

NU 205 ECPHA

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 no flanges on the inner ring, NU 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                | 25 mm       | Bore diameter                   |
| D                | 52 mm       | Outside diameter                |
| B                | 15 mm       | Width                           |
| D <sub>1</sub>   | ≈ 43.8 mm   | Shoulder diameter of outer ring |
| F                | 31.5 mm     | Raceway diameter of inner ring  |
| r <sub>1,2</sub> | min. 1 mm   | Chamfer dimension               |
| r <sub>3,4</sub> | min. 0.6 mm | Chamfer dimension               |
| s                | max. 1.3 mm | Permissible axial displacement  |



| Abutment dimensions |              |                              |
|---------------------|--------------|------------------------------|
| d <sub>a</sub>      | min. 28.9 mm | Diameter of spacer sleeve    |
| d <sub>a</sub>      | max. 30.4 mm | Diameter of spacer sleeve    |
| d <sub>b</sub>      | min. 33 mm   | Diameter of shaft abutment   |
| D <sub>a</sub>      | max. 46.4 mm | Diameter of housing abutment |
|                     |              |                              |

|       |             |                  |
|-------|-------------|------------------|
| $r_a$ | max. 1 mm   | Radius of fillet |
| $r_b$ | max. 0.6 mm | Radius of fillet |

## Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| AGA performance class     |       | AGA Explorer |
| Basic dynamic load rating | C     | 32.5 kN      |
| Basic static load rating  | $C_0$ | 27 kN        |
| Fatigue load limit        | $P_u$ | 3.35 kN      |
| Reference speed           |       | 15 000 r/min |
| Limiting speed            |       | 22 000 r/min |
| Minimum load factor       | $k_r$ | 0.23         |
| Limiting value            | e     | 0.2          |
| Calculation factor        | Y     | 0.6          |

## Associated products

|            |           |
|------------|-----------|
| Angle ring | HJ 205 EC |
|------------|-----------|

## 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