**22256-BEA-XL-MB1**

Spherical Roller Bearing

Spherical roller bearing 222...-BEA-XL-MB1,  
symmetric 2 outer ribs with rib washer

X-life

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | BEA          | With lose center lip ring |
| Bore type                 | Z            | Cylindrical               |
| Cage                      | MB1          | Solid brass cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility    | Standard     |                           |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 280 mm      | Bore diameter                     |
| D           | 500 mm      | Outside diameter                  |
| B           | 130 mm      | Width                             |
| $C_r$       | 2.750.000 N | Basic dynamic load rating, radial |
| $C_{0r}$    | 3.700.000 N | Basic static load rating, radial  |
| $C_{ur}$    | 320.000 N   | Fatigue load limit, radial        |
| $n_G$       | 1.650 1/min | Limiting speed                    |
| $n_{gr}$    | 990 1/min   | Reference speed                   |
| $\approx m$ | 108,495 kg  | Weight                            |

## Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 300 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 480 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 4 mm   | Maximum recess radius                |



## Dimensions

|            |         |                             |
|------------|---------|-----------------------------|
| $r_{\min}$ | 5 mm    | Minimum chamfer dimension   |
| $D_1$      | 436 mm  | Bore diameter outer ring    |
| $d_s$      | 12,5 mm | Diameter lubrication hole   |
| $n_s$      | 23,5 mm | Width of lubricating groove |

## Temperature range

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

## Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,25 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,71 | Dynamic axial load factor  |
| $Y_2$ | 4,04 | Dynamic axial load factor  |
| $Y_0$ | 2,65 | Static axial load factor   |

## Characteristics

|   |  |
|---|--|
|  | 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 |