

**FAG****23218-E1A-XL-K-M**

## Spherical Roller Bearing

Spherical roller bearings 232...-E1A-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

**X-life**

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Design                    | E1A          | Without central rip       |
| Bore type                 | K            | Tapered, taper 1:12       |
| Cage                      | M            | Brass Cage                |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility    | Standard     |                           |

## Main Dimensions &amp; Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 90 mm       | Bore diameter                     |
| D               | 160 mm      | Outside diameter                  |
| B               | 52,4 mm     | Width                             |
| C <sub>r</sub>  | 445.000 N   | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 520.000 N   | Basic static load rating, radial  |
| C <sub>ur</sub> | 50.000 N    | Fatigue load limit, radial        |
| n <sub>G</sub>  | 4.250 1/min | Limiting speed                    |
| n <sub>gr</sub> | 2.650 1/min | Reference speed                   |
| m               | 4,326 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                 |
| $d_{a \max}$ | 107 mm | Maximum diameter of shaft shoulder    |
| $d_{b \min}$ | 100 mm | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 18 mm  | Minimum cavity width of the sleeve    |

### Dimensions

|            |        |                             |
|------------|--------|-----------------------------|
| $r_{\min}$ | 2 mm   | Minimum chamfer dimension   |
| $D_1$      | 140 mm | Bore diameter outer 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

|       |      |  |
|-------|------|--|
| $e$   | 0,31 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2,2  | Dynamic axial load factor  |
| $Y_2$ | 3,27 | Dynamic axial load factor  |
| $Y_0$ | 2,15 | Static axial load factor   |

### Additional information

|         |                   |
|---------|-------------------|
| H2318   | Adapter sleeve    |
| AHX3218 | 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