



Image may differ from product. See technical specification for details.

6020-Z

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	3.937 in
Outside diameter	5.906 in
Width	0.945 in

Performance

Basic dynamic load rating	14 320 lbf
Basic static load rating	12 140 lbf
Reference speed	9 500 r/min
Limiting speed	5 600 r/min
SKF performance class	SKF Explorer

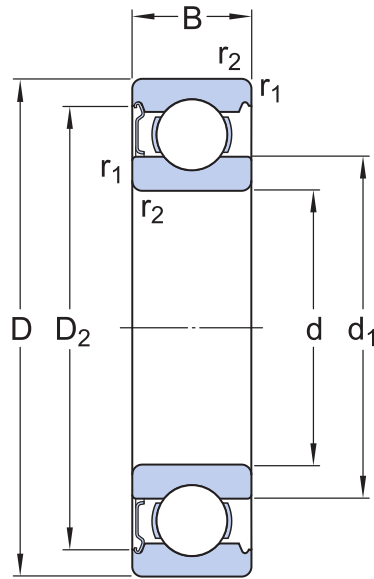
Properties

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 one side
Sealing type	Non-contact
Lubricant	None
Relubrication feature	Without

Logistics

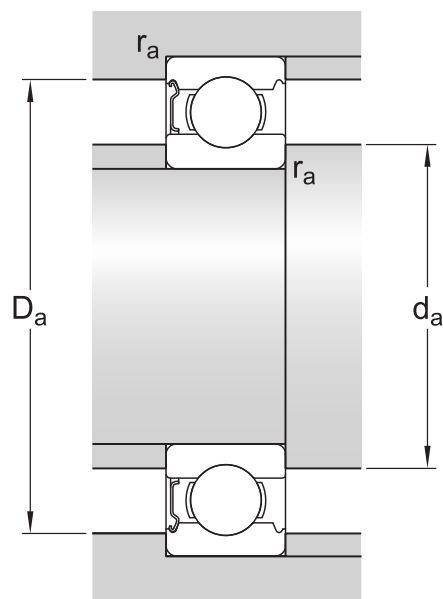
Product net weight	2.754 lb
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	3.937 in	Bore diameter
D	5.906 in	Outside diameter
B	0.945 in	Width
d_1	≈ 4.565 in	Shoulder diameter
D_2	≈ 5.445 in	Recess diameter
$r_{1,2}$	min. 0.059 in	Chamfer dimension



Abutment dimensions

d_a	min. 4.213 in	Diameter of shaft abutment
d_a	max. 4.563 in	Diameter of shaft abutment
D_a	max. 5.63 in	Diameter of housing abutment
r_a	max. 0.059 in	Radius of shaft or housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	14 320 lbf
Basic static load rating	C_0	12 140 lbf
Fatigue load limit	P_u	459 lbf
Reference speed		9 500 r/min
Limiting speed		5 600 r/min
Minimum load factor	k_r	0.025
Calculation factor	f_0	15.9

Tolerance class

Dimensional tolerances	P6
Radial run-out	Normal

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- **Tolerances:** Normal (metric), P6, P5, Normal (inch)
- **Radial internal clearance:** Classes C2 to C5

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits

More Information

Product details

[Single row deep groove ball bearings](#)

[Stainless steel deep groove ball bearings](#)

[Single row deep groove ball bearings with filling slots](#)

[Double row deep groove ball bearings](#)

[General bearing specifications](#)

[Loads](#)

[Temperature limits](#)

[Permissible speed](#)

[Designation system](#)

Engineering information

[Principles of rolling bearing selection](#)

[General bearing knowledge](#)

[Bearing selection process](#)

[Bearing interfaces](#)

[Seat tolerances for standard conditions](#)

[Selecting internal clearance](#)

[Lubrication](#)

[Sealing, mounting and dismounting](#)

[Bearing failure and how to prevent it](#)

Tools

[SKF Product select](#)

[SimPro Quick](#)

[Bearing Frequency Calculator](#)

[LubeSelect for SKF greases](#)

[Heater selection tool](#)

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