View product details on medias

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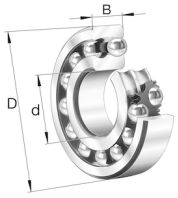


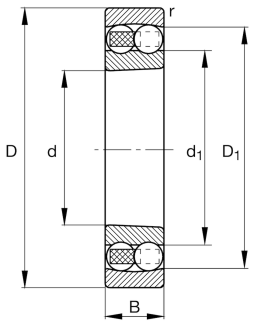

FAG

# 2318-K-M-C3

Self-aligning ball bearing

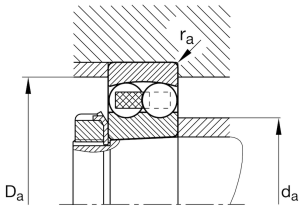
Self-aligning ball bearing 23..-K-M, tapered bore taper 1:12, solid brass cage

## Technical information



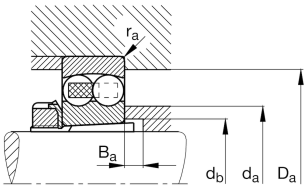

### Your current product variant

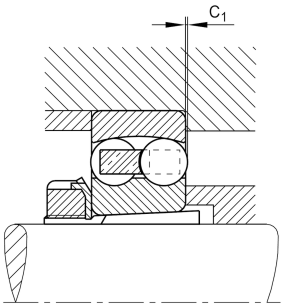
| | | |
|---|---|---|
| Bore type | K | Tapered, taper 1:12 |
| Sealing | Without | Not sealed |
| Cage | M | Solid brass cage, ball guided |
| Tolerance class | PN | Normal (ISO 492:2023) |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Lubricant | Without | Bearing not greased |




### Main Dimensions & Performance Data

| | | |
|---|---|---|
| d | 90 mm | Bore diameter |
| D | 190 mm | Outside diameter |
| B | 64 mm | Width |
| $C_r$ | 156,000 N | Basic dynamic load rating, radial |
| $C_{0r}$ | 58,000 N | Basic static load rating, radial |
| $C_{ur}$ | 3,100 N | Fatigue load limit, radial |
| $n_G$ | 5,100 1/min | Limiting speed |
| $n_{\vartheta r}$ | 5,000 1/min | Reference speed |
| ≈m | 8.35 kg | Weight |






## Mounting dimensions

| | | |
|---|---|---|
| $d_{a\ min}$ | 104 mm | Minimum diameter shaft shoulder |
| $d_{a\ max}$ | 112 mm | Maximum diameter shaft shoulder |
| $D_{a\ max}$ | 176 mm | Maximum diameter of housing shoulder |
| $d_{b\ min}$ | 100 mm | Minimum cavity diameter of the sleeve |
| $B_{a\ min}$ | 7 mm | Minimum cavity width of the sleeve |
| $r_{a\ max}$ | 2.5 mm | Maximum fillet radius |

## Dimensions

| | | |
|---|---|---|
| $r_{min}$ | 3 mm | Minimum chamfer dimension |
| $D_1$ | 159.81 mm | Shoulder diameter outer ring |
| $d_1$ | 115.7 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 | 0.39 | Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 1.64 | Dynamic axial load factor |
| $Y_2$ | 2.53 | Dynamic axial load factor |
| $Y_0$ | 1.71 | Static axial load factor |

## Additional information

| | | |
|---|---|---|
| | H2318 | Adapter sleeve |

## 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