

NUP 230 ECJ

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one integral flange and one loose flange ring on the inner ring, NUP design bearings can locate the shaft axially 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
- Locate the shaft axially in both directions
- Separable design



| Dimensions       |             |                                        |
|------------------|-------------|----------------------------------------|
| d                | 150 mm      | Bore diameter                          |
| D                | 270 mm      | Outside diameter                       |
| B                | 45 mm       | Width                                  |
| d <sub>1</sub>   | ≈ 193 mm    | Shoulder diameter of inner ring        |
| D <sub>1</sub>   | ≈ 232.35 mm | Shoulder diameter of outer ring        |
| F                | 182 mm      | Raceway diameter of inner ring         |
| r <sub>1,2</sub> | min. 3 mm   | Chamfer dimension                      |
| r <sub>3,4</sub> | min. 3 mm   | Chamfer dimension of loose flange ring |



| Abutment dimensions |               |                              |
|---------------------|---------------|------------------------------|
| d <sub>a</sub>      | min. 164 mm   | Diameter of spacer sleeve    |
| d <sub>b</sub>      | min. 196 mm   | Diameter of shaft abutment   |
| D <sub>a</sub>      | max. 254.6 mm | Diameter of housing abutment |
| r <sub>a</sub>      | max. 2.5 mm   | Radius of fillet             |

## Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| AGA performance class     |                | AGA Explorer |
| Basic dynamic load rating | C              | 510 kN       |
| Basic static load rating  | C <sub>0</sub> | 600 kN       |
| Fatigue load limit        | P <sub>u</sub> | 64 kN        |
| Reference speed           |                | 2 600 r/min  |
| Limiting speed            |                | 2 800 r/min  |
| Minimum load factor       | k <sub>r</sub> | 0.15         |
| 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