



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

## WBB1-8705-2Z

### **Stainless steel deep groove ball bearing with integral sealing**

Stainless steel single row deep groove ball bearing with seals or shields on both sides, provide greater chemical and corrosion resistance. As with deep groove ball bearings generally, they 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.

- Greater chemical and corrosion resistance
- Integral sealing prolongs bearing service life
- Typical benefits of single row deep groove ball bearings

# Overview

## Dimensions

Bore diameter	5 mm
Outside diameter	10 mm
Width	4 mm

## Performance

Basic dynamic load rating	0.247 kN
Basic static load rating	0.085 kN
Reference speed	130 000 r/min
Limiting speed	67 000 r/min

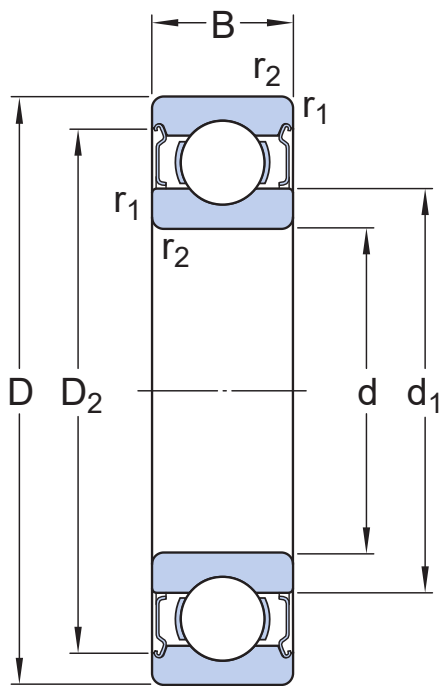
## Properties

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	Stainless steel
Coating	Without
Sealing	Shield on both sides
Sealing type	Non-contact
Lubricant	Grease
Relubrication feature	Without

## Logistics

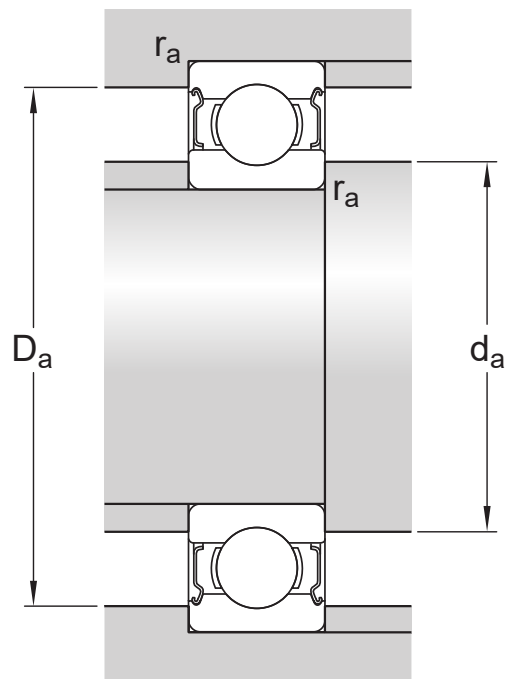
Product net weight	0.0012 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	5 mm	Bore diameter
D	10 mm	Outside diameter
B	4 mm	Width
d <sub>1</sub>	≈ 6 mm	Shoulder diameter
d <sub>2</sub>	≈ 6 mm	Recess diameter
D <sub>2</sub>	≈ 8.4 mm	Recess diameter
r <sub>1,2</sub>	min. 0.15 mm	Chamfer dimension



## Abutment dimensions

$d_a$	min. 5.9 mm	Diameter of shaft abutment
$d_a$	max. 5.9 mm	Diameter of shaft abutment
$D_a$	max. 8.8 mm	Diameter of housing abutment
$r_a$	max. 0.15 mm	Radius of shaft or housing fillet

## Calculation data

Basic dynamic load rating	C	0.247 kN
Basic static load rating	$C_0$	0.085 kN
Fatigue load limit	$P_u$	0.004 kN
Reference speed		130 000 r/min
Limiting speed		67 000 r/min
Minimum load factor	$k_r$	0.015
Calculation factor	$f_0$	7.6

## 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	 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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