

**FAG****30209-A**

## Tapered roller bearing

Tapered roller bearings 302, main dimensions acc. to DIN 720, separable

## Technical information

## Your current product variant

|                 |          |  |
|-----------------|----------|--|
| Tolerance class | PN       | Normal (ISO 492:2014)                        |
| Heat treatment  | Standard |  |
| Cage            | Standard | Sheet steel cage, window cage, roller-guided |
| Internal design | Standard |  |
| Quality level   | Standard |  |
| Number of rows  | 1        | Single-row design                            |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 45 mm       | Bore diameter                     |
| D           | 85 mm       | Outside diameter                  |
| B           | 19 mm       | Width, inner ring                 |
| C           | 16 mm       | Width, outer ring                 |
| T           | 20,75 mm    | Width, total                      |
| $C_r$       | 70.000 N    | Basic dynamic load rating, radial |
| $C_{0r}$    | 82.000 N    | Basic static load rating, radial  |
| $C_{ur}$    | 9.800 N     | Fatigue load limit, radial        |
| $n_G$       | 8.800 1/min | Limiting speed                    |
| $n_{gr}$    | 5.400 1/min | Thermal speed rating              |
| $\approx m$ | 484,4 g     | Weight                            |





### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \max}$ | 54 mm  | Maximum diameter of shaft shoulder   |
| $d_{b \min}$ | 52 mm  | Minimum diameter of shaft shoulder   |
| $D_{a \min}$ | 74 mm  | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 78 mm  | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 80 mm  | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 3 mm   | Minimum axial space                  |
| $C_{b \min}$ | 4,5 mm | Minimum axial space                  |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius of shaft       |
| $r_{b \max}$ | 1,5 mm | Maximum fillet radius of housing     |

### Dimensions

|                 |        |   |
|-----------------|--------|---|
| $r_{1, 2 \min}$ | 1,5 mm | Minimum chamfer dimension of inner ring back face |
| $r_{3, 4 \min}$ | 1,5 mm | Minimum chamfer dimension of outer ring back face |
| $a$             | 18 mm  | Distance between the apexes of the pressure cones |
| $d_1$           | 64 mm  | Guidance rib diameter of inner ring               |

### Temperature range

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

### Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,4  | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y$   | 1,48 | Dynamic axial load factor  |
| $Y_0$ | 0,81 | Static axial load factor   |

### Additional information

T3DB045

Comparative designation to ISO 10317 and ISO 355



### Characteristics

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-  Radial load
-  Axial load in one direction
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed