



FAG

24192-BEA-XL-MB1-C3

Spherical Roller Bearing

Spherical roller bearings 241...-BEA, main dimensions to DIN 635-2

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 | C3 (Group 3) | Internal clearance larger than CN |
| Relubrication | Standard | |

Main Dimensions & Performance Data

| | | |
|-------------|--------------|-----------------------------------|
| d | 460 mm | Bore diameter |
| D | 760 mm | Outside diameter |
| B | 300 mm | Width |
| C_r | 8.500.000 N | Basic dynamic load rating, radial |
| C_{0r} | 14.500.000 N | Basic static load rating, radial |
| C_{ur} | 1.030.000 N | Fatigue load limit, radial |
| n_G | 660 1/min | Limiting speed |
| n_{gr} | 241 1/min | Reference speed |
| $\approx m$ | 534 kg | Weight |

Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 492 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 728 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 6 mm | Maximum recess radius |



Dimensions

| | | |
|------------|----------|-----------------------------|
| r_{\min} | 7,5 mm | Minimum chamfer dimension |
| D_1 | 647,1 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 | 0,38 | 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 |