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

6021

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	4.134 in
Outside diameter	6.299 in
Width	1.024 in

Performance

|	
Basic dynamic load rating	17 108 lbf
Basic static load rating	14 725 lbf
Reference speed	8 500 r/min
Limiting speed	5 300 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	Without
Lubricant	None
Relubrication feature	Without

Logistics

Product net weight	3.446 lb
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification
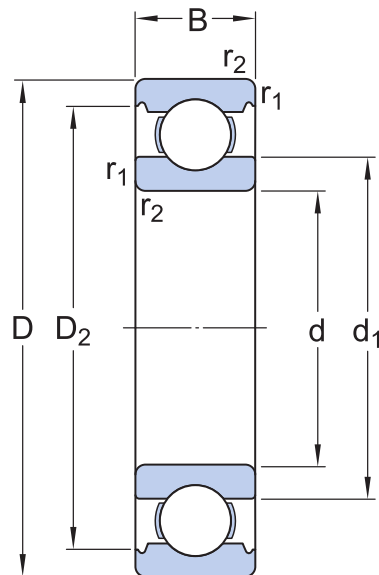
Dimensions

d	4.134 in	Bore diameter
D	6.299 in	Outside diameter
B	1.024 in	Width
d_1	≈ 4.823 in	Shoulder diameter
D_2	≈ 5.7795 in	Recess diameter
$r_{1,2}$	min. 0.079 in	Chamfer dimension
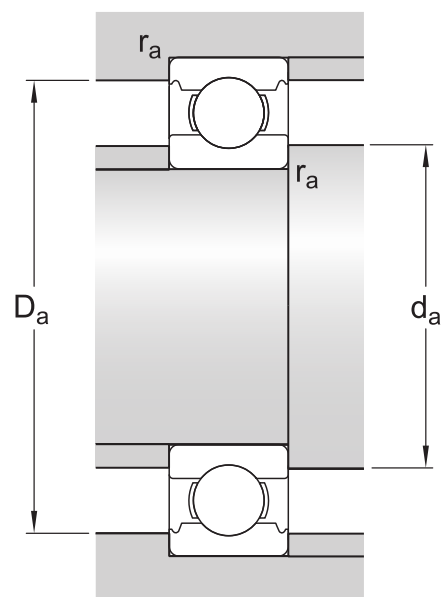
Abutment dimensions

d_a	min. 4.567 in	Diameter of shaft abutment
D_a	max. 5.866 in	Diameter of housing abutment
r_a	max. 0.079 in	Radius of shaft or housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	17 108 lbf
Basic static load rating	C_0	14 725 lbf
Fatigue load limit	P_u	540 lbf
Reference speed		8 500 r/min
Limiting speed		5 300 r/min
Minimum load factor	k_r	0.025
Calculation factor	f_0	15.8

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

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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