

**FAG****X-life****3308-BD-XL-2Z-TVH-C3**

Angular contact ball bearing

Angular contact ball bearing 33.-BD-XL-2Z-TVH, double row, X-life, shields, plastic cage

## Technical information

**Your current product variant**

|                                  |      |  |
|----------------------------------|------|--|
| Design variant                   | B    | Bearing without filling slot                             |
| Changed internal design          | D    | D  |
| Sealing                          | 2Z   | Non-contact shield on both sides                         |
| Cage                             | TVH  | Solid cage made of glass-fiber reinforced polyamide PA66 |
| Tolerance class                  | P6   | Class 6 (ISO 492:2023)                                   |
| Dimensional / heat stabilization | SN   | Rings dimensional stabilized up to 120°                  |
| Lubricant                        | GA13 | Ball bearing and insert bearing grease                   |
| Axial internal clearance         | C3   | Group 3 (C3), bigger than CN                             |

**Main Dimensions & Performance Data**

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 40 mm       | Bore diameter                     |
| D               | 90 mm       | Outside diameter                  |
| B               | 36,5 mm     | Width                             |
| C <sub>r</sub>  | 67.000 N    | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 48.500 N    | Basic static load rating, radial  |
| C <sub>ur</sub> | 3.350 N     | Fatigue load limit, radial        |
| n <sub>G</sub>  | 6.000 1/min | Limiting speed                    |
| n <sub>gr</sub> | 7.000 1/min | Reference speed                   |
| m               | 0,98 kg     | Weight                            |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 49 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 81 mm  | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius                |

### Dimensions

|            |          |   |
|------------|----------|---|
| $r_{\min}$ | 1,5 mm   | Minimum chamfer dimension                         |
| $D_1$      | 77,02 mm | Shoulder diameter outer ring                      |
| $D_2$      | 79,92 mm | Caliber diameter outer ring                       |
| $d_1$      | 58,99 mm | Shoulder diameter inner ring                      |
| $d_2$      | 56,82 mm | Caliber diameter inner ring                       |
| $a$        | 53,1 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                   |
|  | Lifetime lubrication, freedom from maintenance |
|  | Grease Lubrication                             |
|  | Sealed on both sides                           |