

FAG

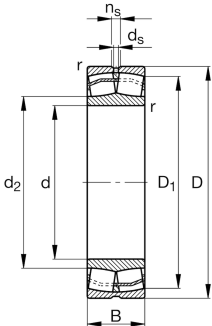
22315-E1-XL

Spherical Roller Bearing

Spherical roller bearings 223...-E1, main dimensions to DIN 635-2

X-life

Technical information



Your current product variant

| | | |
|---------------------------|--------------|---------------------------|
| Design | E1 | without central rip |
| Bore type | Z | Cylindrical |
| Cage | JPA | Sheet metal cage |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication feature | Standard | |

Main Dimensions & Performance Data

| | | |
|-----------------|-------------|-----------------------------------|
| d | 75 mm | Bore diameter |
| D | 160 mm | Outside diameter |
| B | 55 mm | Width |
| C _r | 445,000 N | Basic dynamic load rating, radial |
| C _{0r} | 450,000 N | Basic static load rating, radial |
| C _{ur} | 41,500 N | Fatigue load limit, radial |
| n _G | 4,500 1/min | Limiting speed |
| n _{gr} | 3,550 1/min | Reference speed |
| ≈m | 5.286 kg | Weight |



Mounting dimensions

| | | |
|--------------------|--------|--------------------------------------|
| d _{a min} | 87 mm | Minimum diameter shaft shoulder |
| D _{a max} | 148 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 | 136.3 mm | Bore diameter outer ring |
| d ₂ | 92.4 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 | 0.34 | Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y |
| Y ₁ | 1.99 | Dynamic axial load factor |
| Y ₂ | 2.96 | Dynamic axial load factor |
| Y ₀ | 1.94 | Static axial load factor |



Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed
-  Static angular error and misalignment
-  Dynamic angular error and misalignment