

**FAG****23856-MB**

## Spherical Roller Bearing

Spherical roller bearing 238..-MB, symmetric  
3 ribs

## Technical information



## Your current product variant

|                           |              |                           |
|---------------------------|--------------|---------------------------|
| Bore type                 | Z            | Cylindrical               |
| Cage                      | MB           | Solid brass cage          |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility    | Standard     |                           |

## Main Dimensions &amp; Performance Data

|          |             |                                   |
|----------|-------------|-----------------------------------|
| d        | 280 mm      | Bore diameter                     |
| D        | 350 mm      | Outside diameter                  |
| B        | 52 mm       | Width                             |
| $C_r$    | 520.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$ | 1.230.000 N | Basic static load rating, radial  |
| $C_{ur}$ | 84.000 N    | Fatigue load limit, radial        |
| $n_G$    | 2.370 1/min | Limiting speed                    |
| $n_{gr}$ | 1.090 1/min | Reference speed                   |
| $m$      | 12 kg       | Weight                            |

## Mounting dimensions

|              |          |                                      |
|--------------|----------|--------------------------------------|
| $d_{a \min}$ | 288,8 mm | Minimum diameter shaft shoulder      |
| $D_{a \max}$ | 341,2 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2 mm     | Maximum recess radius                |



## Dimensions

|            |          |                             |
|------------|----------|-----------------------------|
| $r_{\min}$ | 2 mm     | Minimum chamfer dimension   |
| $D_1$      | 330,7 mm | Bore diameter outer ring    |
| $d_s$      | 4,8 mm   | Diameter lubrication hole   |
| $n_s$      | 9,5 mm   | Width of lubricating groove |

## Temperature range

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

## Calculation factors

|       |      |  |
|-------|------|--|
| $e$   | 0,13 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 5,23 | Dynamic axial load factor  |
| $Y_2$ | 7,79 | Dynamic axial load factor  |
| $Y_0$ | 5,11 | 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 |