

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

61940 MA

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	200 mm
Outside diameter	280 mm
Width	38 mm

Performance

Basic dynamic load rating	148 kN
Basic static load rating	166 kN
Reference speed	4 800 r/min
Limiting speed	3 800 r/min

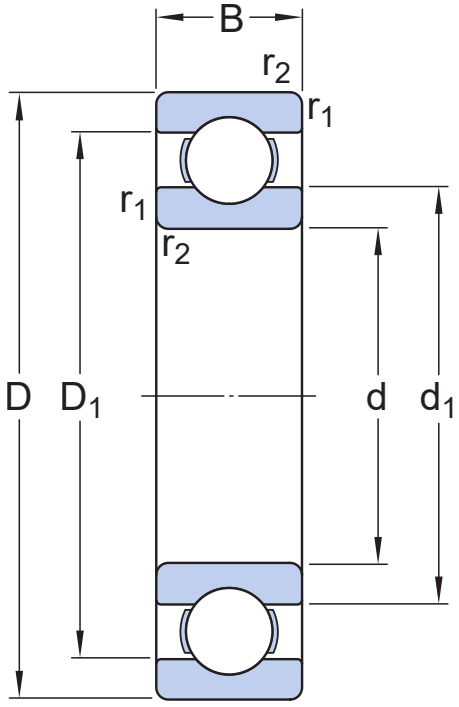
Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Machined metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

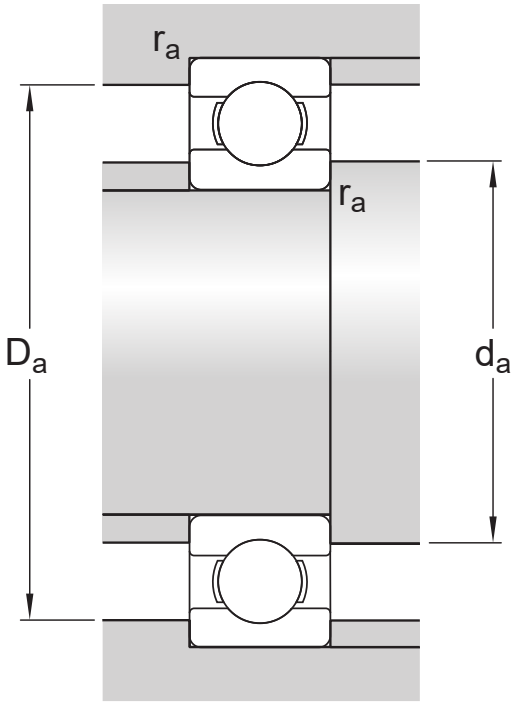
Product net weight	7.38 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	200 mm	Bore diameter
D	280 mm	Outside diameter
B	38 mm	Width
d_1	≈ 225.7 mm	Shoulder diameter
D_1	≈ 255.2 mm	Shoulder diameter
$r_{1,2}$	min. 2.1 mm	Chamfer dimension



Abutment dimensions

d_a	min. 210 mm	Diameter of shaft abutment
D_a	max. 270 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	148 kN
Basic static load rating	C_0	166 kN
Fatigue load limit	P_u	4.55 kN
Reference speed		4 800 r/min
Limiting speed		3 800 r/min
Minimum load factor	k_r	0.02
Calculation factor	f_0	16.4

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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