

6209-2Z

Deep groove ball bearing with seals or shields

Single row deep groove ball bearings with seals or shields 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. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out.

- Integral sealing prolongs bearing service life
- Simple, versatile and robust design
- Low friction and high-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

Overview

Dimensions

Bore diameter	1.772 in
Outside diameter	3.346 in
Width	0.748 in

Performance

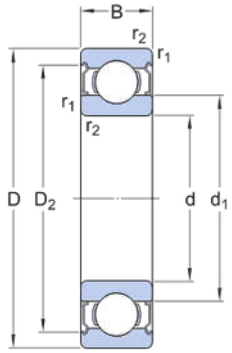
Basic dynamic load rating	7 891 lbf
Basic static load rating	4 856 lbf
Reference speed	17 000 r/min
Limiting speed	8 500 r/min
SKF performance class	SKF Explorer

Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Shield on both sides
Sealing type	Non-contact
Lubricant	Grease
Relubrication feature	Without

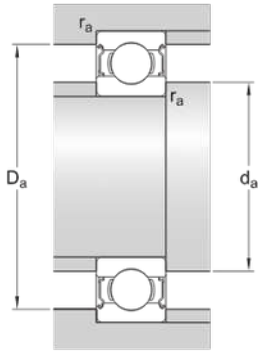
Technical Specification

SKF performance class	SKF Explorer



Dimensions

d	1.772 in	Bore diameter
D	3.346 in	Outside diameter
B	0.748 in	Width
d_1	≈ 2.268 in	Shoulder diameter
D_2	≈ 2.96 in	Recess diameter
$r_{1,2}$	min. 0.043 in	Chamfer dimension



Abutment dimensions

d_a	min. 2.047 in	Diameter of shaft abutment
d_a	max. 2.264 in	Diameter of shaft abutment
D_a	max. 3.071 in	Diameter of housing abutment
r_a	max. 0.039 in	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	7 891 lbf
Basic static load rating	C_0	4 856 lbf
Fatigue load limit	P_u	207 lbf
Reference speed		17 000 r/min

Limiting speed		8 500 r/min
Minimum load factor	k_r	0.025
Calculation factor	f_0	14.2

Mass

Mass bearing	0.954 lb

Tolerance class

Dimensional tolerances	P6
Radial run-out	P6

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