SKF®

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

61901-2RS1

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	12 mm
Outside diameter	24 mm
Width	6 mm

Performance

Basic dynamic load rating	2.91 kN
Basic static load rating	1.46 kN
Limiting speed	19 000 r/min

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	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	Without

Logistics

Product net weight	0.0108 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification
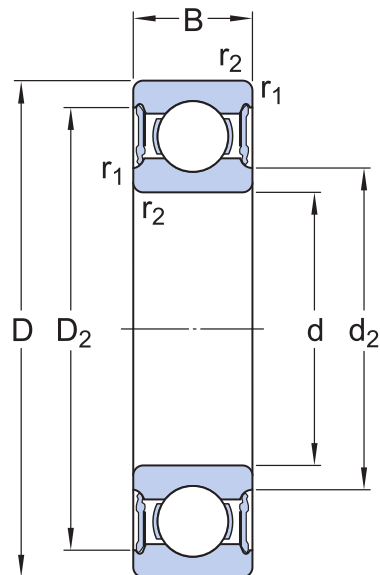
Dimensions

d	12 mm	Bore diameter
D	24 mm	Outside diameter
B	6 mm	Width
d_2	≈ 15.35 mm	Recess diameter
D_2	≈ 21.4 mm	Recess diameter
$r_{1,2}$	min. 0.3 mm	Chamfer dimension
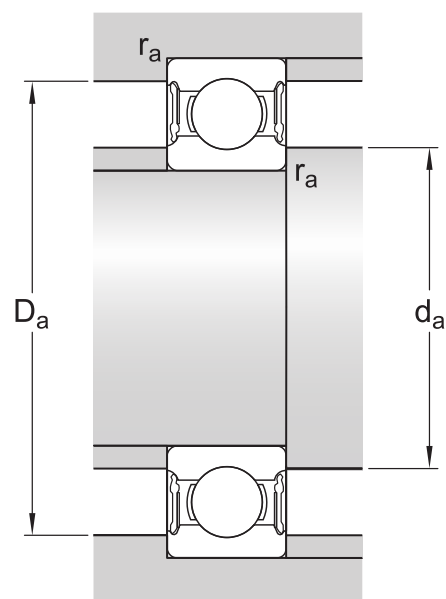
Abutment dimensions

d_a	min. 14 mm	Diameter of shaft abutment
d_a	max. 15.2 mm	Diameter of shaft abutment
D_a	max. 22 mm	Diameter of housing abutment
r_a	max. 0.3 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	2.91 kN
Basic static load rating	C_0	1.46 kN
Fatigue load limit	P_u	0.062 kN
Limiting speed		19 000 r/min
Minimum load factor	k_r	0.02
Calculation factor	f_0	14.5

Tolerance class

Dimensional tolerances	Normal
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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