

**FAG****23184-BEA-XL-MB1**

Spherical Roller Bearing

Spherical roller bearing 231..-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 | |
| Handling thread holes | H78C | Handling thread holes, outer ring |

Main Dimensions & Performance Data

| | | |
|-------------|-------------|-----------------------------------|
| d | 420 mm | Bore diameter |
| D | 700 mm | Outside diameter |
| B | 224 mm | Width |
| C_r | 6.000.000 N | Basic dynamic load rating, radial |
| C_{0r} | 9.600.000 N | Basic static load rating, radial |
| C_{ur} | 660.000 N | Fatigue load limit, radial |
| n_G | 860 1/min | Limiting speed |
| n_{gr} | 455 1/min | Reference speed |
| $\approx m$ | 344 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 446 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 674 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 5 mm | Maximum recess radius |

Dimensions

| | | |
|------------|----------|-----------------------------|
| r_{\min} | 6 mm | Minimum chamfer dimension |
| D_1 | 609,8 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 | 0,31 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2,18 | Dynamic axial load factor |
| Y_2 | 3,24 | Dynamic axial load factor |
| Y_0 | 2,13 | 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