

N 317 ECM

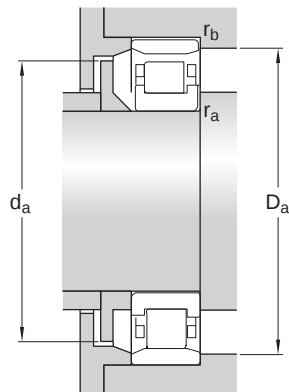
Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the inner ring and no flanges on the outer ring, N design bearings can accommodate axial displacement in both directions. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.



- High radial load carrying capacity
- Low friction
- Long service life
- Accommodate axial displacement in both directions
- Separable design



| Dimensions       |             |                                 |
|------------------|-------------|---------------------------------|
| d                | 85 mm       | Bore diameter                   |
| D                | 180 mm      | Outside diameter                |
| B                | 41 mm       | Width                           |
| d <sub>1</sub>   | ≈ 117 mm    | Shoulder diameter of inner ring |
| E                | 160 mm      | Raceway diameter of outer ring  |
| r <sub>1,2</sub> | min. 3 mm   | Chamfer dimension               |
| r <sub>3,4</sub> | min. 3 mm   | Chamfer dimension               |
| s                | max. 2.3 mm | Permissible axial displacement  |



| Abutment dimensions |             |                              |
|---------------------|-------------|------------------------------|
| d <sub>a</sub>      | min. 99 mm  | Diameter of spacer sleeve    |
| d <sub>a</sub>      | max. 157 mm | Diameter of spacer sleeve    |
| D <sub>a</sub>      | min. 163 mm | Diameter of housing abutment |
| D <sub>a</sub>      | max. 166 mm | Diameter of housing abutment |
|                     |             |                              |

|       |             |                  |
|-------|-------------|------------------|
| $r_a$ | max. 2.5 mm | Radius of fillet |
| $r_b$ | max. 2.5 mm | Radius of fillet |

## Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| AGA performance class     |       | AGA Explorer |
| Basic dynamic load rating | C     | 340 kN       |
| Basic static load rating  | $C_0$ | 335 kN       |
| Fatigue load limit        | $P_u$ | 41.5 kN      |
| Reference speed           |       | 4 000 r/min  |
| Limiting speed            |       | 4 800 r/min  |
| Minimum load factor       | $k_r$ | 0.12         |
| Limiting value            | e     | 0.2          |
| Calculation factor        | Y     | 0.6          |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (), P6, Normal (inch)
- Radial internal clearance: cylindrical bore, tapered bore
- Axial internal clearance: NUP, NJ + HJ

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit