



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

4305 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 | 0.984 in |
| Outside diameter | 2.441 in |
| Width | 0.945 in |

Performance

| | |
|---------------------------|--------------|
| Basic dynamic load rating | 7 171 lbf |
| Basic static load rating | 5 036 lbf |
| Reference speed | 18 000 r/min |
| Limiting speed | 10 000 r/min |

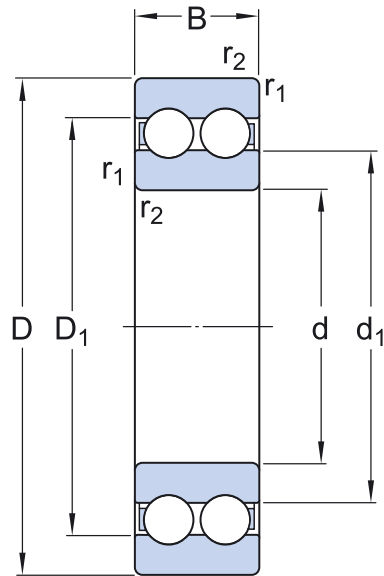
Properties

| | |
|--------------------------------------|---------------|
| 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

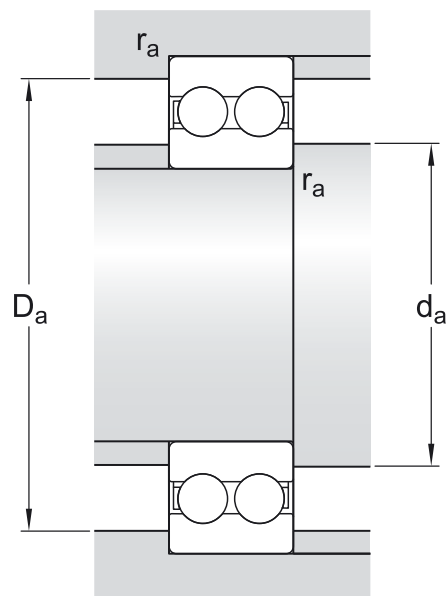
| | |
|--------------------|-------------|
| Product net weight | 0.7297 lb |
| eClass code | 23-05-08-01 |
| UNSPSC code | 31171504 |

Technical specification



Dimensions

| | | |
|-----------|--------------------|-------------------|
| d | 0.984 in | Bore diameter |
| D | 2.441 in | Outside diameter |
| B | 0.945 in | Width |
| d_1 | ≈ 1.469 in | Shoulder diameter |
| D_1 | ≈ 1.957 in | Shoulder diameter |
| $r_{1,2}$ | min. 0.043 in | Chamfer dimension |



Abutment dimensions

| | | |
|-------|---------------|-----------------------------------|
| d_a | min. 1.26 in | Diameter of shaft abutment |
| D_a | max. 2.165 in | Diameter of housing abutment |
| r_a | max. 0.039 in | Radius of shaft or housing fillet |

Calculation data

| | | |
|---------------------------|-------|--------------|
| Basic dynamic load rating | C | 7 171 lbf |
| Basic static load rating | C_0 | 5 036 lbf |
| Fatigue load limit | P_u | 214 lbf |
| Reference speed | | 18 000 r/min |
| Limiting speed | | 10 000 r/min |
| Minimum load factor | k_f | 0.06 |
| Calculation factor | f_0 | 13.1 |

Tolerance class

| | |
|------------------------|--------|
| Dimensional tolerances | Normal |
| Radial run-out | Normal |

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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