

**FAG****6309-C3**

Deep groove ball bearing

Deep groove ball bearing 63, single row, steel sheet metal cage

Technical information



Your current product variant

Sealing	Without	Not sealed
Cage	JN	Steel sheet metal
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 & Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
C_r	56,000 N	Basic dynamic load rating, radial
C_{0r}	31,500 N	Basic static load rating, radial
C_{ur}	2,240 N	Fatigue load limit, radial
n_G	9,500 1/min	Limiting speed
n_{gr}	8,200 1/min	Reference speed
m	0.815 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	86.37 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