



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

## 635-2Z

### 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	5 mm
Outside diameter	19 mm
Width	6 mm

### Performance

Basic dynamic load rating	2.34 kN
Basic static load rating	0.95 kN
Reference speed	80 000 r/min
Limiting speed	40 000 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	Class P6 (P6)
Material, bearing	Bearing steel
Coating	Without
Sealing	Shield on both sides
Sealing type	Non-contact
Lubricant	Grease
Relubrication feature	Without

### Logistics

Product net weight	0.0088 kg
eClass code	23-05-08-01
UNSPSC code	31171504



## Technical specification

### Dimensions

d	5 mm	Bore diameter
D	19 mm	Outside diameter
B	6 mm	Width
d <sub>1</sub>	≈ 11.1 mm	Shoulder diameter
D <sub>2</sub>	≈ 16.5 mm	Recess diameter
r <sub>1,2</sub>	min. 0.3 mm	Chamfer dimension

### Abutment dimensions

d <sub>a</sub>	min. 7.4 mm	Diameter of shaft abutment
d <sub>a</sub>	max. 10.6 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 16.6 mm	Diameter of housing abutment
r <sub>a</sub>	max. 0.3 mm	Radius of shaft or housing fillet

### Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	2.34 kN
Basic static load rating	C <sub>0</sub>	0.95 kN
Fatigue load limit	P <sub>u</sub>	0.04 kN
Reference speed		80 000 r/min
Limiting speed		40 000 r/min
Minimum load factor	k <sub>r</sub>	0.03
Calculation factor	f <sub>0</sub>	13

### Mass

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Mass bearing

0.0093 kg

## Tolerance class

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Dimensional tolerances




P6

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Radial run-out

Normal

## More Information

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