

**FAG****6308-M-C3**

Deep groove ball bearing

Deep groove ball bearing 63.-M, single row, solid brass cage

Technical information



Your current product variant

| | | |
|----------------------------------|--------------|--|
| Sealing | Without | Not sealed |
| Cage | M | Solid brass cage, rolling element guided |
| Tolerance class | PN | Normal (ISO 492:2023) |
| Dimensional / heat stabilization | SN | Rings dimensional stabilized up to 120° |
| Lubricant | Without | Bearing not greased |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Bore type | Z | Cylindrical |

Main Dimensions & Performance Data

| | | |
|----------|--------------|-----------------------------------|
| d | 40 mm | Bore diameter |
| D | 90 mm | Outside diameter |
| B | 23 mm | Width |
| C_r | 45,500 N | Basic dynamic load rating, radial |
| C_{0r} | 25,000 N | Basic static load rating, radial |
| C_{ur} | 1,690 N | Fatigue load limit, radial |
| n_G | 14,000 1/min | Limiting speed |
| n_{gr} | 9,000 1/min | Reference speed |
| m | 0.76 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 49 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 81 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 1.5 mm | Maximum fillet radius |

Dimensions

| | | |
|------------|----------|------------------------------|
| r_{\min} | 1.5 mm | Minimum chamfer dimension |
| D_1 | 74.64 mm | Shoulder diameter outer ring |
| D_2 | 76.5 mm | Caliber diameter outer ring |
| d_1 | 55.55 mm | Shoulder diameter inner ring |

Temperature range

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

Calculation factors

| | | |
|-------|----|--------------------|
| f_0 | 13 | Calculation factor |
|-------|----|--------------------|

Characteristics

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