

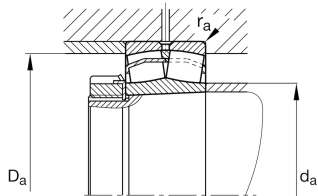
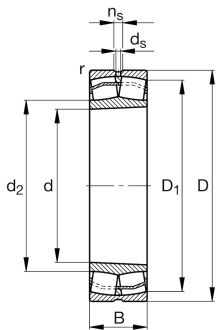
**FAG****21309-E1-XL-K**

## Spherical Roller Bearing

Spherical roller bearings 213...-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

**X-life**

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | E1           | Without central rip       |
| Bore type                 | K            | Tapered, taper 1:12       |
| Cage                      | JPA          | Sheet metal cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication             | Standard     |                           |

## Main Dimensions &amp; Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 45 mm       | Bore diameter                     |
| D               | 100 mm      | Outside diameter                  |
| B               | 25 mm       | Width                             |
| C <sub>r</sub>  | 129.000 N   | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 130.000 N   | Basic static load rating, radial  |
| C <sub>ur</sub> | 17.700 N    | Fatigue load limit, radial        |
| n <sub>G</sub>  | 9.000 1/min | Limiting speed                    |
| n <sub>gr</sub> | 4.750 1/min | Reference speed                   |
| m               | 0,96 kg     | Weight                            |



### Mounting dimensions

|              |        |                                       |
|--------------|--------|---------------------------------------|
| $d_{a \min}$ | 54 mm  | Minimum diameter shaft shoulder       |
| $d_{a \max}$ | 67 mm  | Maximum diameter of shaft shoulder    |
| $D_{a \max}$ | 91 mm  | Maximum diameter of housing shoulder  |
| $r_{a \max}$ | 1,5 mm | Maximum recess radius                 |
| $d_{b \min}$ | 50 mm  | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 5 mm   | Minimum cavity width of the sleeve    |

### Dimensions

|            |         |                                    |
|------------|---------|------------------------------------|
| $r_{\min}$ | 1,5 mm  | Minimum chamfer dimension          |
| $D_1$      | 89,8 mm | Bore diameter outer ring           |
| $d_2$      | 67,6 mm | Raceway diameter of the inner ring |
| $d_s$      | 3,2 mm  | Diameter lubrication hole          |
| $n_s$      | 4,8 mm  | Width of lubricating groove        |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 200 °C | Operating temperature max. |

### Calculation factors

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,21 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 3,17 | Dynamic axial load factor                                                            |
| $Y_2$ | 4,72 | Dynamic axial load factor                                                            |
| $Y_0$ | 3,1  | Static axial load factor                                                             |

### Additional information

|       |                   |
|-------|-------------------|
| H309  | Adapter sleeve    |
| AH309 | Withdrawal sleeve |



## 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