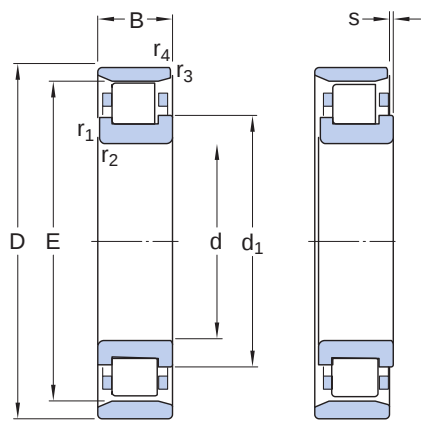


N 220 ECP

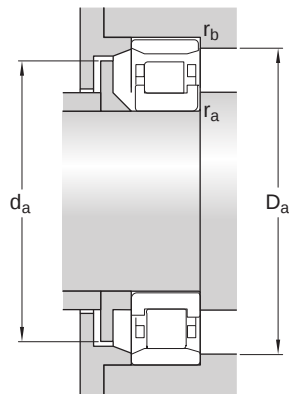
Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the inner ring and no flanges on the outer ring, N design bearings can accommodate axial displacement in both directions. An important feature is the separable 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                | 100 mm      | Bore diameter                   |
| D                | 180 mm      | Outside diameter                |
| B                | 34 mm       | Width                           |
| d <sub>1</sub>   | ≈ 127 mm    | Shoulder diameter of inner ring |
| E                | 163 mm      | Raceway diameter of outer ring  |
| r <sub>1,2</sub> | min. 2.1 mm | Chamfer dimension               |
| r <sub>3,4</sub> | min. 2.1 mm | Chamfer dimension               |
| s                | max. 1.7 mm | Permissible axial displacement  |



| Abutment dimensions |             |                              |
|---------------------|-------------|------------------------------|
| d <sub>a</sub>      | min. 113 mm | Diameter of spacer sleeve    |
| d <sub>a</sub>      | max. 160 mm | Diameter of spacer sleeve    |
| D <sub>a</sub>      | min. 166 mm | Diameter of housing abutment |
| D <sub>a</sub>      | max. 168 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     | 285 kN       |
| Basic static load rating  | $C_0$ | 305 kN       |
| Fatigue load limit        | $P_u$ | 36.5 kN      |
| Reference speed           |       | 4 000 r/min  |
| Limiting speed            |       | 4 500 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