



FAG

**21313-E1-XL>A**

Spherical Roller Bearing

Spherical roller bearings 213..-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 facility    | Standard     |                           |

**Main Dimensions & Performance Data**

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 65 mm       | Bore diameter                     |
| D           | 140 mm      | Outside diameter                  |
| B           | 33 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        |
| $n_G$       | 6.200 1/min | Limiting speed                    |
| $n_{gr}$    | 3.600 1/min | Reference speed                   |
| $\approx m$ | 2,501 kg    | Weight                            |

**Mounting dimensions**

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 77 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 128 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2,1 mm | Maximum recess radius                |



## Dimensions

|            |          |                                    |
|------------|----------|------------------------------------|
| $r_{\min}$ | 2,1 mm   | Minimum chamfer dimension          |
| $D_1$      | 126,8 mm | Bore diameter outer ring           |
| $d_2$      | 94,9 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. |
| $T_{\max}$ | 200 °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   |

## 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