

**FAG****23936-S-MB-C3**

## Spherical Roller Bearing

Spherical roller bearings 239, main dimensions to DIN 635-2

## Technical information

**Your current product variant**

Bore type	Z	Cylindrical
Cage	MB	Solid brass cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	S	With 3 lubricating holes and groove

**Main Dimensions & Performance Data**

d	180 mm	Bore diameter
D	250 mm	Outside diameter
B	52 mm	Width
$C_r$	445.000 N	Basic dynamic load rating, radial
$C_{0r}$	840.000 N	Basic static load rating, radial
$C_{ur}$	59.000 N	Fatigue load limit, radial
$n_G$	3.200 1/min	Limiting speed
$n_{gr}$	1.850 1/min	Reference speed
$m$	7,785 kg	Weight

**Mounting dimensions**

$d_{a \min}$	188,8 mm	Minimum diameter shaft shoulder
$D_{a \max}$	241,2 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2 mm	Maximum recess radius



## Dimensions

$r_{\min}$	2 mm	Minimum chamfer dimension
$D_1$	230,9 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

$e$	0,2	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	3,42	Dynamic axial load factor
$Y_2$	5,09	Dynamic axial load factor
$Y_0$	3,34	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