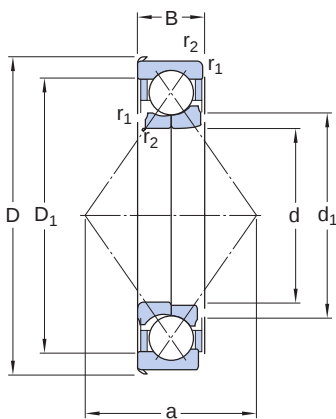


## QJ 209 MA

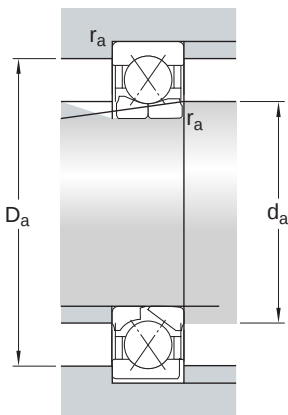


Four-point contact ball bearings can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring, with ball and cage assembly, can be mounted separately from the two inner ring halves.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings



| Dimensions       |             |                                                             |
|------------------|-------------|-------------------------------------------------------------|
| d                | 45 mm       | Bore diameter                                               |
| D                | 85 mm       | Outside diameter                                            |
| B                | 19 mm       | Width                                                       |
| d <sub>1</sub>   | ≈ 54.5 mm   | Shoulder diameter inner ring                                |
| D <sub>1</sub>   | ≈ 72 mm     | Shoulder diameter outer ring/ inner diameter housing washer |
| a                | 46 mm       | Distance pressure point(s)                                  |
| r <sub>1,2</sub> | min. 1.1 mm | Chamfer dimension inner ring                                |



| Abutment dimensions |            |                           |
|---------------------|------------|---------------------------|
| d <sub>a</sub>      | min. 52 mm | Abutment diameter shaft   |
| D <sub>a</sub>      | max. 78 mm | Abutment diameter housing |
| r <sub>a</sub>      | max. 1 mm  | Fillet radius             |

### Calculation data

|                           |                |         |
|---------------------------|----------------|---------|
| performance class         | Explorer       |         |
| Basic dynamic load rating | C              | 63 kN   |
| Basic static load rating  | C <sub>0</sub> | 56 kN   |
| Fatigue load limit        | P <sub>u</sub> | 2.36 kN |
| Limiting speed            | 14 000 r/min   |         |
| Calculation factor        | A              | 0.00871 |
| Limiting value            | e              | 0.95    |
| Calculation factor        | X              | 0.6     |
| Calculation factor        | Y <sub>0</sub> | 0.58    |
| Calculation factor        | Y <sub>1</sub> | 0.66    |
| Calculation factor        | Y <sub>2</sub> | 1.07    |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6
- Internal clearance: table

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit