

**FAG****1317-M**

Self-aligning ball bearing

Self-aligning ball bearing 13..-M, solid brass cage

## Technical information



## Your current product variant

|                           |              |                               |
|---------------------------|--------------|-------------------------------|
| Bore type                 | Z            | Cylindrical                   |
| Sealing                   | Without      | Not sealed                    |
| Cage                      | M            | Solid brass cage, ball guided |
| Tolerance class           | PN           | Normal (ISO 492:2023)         |
| Radial internal clearance | CN (Group N) | Normal internal clearance     |
| Lubricant                 | Without      | Bearing not greased           |

## Main Dimensions &amp; Performance Data

|             |             |                                   |
|-------------|-------------|-----------------------------------|
| d           | 85 mm       | Bore diameter                     |
| D           | 180 mm      | Outside diameter                  |
| B           | 41 mm       | Width                             |
| $C_r$       | 99,000 N    | Basic dynamic load rating, radial |
| $C_{0r}$    | 38,000 N    | Basic static load rating, radial  |
| $C_{ur}$    | 2,070 N     | Fatigue load limit, radial        |
| $n_G$       | 5,800 1/min | Limiting speed                    |
| $n_{gr}$    | 4,300 1/min | Reference speed                   |
| $\approx m$ | 5.208 kg    | Weight                            |

## Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 99 mm  | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 166 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2.5 mm | Maximum fillet radius                |



## Dimensions

|            |           |                              |
|------------|-----------|------------------------------|
| $r_{\min}$ | 3 mm      | Minimum chamfer dimension    |
| $D_1$      | 151.93 mm | Shoulder diameter outer ring |
| $d_1$      | 117.2 mm  | Shoulder diameter inner ring |

## Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 150 °C | Operating temperature max. |

## Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0.22 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 2.88 | Dynamic axial load factor  |
| $Y_2$ | 4.46 | Dynamic axial load factor  |
| $Y_0$ | 3.02 | 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 |