



## 609

## 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	0.354 in
Outside diameter	0.945 in
Width	0.276 in

#### Performance

Basic dynamic load rating	877 lbf
Basic static load rating	373 lbf
Limiting speed	43 000 r/min
Reference speed	70 000 r/min
SKF performance class	SKF Explorer

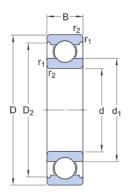
#### **Properties**

Bore type	Cylindrical
Cage	Sheet metal
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



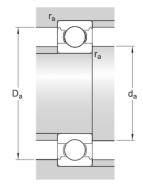
# Technical Specification

SKF performance class	SKF Explorer
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## Dimensions

d	0.354 in	Bore diameter
D	0.945 in	Outside diameter
В	0.276 in	Width
$d_1$	≈ 0.569 in	Shoulder diameter
$D_2$	≈ 0.8346 in	Recess diameter
r <sub>1,2</sub>	min. 0.012 in	Chamfer dimension



### Abutment dimensions

d <sub>a</sub> min. 0.433 in	Diameter of shaft abutment
D <sub>a</sub> max. 0.866 in	Diameter of housing abutment
r <sub>a</sub> max. 0.012 in	Radius of shaft or housing fillet

### Calculation data

Basic dynamic load rating	С	877 lbf
Basic static load rating	$C_0$	373 lbf
Fatigue load limit	$P_{u}$	16 lbf
Reference sneed		70 000 r/min



Limiting speed		43 000 r/min
Minimum load factor	k <sub>r</sub>	0.025
Calculation factor	$f_0$	13

### Mass

## Tolerance class

Dimensional tolerances	P6
Radial run-out	P5



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