

6307-2Z

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	1.378 in
Outside diameter	3.15 in
Width	0.827 in

Performance

Basic dynamic load rating	7 891 lbf
Basic static load rating	4 271 lbf
Limiting speed	9 500 r/min
Reference speed	19 000 r/min
SKF performance class	SKF Explorer

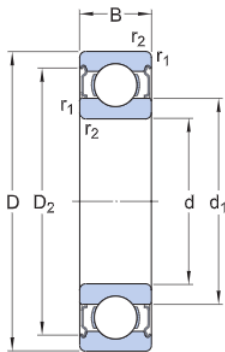
Properties

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

Technical Specification

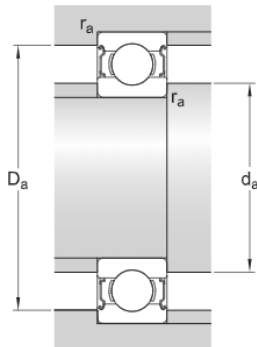
SKF performance class

SKF Explorer



Dimensions

d	1.378 in	Bore diameter
D	3.15 in	Outside diameter
B	0.827 in	Width
d_1	≈ 1.951 in	Shoulder diameter
D_2	≈ 2.724 in	Recess diameter
$r_{1,2}$	min. 0.059 in	Chamfer dimension



Abutment dimensions

d_a min.	1.732 in	Diameter of shaft abutment
d_a max.	1.949 in	Diameter of shaft abutment
D_a max.	2.795 in	Diameter of housing abutment
r_a max.	0.059 in	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	7 891 lbf
Basic static load rating	C_0	4 271 lbf
Fatigue load limit	P_u	183 lbf
Reference speed		19 000 r/min

Limiting speed		9 500 r/min
Minimum load factor	k_r	0.03
Calculation factor	f_0	13.1

Mass

Mass bearing		1.047 lb
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Tolerance class

Dimensional tolerances		P6
Radial run-out		P6

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