



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

6003-2RSH

Deep groove ball bearing with seals

Single row deep groove ball bearings with seals on one or both sides 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 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	17 mm
Outside diameter	35 mm
Width	10 mm

Performance

Basic dynamic load rating	6.37 kN
Basic static load rating	3.25 kN
Limiting speed	13 000 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
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Seal on both sides
Sealing type	Contact
Lubricant	Grease
Relubrication feature	Without

Logistics

Product net weight	0.0398 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification

Dimensions

d	17 mm	Bore diameter
D	35 mm	Outside diameter
B	10 mm	Width
d ₂	≈ 20.45 mm	Recess diameter
D ₂	≈ 31.2 mm	Recess diameter
r _{1,2}	min. 0.3 mm	Chamfer dimension

Abutment dimensions

d _a	min. 19 mm	Diameter of shaft abutment
d _a	max. 20.5 mm	Diameter of shaft abutment
D _a	max. 33 mm	Diameter of housing abutment
r _a	max. 0.3 mm	Radius of shaft or housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	6.37 kN
Basic static load rating	C ₀	3.25 kN
Fatigue load limit	P _u	0.137 kN
Limiting speed		13 000 r/min
Minimum load factor	k _r	0.025
Calculation factor	f ₀	14




Mass

Mass bearing	0.039 kg
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Tolerance class

Dimensional tolerances	P6
Radial run-out	P5

More Information

 Product details	 Engineering information	 Tools
Single row deep groove ball bearings		SKF Product select
Stainless steel deep groove ball bearings	Principles of rolling bearing selection	SimPro Quick
Single row deep groove ball bearings with filling slots	General bearing knowledge	Bearing Frequency Calculator
Double row deep groove ball bearings	Bearing selection process	LubeSelect for SKF greases
General bearing specifications	Bearing interfaces	Heater selection tool
Loads	Seat tolerances for standard conditions	
Temperature limits	Selecting internal clearance	
Permissible speed	Lubrication	
Designation system	Sealing, mounting and dismounting	
	Bearing failure and how to prevent it	



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