

**FAG****6309-2Z-C3** [🔗](#)

Deep groove ball bearing

Deep groove ball bearing 63...-2Z, single row, shields, steel sheet metal cage

Technical information



Your current product variant

Sealing	2Z	Non-contact shield on both sides
Cage	JN	Steel sheet metal
Tolerance class	PN	Normal (ISO 492:2023)
Dimensional / heat stabilization	S0	Rings dimensional stabilized up to 150°
Lubricant	GA13	Ball bearing and insert bearing grease
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	8.100 1/min	Limiting speed
n_{gr}	8.200 1/min	Reference speed
$\approx m$	0,849 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 mm	Shoulder diameter inner ring

Temperature range

T_{\min}	-20 °C	Operating temperature min.
T_{\max}	120 °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
	Lifetime lubrication, freedom from maintenance
	Grease Lubrication
	Sealed on both sides