



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

## 3306 ATN9

### Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

## Overview

### Dimensions

|                  |         |
|------------------|---------|
| Bore diameter    | 30 mm   |
| Outside diameter | 72 mm   |
| Width            | 30.2 mm |
| Contact angle    | 30 °    |

### Performance

|                           |              |
|---------------------------|--------------|
| Basic dynamic load rating | 42.5 kN      |
| Basic static load rating  | 30 kN        |
| Reference speed           | 10 000 r/min |
| Limiting speed            | 9 000 r/min  |
| SKF performance class     | SKF Explorer |

### Properties

|   |                                    |
|---|------------------------------------|
| Contact type                                      | Normal contact (two-point contact) |
| Number of rows                                    | 2                                  |
| Locating feature, bearing outer ring              | None                               |
| Ring type   | One-piece inner and outer rings    |
| Cage  | Non-metallic                       |
| Arrangement of contact angle (double-row bearing) | Back-to-back (O)                   |
| Matched arrangement                               | No                                 |
| Universal matching bearing                        | No                                 |
| Axial internal clearance                          | CN                                 |
| Material, bearing                                 | Bearing steel                      |
| Coating   | Without                            |
| Sealing   | Without                            |
| Lubricant   | None                               |
| Relubrication feature                             | Without                            |

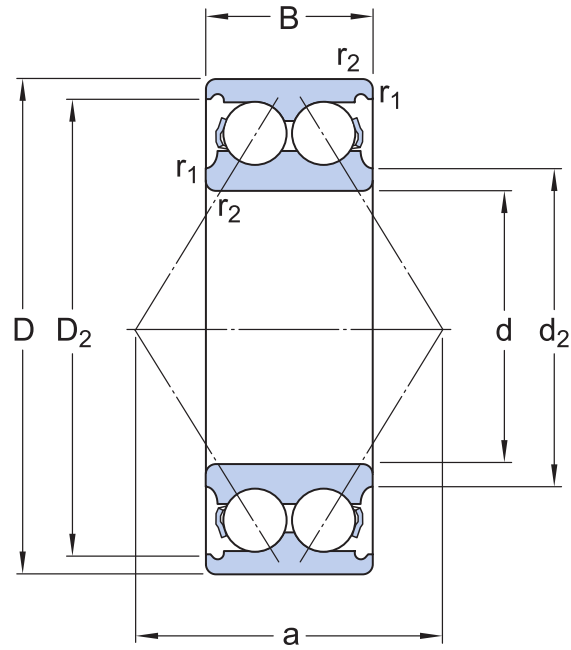
### Logistics

|                    |             |
|--------------------|-------------|
| Product net weight | 0.52 kg     |
| eClass code        | 23-05-08-03 |

UNSPSC code

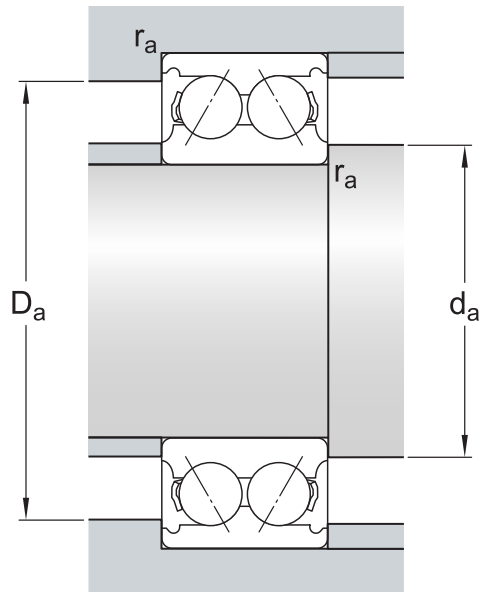
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## Technical specification



## Dimensions

|                  |             |                                     |
|------------------|-------------|-------------------------------------|
| d                | 30 mm       | Bore diameter                       |
| D                | 72 mm       | Outside diameter                    |
| B                | 30.2 mm     | Width                               |
| d <sub>2</sub>   | ≈ 39.8 mm   | Recess diameter inner ring shoulder |
| D <sub>2</sub>   | ≈ 64.1 mm   | Recess diameter outer ring shoulder |
| r <sub>1,2</sub> | min. 1.1 mm | Chamfer dimension inner ring        |
| a                | 42 mm       | Distance pressure point(s)          |






## Abutment dimensions

|       |            |                           |
|-------|------------|---------------------------|
| $d_a$ | min. 37 mm | Abutment diameter shaft   |
| $D_a$ | max. 65 mm | Abutment diameter housing |
| $r_a$ | max. 1 mm  | Fillet radius             |

## Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| SKF performance class     |       | SKF Explorer |
| Basic dynamic load rating | C     | 42.5 kN      |
| Basic static load rating  | $C_0$ | 30 kN        |
| Fatigue load limit        | $P_u$ | 1.27 kN      |
| Reference speed           |       | 10 000 r/min |
| Limiting speed            |       | 9 000 r/min  |
| Calculation factor        | $k_r$ | 0.07         |
| Limiting value            | e     | 0.8          |
| Calculation factor        | X     | 0.63         |
| Calculation factor        | $Y_0$ | 0.66         |
| Calculation factor        | $Y_1$ | 0.78         |
| Calculation factor        | $Y_2$ | 1.24         |

## More Information

|   |   |  |
|---|---|--|
| <p> <b>Product details</b></p> <hr/> <p><a href="#">Designs and variants</a></p> <hr/> <p><a href="#">General bearing specifications</a></p> <hr/> <p><a href="#">Loads</a></p> <hr/> <p><a href="#">Temperature limits</a></p> <hr/> <p><a href="#">Permissible speed</a></p> <hr/> <p><a href="#">Designation system</a></p> <hr/> | <p> <b>Engineering information</b></p> <hr/> <p><a href="#">Principles of rolling bearing selection</a></p> <hr/> <p><a href="#">General bearing knowledge</a></p> <hr/> <p><a href="#">Bearing selection process</a></p> <hr/> <p><a href="#">Bearing interfaces</a></p> <hr/> <p><a href="#">Seat tolerances for standard conditions</a></p> <hr/> <p><a href="#">Selecting internal clearance or preload</a></p> <hr/> <p><a href="#">Lubrication</a></p> <hr/> <p><a href="#">Sealing, mounting and dismounting</a></p> <hr/> <p><a href="#">Bearing failure and how to prevent it</a></p> <hr/> | <p> <b>Tools</b></p> <hr/> <p><a href="#">SKF Product select</a></p> <hr/> <p><a href="#">SimPro Quick</a></p> <hr/> <p><a href="#">Bearing Frequency Calculator</a></p> <hr/> <p><a href="#">LubeSelect for SKF greases</a></p> <hr/> <p><a href="#">Heater selection tool</a></p> <hr/> <p><a href="#">Rolling bearings mounting and dismounting instructions</a></p> <hr/> |
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