

**FAG****1309-TVH-C3>N**

Self-aligning ball bearing

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

Technical information



Your current product variant

| | | |
|---------------------------|--------------|--|
| Version code | >N | Not marked on bearing |
| Bore type | Z | Cylindrical |
| Type of Seal | 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 | 45 mm | Bore diameter |
| D | 100 mm | Outside diameter |
| B | 25 mm | Width |
| C_r | 38.500 N | Basic dynamic load rating, radial |
| C_{0r} | 12.700 N | Basic static load rating, radial |
| C_{ur} | 810 N | Fatigue load limit, radial |
| n_G | 7.500 1/min | Limiting speed |
| n_{gr} | 6.700 1/min | Reference speed |
| m | 0,95 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 54 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 91 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius |

Dimensions

| | | |
|------------|----------|------------------------------|
| r_{\min} | 1,5 mm | Minimum chamfer dimension |
| D_1 | 83,53 mm | Shoulder diameter outer ring |
| d_1 | 64,05 mm | Shoulder diameter inner ring |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0,25 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2,51 | Dynamic axial load factor |
| Y_2 | 3,88 | Dynamic axial load factor |
| Y_0 | 2,63 | 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 |