RLS 7-2Z

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	0.875 in
Outside diameter	2 in
Width	0.563 in

Performance

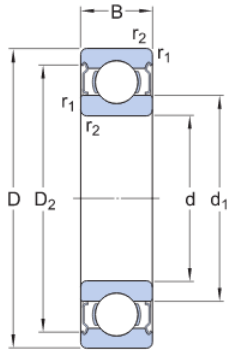
Basic dynamic load rating	3 147 lbf
Basic static load rating	1 720 lbf
Limiting speed	13 000 r/min
Reference speed	26 000 r/min

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

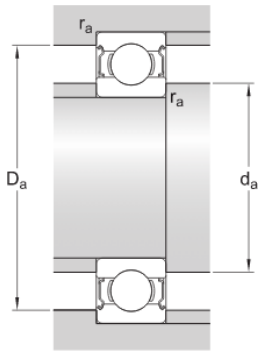
Technical Specification

Aftermarket only	Yes



Dimensions

d	0.875 in	Bore diameter
D	2 in	Outside diameter
B	0.563 in	Width
d_1	≈ 1.268 in	Shoulder diameter
D_2	≈ 1.732 in	Recess diameter
$r_{1,2}$	min. 0.063 in	Chamfer dimension



Abutment dimensions

d_a	min. 1.161 in	Diameter of shaft abutment
d_a	max. 1.26 in	Diameter of shaft abutment
D_a	max. 1.693 in	Diameter of housing abutment
r_a	max. 0.059 in	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	3 147 lbf
Basic static load rating	C_0	1 720 lbf
Fatigue load limit	P_u	73 lbf
Reference speed		26 000 r/min

Limiting speed		13 000 r/min
Minimum load factor	k_r	0.025
Calculation factor	f_0	14

Mass

Mass bearing	0.287 lb

Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal

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