

**FAG****3307-BD-XL-C3**

Angular contact ball bearing

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

## Technical information



## Your current product variant

|                                  |         |   |
|----------------------------------|---------|---|
| Design variant                   | B       | Bearing without filling slot            |
| Changed internal design          | D       | D                                       |
| Type of Seal                     | Without | Not sealed                              |
| Cage                             | JH      | Steel sheet metal                       |
| Tolerance class                  | P6      | Class6 (P6), better than PN             |
| Dimensional / heat stabilization | SN      | Rings dimensional stabilized up to 120° |
| Lubricant                        | Without | Bearing not greased                     |
| Axial internal clearance         | C3      | Group 3 (C3), bigger than CN            |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 35 mm       | Bore diameter                     |
| D           | 80 mm       | Outside diameter                  |
| B           | 34,9 mm     | Width                             |
| $C_r$       | 55.000 N    | Basic dynamic load rating, radial |
| $C_{0r}$    | 36.500 N    | Basic static load rating, radial  |
| $C_{ur}$    | 2.550 N     | Fatigue load limit, radial        |
| $n_G$       | 9.000 1/min | Limiting speed                    |
| $n_{gr}$    | 8.100 1/min | Reference speed                   |
| $\approx m$ | 0,72 kg     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 44 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 71 mm  | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius                |

### Dimensions

|            |          |   |
|------------|----------|---|
| $r_{\min}$ | 1,5 mm   | Minimum chamfer dimension                         |
| $D_1$      | 68,92 mm | Shoulder diameter outer ring                      |
| $D_2$      | 71,91 mm | Caliber diameter outer ring                       |
| $d_1$      | 51,8 mm  | Shoulder diameter inner ring                      |
| $d_2$      | 49,63 mm | Caliber diameter inner ring                       |
| $a$        | 48 mm    | Distance between the apexes of the pressure cones |
| $\alpha$   | 30 °     | Contact angle                                     |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 120 °C | Operating temperature max. |

### Characteristics

|   |                              |
|---|------------------------------|
|  | Radial load                  |
|  | Axial load in one direction  |
|  | Axial load in two directions |
|  | Grease Lubrication           |
|  | Oil Lubrication              |
|  | Not sealed                   |