

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

4210 ATN9

Double row deep groove ball bearing

Double row deep groove ball bearings correspond, in their design and operation, to a pair of single row deep groove ball bearings. They are robust in operation, requiring little maintenance, can operate at high speeds and accommodate radial and axial loads in both directions. They are slightly wider than single row bearings of the same bore and outside diameter but have a considerably higher load carrying capacity.

- Versatile and robust design
- High-speed capability
- Accommodate high axial and radial loads in both directions
- Require little maintenance

Overview

Dimensions

Bore diameter	50 mm
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	41 kN
Basic static load rating	40 kN
Reference speed	11 000 r/min
Limiting speed	6 000 r/min

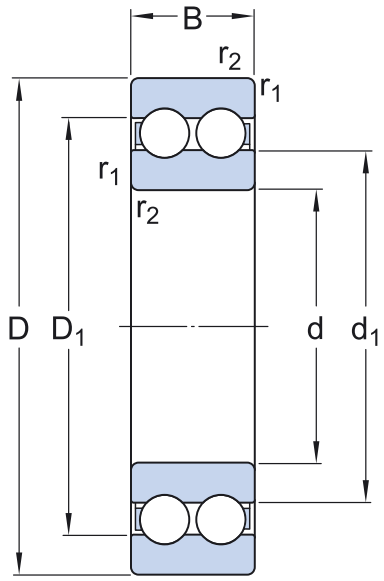
Properties

Filling slots	Without
Number of rows	2
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Non-metallic
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

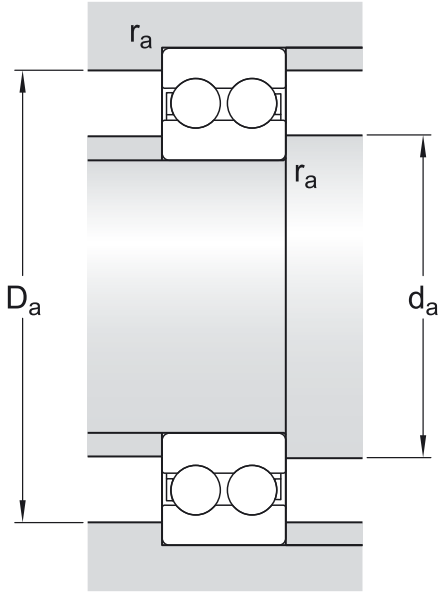
Product net weight	0.569 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d_1	≈ 65.5 mm	Shoulder diameter
D_1	≈ 77.5 mm	Shoulder diameter
$r_{1,2}$	min. 1.1 mm	Chamfer dimension



Abutment dimensions

d_a	min. 57 mm	Diameter of shaft abutment
D_a	max. 83 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	41 kN
Basic static load rating	C_0	40 kN
Fatigue load limit	P_u	1.7 kN
Reference speed		11 000 r/min
Limiting speed		6 000 r/min
Minimum load factor	k_r	0.05
Calculation factor	f_0	15.4

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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