

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

61813

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	65 mm
Outside diameter	85 mm
Width	10 mm

Performance

Basic dynamic load rating	11.9 kN
Basic static load rating	9.65 kN
Reference speed	16 000 r/min
Limiting speed	10 000 r/min

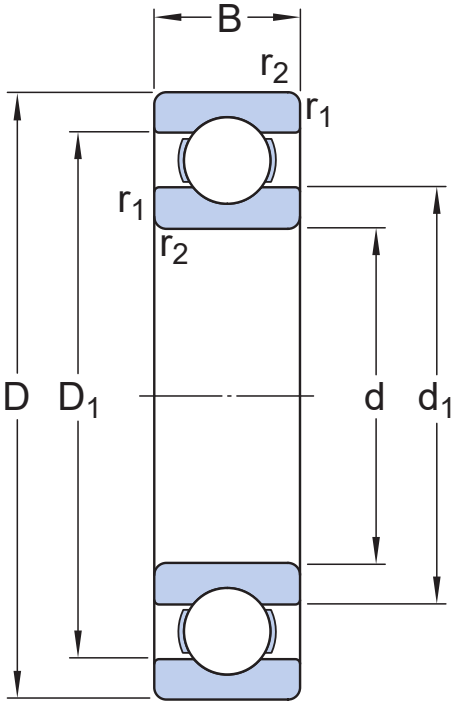
Properties

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	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

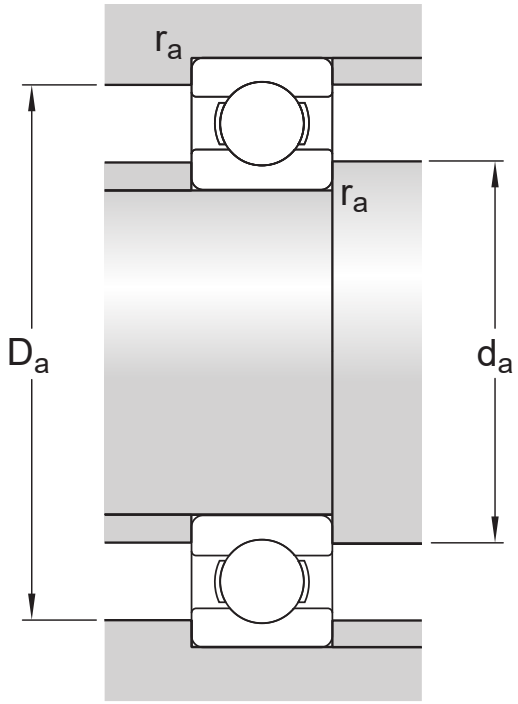
Product net weight	0.129 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	65 mm	Bore diameter
D	85 mm	Outside diameter
B	10 mm	Width
d_1	≈ 71.4 mm	Shoulder diameter
D_1	≈ 78.9 mm	Shoulder diameter
$r_{1,2}$	min. 0.6 mm	Chamfer dimension



Abutment dimensions

d_a	min. 68.2 mm	Diameter of shaft abutment
D_a	max. 81.8 mm	Diameter of housing abutment
r_a	max. 0.6 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	11.9 kN
Basic static load rating	C_0	9.65 kN
Fatigue load limit	P_u	0.51 kN
Reference speed		16 000 r/min
Limiting speed		10 000 r/min
Minimum load factor	k_r	0.015
Calculation factor	f_0	17

Tolerance class

Dimensional tolerances	Normal
Radial run-out	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

Product details

- Single row deep groove ball bearings
- Stainless steel deep groove ball bearings
- Single row deep groove ball bearings with filling slots
- Double row deep groove ball bearings
- General bearing specifications
- Loads
- Temperature limits
- Permissible speed
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing interfaces
- Seat tolerances for standard conditions
- Selecting internal clearance
- Lubrication
- Sealing, mounting and dismounting
- Bearing failure and how to prevent it

Tools

- SKF Product select
- SimPro Quick
- Bearing Frequency Calculator
- LubeSelect for SKF greases
- Heater selection tool

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