



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

# 211-2Z

### Deep groove ball bearing with filling slots and integral sealing

Single row deep groove ball bearings with filling slots and shields on one or both sides, accommodate more balls than standard deep groove ball bearings. They are of a simple, yet versatile, design and are robust in operation, requiring little maintenance. They can accommodate radial and axial loads in both directions. They have a higher radial load carrying capacity than the corresponding bearings without filling slots but have a limited axial load carrying capacity due to the filling slots. 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
- Accommodate higher radial loads than corresponding bearings without filling slots, with limited axial loads in both directions
- Require little maintenance

# Overview

## **Dimensions**

Bore diameter	55 mm
Outside diameter	100 mm
Width	21 mm

### Performance

Basic dynamic load rating	48.4 kN
Basic static load rating	44 kN
Reference speed	12 000 r/min
Limiting speed	5 600 r/min

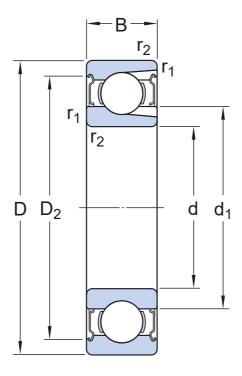
# **Properties**

Filling slots	With
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	Shield on both sides
Sealing type	Non-contact
Lubricant	Grease
Relubrication feature	Without

# Logistics

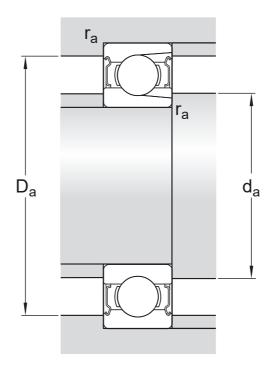
Product net weight	0.679 kg
eClass code	23-05-08-01
UNSPSC code	31171504

# **Technical specification**



# Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
В	21 mm	Width
$d_1$	≈ 69.06 mm	Shoulder diameter
D <sub>2</sub>	≈ 89.4 mm	Recess diameter
r <sub>1.2</sub>	min. 1.5 mm	Chamfer dimension



## **Abutment dimensions**

d <sub>a</sub>	min. 64 mm	Diameter of shaft abutment
d <sub>a</sub>	max. 68.9 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 91 mm	Diameter of housing abutment
r <sub>a</sub>	max. 1.5 mm	Radius of shaft or housing fillet

## Calculation data

Basic dynamic load rating	С	48.4 kN
Basic static load rating	$C_0$	44 kN
Fatigue load limit	$P_{u}$	1.86 kN
Reference speed		12 000 r/min
Limiting speed		5 600 r/min
Minimum load factor	k <sub>r</sub>	0.04

## 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**

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



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