

# 618/6

## Deep groove ball bearing

Single row deep groove ball bearings are particularly versatile, have low friction and are optimized for low noise and low vibration, which enables high rotational speeds. They accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than many other bearing types.

- Simple, versatile and robust design
- Low friction
- High-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance



## Overview

### Dimensions

Bore diameter	0.236 in
Outside diameter	0.512 in
Width	0.138 in

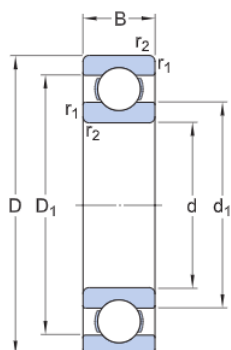
### Performance

Basic dynamic load rating	161 lbf
Basic static load rating	50 lbf
Limiting speed	67 000 r/min
Reference speed	110 000 r/min

### Properties

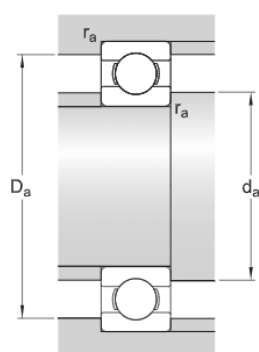
Bore type	Cylindrical
Coating	Without
Filling slots	Without
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Radial internal clearance	CN
Relubrication feature	Without
Sealing	Without

# Technical Specification



## Dimensions

d	0.236 in	Bore diameter
D	0.512 in	Outside diameter
B	0.138 in	Width
d <sub>1</sub>	≈ 0.315 in	Shoulder diameter
D <sub>1</sub>	≈ 0.433 in	Shoulder diameter
r <sub>1,2</sub>	min. 0.006 in	Chamfer dimension



## Abutment dimensions

d <sub>a</sub>	min. 0.268 in	Diameter of shaft abutment
D <sub>a</sub>	max. 0.48 in	Diameter of housing abutment
r <sub>a</sub>	max. 0.004 in	Radius of shaft or housing fillet

## Calculation data

Basic dynamic load rating	C	161 lbf
Basic static load rating	C <sub>0</sub>	50 lbf
Fatigue load limit	P <sub>u</sub>	2.1 lbf
Reference speed		110 000 r/min
Limiting speed		67 000 r/min
Minimum load factor	k <sub>r</sub>	0.015
Calculation factor	f <sub>0</sub>	7

## Mass

Mass bearing	0.009 lb
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## Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal

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