



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

4205 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	25 mm
Outside diameter	52 mm
Width	18 mm

Performance

Basic dynamic load rating	19 kN
Basic static load rating	14.6 kN
Reference speed	20 000 r/min
Limiting speed	11 000 r/min

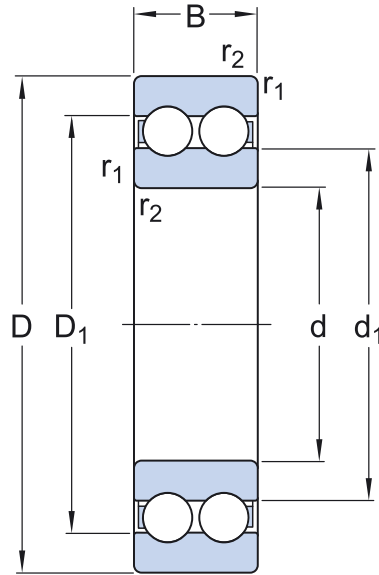
Properties

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
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

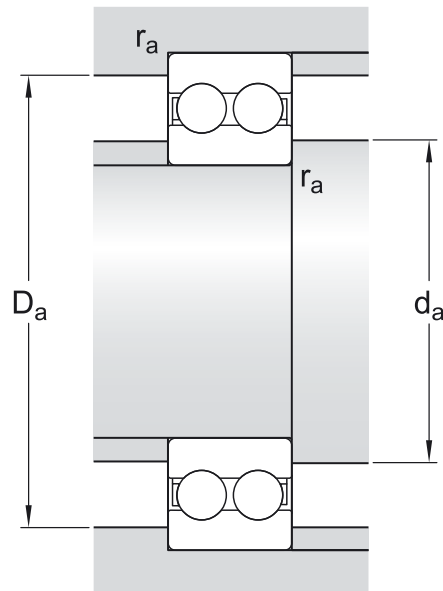
Product net weight	0.161 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	18 mm	Width
d_1	≈ 34.2 mm	Shoulder diameter
D_1	≈ 42.8 mm	Shoulder diameter
$r_{1,2}$	min. 1 mm	Chamfer dimension



Abutment dimensions

d_a	min. 30.6 mm	Diameter of shaft abutment
D_a	max. 46.4 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	14.6 kN
Fatigue load limit	P_u	0.62 kN
Reference speed		20 000 r/min
Limiting speed		11 000 r/min
Minimum load factor	k_r	0.05
Calculation factor	f_0	14.3




Mass

Mass bearing	0.17 kg
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Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal

More Information

 Product details	 Engineering information	 Tools
Single row deep groove ball bearings		SKF Product select
Stainless steel deep groove ball bearings	Principles of rolling bearing selection	SimPro Quick
Single row deep groove ball bearings with filling slots	General bearing knowledge	Bearing Frequency Calculator
Double row deep groove ball bearings	Bearing selection process	LubeSelect for SKF greases
General bearing specifications	Bearing interfaces	Heater selection tool
Loads	Seat tolerances for standard conditions	
Temperature limits	Selecting internal clearance	
Permissible speed	Lubrication	
Designation system	Sealing, mounting and dismounting	
	Bearing failure and how to prevent it	



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