

**FAG****30338**

Tapered roller bearing

Tapered roller bearings 303, main dimensions  
acc. to DIN 720, separable

## Technical information

## Your current product variant

|                 |          |  |
|-----------------|----------|--|
| Tolerance class | PN       | Normal (ISO 492:2023)                        |
| 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           | 190 mm      | Bore diameter                     |
| D           | 400 mm      | Outside diameter                  |
| B           | 78 mm       | Width, inner ring                 |
| C           | 65 mm       | Width, outer ring                 |
| T           | 86 mm       | Width, total                      |
| $C_r$       | 1.210.000 N | Basic dynamic load rating, radial |
| $C_{0r}$    | 1.600.000 N | Basic static load rating, radial  |
| $C_{ur}$    | 143.000 N   | Fatigue load limit, radial        |
| $n_G$       | 1.800 1/min | Limiting speed                    |
| $n_{gr}$    | 1.180 1/min | Thermal speed rating              |
| $\approx m$ | 46,7 kg     | Weight                            |





### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \max}$ | 240 mm | Maximum diameter of shaft shoulder   |
| $d_{b \min}$ | 210 mm | Minimum diameter of shaft shoulder   |
| $D_{a \min}$ | 341 mm | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 378 mm | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 364 mm | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 10 mm  | Minimum axial space                  |
| $C_{b \min}$ | 21 mm  | Minimum axial space                  |
| $r_{a \max}$ | 6 mm   | Maximum fillet radius of shaft       |
| $r_{b \max}$ | 5 mm   | Maximum fillet radius of housing     |

### Dimensions

|                 |        |   |
|-----------------|--------|---|
| $r_{1, 2 \min}$ | 6 mm   | Minimum chamfer dimension of inner ring back face |
| $r_{3, 4 \min}$ | 5 mm   | Minimum chamfer dimension of outer ring back face |
| $a$             | 72 mm  | Distance between the apexes of the pressure cones |
| $d_1$           | 279 mm | Guidance rib diameter of inner ring               |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 200 °C | Operating temperature max. |

### Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,35 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y$   | 1,74 | Dynamic axial load factor  |
| $Y_0$ | 0,96 | Static axial load factor   |



### Characteristics

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