

**3003**

Angular contact ball bearing

Angular contact ball bearing 30..-B-TVH,
double row, plastic cage

Technical information



Your current product variant

| | | |
|----------------------------------|---------|--|
| Design variant | B | Bearing without filling slot |
| Sealing | Without | Not sealed |
| Cage | TVH | Solid cage made of glass-fiber reinforced polyamide PA66 |
| Tolerance class | PN | Normal (ISO 492:2023) |
| Dimensional / heat stabilization | SN | Rings dimensional stabilized up to 120° |
| Lubricant | Without | Bearing not greased |
| Axial internal clearance | CN | Group N (CN) |

Main Dimensions & Performance Data

| | | |
|-------------|--------------|-----------------------------------|
| d | 17 mm | Bore diameter |
| D | 35 mm | Outside diameter |
| B | 14 mm | Width |
| C_r | 9.100 N | Basic dynamic load rating, radial |
| C_{0r} | 6.100 N | Basic static load rating, radial |
| C_{ur} | 315 N | Fatigue load limit, radial |
| n_G | 22.500 1/min | Limiting speed |
| n_{gr} | 15.300 1/min | Reference speed |
| $\approx m$ | 0,054 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 19 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 33 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 0,3 mm | Maximum fillet radius |

Dimensions

| | | |
|------------|----------|---|
| r_{\min} | 0,3 mm | Minimum chamfer dimension |
| D_1 | 29,17 mm | Shoulder diameter outer ring |
| D_2 | 29,75 mm | Caliber diameter outer ring |
| d_1 | 23,1 mm | Shoulder diameter inner ring |
| d_2 | 21,08 mm | Caliber diameter inner ring |
| a | 17,1 mm | Distance between the apexes of the pressure cones |
| α | 25 ° | 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 |