

### 3203 ATN9

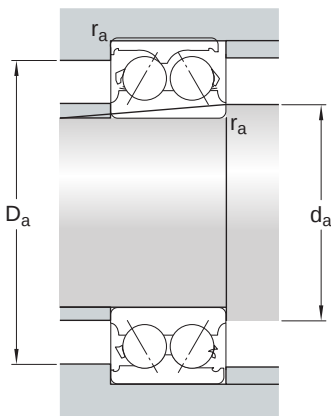
Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting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



| Dimensions       |             |                                     |
|------------------|-------------|-------------------------------------|
| d                | 17 mm       | Bore diameter                       |
| D                | 40 mm       | Outside diameter                    |
| B                | 17.5 mm     | Width                               |
| d <sub>2</sub>   | ≈ 23.3 mm   | Recess diameter inner ring shoulder |
| D <sub>2</sub>   | ≈ 34.95 mm  | Recess diameter outer ring shoulder |
| r <sub>1,2</sub> | min. 0.6 mm | Chamfer dimension inner ring        |
| a                | 23 mm       | Distance pressure point(s)          |



| Abutment dimensions |              |                           |
|---------------------|--------------|---------------------------|
| d <sub>a</sub>      | min. 21.4 mm | Abutment diameter shaft   |
| d <sub>a</sub>      | max. 23 mm   | Abutment diameter shaft   |
| D <sub>a</sub>      | max. 35.6 mm | Abutment diameter housing |
| r <sub>a</sub>      | max. 0.6 mm  | Fillet radius             |

## Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| Basic dynamic load rating | C              | 14.3 kN      |
| Basic static load rating  | C <sub>0</sub> | 8.8 kN       |
| Fatigue load limit        | P <sub>u</sub> | 0.365 kN     |
| Reference speed           |                | 19 000 r/min |
| Limiting speed            |                | 16 000 r/min |
| Calculation factor        | k <sub>r</sub> | 0.06         |
| Limiting value            | e              | 0.8          |
| Calculation factor        | X              | 0.63         |
| Calculation factor        | Y <sub>0</sub> | 0.66         |
| Calculation factor        | Y <sub>1</sub> | 0.78         |
| Calculation factor        | Y <sub>2</sub> | 1.24         |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5
- Internal clearance: table, drawing no

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit