

## NCF 2924 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                | 120 mm      | Bore diameter                                                                                     |
| D                | 165 mm      | Outside diameter                                                                                  |
| B                | 27 mm       | Width                                                                                             |
| d <sub>1</sub>   | ≈ 136 mm    | Shoulder diameter inner ring                                                                      |
| D <sub>1</sub>   | ≈ 149 mm    | Shoulder diameter outer ring                                                                      |
| E                | 154.3 mm    | Raceway diameter outer ring                                                                       |
| s                | max. 1.3 mm | Permissible axial displacement from the normal position of one bearing ring relative to the other |
| r <sub>1,2</sub> | min. 1.1 mm | Chamfer dimension                                                                                 |
| r <sub>3,4</sub> | min. 1 mm   | Chamfer dimension                                                                                 |



### Abutment dimensions

|          |             |                           |
|----------|-------------|---------------------------|
| $d_a$    | min. 126 mm | Abutment diameter shaft   |
| $d_{as}$ | 133 mm      | Abutment diameter shaft   |
| $D_a$    | max. 159 mm | Abutment diameter housing |
| $D_b$    | max. 159 mm | Abutment diameter housing |
| $r_a$    | max. 1 mm   | Fillet radius             |
| $r_b$    | max. 1 mm   | Fillet radius             |

### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 172 kN      |
| Basic static load rating  | $C_0$ | 290 kN      |
| Fatigue load limit        | $P_u$ | 34 kN       |
| Reference speed           |       | 1 800 r/min |
| Limiting speed            |       | 2 200 r/min |
| Calculation factor        | $k_r$ | 0.2         |
| 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