

NCF 3038 CV

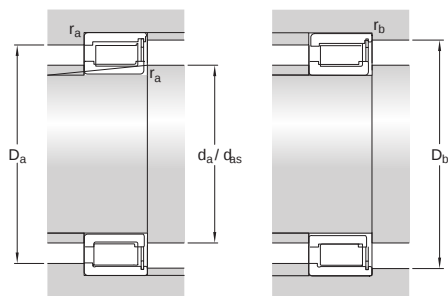
Single row full complement cylindrical roller bearings are designed to accommodate very high radial loads in combination with moderate speeds. The bearings incorporate a maximum number of rollers as they are not equipped with a cage. Having two integral flanges on the inner ring and one flange on the outer ring, NCF design bearings can accommodate axial displacement in one direction. A retaining ring on the outer ring holds the bearing together. The retaining ring should not be loaded axially during operation.



- Very high radial load carrying capacity
- High radial stiffness
- Long service life
- Locate the shaft axially in one direction



| Dimensions       |             |                                                                                                   |
|------------------|-------------|---------------------------------------------------------------------------------------------------|
| d                | 190 mm      | Bore diameter                                                                                     |
| D                | 290 mm      | Outside diameter                                                                                  |
| B                | 75 mm       | Width                                                                                             |
| d <sub>1</sub>   | ≈ 222 mm    | Shoulder diameter inner ring                                                                      |
| D <sub>1</sub>   | ≈ 258 mm    | Shoulder diameter outer ring                                                                      |
| E                | 269.76 mm   | Raceway diameter outer ring                                                                       |
| s                | max. 8 mm   | Permissible axial displacement from the normal position of one bearing ring relative to the other |
| r <sub>1,2</sub> | min. 2.1 mm | Chamfer dimension                                                                                 |
| r <sub>3,4</sub> | min. 2.1 mm | Chamfer dimension                                                                                 |



### Abutment dimensions

|          |             |                           |
|----------|-------------|---------------------------|
| $d_a$    | min. 202 mm | Abutment diameter shaft   |
| $d_{as}$ | 216 mm      | Abutment diameter shaft   |
| $D_a$    | max. 279 mm | Abutment diameter housing |
| $D_b$    | max. 279 mm | Abutment diameter housing |
| $r_a$    | max. 2 mm   | Fillet radius             |
| $r_b$    | max. 2 mm   | Fillet radius             |

### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 792 kN      |
| Basic static load rating  | $C_0$ | 1 290 kN    |
| Fatigue load limit        | $P_u$ | 140 kN      |
| Reference speed           |       | 1 000 r/min |
| Limiting speed            |       | 1 300 r/min |
| Calculation factor        | $k_r$ | 0.3         |
| Limiting value            | e     | 0.3         |
| Calculation factor        | Y     | 0.4         |

### Tolerances and clearances

#### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal
- Radial internal clearance: table

#### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit