



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

4312 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	60 mm
Outside diameter	130 mm
Width	46 mm

Performance

Basic dynamic load rating	112 kN
Basic static load rating	98 kN
Reference speed	8 500 r/min
Limiting speed	4 500 r/min

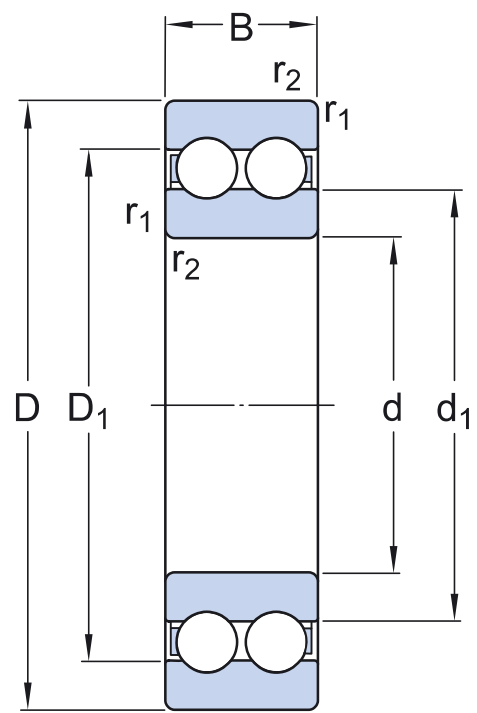
Properties

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

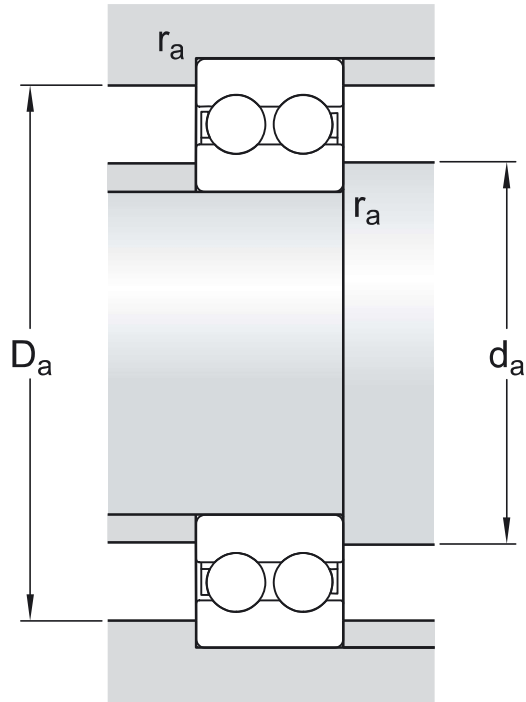
Product net weight	2.61 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	60 mm	Bore diameter
D	130 mm	Outside diameter
B	46 mm	Width
d ₁	≈ 83.1 mm	Shoulder diameter
D ₁	≈ 107 mm	Shoulder diameter
r _{1,2}	min. 2.1 mm	Chamfer dimension



Abutment dimensions

d_a	min. 72 mm	Diameter of shaft abutment
D_a	max. 118 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	112 kN
Basic static load rating	C_0	98 kN
Fatigue load limit	P_u	4.15 kN
Reference speed		8 500 r/min
Limiting speed		4 500 r/min
Minimum load factor	k_r	0.06
Calculation factor	f_0	13.7

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	 Engineering information	 Tools
Single row deep groove ball bearings	Principles of rolling bearing selection	SKF Product select
Stainless steel deep groove ball bearings	General bearing knowledge	SimPro Quick
Single row deep groove ball bearings with filling slots	Bearing selection process	Bearing Frequency Calculator
Double row deep groove ball bearings	Bearing interfaces	LubeSelect for SKF greases
General bearing specifications	Seat tolerances for standard conditions	Heater selection tool
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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