

**FAG****2310-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 | 50 mm | Bore diameter |
| D | 110 mm | Outside diameter |
| B | 40 mm | Width |
| C_r | 66.000 N | Basic dynamic load rating, radial |
| C_{0r} | 20.200 N | Basic static load rating, radial |
| C_{ur} | 1.280 N | Fatigue load limit, radial |
| n_G | 6.300 1/min | Limiting speed |
| n_{gR} | 7.600 1/min | Reference speed |
| $\approx m$ | 1,554 kg | Weight |



Mounting dimensions

| | | |
|--------------|-------|---------------------------------------|
| $d_{a \min}$ | 61 mm | Minimum diameter shaft shoulder |
| $d_{a \max}$ | 63 mm | Maximum diameter shaft shoulder |
| $D_{a \max}$ | 99 mm | Maximum diameter of housing shoulder |
| $d_{b \min}$ | 56 mm | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 5 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 | 91,44 mm | Shoulder diameter outer ring |
| d_1 | 65,86 mm | Shoulder diameter inner ring |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0,43 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 1,46 | Dynamic axial load factor |
| Y_2 | 2,27 | Dynamic axial load factor |
| Y_0 | 1,53 | Static axial load factor |

Additional information

H2310

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