

BT4B 328376/HA4

Four-row tapered roller bearings can accommodate combined heavy radial and axial loads at low to moderate speeds. They are used almost exclusively in work roll applications such as rolling mills. NR manufactures four-row tapered roller bearings in TQO and TQI designs, in many variants and with different features.



- Very high radial load carrying capacity
- Accommodate axial loads in both directions
- Axial space-saving solution for roll necks
- Low friction
- Long service life

| Design variant/feature | TQO.1/WI         |                                             |
|------------------------|------------------|---------------------------------------------|
| Bore type              | Cylindrical      |                                             |
|                        | Dimensions       |                                             |
|                        | d                | 750 mm Bore diameter                        |
|                        | D                | 1 130 mm Outside diameter                   |
|                        | B                | 690 mm Total bearing width over inner rings |
|                        | T                | 690 mm Total bearing width over outer rings |
|                        | d <sub>1</sub>   | ≈ 826 mm Abutment diameter shaft            |
|                        | D <sub>1</sub>   | ≈ 990 mm Abutment diameter housing          |
|                        | r <sub>1,2</sub> | min. 4 mm Chamfer dimension inner ring      |
|                        | r <sub>3,4</sub> | min. 7.5 mm Outer ring radius (chamfer)     |
|                        |                  |                                             |

| Calculation data          |                |           |
|---------------------------|----------------|-----------|
| Basic dynamic load rating | C              | 20 100 kN |
| Basic static load rating  | C <sub>0</sub> | 46 500 kN |

|                                |          |          |
|--------------------------------|----------|----------|
| Fatigue load limit             | $P_u$    | 3 000 kN |
| Comparative radial load rating | $C_F$    | 5 400 kN |
| Comparative axial load rating  | $C_{Fa}$ | 1 300 kN |
| Thrust factor                  | K        | 1.2      |
| Limiting value                 | e        | 0.48     |
| Calculation factor             | $Y_1$    | 1.4      |
| Calculation factor             | $Y_2$    | 2.1      |
| Calculation factor             | $Y_0$    | 1.4      |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: bearings (Normal and CL7C), inch bearings
- Internal clearance

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit