



FAG

24156-BE-XL-C3

Spherical Roller Bearing

Spherical roller bearing 241...-BE-XL,
symmetric with rib washer

X-life

Technical information



Your current product variant

| | | |
|---------------------------|--------------|-----------------------------------|
| Design | BE | With lose center lip ring |
| Bore type | Z | Cylindrical |
| Cage | JPB | Sheet metal cage |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Relubrication facility | Standard | |



Main Dimensions & Performance Data

| | | |
|-------------|-------------|-----------------------------------|
| d | 280 mm | Bore diameter |
| D | 460 mm | Outside diameter |
| B | 180 mm | Width |
| C_r | 3.300.000 N | Basic dynamic load rating, radial |
| C_{0r} | 5.200.000 N | Basic static load rating, radial |
| C_{ur} | 435.000 N | Fatigue load limit, radial |
| n_G | 1.230 1/min | Limiting speed |
| n_{gr} | 520 1/min | Reference speed |
| $\approx m$ | 115,615 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 300 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 440 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 4 mm | Maximum recess radius |

Dimensions

| | | |
|------------|----------|------------------------------------|
| r_{\min} | 5 mm | Minimum chamfer dimension |
| D_1 | 392,4 mm | Bore diameter outer ring |
| d_2 | 312,8 mm | Raceway diameter of the inner ring |
| d_s | 8 mm | Diameter lubrication hole |
| n_s | 15 mm | Width of lubricating groove |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0,38 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 1,76 | Dynamic axial load factor |
| Y_2 | 2,62 | Dynamic axial load factor |
| Y_0 | 1,72 | 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