

NCF 2892 V/HB1

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                | 460 mm    | Bore diameter                                                                                     |
| D                | 580 mm    | Outside diameter                                                                                  |
| B                | 72 mm     | Width                                                                                             |
| d <sub>1</sub>   | ≈ 501 mm  | Shoulder diameter inner ring                                                                      |
| D <sub>1</sub>   | ≈ 543 mm  | Shoulder diameter outer ring                                                                      |
| E                | 553 mm    | Raceway diameter outer ring                                                                       |
| s                | max. 5 mm | Permissible axial displacement from the normal position of one bearing ring relative to the other |
| r <sub>1,2</sub> | min. 3 mm | Chamfer dimension                                                                                 |



| Abutment dimensions |             |                           |
|---------------------|-------------|---------------------------|
| d <sub>a</sub>      | min. 473 mm | Abutment diameter shaft   |
| d <sub>as</sub>     | 495 mm      | Abutment diameter shaft   |
| D <sub>a</sub>      | max. 567 mm | Abutment diameter housing |

|       |             |                           |
|-------|-------------|---------------------------|
| $D_b$ | max. 567 mm | Abutment diameter housing |
| $r_a$ | max. 2.5 mm | Fillet radius             |

## Calculation data

|                           |       |           |
|---------------------------|-------|-----------|
| Basic dynamic load rating | C     | 1 300 kN  |
| Basic static load rating  | $C_0$ | 3 050 kN  |
| Fatigue load limit        | $P_u$ | 260 kN    |
| Reference speed           |       | 430 r/min |
| Limiting speed            |       | 530 r/min |
| Calculation factor        | $k_r$ | 0.11      |
| 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