

NU 424

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                | 120 mm      | Bore diameter                   |
| D                | 310 mm      | Outside diameter                |
| B                | 72 mm       | Width                           |
| D <sub>1</sub>   | ≈ 238.5 mm  | Shoulder diameter of outer ring |
| F                | 170 mm      | Raceway diameter of inner ring  |
| r <sub>1,2</sub> | min. 5 mm   | Chamfer dimension               |
| r <sub>3,4</sub> | min. 5 mm   | Chamfer dimension               |
| s                | max. 6.3 mm | Permissible axial displacement  |



| Abutment dimensions |             |                              |
|---------------------|-------------|------------------------------|
| d <sub>a</sub>      | min. 144 mm | Diameter of spacer sleeve    |
| d <sub>a</sub>      | max. 165 mm | Diameter of spacer sleeve    |
| d <sub>b</sub>      | min. 173 mm | Diameter of shaft abutment   |
| D <sub>a</sub>      | max. 286 mm | Diameter of housing abutment |
|                     |             |                              |

|       |           |                  |
|-------|-----------|------------------|
| $r_a$ | max. 4 mm | Radius of fillet |
| $r_b$ | max. 4 mm | Radius of fillet |

## Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | C     | 644 kN      |
| Basic static load rating  | $C_0$ | 735 kN      |
| Fatigue load limit        | $P_u$ | 78 kN       |
| Reference speed           |       | 2 400 r/min |
| Limiting speed            |       | 2 800 r/min |
| Minimum load factor       | $k_r$ | 0.15        |
| Limiting value            | e     | 0.2         |
| Calculation factor        | Y     | 0.6         |

## Associated products

|            |        |
|------------|--------|
| Angle ring | HJ 424 |
|------------|--------|

## 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