

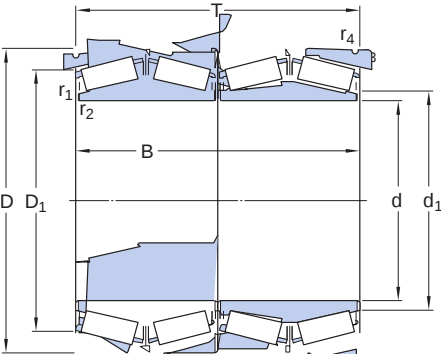
BT4-0039 E8/C355

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 | TQON/GW                         |
|------------------------|---------------------------------|
| Bore type              | Cylindrical with helical groove |



| Dimensions       |             |                                      |
|------------------|-------------|--------------------------------------|
| d                | 254 mm      | Bore diameter                        |
| D                | 358.775 mm  | Outside diameter                     |
| B                | 269.875 mm  | Total bearing width over inner rings |
| T                | 269.875 mm  | Total bearing width over outer rings |
| d <sub>1</sub>   | ≈ 267 mm    | Abutment diameter shaft              |
| D <sub>1</sub>   | ≈ 323 mm    | Abutment diameter housing            |
| r <sub>1,2</sub> | min. 1.5 mm | Chamfer dimension inner ring         |
| r <sub>3,4</sub> | min. 3.3 mm | Outer ring radius (chamfer)          |

| Calculation data          |              |          |
|---------------------------|--------------|----------|
| AGA performance class     | AGA Explorer |          |
| Basic dynamic load rating | C            | 3 050 kN |

|                                |          |          |
|--------------------------------|----------|----------|
| Basic static load rating       | $C_0$    | 5 700 kN |
| Fatigue load limit             | $P_u$    | 510 kN   |
| Comparative radial load rating | $C_F$    | 750 kN   |
| Comparative axial load rating  | $C_{Fa}$ | 120 kN   |
| Thrust factor                  | K        | 1.76     |
| Limiting value                 | e        | 0.33     |
| Calculation factor             | $Y_1$    | 2        |
| Calculation factor             | $Y_2$    | 3        |
| Calculation factor             | $Y_0$    | 2        |

## 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