

**FAG****1305-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 13..-TVH, plastic cage

Technical information



Your current product variant

| | | |
|---------------------------|--------------|--|
| Bore type | Z | Cylindrical |
| 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 | 25 mm | Bore diameter |
| D | 62 mm | Outside diameter |
| B | 17 mm | Width |
| C_r | 18,300 N | Basic dynamic load rating, radial |
| C_{0r} | 5,000 N | Basic static load rating, radial |
| C_{ur} | 320 N | Fatigue load limit, radial |
| n_G | 12,900 1/min | Limiting speed |
| n_{gr} | 10,000 1/min | Reference speed |
| $\approx m$ | 0.258 kg | Weight |

Mounting dimensions

| | | |
|--------------|-------|--------------------------------------|
| $d_{a \min}$ | 32 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 55 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1 mm | Maximum fillet radius |



Dimensions

| | | |
|------------|----------|------------------------------|
| r_{\min} | 1.1 mm | Minimum chamfer dimension |
| D_1 | 50.42 mm | Shoulder diameter outer ring |
| d_1 | 38.1 mm | Shoulder diameter inner ring |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0.28 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2.29 | Dynamic axial load factor |
| Y_2 | 3.54 | Dynamic axial load factor |
| Y_0 | 2.4 | Static axial load factor |

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 |