

**FAG****3311-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                                       |
| Sealing                          | Without | Not sealed                              |
| Cage                             | JH      | Steel sheet metal                       |
| Tolerance class                  | P6      | Class 6 (ISO 492:2023)                  |
| Dimensional / heat stabilization | S0      | Rings dimensional stabilized up to 150° |
| Lubricant                        | Without | Bearing not greased                     |
| Axial internal clearance         | C3      | Group 3 (C3), bigger than CN            |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 55 mm       | Bore diameter                     |
| D           | 120 mm      | Outside diameter                  |
| B           | 49,2 mm     | Width                             |
| $C_r$       | 116.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$    | 88.000 N    | Basic static load rating, radial  |
| $C_{ur}$    | 6.100 N     | Fatigue load limit, radial        |
| $n_G$       | 5.800 1/min | Limiting speed                    |
| $n_{gr}$    | 5.900 1/min | Reference speed                   |
| $\approx m$ | 2,31 kg     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 66 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 109 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2 mm   | Maximum fillet radius                |

### Dimensions

|            |           |   |
|------------|-----------|---|
| $r_{\min}$ | 2 mm      | Minimum chamfer dimension                         |
| $D_1$      | 103,3 mm  | Shoulder diameter outer ring                      |
| $D_2$      | 106,78 mm | Caliber diameter outer ring                       |
| $d_1$      | 78,77 mm  | Shoulder diameter inner ring                      |
| $d_2$      | 76,35 mm  | Caliber diameter inner ring                       |
| $a$        | 71,4 mm   | Distance between the apexes of the pressure cones |
| $\alpha$   | 30 °      | Contact angle                                     |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 150 °C | Operating temperature max. |

### Characteristics

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