

## QJ 216 N2MA

Four-point contact ball bearings with locating slots 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. The locating slots can be used to prevent the outer ring from rotating.



- 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
- The locating slots can be used to prevent the outer ring from rotating



| Dimensions       |           |                                                             |
|------------------|-----------|-------------------------------------------------------------|
| d                | 80 mm     | Bore diameter                                               |
| D                | 140 mm    | Outside diameter                                            |
| B                | 26 mm     | Width                                                       |
| d <sub>1</sub>   | ≈ 95.3 mm | Shoulder diameter inner ring                                |
| D <sub>1</sub>   | ≈ 120 mm  | Shoulder diameter outer ring/ inner diameter housing washer |
| a                | 77 mm     | Distance pressure point(s)                                  |
| h                | 8.1 mm    | Locating slot depth outer ring                              |
| b                | 6.5 mm    | Locating slot width outer ring                              |
| r <sub>0</sub>   | 1 mm      | Corner radius locating slot                                 |
| r <sub>1,2</sub> | min. 2 mm | Chamfer dimension inner ring                                |



#### Abutment dimensions

|       |             |                           |
|-------|-------------|---------------------------|
| $d_a$ | min. 91 mm  | Abutment diameter shaft   |
| $D_a$ | max. 130 mm | Abutment diameter housing |
| $r_a$ | max. 2 mm   | Fillet radius             |

#### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| performance class         |       | Explorer    |
| Basic dynamic load rating | C     | 146 kN      |
| Basic static load rating  | $C_0$ | 156 kN      |
| Fatigue load limit        | $P_u$ | 6.4 kN      |
| Limiting speed            |       | 8 000 r/min |
| Calculation factor        | A     | 0.0629      |
| Limiting value            | e     | 0.95        |
| Calculation factor        | X     | 0.6         |
| Calculation factor        | $Y_0$ | 0.58        |
| Calculation factor        | $Y_1$ | 0.66        |
| Calculation factor        | $Y_2$ | 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

AGA BEARINGS