



# QJ 220 N2MA Angular contact ball bearings, four-point contact ball bearings

- Product item

- SKF Explorer

## Angular contact ball bearings, four-point contact ball bearings

### Bearing data

[Tolerances,](#)

Normal, P6,

[Internal clearance,](#)

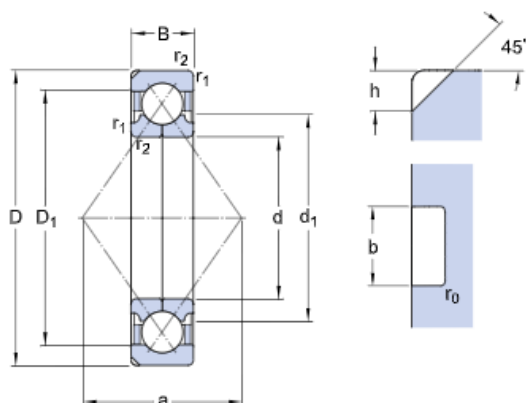
table

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

## Technical specification

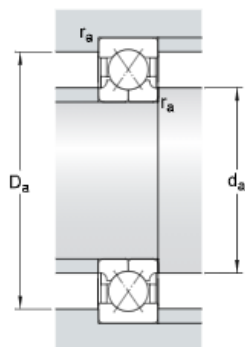


### DIMENSIONS

|                  |             |                                                                |
|------------------|-------------|----------------------------------------------------------------|
| d                | 100 mm      | Bore diameter                                                  |
| D                | 180 mm      | Outside diameter                                               |
| B                | 34 mm       | Width                                                          |
| d <sub>1</sub>   | ≈ 127 mm    | Shoulder diameter inner ring                                   |
| D <sub>1</sub>   | ≈ 153 mm    | Shoulder diameter outer ring/<br>inner diameter housing washer |
| a                | 98 mm       | Distance pressure point(s)                                     |
| h                | 10.1 mm     | Locating slot depth outer ring                                 |
| b                | 8.5 mm      | Locating slot width outer ring                                 |
| r <sub>0</sub>   | 2 mm        | Corner radius locating slot                                    |
| r <sub>1,2</sub> | min. 2.1 mm | Chamfer dimension inner ring                                   |

### ABUTMENT DIMENSIONS

|                            |                           |
|----------------------------|---------------------------|
| d <sub>a</sub> min. 112 mm | Abutment diameter shaft   |
| D <sub>c</sub> max. 168 mm | Abutment diameter housing |
| r <sub>a</sub> max. 2 mm   | Fillet radius             |



## CALCULATION DATA

|                |             |                           |
|----------------|-------------|---------------------------|
| C              | 236 kN      | Basic dynamic load rating |
| C <sub>0</sub> | 265 kN      | Basic static load rating  |
| P <sub>u</sub> | 9.5 kN      | Fatigue load limit        |
|                | 6 300 r/min | Limiting speed            |
| A              | 0.176       | Calculation factor        |
| 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        | Calculation factor        |

## MASS

|         |              |
|---------|--------------|
| 4.05 kg | Mass bearing |
|---------|--------------|