

**FAG****1218-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 12..-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 &amp; Performance Data

|          |             |                                   |
|----------|-------------|-----------------------------------|
| d        | 90 mm       | Bore diameter                     |
| D        | 160 mm      | Outside diameter                  |
| B        | 30 mm       | Width                             |
| $C_r$    | 57.000 N    | Basic dynamic load rating, radial |
| $C_{0r}$ | 23.500 N    | Basic static load rating, radial  |
| $C_{ur}$ | 1.330 N     | Fatigue load limit, radial        |
| $n_G$    | 4.550 1/min | Limiting speed                    |
| $n_{gr}$ | 4.850 1/min | Reference speed                   |
| $m$      | 2.462 kg    | Weight                            |

## Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 101 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 149 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2 mm   | Maximum fillet radius                |



## Dimensions

|            |          |                              |
|------------|----------|------------------------------|
| $r_{\min}$ | 2 mm     | Minimum chamfer dimension    |
| $D_1$      | 138,7 mm | Shoulder diameter outer ring |
| $d_1$      | 112,7 mm | Shoulder diameter inner ring |

## Temperature range

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

## Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,17 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 3,74 | Dynamic axial load factor  |
| $Y_2$ | 5,79 | Dynamic axial load factor  |
| $Y_0$ | 3,92 | 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 |