

**FAG****6309-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	S0	Rings dimensional stabilized up to 150°
Lubricant	Without	Bearing not greased
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Bore type	Z	Cylindrical

## Main Dimensions &amp; Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
C <sub>r</sub>	56,000 N	Basic dynamic load rating, radial
C <sub>0r</sub>	31,500 N	Basic static load rating, radial
C <sub>ur</sub>	2,240 N	Fatigue load limit, radial
n <sub>G</sub>	12,400 1/min	Limiting speed
n <sub>gr</sub>	8,200 1/min	Reference speed
m	1.02 kg	Weight



### Mounting dimensions

$d_{a \min}$	54 mm	Minimum diameter shaft shoulder
$D_{a \max}$	91 mm	Maximum diameter of housing shoulder
$r_{a \max}$	1.5 mm	Maximum fillet radius

### Dimensions

$r_{\min}$	1.5 mm	Minimum chamfer dimension
$D_1$	83.3 mm	Shoulder diameter outer ring
$D_2$	85.64 mm	Caliber diameter outer ring
$d_1$	62.26 mm	Shoulder diameter inner ring

### Temperature range

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

### Calculation factors

$f_0$	12.9	Calculation factor
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### Characteristics

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