

**FAG****3309-BD-XL-2HRS**

Angular contact ball bearing

Angular contact ball bearing 33..-BD-XL-2HRS, double row, X-life, seals, steel sheet metal cage

**X-life**

## Technical information



## Your current product variant

|                                  |      |   |
|----------------------------------|------|---|
| Design variant                   | B    | Bearing without filling slot            |
| Changed internal design          | D    | D                                       |
| Sealing                          | 2HRS | Contact seal on both sides              |
| Cage                             | JH   | Steel sheet metal                       |
| Tolerance class                  | P6   | Class 6 (ISO 492:2023)                  |
| Dimensional / heat stabilization | S0   | Rings dimensional stabilized up to 150° |
| Lubricant                        | GA13 | Ball bearing and insert bearing grease  |
| Axial internal clearance         | CN   | Group N (CN)                            |

## Main Dimensions &amp; Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 45 mm       | Bore diameter                     |
| D               | 100 mm      | Outside diameter                  |
| B               | 39,7 mm     | Width                             |
| C <sub>r</sub>  | 72.000 N    | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 54.000 N    | Basic static load rating, radial  |
| C <sub>ur</sub> | 3.700 N     | Fatigue load limit, radial        |
| n <sub>G</sub>  | 5.500 1/min | Limiting speed                    |
| ≈m              | 1,36 kg     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 54 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 91 mm  | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius                |

### Dimensions

|            |          |   |
|------------|----------|---|
| $r_{\min}$ | 1,5 mm   | Minimum chamfer dimension                         |
| $D_1$      | 84,39 mm | Shoulder diameter outer ring                      |
| $D_2$      | 87,32 mm | Caliber diameter outer ring                       |
| $d_1$      | 65,45 mm | Shoulder diameter inner ring                      |
| $d_2$      | 63,25 mm | Caliber diameter inner ring                       |
| $a$        | 57,8 mm  | Distance between the apexes of the pressure cones |
| $\alpha$   | 30 °     | Contact angle                                     |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -20 °C | Operating temperature min. |
| $T_{\max}$ | 100 °C | Operating temperature max. |

### Characteristics

|   |  |
|---|--|
|  | Radial load                                    |
|  | Axial load in one direction                    |
|  | Axial load in two directions                   |
|  | Lifetime lubrication, freedom from maintenance |
|  | Grease Lubrication                             |
|  | Sealed on both sides                           |