



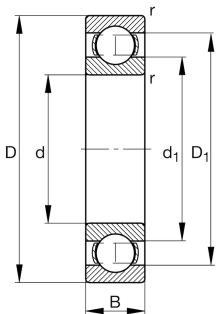
FAG

6301-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 (PN)
Dimensional / heat stabilization	SN	Rings dimensional stabilized up to 120°
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	12 mm	Bore diameter
D	37 mm	Outside diameter
B	12 mm	Width
C _r	10,300 N	Basic dynamic load rating, radial
C _{0r}	4,200 N	Basic static load rating, radial
C _{ur}	290 N	Fatigue load limit, radial
n _G	28,500 1/min	Limiting speed
n _{gr}	20,000 1/min	Reference speed
≈m	60.6 g	Weight



Mounting dimensions

$d_{a\min}$	17.6 mm	Minimum diameter shaft shoulder
$D_{a\max}$	31.4 mm	Maximum diameter of housing shoulder
$r_{a\max}$	1 mm	Maximum fillet radius

Dimensions

$r_{\min}$	1 mm	Minimum chamfer dimension
D_1	29.55 mm	Shoulder diameter outer ring
D_2	31.36 mm	Caliber diameter outer ring
d_1	19.5 mm	Shoulder diameter inner ring

Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	120 °C	Operating temperature max.

Calculation factors

f_0	11.1	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