

**FAG****3303-BD-XL-TVH**

Angular contact ball bearing

Angular contact ball bearing 33..-BD-XL-TVH,  
double row, X-life, plastic 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                             | TVH     | Solid cage made of glass-fiber reinforced polyamide PA66 |
| 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         | CN      | Group N (CN)   |

## Main Dimensions &amp; Performance Data

|                 |              |                                   |
|-----------------|--------------|-----------------------------------|
| d               | 17 mm        | Bore diameter                     |
| D               | 47 mm        | Outside diameter                  |
| B               | 22,2 mm      | Width                             |
| C <sub>r</sub>  | 22.500 N     | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 13.100 N     | Basic static load rating, radial  |
| C <sub>ur</sub> | 910 N        | Fatigue load limit, radial        |
| n <sub>G</sub>  | 16.600 1/min | Limiting speed                    |
| n <sub>gr</sub> | 12.600 1/min | Reference speed                   |
| m               | 0,171 kg     | Weight                            |



### Mounting dimensions

|              |         |                                      |
|--------------|---------|--------------------------------------|
| $d_{a \min}$ | 22,6 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 41,4 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1 mm    | Maximum fillet radius                |

### Dimensions

|            |          |   |
|------------|----------|---|
| $r_{\min}$ | 1 mm     | Minimum chamfer dimension                         |
| $D_1$      | 38,97 mm | Shoulder diameter outer ring                      |
| $D_2$      | 41,13 mm | Caliber diameter outer ring                       |
| $d_1$      | 28,52 mm | Shoulder diameter inner ring                      |
| $d_2$      | 27,14 mm | Caliber diameter inner ring                       |
| $a$        | 27,5 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                   |