

N 217 ECM

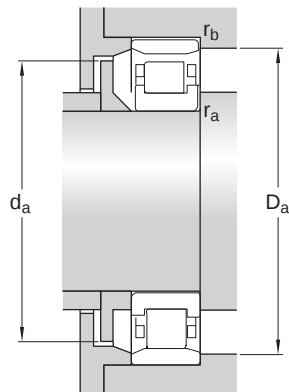
Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the inner ring and no flanges on the outer ring, N design bearings can accommodate axial displacement in both directions. An important feature is the separable 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                | 150 mm      | Outside diameter                |
| B                | 28 mm       | Width                           |
| d <sub>1</sub>   | ≈ 107 mm    | Shoulder diameter of inner ring |
| E                | 136.5 mm    | Raceway diameter of outer ring  |
| r <sub>1,2</sub> | min. 2 mm   | Chamfer dimension               |
| r <sub>3,4</sub> | min. 2 mm   | Chamfer dimension               |
| s                | max. 1.5 mm | Permissible axial displacement  |



| Abutment dimensions |             |                              |
|---------------------|-------------|------------------------------|
| d <sub>a</sub>      | min. 96 mm  | Diameter of spacer sleeve    |
| d <sub>a</sub>      | max. 134 mm | Diameter of spacer sleeve    |
| D <sub>a</sub>      | min. 139 mm | Diameter of housing abutment |
| D <sub>a</sub>      | max. 140 mm | Diameter of housing abutment |

|       |           |                  |
|-------|-----------|------------------|
| $r_a$ | max. 2 mm | Radius of fillet |
| $r_b$ | max. 2 mm | Radius of fillet |

## Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| AGA performance class     |       | AGA Explorer |
| Basic dynamic load rating | C     | 190 kN       |
| Basic static load rating  | $C_0$ | 200 kN       |
| Fatigue load limit        | $P_u$ | 25 kN        |
| Reference speed           |       | 4 800 r/min  |
| Limiting speed            |       | 5 300 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