



FAG

**WS22216-E1-XL-2VSR-C3**

Spherical Roller Bearing

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

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 | C3 (Group 3) | Internal clearance larger than CN     |
| Relubrication facility    | Standard     |                                       |
| Sealing                   | 2VSR         | Seals on both sides, high temperature |
| Sealing - excess width    | WS           | Sealing - excess width                |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 80 mm       | Bore diameter                     |
| D           | 140 mm      | Outside diameter                  |
| B           | 40 mm       | Width                             |
| $C_r$       | 250.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$    | 270.000 N   | Basic static load rating, radial  |
| $C_{ur}$    | 34.500 N    | Fatigue load limit, radial        |
| $n_G$       | 1.540 1/min | Limiting speed                    |
| $\approx m$ | 2,409 kg    | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 91 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 129 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2 mm   | Maximum recess radius                |

### Dimensions

|            |          |                                    |
|------------|----------|------------------------------------|
| $r_{\min}$ | 2 mm     | Minimum chamfer dimension          |
| $D_1$      | 128,6 mm | Bore diameter outer ring           |
| $d_2$      | 91,3 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

|       |      |  |
|-------|------|--|
| $e$   | 0,22 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 3,14 | Dynamic axial load factor  |
| $Y_2$ | 4,67 | Dynamic axial load factor  |
| $Y_0$ | 3,07 | Static axial load factor   |