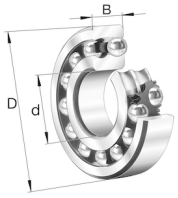


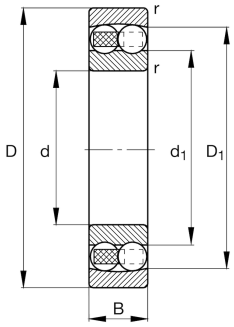

FAG

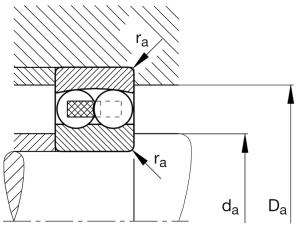
# 1316-M-C3

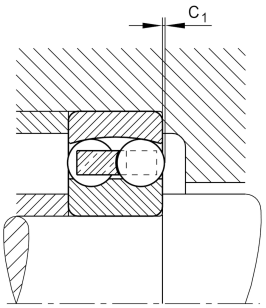
Self-aligning ball bearing

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

## Technical information




### Your current product variant

| | | |
|---|---|---|
| Bore type | Z | Cylindrical |
| Type of Sealing | Without | Not sealed |
| Cage | M | Solid brass cage, ball guided |
| Tolerance class | PN | Tolerance class PN, acc. to DIN 620 |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Lubricant | Without | Bearing not greased |

### Main Dimensions & Performance Data

| | | |
|---|---|---|
| d | 80 mm | Bore diameter |
| D | 170 mm | Outside diameter |
| B | 39 mm | Width |
| $C_r$ | 89.000 N | Basic dynamic load rating, radial |
| $C_{0r}$ | 33.000 N | Basic static load rating, radial |
| $C_{ur}$ | 1.870 N | Fatigue load limit, radial |
| $n_G$ | 6.200 1/min | Limiting speed |
| $n_{\vartheta r}$ | 4.500 1/min | Reference speed |
| ≈m | 4,407 kg | Weight |

### Mounting dimensions

| | | |
|---|---|---|
| $d_{a\ min}$ | 92 mm | Minimum diameter shaft shoulder |
| $D_{a\ max}$ | 158 mm | Maximum diameter of housing shoulder |
| $r_{a\ max}$ | 2,1 mm | Maximum fillet radius |

## Dimensions

| | | |
|---|---|---|
| $r_{min}$ | 2,1 mm | Minimum chamfer dimension |
| $D_1$ | 144,25 mm | Shoulder diameter outer ring |
| $d_1$ | 110,62 mm | Shoulder diameter inner ring |
| $C_1$ | 0,1 mm | Overhang rolling element |

## Temperature range

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

## Calculation factors

| | | |
|---|---|---|
| e | 0,22 | Limiting value of Fa/Fr 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