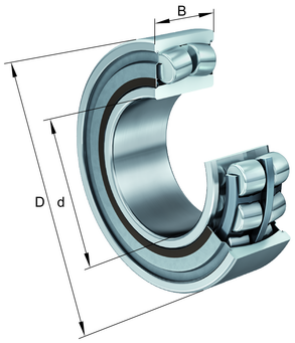
View product details on medias

18.06.2026, 15:21:42 UTC

SCHAEFFLER




FAG

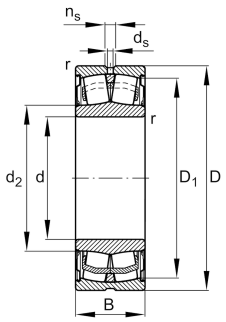
X-life

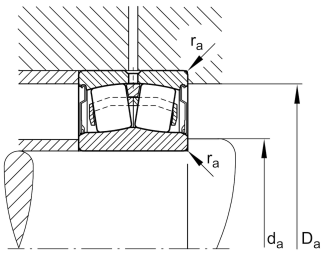
# WS22218-E1-XL-2VSR-C4

Spherical Roller Bearing

Spherical roller bearing WS222..-E1-XL-2VSR, symmetric with cage guidance ring

## Technical information




### Your current product variant

| | | |
|---|---|---|
| Design | E1 | Without central rip |
| Bore type | Z | Cylindrical |
| Cage | JPA | Sheet metal cage |
| Radial internal clearance | C4 (Group 4) | Internal clearance larger than C3 |
| Relubrication facility | Standard | |
| Sealing | 2VSR | Seals on both sides, high temperature |
| Sealing - excess width | WS | Sealing - excess width |

### Main Dimensions & Performance Data

| | | |
|---|---|---|
| d | 90 mm | Bore diameter |
| D | 160 mm | Outside diameter |
| B | 48 mm | Width |
| $C_r$ | 345.000 N | Basic dynamic load rating, radial |
| $C_{0r}$ | 375.000 N | Basic static load rating, radial |
| $C_{ur}$ | 43.500 N | Fatigue load limit, radial |
| $n_G$ | 1.300 1/min | Limiting speed |
| ≈m | 3,8 kg | Weight |

## Mounting dimensions

| | | |
|---|---|---|
| $d_{a\ min}$ | 101 mm | Minimum diameter shaft shoulder |
| $D_{a\ max}$ | 149 mm | Maximum diameter of housing shoulder |
| $r_{a\ max}$ | 2 mm | Maximum recess radius |

## Dimensions

| | | |
|---|---|---|
| $r_{min}$ | 2 mm | Minimum chamfer dimension |
| $D_1$ | 146,7 mm | Bore diameter outer ring |
| $d_2$ | 101,4 mm | Raceway diameter of the inner ring |
| $d_s$ | 3,2 mm | Diameter lubrication hole |
| $n_s$ | 6,5 mm | Width of lubricating groove |

## Temperature range

| | | |
|---|---|---|
| $T_{min}$ | -30 °C | Operating temperature min. |
| $T_{max}$ | 180 °C | Operating temperature max. |

## Calculation factors

| | | |
|---|---|---|
| e | 0,23 | Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,9 | Dynamic axial load factor |
| $Y_2$ | 4,31 | Dynamic axial load factor |
| $Y_0$ | 2,83 | Static axial load factor |

## Characteristics

Radial load

Axial load in one direction

Axial load in two directions


Grease Lubrication


Sealed on both sides


Static angular error and misalignment


Dynamic angular error and misalignment