



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

# 16022

#### Deep groove ball bearing

Single row deep groove ball bearings 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.

- Simple, versatile and robust design
- Low friction
- High-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

## Overview

### Dimensions

Bore diameter	110 mm
Outside diameter	170 mm
Width	19 mm

### Performance

Basic dynamic load rating	60.5 kN
Basic static load rating	57 kN
Reference speed	8 000 r/min
Limiting speed	5 000 r/min
SKF performance class	SKF Explorer

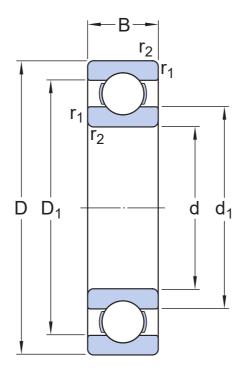
## **Properties**

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	Without
Lubricant	None
Relubrication feature	Without

## Logistics

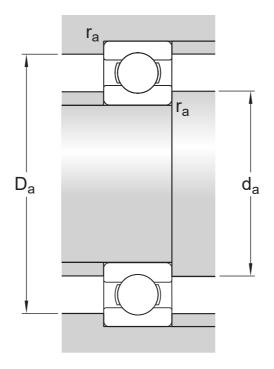
Product net weight	1.44 kg
eClass code	23-05-08-01
UNSPSC code	31171504

## **Technical specification**



## Dimensions

d	110 mm	Bore diameter
$t_{\Deltadmp}$	-15 – 0 μm	Deviation limits of mid-range bore diameter
D	170 mm	Outside diameter
$t_{\DeltaDmp}$	-18 − 0 μm	Deviation limits of mid-range outside diameter
В	19 mm	Width
t∆Bs	-100 – 0 μm	Deviation limits of ring width
d <sub>1</sub>	≈ 130 mm	Shoulder diameter
$D_1$	≈ 149.95 mm	Shoulder diameter
r <sub>1,2</sub>	min. 1 mm	Chamfer dimension
	P6 and tighter width tolerance	ISO tolerance class for dimensions



## Abutment dimensions

da	min. 115 mm	Diameter of shaft abutment
Da	max. 165 mm	Diameter of housing abutment
r <sub>a</sub>	max. 1 mm	Radius of shaft or housing fillet

### Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	С	60.5 kN
Basic static load rating	C <sub>0</sub>	57 kN
Fatigue load limit	$P_{\rm u}$	2.04 kN
Reference speed		8 000 r/min
Limiting speed		5 000 r/min
Minimum load factor	k <sub>r</sub>	0.02
Calculation factor	f <sub>0</sub>	16.3

### Tolerances of run-out

Range of section height at inner ring of assembled bearing	t <sub>Kia</sub>	25 μm
Range of section height at outer ring of assembled bearing	t <sub>Kea</sub>	45 μm

ISO tolerance class for geometrica
tolerances

Normal

### 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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