

**FAG****1204-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               | 20 mm        | Bore diameter                     |
| D               | 47 mm        | Outside diameter                  |
| B               | 14 mm        | Width                             |
| C <sub>r</sub>  | 10.100 N     | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 2.600 N      | Basic static load rating, radial  |
| C <sub>ur</sub> | 166 N        | Fatigue load limit, radial        |
| n <sub>G</sub>  | 18.100 1/min | Limiting speed                    |
| n <sub>gr</sub> | 15.300 1/min | Reference speed                   |
| ≈m              | 0,12 kg      | Weight                            |

## Mounting dimensions

|                    |         |                                      |
|--------------------|---------|--------------------------------------|
| d <sub>a min</sub> | 25,6 mm | Minimum diameter shaft shoulder      |
| D <sub>a max</sub> | 41,4 mm | Maximum diameter of housing shoulder |
| r <sub>a max</sub> | 1 mm    | Maximum fillet radius                |



Dimensions

|           |          |                              |
|-----------|----------|------------------------------|
| $r_{min}$ | 1 mm     | Minimum chamfer dimension    |
| $D_1$     | 37,75 mm | Shoulder diameter outer ring |
| $d_1$     | 29,2 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 |
| $Y_1$ | 2,24 | Dynamic axial load factor                                                            |
| $Y_2$ | 3,47 | Dynamic axial load factor                                                            |
| $Y_0$ | 2,35 | 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 |