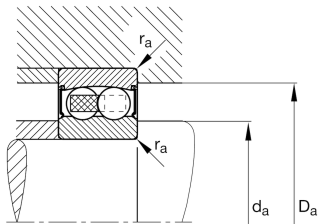
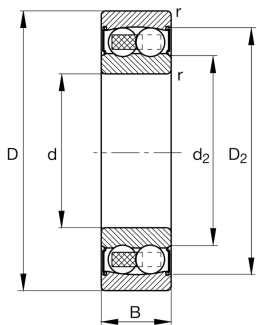
**FAG****2209-2RS-TVH** 

Self-aligning ball bearing

Self-aligning ball bearing 22..-2RS-TVH,  
seals, plastic cage

## Technical information



## Your current product variant

|                           |              |                                                          |
|---------------------------|--------------|----------------------------------------------------------|
| Bore type                 | Z            | Cylindrical                                              |
| Type of Sealing           | 2RS          | Contact seal on both sides                               |
| Cage                      | TVH          | Solid cage made of glass-fiber reinforced polyamide PA66 |
| Tolerance class           | PN           | Normal (ISO 492:2023)                                    |
| Radial internal clearance | CN (Group N) | Normal internal clearance                                |
| Lubricant                 | GA13         | Ball bearing and insert bearing grease                   |

## Main Dimensions &amp; Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 45 mm       | Bore diameter                     |
| D               | 85 mm       | Outside diameter                  |
| B               | 23 mm       | Width                             |
| C <sub>r</sub>  | 22.000 N    | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 7.300 N     | Basic static load rating, radial  |
| C <sub>ur</sub> | 465 N       | Fatigue load limit, radial        |
| n <sub>G</sub>  | 4.900 1/min | Limiting speed                    |
| ≈m              | 0,527 kg    | Weight                            |

## Mounting dimensions

|                    |       |                                      |
|--------------------|-------|--------------------------------------|
| d <sub>a min</sub> | 52 mm | Minimum diameter shaft shoulder      |
| D <sub>a max</sub> | 78 mm | Maximum diameter of housing shoulder |
| r <sub>a max</sub> | 1 mm  | Maximum fillet radius                |



Dimensions

|           |           |                              |
|-----------|-----------|------------------------------|
| $r_{min}$ | 1,1 mm    | Minimum chamfer dimension    |
| $D_1$     | 72,259 mm | Shoulder diameter outer ring |
| $D_2$     | 75,98 mm  | Caliber diameter outer ring  |
| $d_1$     | 57,7 mm   | Shoulder diameter inner ring |
| $d_2$     | 53,8 mm   | Caliber diameter inner ring  |

Temperature range

|           |        |                            |
|-----------|--------|----------------------------|
| $T_{min}$ | -20 °C | Operating temperature min. |
| $T_{max}$ | 100 °C | Operating temperature max. |

Calculation factors

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,21 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 3,03 | Dynamic axial load factor                                                            |
| $Y_2$ | 4,68 | Dynamic axial load factor                                                            |
| $Y_0$ | 3,17 | Static axial load factor                                                             |

Characteristics

|                                                                                     |                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------|
|  | Radial load                                    |
|  | Axial load in one direction                    |
|  | Axial load in two directions                   |
|  | Lifetime lubrication, freedom from maintenance |
|  | Grease Lubrication                             |
|  | Sealed on both sides                           |
|  | Static angular error and misalignment          |
|  | Dynamic angular error and misalignment         |