



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

## 6203-RSH

### 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	0.669 in
Outside diameter	1.575 in
Width	0.472 in

## Performance

Basic dynamic load rating	2 237 lbf
Basic static load rating	1 068 lbf
Limiting speed	12 000 r/min
SKF performance class	SKF Explorer

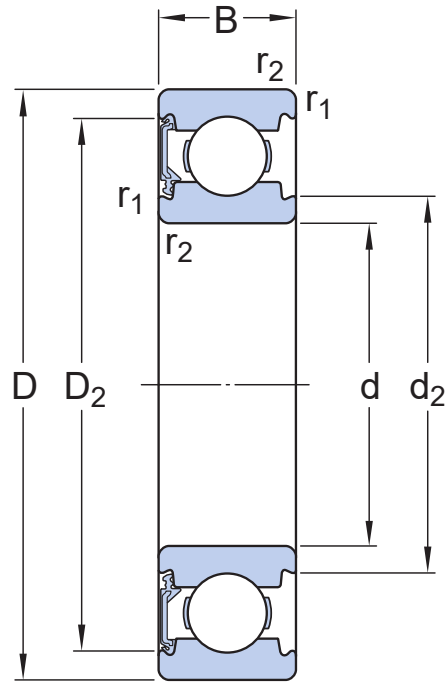
## Properties

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
Material, bearing	Bearing steel
Coating	Without
Sealing	Seal on one side
Sealing type	Contact
Lubricant	None
Relubrication feature	Without

## Logistics

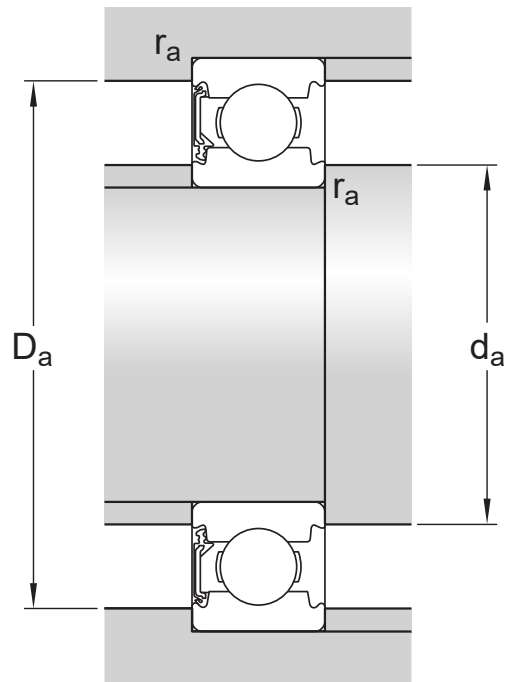
Product net weight	0.1385 lb
eClass code	23-05-08-01
UNSPSC code	31171504

## Technical specification



## Dimensions

d	0.669 in	Bore diameter
t <sub>Δdmp</sub>	-7 – 0 μm	Deviation limits of mid-range bore diameter
D	1.575 in	Outside diameter
t <sub>ΔDmp</sub>	-9 – 0 μm	Deviation limits of mid-range outside diameter
B	0.472 in	Width
t <sub>ΔBs</sub>	-60 – 0 μm	Deviation limits of ring width
d <sub>2</sub>	≈ 0.856 in	Recess diameter
D <sub>2</sub>	≈ 1.377 in	Recess diameter
r <sub>1,2</sub>	min. 0.024 in	Chamfer dimension
	P6 and tighter width tolerance	ISO tolerance class for dimensions



## Abutment dimensions

$d_a$	min. 0.835 in	Diameter of shaft abutment
$d_a$	max. 0.866 in	Diameter of shaft abutment
$D_a$	max. 1.409 in	Diameter of housing abutment
$r_a$	max. 0.024 in	Radius of shaft or housing fillet

## Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	2 237 lbf
Basic static load rating	$C_0$	1 068 lbf
Fatigue load limit	$P_u$	45 lbf
Limiting speed		12 000 r/min

## Tolerances of run-out

Range of section height at inner ring of assembled bearing	$t_{kia}$	4 $\mu\text{m}$
Maximum run-out of inner ring side face to the bore	$t_{sd}$	7 $\mu\text{m}$
Maximum axial run-out of inner ring of assembled bearing	$t_{sia}$	7 $\mu\text{m}$
Range of section height at outer ring of assembled bearing	$t_{kea}$	7 $\mu\text{m}$

Perpendicularity of outer ring outside surface	$t_{SD}$	4 $\mu m$
Maximum axial run-out of outer ring of assembled bearing	$t_{Sea}$	8 $\mu m$
ISO tolerance class for geometrical tolerances		P5

## Tolerances and clearances

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

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