

**FAG****2311-K-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 23...-K-TVH, tapered bore taper 1:12, plastic cage

Technical information



Your current product variant

| | | |
|---------------------------|--------------|--|
| Bore type | K | Tapered, taper 1:12 |
| Sealing | Without | Not sealed |
| Cage | TVH | Solid cage made of glass-fiber reinforced polyamide PA66 |
| Tolerance class | PN | Normal (ISO 492:2023) |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Lubricant | Without | Bearing not greased |

Main Dimensions & Performance Data

| | | |
|-------------|-------------|-----------------------------------|
| d | 55 mm | Bore diameter |
| D | 120 mm | Outside diameter |
| B | 43 mm | Width |
| C_r | 77,000 N | Basic dynamic load rating, radial |
| C_{0r} | 24,000 N | Basic static load rating, radial |
| C_{ur} | 1,520 N | Fatigue load limit, radial |
| n_G | 5,700 1/min | Limiting speed |
| n_{gR} | 7,100 1/min | Reference speed |
| $\approx m$ | 2.05 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|---------------------------------------|
| $d_{a \min}$ | 66 mm | Minimum diameter shaft shoulder |
| $d_{a \max}$ | 69 mm | Maximum diameter shaft shoulder |
| $D_{a \max}$ | 109 mm | Maximum diameter of housing shoulder |
| $d_{b \min}$ | 61 mm | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 6 mm | Minimum cavity width of the sleeve |
| $r_{a \max}$ | 2 mm | Maximum fillet radius |

Dimensions

| | | |
|------------|----------|------------------------------|
| r_{\min} | 2 mm | Minimum chamfer dimension |
| D_1 | 100.2 mm | Shoulder diameter outer ring |
| d_1 | 71.68 mm | Shoulder diameter inner ring |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0.42 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 1.5 | Dynamic axial load factor |
| Y_2 | 2.33 | Dynamic axial load factor |
| Y_0 | 1.58 | Static axial load factor |

Additional information

H2311

Adapter sleeve



Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed
-  Static angular error and misalignment
-  Dynamic angular error and misalignment