



4311 ATN9

Deep groove ball bearings

Bearing data

[Tolerances,](#)

Normal (metric), P6, P5, Normal (inch),

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

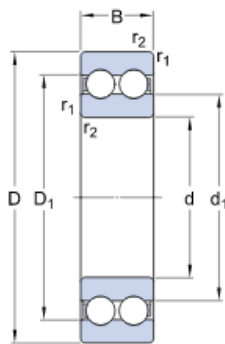
$d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions,](#)

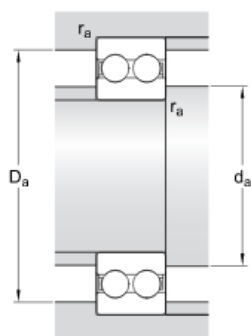
[Tolerances and resultant fits](#)

Technical specification



DIMENSIONS

| | |
|-----------|-----------|
| d | 55 mm |
| D | 120 mm |
| B | 43 mm |
| d_1 | ≈ 76.5 mm |
| D_1 | ≈ 98.5 mm |
| $r_{1,2}$ | min. 2 mm |



ABUTMENT DIMENSIONS

| | |
|-------|-------------|
| d_a | min. 66 mm |
| D_a | max. 109 mm |
| r_a | max. 2 mm |

CALCULATION DATA

| | | |
|---------------------------|----------------|------------|
| Basic dynamic load rating | C | 97.5 kN |
| Basic static load rating | C ₀ | 83 kN |
| Fatigue load limit | P _u | 3.45 kN |
| Reference speed | | 9000 r/min |
| Limiting speed | | 5000 r/min |
| Calculation factor | k _r | 0.06 |
| Calculation factor | f ₀ | 14 |

MASS

| | | |
|--------------|--|---------|
| Mass bearing | | 2.15 kg |
|--------------|--|---------|

More information

| Product details | Product details | Engineering information | Engineering information | Tools | Tools |
|--|--|---|---|--|--|
| 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 Bearing data | 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 Bearing data | Principles of rolling bearing selection General bearing knowledge | Principles of rolling bearing selection General bearing knowledge | Bearing Select | Bearing Select |
| | | Bearing selection process | Bearing selection process | SimPro Quick | SimPro Quick |
| | | Bearing interfaces | Bearing interfaces | Engineering Calculator | Engineering Calculator |
| | | Seat tolerances for standard condition | Seat tolerances for standard condition | LubeSelect for SKF greases | LubeSelect for SKF greases |
| | | Selecting internal clearance | Selecting internal clearance | Heater selection tool | Heater selection tool |
| Loads | Loads | Lubrication | Lubrication | Rolling bearings mounting and dismounting instructions | Rolling bearings mounting and dismounting instructions |
| Temperature limits | Temperature limits | Sealing, mounting and dismounting | Sealing, mounting and dismounting | | |
| Permissible speed | Permissible speed | Bearing failure and how to prevent it | Bearing failure and how to prevent it | | |
| Designation system | Designation system | | | | |

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